SEQUENCE LISTING

<110> Helix Research Institute

<120> Primers for Synthesis of Full Length cDNAs and there uses.

<130> H1-107DP4

<140>
<141>

<150> JP 1999-248036
<151> 1999-07-29

<150> JP 1999-300253
<151> 1999-08-27

<150> JP 2000-118776
<151> 2000-01-11

<150> JP 2000-183767
<151> 2000-05-02

<150> H1-107DP4
<151> 2000-06-09

<150> US 60/159590
<151> 1999-10-18

<150> US 60/183322
<151> 2000-02-17

<160> 19025

<170> PatentIn Ver. 2.0

<210> 1
<211> 855
<212> DNA
<213> Homo sapiens

<400> 1
gcgcttttca ctgacaggcg ctgttcccca cagccagcgc cgcccgccac gtcccagctc 60
tcggccaacg gagctgcgcg gcgggtgacc tttccgagcc cagcgcgatg acggctcctt 120
gctcccagcc ggcgcagctt cctggacgcc gccagctcgg gctggtgccg ttcccgccgc 180
cgccgccgcg gacgccgctg ctgtggctgc tgctgctgct gctggccgcc gtggcgccgg 240
cgcgcggctg ggagagcgga gacctggagt tgtttgactt agtggaggag gtgcagctca 300

09622460 . 072800

acttctacca gttcctcggg gtgcagcagg atgcatcatc tgcagacatc agaaaagcat 360
atcgtaagct ttcactaact ttacatccag acaagaataa agatgaaaat gcagaaactc 420
agtttagaca attggtggcc atttatgaag ttttaaagga tgatgaacga aggcagaggt 480
atgatgatat tctgatcaat ggacttccag attggcgaca gcctgtattc tactacaggc 540
gggtgagaaa aatgagcaat gctgagctgg cattactctt gttcattatt ctcacagtgg 600
gtcattatgc tgtggtttgg tcaatctacc tggaaaaaca actggatgaa ctactaagta 660
naaaaaagag agaaaagaaa aaaaagactg gancaagagt gtggatgtat caaaactcgg 720
gtgcttcaga aaaaaaatga aaagantgct gattgaaacc acagtgggca atgatttgct 780
ttcaatgcaa aactgggggа attttgggtt ttgcccttaa aactaaaaag caattacctc 840
nacctcaanc caang 855

<210> 2
<211> 685
<212> DNA
<213> Homo sapiens

<400> 2
cacaggcaac ttcctcactt tgacccaagc tattgacaaa ttttcagcag atggaatgcg 60
tttggctctg gctgatgctg gtgacactgt agaagatgcc aactttgtgg aagccatggc 120
agatgcaggt attctccgtc tgtacacctg ggtagagtgg gtgaaagaaa tggttgccaa 180
ctgggacagc ctaagaagtg gtcctgccag cactttcaat gatagagttt ttgccagtga 240
attgaatgca ggaattataa aaacagatca aaactatgaa aagatgatgt ttaaagaagc 300
tttgaaaaca gggtttttg agtttcaggc cgcaaaagat aagtaccgtg aattggctgt 360
ggaagggatg cacagagaac ttgtgttccg gtttattgaa gttcagacac ttctcctcgc 420
tccattctgt ccacatttgt gtgagcacat ctggacactc ctgggaaagc ctgactcaat 480
tatgaatgct tcatggnctg tggcaggtcc tgttaatgaa gttttaatac actcctcaca 540
gtatcttatg gaagtaacac atgaccttag actacgactc aagaactata tgatgccagc 600
taaagggaag aagactgaca aacancccct gcanaaagcc ctcacattgc accaacctat 660
gtggcaaaga aactatccan cttgg 685

<210> 3
<211> 755
<212> DNA
<213> Homo sapiens

<400> 3
agcactctgc gcgcccgctc ttctgctgct gtttgtctac ttcctcctgc ttccccgccg 60
ccgccgccgc catcatgagg gaaaacgtgc acttgcaggc cgggcagtgc ggcaaccaaa 120
tcggcgccaa gttttgggag gtgatcagcg atgagcacgg catcgacccc acgggcacct 180
accacgggga cagcgacctg cagctggaac gcatcaacgt gtactacaat gaggccaccg 240
gcggcaagta cgtgccccgc gccgtgctcg tggatctgga gcccggcacc atggactccg 300
tgcgctcggg gcccttcggg cagatcttcc agctgaccca ctccctgggt ggggggactg 360
ggtctgggat gggtaccctc ctcatcagca agatccggga ggagtaccca gacaggatca 420
tgaacacgtt tagtgtggtg ccttcgccca aagtgtcaga cacagtggtg gagccctaca 480
acgccaccct ctcagtccac cagctcgtag aaaacacaga cgagacctac tgcattgata 540
acgaagctct ctacgacatt tgcttcanaa ccctaaagct gaccacgccc acctatggtg 600
acctgaacca cctggtgtcn gctaccatgg gtggggtcac cacctgcctg cgcttcccag 660
gncagctcaa tgctgacctg cggaagctgg gtgtaaacat ggtcccgttt cccgggtnca 720

0550245 0072800

cttcttcatg ccccggcttt ngccccactg aacaa 755

<210> 4
<211> 752
<212> DNA
<213> Homo sapiens

<400> 4
tttcccgcca cggcagtgga gccgacagtg actatgagaa cacgcaaagt ggggacccac 60
tgctggggct ggaagggaag aggtttctag agctgggcaa agaggaagac ttccacccag 120
agctggaaag cctggatgga gacctagatc ctgggcttcc cagcacagag gatgtcatct 180
tgaagacaga gcaggtcacc aagaacattc aggaactgtt gcgggcagcc caggagttca 240
agcatgacag cttcgtgccc tgctcagaga agatccattt ggctgtgacc gagatggcct 300
ccctcttccc aaagaggcca gccctggagc cagtgcggag ctcactgcgg ctgctcaacg 360
ccagcgccta ccggctgcag agtgagtgcc ggaagacagt gcccccagag cccggcgccc 420
cagtggactt ccagctgctg actcagcagg tgatccagtg cgcctatgac atcgccangg 480
ctgccaagca gctggtcacc atcaccaccc gagagaagaa gcagtgacct ctctccccac 540
accctcacct gcaccctagg acctcactgg ccatangagc tgggccactc cagacattaa 600
tccccacccc aacagagcca ctggcacaag tgcccttagt gctgccacac tccctggcag 660
ccaggtgccc tggtgccacc cctgtcgagc ccctaaggat ggggaggtgg nggggcagga 720
nctttctgtc ccccaanatt ccaatggcac ct 752

<210> 5
<211> 766
<212> DNA
<213> Homo sapiens

<400> 5
ctatagtcaa gctaatgacc catgtagatg tagtgttgta cctggtgtcc gtgtccctgt 60
gaatgtgtca tgttgtgctg gcctgattcc ccaacatcag ccccagggag ccagcagctg 120
gagcagctgt catcttgtga aagcagagtg tccttgttgc tattgattgg gttgttcagt 180
caattgcaaa aaaagtggat ctaactgtca atggtagtta tatgataatc ctggagataa 240
ataagtgtca agtgaagtat tacttgaatt taggacctga agagagagaa aggggtatga 300
gtagttggag gggaagattt gctatgacaa gctattattc agtgtggtta ttttgtatga 360
caggtaagtc tacaggtatc ttttgttaga taaaccagaa attaagcatt ccctttgtaa 420
actccaaaca agattttgaa acaccatggt ccccccttat ccacctccaa gatctccagt 480
ggatgtctga aaccactgat agtactgaag tctctatata ttatgttttt cccctgtatg 540
taatacatac ctgtgataaa gtttaattta taaattangc acaggaagaa attaacaaaa 600
ataagtaaga atagaacagt tataactata tgttcnatta aaagttangt gaatttgttt 660
tctgtctctc tcaaaatatc ctgttgtgct gtgtgttcaa ccatttttga gnttccgttg 720
acctggtgga taacaaaacc acagaaaagt tgnnacttca cataaa 766

<210> 6
<211> 739
<212> DNA
<213> Homo sapiens

<400> 6

0050203-0050469

ttgtagaatg taatctctgg taacactgac tttaagaggc aatgagtgtg tgtgtgtgtg 60
tgtatgtgtg tgagtgtata tatattccca taggctagca aatgaaaact gacagtgaac 120
ttttcctcta gctctgatag agtgactggc attgggcatt tcctcctggc atagacaact 180
ctaaagctgg taaaatgtgc atgacaaatg ttttaaggca ttaaacaaca ggcagcacag 240
aactgtaatt cttgagagaa aggaaacatg agaggtgagg ctcagtttgc cccagtgctc 300
tgcctgggac cgtttcctgc acatctccag cagaactgtg gcctcactga cctgaggagg 360
agattggagc tgtggtctca gaagcagctg agatttgggg agccaagtgc aagagcagaa 420
gctgaggaca agggtttcca gaagtcttga tgaagactca ttgctggttt ttggctgaag 480
gctgcccaca ccatggcang cagtacacag ggcctagcag tggttgcctt ctgcagggct 540
gggaatgaat gaaggcatta ttgctatgca ccaccaagga gatgctggag ctccagctca 600
gccagaatgg agagaactca ntgagcatct caagtcaggc attcagttga aacctcagaa 660
agtccacacc atancaagta aaagctatac cctcaaataa ngggccacac cttagcccat 720
aactangata agttcaagt 739

<210> 7
<211> 772
<212> DNA
<213> Homo sapiens

<400> 7
gttaccatgc taaatgtaat gcgtttattt attattcagc aaaatctatg gcagaggcat 60
tccaaatagt agctcgtgga gaattaaaag tatcagggac ttgtagaaat cttggtttct 120
ttatttttt aaagcatcag aaggtacttg aaagatgtga acagataaat taaggctaaa 180
aagaaaacag aaatggctac attttaaact gcctttctac cctcagtatt taattagatc 240
aattgtatag aggaatgaac agaggtgaca ttcctcattg ggattccttc caggactctt 300
atagactttg cattcagaat gttcccattt tcattgtgtt gtactgatga taatttaagt 360
attaggggaa aatccattta taaattaaac aaaatgactt gatatccatc agtcccctag 420
ttcatcaagc tgttcaaaca cggggaagat tggctggtcg gcctgggtct tccgagagcg 480
ctggtaatta gatctgcgaa ggatttattc tttgctgatt ggggctttaa attaattgaa 540
gttccacatt tgtggntttg tccttttttgg acttttttag aggagatatt tcatattcct 600
gtgtggtgga gtgcttggnc aagcagcagt gggttaaatg ttaatttttc tcatgagaag 660
tttaagattt tttgatgaat caagggctga tttgaagtgc aaagttgtan ttgcttacct 720
ggggaaatta ttttttcacn cctcaaaaga tgccttggac nttaacttga tc 772

<210> 8
<211> 879
<212> DNA
<213> Homo sapiens

<400> 8
agggcgggtg gagtcgcgga gtagtcctca tggccgcccc gccggagccc ggtgagcccg 60
aggagaggaa gtcccttaag ctcctaggat ttttagatgt tgaaaatact ccctgcgccc 120
ggcattcaat attgtatggt tcattaggat ctgttgtggc tggctttgga catttttgt 180
tcactagtag aattagaaga tcatgtgatg ttggagtagg agggtttatc ttggtgactt 240
tgggatgctg gtttcattgt aggtataatt atgcaaagca aagaatccag gaaagaattg 300
ccagagaaga aattaaaaag aagatattat atgaaggtac ccacctcgat cctgaaagaa 360
aacacaacgg cagcagcagc aattgaacaa tcttgagcat agaagtcaat gtaaacgaag 420
ttaagatcaa ccacataaaa catttcatgt gcaataagct ctcaatcaag taaataaagt 480

0050-0050-0050-0050-0050

ttaagttgta gtcatttttt tcccacactt gtgtggaatg aaaacttgcc aatttattct 540
ggccctgtgt ctactgccag gatagcattc ttacgtgtta catatagtgg acttgtcatc 600
cttaaaatgt gaacagaatt tattggcaag tgtggcaaag aattataaaa catagtgttt 660
aatgtacttg gagtttcctt gtagtnngta agtatagagt ttgatgataa gtaaacgtcc 720
cttaacaaaa acctcaacct tattactaat cccattaaaa aaacagcaaa tacttactga 780
gttcctgtaa gagcctaatg tcatggtaga tttaaaccaa ggggctttta acactttgca 840
aaatttantt ttttaaatng cattcaacan ttggcaaag 879

<210> 9
<211> 758
<212> DNA
<213> Homo sapiens

<400> 9
cactgttcta aaaatacata tgattatagc tgccactcca tcaggagcaa attcttctgt 60
taaaagctaa ctgatcaacc ttgaccactt ttttgacatg tgagatcaaa gtgtcaagtt 120
ggctgaggtt ttttggaaag ctttagaact aataagctgc tggtggcagc tttgtaacgt 180
atgattatct aagctgattt tgatgctaaa ttatcttagt gatctaaggg gcagtttagt 240
gaagatggaa tcttgtattt aaaatagcct tttaaaattt gttttgtgat gatgtatttt 300
gacaacttcc atctttagga gttatataat caccttgatt ttagtttcct gatgtttgga 360
ctatttataa tcaaggacac caagcaagca taagcatatc tatatttctg actggtgtct 420
ctttgagaag gatgggaagt agaaaaaaaa aaaaaagaaa gaaaggaaag gaagagagga 480
gagaagaagg cagggatctc cactatgcat gttttcactt tagaactgtt gagcccatgc 540
ttaattttaa tctagaagtc tttaaatggt gagacagtga ctggagcatg ccaatcagag 600
agcatttgtc ctcagaaaaa aaaaaaaatc tgagtttgag actancctgg ccaacatgtt 660
gaaaccccca ttcctacaaa aaatacaaaa attancctgg tggtggtngc gcacgcctgt 720
agtcccaagc tactccggga gcctgaggga acgtgaan 758

<210> 10
<211> 713
<212> DNA
<213> Homo sapiens

<400> 10
agtttcaagt ttccatttct gatttctgct ctctgcgctg agcacagcgg caccaggctg 60
agctaagcag ggccgccttg ggcaggccta cgtggtggtg caggcgagac ccaggctggg 120
caaggcgcag tttcagtttc catcttgggt ctctgagctg agcagagtgg caccaggctg 180
agttaagtgg gactgccctg ggcagaccta cctactagag cagaatggag cttcggtcct 240
accaatggga ggtgatcatg cctgccctgg agggcaagaa tatcatcatc tggctgccca 300
cgggtgccgg gaagacccgg gcggctgctt atgtggccaa gcggcaccta gagactgtgg 360
atggagccaa ggtggttgta ttggtcaaca gggtgcacct ggtgacccag catggtgaag 420
agttcaggcg catgctggat ggacgctgga ccgtgacaac cctgagtggg gacatgggac 480
cacgtgctgg ctttggccac ctggcccggt gccatgacct gctcatctgc acagcagagc 540
ttctgcagat ggcactgacc agccccgagg angangagca cgtggagctc actgtcntct 600
ccctgatcgt ggtgggatga gtgccaacac acgcacaagg acaccgtcta caacgtcatc 660
atgaagccag tacctanaac ttaaactcca aaggggaana nccgctaacc cca 713

<210> 11

US 2003/0224000 A1

0962946 .0720800

<211> 823
<212> DNA
<213> Homo sapiens

<400> 11
tacgaagcat tccagaagac tcagagttaa atacagttac attgccaaga aaagcaagaa 60
tgaaagacca gtttggcaat tctattatca acacacctct gaaacgtcgt aaagtgtttt 120
ctcaagaacc tccagatgct ttagctttaa gctgccaaag ttcctttgac agtgtcattt 180
taaactgtcg aagtatacga gtaggaacac tcttccggct gttaatagag cctgtaattt 240
tttgtttaga ttttatcaag atacagctag acgaaccaga ccatgatcct gtagagatta 300
tattaaatac ctctgatcta actaaatgtg aatggtgtaa tgtccgaaaa ttacctgtag 360
tgtttcttca agcaattcca gcagtttatc aaaagctgag catccaactg caaatgaata 420
aggaggataa agtttggaat gattgtaaag gagtaaataa attaacaaat ttagaagaac 480
aatatataat tttaattttt caaaatggcc ttgatcctcc ggcaaatatg gtatttgaaa 540
gtatcattaa tgaaattggt ataaagaata acatctccaa ttttttgcg aaaattccct 600
ttgaagaagc taatggcaga cttgttgcct gtacaagaac ctatgaagag agcatcaaan 660
ggaagttgtg gggcaaaagg gaaacaaaat taaaactgta tcatttgaat ctaaaataca 720
acttaagaag caaacaagaa tttcagtttt ttggatgaan gaaagaagga aactgggaga 780
aaaccacacc aatcttcaan tgggcccaag tngaaaaagg ttg 823

<210> 12
<211> 603
<212> DNA
<213> Homo sapiens

<400> 12
ggaaggctga ggcaggagaa tcgcttgaac ccgggaggcg gaggttgcag tgagccaagt 60
tcgcaccact gcactccagc ctgggcaaca agagcgagac ttcatctcaa aagaaaaaaa 120
anaaagaaaa agctgcccca tcgcatcgca tagaggctgc tatgggatta gaacgtagct 180
tgagatctgc aggtcaacag gtctgtttgg catctcaggt tttcctcaca taagtgaaag 240
atgcctggta tggcctagtg ttgttctgcc tccctcctct gcccgccagg tatacatgga 300
ctggtacgag aagttccagg acaggctcaa caagaaggtg gtactcctga caggcgagac 360
cagcacagac ctgaagctgc tgggcaaagg gaacattatc atcagcaccc ctganaagtg 420
ggacatactt tcccggcgat ggaagcancg caagaacgtg cagaacatca acctcttcgt 480
ggtggatgag gtccacctta tcgggggcga taatggggta tggcgttcct tgcagcacag 540
atgagggact gggantgacc aagtggnctt ggcattggnc ctaatgtttg ggtctgagga 600
cgg 603

<210> 13
<211> 744
<212> DNA
<213> Homo sapiens

<400> 13
aagatggctg ccgctaccgg tgcggtggca gcctcggccg cctcgggtca ggcggaaggt 60
aaaaagatca ccgatctgcg ggtcatcgat ctgaagtccg agctgaagcg gcggaactta 120
gacatcaccg gagtcaagac cgtgctcatc tcccgactca agcaggctat tgaagaggaa 180
ggaggcgatc cagataatat tgaattaact gtttcaactg atactccaaa caagaaacca 240

actaaaggca aaggtaaaaa acatgaagca gatgagttga gtggagatgc ttctgtggaa 300
gatgatgctt ttatcaagga ctgtgaattg gagaatcaag aggcacatga gcaagatgga 360
aatgatgaac taaaggactt tgaagaattt ggtgaaaatg aagaagaaaa tgtgcattcc 420
aaggagttac tctctgcaga agaaaacaag agagctcatg aattaatana ggcagaagga 480
atagaagata tagaaaaaga ggacatcgaa agtcaggaaa ttgaagctca agaaggtgaa 540
gatgatacct ttctaacagc ccaagatggt gaggaagaag aaaatgagaa agatatagca 600
ggttctggtg atggtacaca aggaagtatc taaacctctt ccttcanaag ggaacctact 660
gangctgatc acacagctca tgaagagatt ggaaagctca tncgaactgt gaaagaagct 720
gagggatgac aaaatctccg ggca 744

<210> 14
<211> 782
<212> DNA
<213> Homo sapiens

<400> 14
acccatctac agcaagaaga cggaaatcca aaggcagaca gtacgggctc ccttcgccaa 60
actcttcatt ttctctgcac ttcaggtggc aagacagctc cttcttcagc agcaacagca 120
gcagcaagtt agtggattaa aatctcccaa gaggaatgac aaacaaccag ctcttcaggt 180
tcccgtgtca gtggctatga tgacacctca agttatcact ccccagcaaa tgcagcagat 240
cctccagcaa caagtgctga gccctcagca gctccaggtt ctcctccagc agcagcaggc 300
cctcatgctt caacagcagc agcttcaaga gttttataaa aaacaacagg aacagttgca 360
gcttcaactt ttacaacaac aacatgctgg aaaacagcct aaagagcaac agcgggtggc 420
tacccagcag ttggcttttc agcagcagct tttacagatg cagcagttac agcaagcagc 480
acctcctgtc tttgcaagcg ccaaggcctt gtgacaattc aagcccgggc agcctgccct 540
tcccccttcaa cctcttgctc aaggcatgat tccaacagaa ctgcagcagc tctggaaaga 600
agtgacaagt gctcatactg cagaagaaac cacaggcaac aatcacagca gtttggatct 660
gaccacgaca tgtgtctcct cctctgcacc ttccaagact ccttaanaat gaacccacat 720
gcctctacaa tgggacagct ctcagtccan actcccaaaa ngggaaagtt tgtcccatga 780
gg 782

<210> 15
<211> 589
<212> DNA
<213> Homo sapiens

<400> 15
aggaagtaga acgccggctc gcatgcctgc ccgcccgcca gcctgccggg tacggccttt 60
tccgccgggg cttccaggtc aaagaattcg cctttgccgc taccgctttc ttaccctccg 120
cacccgttaa gttctccggt cgggcggcag tctctgaaca cttagccgcg ccatccgggg 180
tcacaccgcc tggaaggagg tgacgggggc ggcgcggggc gcggacactc cccgctgaga 240
gtccgcctgc catggactcg gaatattaca gcggcgacca gtcagatgat ggtggtgcta 300
ccccagtaca ggatgaacgg gattcagggt cagacggtga ggatgatgta aatgagcaac 360
actccggatc agacactgga agtgtagaac gtcattcaga gaatgaaact agtgactcag 420
aaaatgaaga gcttcccaaa ccccgaatca gtgattcgga aagtgaggat ccccaaggaa 480
ccaggccagt gattcggaaa atgaggagct acccaaaccc cgagtcaant gactctgaga 540
gtgangggcc tcanaagggg cctgccagtg actcagaaac tgaggatgc 589

0562450 0780211

<210> 16
<211> 730
<212> DNA
<213> Homo sapiens

<400> 16
atcgcttctc ggccttttgg ctaatgatca agtgtagtat ctgttcttat cagtttaata 60
tctgatacgt cctctatccg aggacaatat attaaatgga tttttggaac aaaacaaaac 120
aaaaacaaaa acaaaaaatc caaacaaaaa caatcctgcc gaagtggggc agaaatgagt 180
ggaaacttaa caaatgaatg ggaaaaaaaa aatcgaagtt cctttatcga aaatataatg 240
tattttaact aaagtgttaa attttgaaac agtggaataa aacgtttaaa gtgaatttta 300
ttcccatctt tgcggcaaat gcccagggtc ccccaaaaaa gggcatgctc aagtccccca 360
cagtcgaaat ctgctaatcc agaatgaaaa tggaatcatt aggataaaat tatcgagtgt 420
gttcaggagc ggctatgcca gtgaatttcc agcctgaaat gaaatcatga cttangtgta 480
tttatgagta tctgttttaa aaaccactgt gatagctagc tatcacctca aattttgaag 540
tcgtttcgtt gagtgtgaaa naaaggagaa gacatttcaa agtgcattta gctatttaaa 600
aacccttttat tcactgantg tgctgctgat tattacatgt ctgtggaagc ttctggagcc 660
attggtggga gaggcaagat gtgaaanaat cagtcgagat ggtanattga tatgacattt 720
tgnaccaaca 730

<210> 17
<211> 542
<212> DNA
<213> Homo sapiens

<400> 17
agcctacacc gactctggga ggaagactgg agcctttgcg gcggcgctgc ccctcccctg 60
gtccccgcga gctcggaggg cccggctggt gctgcggggg ccccgggagc gtgcttctgt 120
tcttcaagat tgaaaactaa gcatggggaa gagctgcaag gtggtcgtgt gtggccaggc 180
gtctgtgggc aaaacttcaa tcctggagca gcttctgtat gggaaccatg tagtgggttc 240
ggagatgatc gagacgcagg aggacatcta cgtgggctcc attgagacag accggggggt 300
gcgagagcag gtgcgtttct atgacacccg ggggctccgg gatggggccg aactgccccg 360
acactgcttc tcttgcactg atggctacgt cctggtctat agcacagata gcagagagtc 420
ttttcaacgt gtggagctgc tcaagaagga gattgacaaa tccaaggaca agaaggangt 480
caccatcgtg gtccttggca acaaagtgtg acttacagga gcancggcgt gttagaccca 540
gn 542

<210> 18
<211> 751
<212> DNA
<213> Homo sapiens

<400> 18
gcttctccgg cggaacccag gctggaccgc gggccccggc ctgggggcca ctgctgccac 60
cgccgccgcc acctcgtctc ctccccgtcc ccgcccagcc ccaggtctcc ccgcctcact 120
cgggcccgtg gccggggtca ctccccgccg cccctccccg cacggatgcc gaaggtgaag 180
gcgctgcagt gcgccctggc gctggagatc agctcagtaa cttgcccagg agtcgtgctt 240
aaagacaaag aggacatcta tcttagcatc tgtgtgtttg gccaatacaa aaagacacaa 300

0502345-020200

tgtgtcccag ccacttttcc cctggtcttc aatgccagaa tggtgtttga aaaggtgttc 360
ccggacgcag tagatcctgg agatgtggtt acacagcttg aatatgatac agcagtgttc 420
gagttgatac agctagttcc accagtgggt gaaacactgt ctacgtatga cgaaaataca 480
cgagatttca tgtttccggg tccaaaccaa atgtctggac accatgattc aaaccgccag 540
gttaccatga ggaggatttc tggccttcga ggaaatgctc caaggctgga attttctacg 600
acttcagtga ttactgaatg tctgataagt tcaaggaaat gccacactca ggataaattt 660
atttaccant tggctccagt tgaaaaatca catggcaaac tgcaaaaaca gaacatcaag 720
atnacaanag aaaaaaatcc aaagtcacct t 751

<210> 19
<211> 806
<212> DNA
<213> Homo sapiens

<400> 19
gtcgtctgcg gcggcggcgg cggctgagga gcccggctga ggcgccagta cccggcccgg 60
tccgcatttc gccttccggc ttcggtttcc ctcggcccag cacgccccgg ccccgcccca 120
gccctcctga tccctcgcag cccggctccg gccgcccgcc tctgccgccg caatgatgat 180
gatggcgctg agcaagacct tcgggcagaa gcccgtgaag ttccagctgg aggacgacgg 240
cgagttctac atgatcggct ccgaggtggg aaactacctc cgtatgttcc gaggttctct 300
gtacaagaga taccctcac tctggaggcg actaagccac tgtggaagag aggaagaaaa 360
tagttgcatc gtcacatgat cacggataca cgactctagc caccagtgtg accctgttaa 420
aagcctcgga agtggaagag attctggatg gcaacgatga gaagtacaag gctgtgtcca 480
tcagcacaga gccccccacc tacctcaggg aacagaaggc caagaggaac agccagtggg 540
tacccaccct gcccaacagc tcccaccact tagatgccgt gccatgctcc acaaccatca 600
acaaggaacc gcatggggcc gaagacaaga agagaaacct tccccctttg ctttgatgac 660
catgacccan ctgtgatcca tgagaacgca tctcaagccc gaggtgctgg tccccatccc 720
ggctgggcat ggagattcga tggggangaa gctgcgaaga cgccttcacc tgggaacatg 780
aatgagaagt tnatgacccc ngagaa 806

<210> 20
<211> 891
<212> DNA
<213> Homo sapiens

<400> 20
acacttttat attaacaagc attttgaaaa ggctgagggc agatatgtta gaagccatct 60
tcttattcct aaattcatgc ttaaatgtaa ttgtccttca gttttcccac tcctgagttt 120
ggagtctgct ggatgatggg tggtttgggg aaggaaaagg gttctgtaca ttggcctggc 180
ctgcaatacg gctcgctata tttatatttc ctacctggag aatgcctgga ctgttctccc 240
catggaagtt cttcaaggag tgaagagcag caggctcagc tggccgcggg aggacactga 300
gggcatcctg ctcatctcac acaggagcta cagtacatat tggcaggaaa aggtaaactt 360
tcgtaatctc attggaatta caacagggaa atggagttca atgaggactt tcagttcttt 420
gcttggttag gttaaggatg atagaatttc tctgccagtg cagtaagagt tgaaaccggc 480
agttacacta agtaagtgga gggaatgaaa gtgtttcgag gtgaatgtgg atataatttc 540
cctcttctga ttatttattc ttatttggtt cctaacacaa actgggaaga agatagaatt 600
catctatact ttctttttc ttggagagaa ccgtttaaaa aattacaaga tatatttaaa 660
aagtaaccaa gataaaagtt agcacatgtg cttttgttaa aaaataaagt taaaagttaa 720

0352459-092800

agttaaaaaa atggaagtta aaaagtttca tcaggaaact ttacatatcc tttagcaaat 780
atatttttaa aaggtgtang ggcatataat gggaaataat tcctttgagc aaacaanaag 840
gctattaatt aaactactng caaagcctaa gccccaagcc ttaaaaaatg g 891

<210> 21
<211> 873
<212> DNA
<213> Homo sapiens

<400> 21
actcgtaact cgcacccggg tcctggctgc accgcatccc ctcctgcacc ccctggatgg 60
cccttcagcc aacgggggcc tgggcgatgg tcgaccacgg agctgcgcaa ggaaaagtcc 120
cgggatgcgg cccgcagccg gcgcagccag gagaccgagg tgctgtacca gctggctcac 180
acgctgccct tcgcccgcgg cgtcagcgcc cacctggaca aggcctctat catgcgcctc 240
accatcagct acctgcgcat gcaccgcctc tgcgccgcag ctggagctca ttggacacag 300
catctttgat ttcatccacc cctgtgacca agaggagctt caggacgccc tgacccccca 360
gcagaccctg tccaggagga aggtggaggc ccccacggag cggtgcttct ccttgcgcat 420
gaagagtacg ctcaccagcc gcgggcgcac cctcaacctc aaggcggcca cctggaaggt 480
gctgaactgc tctggacata tgagggccta caagccacct gcgcagactt ctccagctgg 540
gagccctgac tcagagcccc cgctgcagtg cctggtgctc atctgcgaag ccatccccca 600
cccaggcaag cctggagccc ccactgggcc gaggggcctt cctcagccgc cacagcctgg 660
gacatgaagt tcactactgt gacgacaggg ttgcaaaaag tggctggcta tagtccgatg 720
acctgatcgg ctgttccgcc tacgagtaca tcaacgcgct ggactcccga cgcggtcaag 780
caaagaagca tccaaaaccc ttgctggagc aaaggggcca aggcagttaa caaggggcan 840
attatcgcct ttccttgggc ccgggaantt ggn 873

<210> 22
<211> 779
<212> DNA
<213> Homo sapiens

<400> 22
atagagaaga acggaggtac ggcctgtggt catggcgctg ttcccagcct ttgcggggct 60
tagtgaggct cccgatggcg ggagctccag gaaagagtta gactggctga gcaacccaag 120
cttttgtgtt ggatccataa cgtccctgag ccaacaaact gaagcagctc cagcccatgt 180
ttctgaaggg ttaccgctga caaggagtca tctgaaatca gagtcttcag atgaaagtga 240
cactaacaaa aagctcaaac aaacaagtag aaaaaagaag aaagagaaaa agaaaaaaag 300
gaagcatcag catcataaga aaacaaagag gaagcatggg ccgtcgagta gcagcaggtc 360
tgagacagac accgattctg gaaaggacaa accttccaga ggcgttggag gcagtaaaaa 420
ggaatctgag gaaccgaatc aaggaaataa tgctgcagct gatactggac atcgctttgt 480
ttggcttgag gacattcagg ctgtgacggg agaaaccttc agaacagata agaaaccaga 540
tcctgcgaac tgggagtaca agtctctcta ccgaggggat atagcaagat acaagaggaa 600
aggagactcc tgccttggca ttaaccctaa gaagcagtgc atatcttggg aagggacttc 660
cacagagaag aagcattcac gcaagcaagt ttgaacgcta ttttactaag aagagtgtgg 720
gattaatgaa catcgatgga nttgncanta acagtaaaac tgaaacctcc ctcatctgg 779

<210> 23
<211> 856

0050050.0070000

<212> DNA
<213> Homo sapiens

<400> 23
gcttcccgga agtggcggcg cggtcagggc tggccttggc ttcagctgcg gttttggggt 60
cccggactct gggatcggcg gcgctatgag ttctttcgag gggcagatgg ccgagtatcc 120
aactatctcc atagaccgct tcgataggga gaacctgagg gcccgcgcct acttcctgtc 180
ccactgccac aaagatcaca tgaaaggatt aagagcccct accttgaaaa gaaggttgga 240
gtgcagcttg aaggtttatc tatactgttc acctgtgact aaggagttgt tgttaacgag 300
cccgaaatac agattttgga agaaacgaat tatatctatt gaaatcgaga ctcctaccca 360
gatatcttta gtggatgaag catcaggaga ggtttttatt tcagggcaat aatggaactg 420
tcctgtacac aggagacttc agattggcgc aaggagaagc tgctagaatg gagcttctgc 480
actccggggg cagagtcaaa gacatccaaa gtgtatattt ggatactacg ttctgtgatc 540
gaagatttta ccaaattcca agtcgggagg agtgtttaag tggagtctta nagctggtcc 600
gaagctggat cactcggagc ccgtaccatg ttgtgtggct gaactgcaaa gcggcttatg 660
gctatgaata tctgttcacc aaccttaagt gaagaattag gggtcaaggt tcaatgttga 720
ataagctaag acatgtttaa ggaacaatgc cctgagattc cttcatcaat ctcacaaaca 780
agaccggcaa cactcaagan tccaatgcaa tgcccgggaa tccccaaggg caanaaggaa 840
ataattttca agtggn 856

<210> 24
<211> 740
<212> DNA
<213> Homo sapiens

<400> 24
cggcngaaga cggcctatgt gggccttttt ttttttttt ttatattttg agaaacctcc 60
atactgtttt ggcatagata gtggctgcac aattttgcat tcccacccag catacaaggg 120
ttccaattcc tccatatcct caccaacact cttttgtttt tttgatagta gtcatcataa 180
caggtgaggt gatattaagg agtacttctg cactgaggca cttgtctcaa ctatattttt 240
gttgtacttt caggagacta atagatctgt ggaaatttat caaatctttg ctcatttttt 300
taacttctga gagctcttct ttaatctgag tgttcctttt tatgaaattg ttgatgaaaa 360
aagccgaaca agtgtaaaat attttaagag atttattctg agccaaatat gagtgaccac 420
agcccatgac acagccctca ggaggtcctc agaacatgtg cccaaggtgg ctaaggtaca 480
gcttagtttt atatatttta gggaggcata agatatcaaa tacatttaag aaacacattg 540
gtctggttta gaaaggtggg acaactcaaa gcaggggctt ccagactata ggtaaattta 600
aacattttct ggttgacaat aggatgagtt tatctgaaga cctgggatca acagaaaaga 660
aatgttcang ttaagataaa ggattgtgga gaccaagttt cactgtgcaa aggaagctct 720
canagagcag acttcanaga 740

<210> 25
<211> 794
<212> DNA
<213> Homo sapiens

<400> 25
accaccccag tgaaacccac agaaccatgt acaccctcta agtcccgaag tgccagctca 60
gaggaggcct cagagtcacc tacagcccgg cagatccccc cagaggcacg tcggctcata 120

0356203-20020800

gtgaacaaaa atgctggtga gaccctcctg cagagggcgg cgcgtcttgg ctataaggat 180
gttgttctct actgcctcca gaaagacagt gaagatgtga atcaccgtga caatgctggc 240
tacacagccc tgcatgaggc ttgttcccgg ggctggaccg acatcctgaa catcctgctg 300
gagcacgggg ccaacgtgaa ctgcagtgcg caggacggca cgaggccagt tcatgatgcg 360
gtggtcaatg acaacctgga gaccatctgg ctcctgctgt cctatggggc cgatcccaca 420
ctggctacct actcgggtca gacagccatg aagctggcca gcagcgacac catgaagcgc 480
tttctcagtg atcacctctc ggatcttcag ggccgggcag agggtgatcc cggtgtatcc 540
tgggattttt acagcagttc tgtgttggag gaaaaagacg ggtttgcctg tgacctccta 600
cataatcctc ctgggagctc agatcaagaa ggagacgatc cgatggagga ggatgatttc 660
atgtttgaac tctcagacaa gcctcttctc ccttgctaca acctccaagt gtcagttgtc 720
ccgcgggncc tgcaactggg ttcctctttt tccgaatgtc ttgaanaagg ctggaaagct 780
ttccctcnaa gggt 794

<210> 26
<211> 703
<212> DNA
<213> Homo sapiens

<400> 26
gaatcttagc tgattgcatt atgaactgtc aaactgtgaa gatgacccat atgtaaacag 60
ttataacagc tacagattat tgctagtagc attctataca attccatatt aatgttctta 120
ggagctaata tttgataaag gggaaagcta gttaaaaact aattaatttg tcaaatgtag 180
cattcttatt atgagtgtaa tatctcatgg agatttaaat atgaacgaaa ggacttatcc 240
ttctgctttt taaaagcccc agcattacta gatagtgttt ttcttgaagg ccaaagctgt 300
aaaatgacaa agttggtgat tttcagcagc actcacctga gctgtgagcg cctgcacctg 360
ttcggtagaa cccactagaa tcacttctct gtaggataag tgatgccttt gaatccagca 420
gcataaaaat ctgttctttt tagtcatcaa gtttttgttt ccaggatatt tctagcattg 480
caaaaaaaaa tttcttcacc aaacactaat tcctaaacac ccatccaaac cacaaaaatt 540
ctcttgttag tangcgagag tgctaggact tcctgtgttc aactcccatg cacccagcan 600
tgtcttttat gcatgagata ttccattaga ttttcctaaa agtggcaagg acacccttca 660
tagtangtta tatcccttaa ctgggattcc aanagtttaa ncc 703

<210> 27
<211> 685
<212> DNA
<213> Homo sapiens

<400> 27
accctgtact tactcactat cataatttat gagaatgaca aatttttaga aataagcaaa 60
ttgacatctc taactctgac ttctctgtct aaactactgt tgcttgaatt tcccaaaata 120
tctgaactcc atatatctga acctaactca taacctctct ttggcaagcc tgttgctgct 180
ttcctatttt tactattcta tctcagggcc ttattcaaag ctcaagcctg gattatcagg 240
acagttttgc taattcactg ctctactttg tctctccttc gaaaccattt ttacccacta 300
ccatgaaaat ggctctctag aatctttatc ggacaaaggt aaaatttctc aattcattat 360
taccaacctt ctaaaatcca gcttcaatct gcctttcttc agactaacat ctcattatcc 420
cccacaaata ctggtctcac taatgttcct tgaagagctt gttttccagc ttccataact 480
ttgctctaaa tgcccaccct ccttggcaat actttccctc cttcacctat cctccaccca 540
gctttcangg ttggggtcag attccatgag gcacttactg atctctttgn cncaagggaa 600

0500259A1 050208

ttgttggcct cctctgtccc actcatctgg cattaatcct aaggctgcct tatatctctt 660
aaagggtatc cancttaaca catat 685

<210> 28
<211> 724
<212> DNA
<213> Homo sapiens

<400> 28
gtcactgact aatccataat actaattcag cttctttgtc cgagtgggag ccagaatttt 60
aaaattgtta caggctaaaa tggtagagtc cacctgagct ggatgtgaag gggacaggga 120
gaaggagcaa gaagggaagt catccttccc cacagggctc catgtgcctc tgggtgcaac 180
tttgaacttt gaacctgaaa cttgcactgc tcccctccac tcccttctcc actttccccc 240
tcctgctcag gccctgtgta tgtggactgc agctgggggt aagggacaga ggctggtact 300
ggggcaccag aggtcaaggg ggaagtgggg tgttgagcaa gagagagctg ttcttgtttg 360
gtactgagca aagcctacat ccacaagcag ttttctgtct ttccagattc ttgaactctt 420
ctgtgggcaa ggagttcatg aactctttag aactggaagc aaccttagag cttttctagc 480
tccatgtttg taaacttttg taagctatgg aacacttact tcaaattgat gcaggatttt 540
tgctccttag ttcagctaaa tccaggttct tgtctcacaa ccaggaaaaa ttagacatgc 600
ggacacattg aagggtgagg caaggcaaga atttagttaa gcganaggga aaactctcgg 660
naaaagagaa ggggtttcct ccaaagcagg gtttcccctc ctcaanaagt tttgaaatta 720
ccca 724

<210> 29
<211> 718
<212> DNA
<213> Homo sapiens

<400> 29
gttgaaaaca gtttttgaat agaacctgtt gagtccacca atataataaa atcagctgtt 60
tgtttttgaa ataaatacat atttatttca atataataaa atcagctgtt tgtttttgaa 120
ataaatacat atttcaaaaa gtataaaatt ttagttgttt cagcgcttct ttttactctt 180
gtgtcccagt ttgcatgata aattatatag tattcacact ttaaagacat ttctcataag 240
ttatatgaga tttttctgct tacatcctgt tgaccagaat ttaattatat agccatacct 300
agctgtaagg gaagctagaa aatgtaattc ttattgtagg tcatcatgga tccagccaaa 360
aatctggaag atacagataa aagatactag gagacaagta acattctgcc ctaccttctc 420
atcatgtgtt tgcatttttg gctagcacat atactcatga ggtagacctg cggaatttaa 480
gggagaaagt agtatggtac ctttaatatc taatttatat tcatattttt ttaaaagcta 540
aagtaaaaaa tgaattgatc ctattaagca gatattagag aatcttgggt caggcatggt 600
ggctcatgcc tatcatccca gtactttggg agatggaggt gggaggatag cttgagccca 660
ngagttggga gaccagcctg gggcaacata gcaagaccct ggtctctaca ggaanana 718

<210> 30
<211> 906
<212> DNA
<213> Homo sapiens

<400> 30

0050205450 : 07/20/2000

agaactcccc tgtttcccga gtgcatagga aagtgcttag cattgaatgt ggagcgatag 60
aatgaacaaa gaaatgacaa aatgactagg tggatgaatg catagcttaa tatcagcgag 120
gcaggaagta aacaaagaga cactgagcac caagtaattc aatacaattc atcatgagaa 180
cttatcttta agctcctgtt tcatgaggtt agatactgtc caacatggtt cttacagcac 240
ttgttttagc tgacagcact ggcattcagt gaaaattaca gtgggcttga gtatctttgg 300
aaataacggt tttgcaaatt tgattaccat taaacagcct ttataaaaca cctacctgag 360
taggaatgga gtatatatgt tagccaagac ttaattattc atctcaggaa ttggcacact 420
atctgttggc taaagccatc ttcctgtcta cttaccttat ctgtttttat agagcccata 480
ttctaaaaat gatttttaca tttttatatg tttggggaaa aaaattcaaa agaatgatac 540
atgataatta catgaatttt gaatttttt gcccaccaac gaagttttat tgggacacag 600
cccgggaaac aacaacaaca aaaatgatac tgaaaataat aaatctattt atggacaaaa 660
gaataggagt caaaaatang gaggcaagag agcacactgg gaatttaggg aaaaagaaag 720
aaaggnaatt tttggngcaa gaatcatcat taatgggtgt gatttgaggg gatacatggg 780
taatgaacat ttgctaantt tttaaattac acaaaatcca tataaatatn ttactttgat 840
aaatataaat atattaatat ngttaaaaat taaacacttc caataacaaa tcccttgaca 900
cngggt 906

<210> 31
<211> 698
<212> DNA
<213> Homo sapiens

<400> 31
gaggcccagc ccgcgcggcg acgtctccgc gtggcgtcac ggcaccgact gacggccacc 60
caccatggcc gcagaccagc gcccgaaggc cgacacgctg gccctgaggc aacggctcat 120
caggtacccg ggcgggggcc gggcggcggg gggcgcgggg ctgcgcggag gggcacgcgc 180
acgcacgacg cacgcacgca cgcactacgc acgcgcctcc ggctaggaag ccgctgctac 240
ccatcccgtc cggccgctgc cccggccccg ctggagcttc tagggcccga ggcgggcggc 300
gccgttgggc agtcccggcg ggtggtctcc ggggccgcct ccccgacagc gccgtctcca 360
ggccgcccag ttcaggagac ggccccgccc tcaccgctgt tcggctgtgt cagcctcgct 420
tggcagcctt tactccggag aagaccttca ccctggcgcc tgagaggacc tcacccaggg 480
tggcccgtca gcagcacctg ggcctggctc gagagtgacc tgggaggggg ctgaaagggc 540
agacaaggga gagtcggggg agtcggttca caggcagcac acttgacctg tgaggggccc 600
ctcggtggga cggtgggtga ggtcgcctcc cactggaact taagggcttg gcacccagcg 660
aaggggcaan aaggaccaac gttggcttgg naaangga 698

<210> 32
<211> 827
<212> DNA
<213> Homo sapiens

<400> 32
gactttggac tcacgtaggc ataggagaac gaaacttctg tacattttaa tctgaataat 60
tcttcaggat ttaaaattaa ttggctctgg cttggttgga ccgtactcgg atctcgccac 120
ctctgcgttt cccgagtcac tggcgaagag gtcccagttc ctctgggaat cgtcctgtat 180
gcaacatctt cacaagagtg gcaggcagtt gaatctctgg ccttcgtggg accactggac 240
atctggcaga gaaccaggaa accacggttc ccttctgtga gtccctcagc cggaaaacta 300
caagctcctc atgcagctgc tgtctacaga ccccctggac tgcctgggga agtgagtcgg 360

0050-3050-0200

agctcctgca gcagaggggt ggaacagcta cacgaagatc cgaaggtggc caaaaataac 420
agcgctttcc agatgaggga gccagttgtc cagcacagtg tcatgggaca gtgggccctg 480
gtgccacaat gcccggcatc tccaccagat acagctttga gatcttcatg atgaagcttg 540
ctccaatcca agggctgtca ngtggggttt gcggttcagc tgctaacctt tctttgatca 600
aaatcctgtc ttcactggct tcaagaatct gtcttcactg gcttcaaaac tgggatgaag 660
gaggctcctt antggagagc aaagcaaaga gaaactcaaa ttggntcata ttaaagaaga 720
gaaaggatgg atttgtttag acaacacaaa cctaggaagg gtttganaag tganacaagc 780
tggggttatg gatgaacggg ggcaattgga atgtngaaat tgaagca 827

<210> 33
<211> 849
<212> DNA
<213> Homo sapiens

<400> 33
ctgagagaca ctgcgagcgg cgagcgcggt ggggccgcat ctgcatcagc cgccgcagcc 60
gctgcggggc cgcgaacaaa gaggaggagc cgaggcgcga gagcaaagtc tgaaatggat 120
gttacatgag tcattttaag ggatgcacac aactatgaac atttctgaag attttttctc 180
agtaaagtag ataaagatgg atgaatcagc cttgttggat cttttggagt gtccggtgtg 240
tctagagcgc cttgatgctt ctgcgaaggt cttgccttgc cagcatacgt tttgcaagcg 300
atgtttgctg gggatcgtag gttctcgaaa tgaactcaga tgtcccgagt gcaggactct 360
tgttggctcg ggtgtcgagg agcttcccag taacatcttg ctggtcagac ttctggatgg 420
catcaaacag aggccttgga aacctggtcc tggtggggga agtgggacca actgcacaaa 480
tgcattaagg tctcagagca gcactgtggc taattgtagc tcaaaagatc tgcagagctc 540
ccagggcgga cagcagcctc gggtgcaatc ctggagcccc ccagtgaggg gtatacctca 600
gttaccatgt gccaaagcgt tatacaacta tgaaggaaaa gagcctggag accttaaatt 660
cagcaaaggg cgacatcatc atttttgcna aagacaagtg ggattgaaaa ttggtancaa 720
tgggggaaat caaatgggat ccaatggctt tttccccaac aaacttttgt gcaagattta 780
ttaaaacccg tttacctcaa gcccccaacc tcaagtggca aaangcnact tttaaggaac 840
ttttgaaan 849

<210> 34
<211> 245
<212> DNA
<213> Homo sapiens

<400> 34
tactaaatga tgtttatttc actatatccc atgtgctctg actctgagac ttcaaggttt 60
gaaggggget aaacatgaaa tacaagttcc cctggaattc agactggttg aatccaagca 120
gtttcactgg ccaagaaaac tttatgtttt ggccgggcac agtggttcac gcctgttaat 180
gccagcactt tggaaggctg aggcgggcgg atcccctgag gtaaggagtt ggggacatcc 240
nngnc 245

<210> 35
<211> 820
<212> DNA
<213> Homo sapiens

0950203 - 020200

<400> 35
aatcagctat ttcatgcagt gcaaagattg caaagagtac aaaaccagct gaaaagcatg 60
cgccaagctg cagcagatgc aaagcctgaa agtttaatga agaggctaga ggaggagata 120
aaatttaatt tatatatggt aactgaaaaa tttcctaaag aattagaaaa taagaaaaag 180
gaattacatt ttttacaaaa agtagtttca gagccagcta tgggccattc tgatcttctt 240
gaacttgaat ctaaaataaa tgaaataaac acagaaatta accagttgat tgaaaagaaa 300
atgatgagaa atgagcccat tgaaggcaaa ctctcactgt ataggcaaca ggcatctatc 360
atttcccgta aaaaagaagc caaagctgag gaacttcagg aggccaagga gaagttagcc 420
agcctagaga gagaagcatc agtaaagaga aatcagaccc gtgaatttga tggtactgaa 480
gttttaaagg gagatgagtt caaacgatat gtcaataaac ttcgaagcaa gagtacagtt 540
ttcaaaaaga agcatcagat aatagctgaa cttaaagctg aattcggtct tttgcagagg 600
actgaagaac ttcttaagca acgtcatgaa aatattcaac aacaactgca aactatggag 660
gagaaaaagg gtatatctgg atatagttac acccaagaag agctagaaag agtatctgca 720
ctgaagagtg aaagttgatg aaatgaaagg gacgaacatt gggtgatatg tccgaaaatg 780
gggaaaaaaa actgtattca atggnaanct naaaaaggaa 820

<210> 36
<211> 884
<212> DNA
<213> Homo sapiens

<400> 36
gttgacccgc ggcgttcacg ggaactgttc gctttagtgc cggcgccatg gggtcggagc 60
tgatcgggcg cctagccccg cgcctgggcc tcgccgagcc cgacatgctg aggaaagcag 120
aggagtactt gcgcctgtcc cgggtgaagt gtgtcggcct ctccgcacgc accacggaga 180
ccagcagtgc agtcatgtgc ctggaccttg cagcttcctg gatgaagtgc cccttggaca 240
gggcttattt aattaaactt tctggtttga acaaggagac gtatcagagc tgtcttaaat 300
cttttgagtg tttactgggc ctgaattcaa atattggaat aagagaccta gctgtacagt 360
ttagctgtat agaagcagtg aacatggctt caaagatact aaaaagctat gagtccagtc 420
ttccccagac acagcaagtg gatcttgact tatccaggcc acttttcact tctgctgcac 480
tgctttcagc atgcaagtag gtatttcatt aaacattcag aaaagttacc aatttacaag 540
tgggtttttc atccccaagg aatacttcta acttagttga tatcaattca gagcatattt 600
tcccctagaa ataatattag gaatattggc caagtgacta tattcccaag tttatcccat 660
aatgtancta acaacttgga actagtgttg ccaagaattc cactagcaaa tagcagctgt 720
atatatatgc tgggaantct gatttcantc tgccttttgt aagagatgat atctgtcatt 780
aaaaacagtc ctcacaatga gaattttccg gctcaaaatt ttttaaaaaa ggtactgggt 840
tggggccaan gcngtgggtg ggtncccgcc tggtaatccc caaa 884

<210> 37
<211> 917
<212> DNA
<213> Homo sapiens

<400> 37
aatatcagaa gagagcaatc aaggtagctt attaactgtg ccaggagata ctagtccttc 60
tcccaaacct gaggtattct caaatgtgcc tgaaagagac ctttcaaatg tatctaacat 120
acattccagt tttgcaactt ctccaactgg agcttcaaac agcaagtatg tttcagctga 180
tagaaatctc atcaagaata ctgccccagt gaacactgta atggacagtc cagtgcattt 240

0356345 : 07/12/00

agagccatct agtcaggttg gtgtgatcca gaataaatca tgggagatgc ctgttgatag 300
actagagaca ttaagcacca gagactttat ctgcccaaat tctaacatac ctgatcaaga 360
atcctctctt cagagttttt gtaattctga aaataaggta ttgaaagaaa atgctgattt 420
tttatccctg cgccagactg aactgccagg aaactcttgt gctcaggatc cggcatcctt 480
tatgcctcca cagcagcctt gctctttccc cagccaatca ctttcagatg ctgaatcgat 540
ttctaaacat atgtctttgt catatgttgc taatcaagag ccaggtattt tacaacaaaa 600
aaatgcagtt cagattatta gttctgcttt agatactgat aatgaatcta caanaagata 660
caagaaaaat acttttgtcc taagagatgt tcaaaaaaca gatgcctttg tcccagtgta 720
ctcctgacaa gcactattca agaagcatca ccaaaacttt gagatanctt atactttacc 780
tgtgttacca tcangaaaan ggactttaat gggaagtgat gcctccaacc aagctaaatt 840
cacattatgc atttaacaaa ctaacttaaa gtcctccagt ggncatgaag ttgggatanc 900
acaactggta cccaagg 917

<210> 38
<211> 743
<212> DNA
<213> Homo sapiens

<400> 38
tctattattg atttcttatt taattttggt atagccagag aacaccattt atgtggatga 60
tctcggctca ccacaacctc tgcctcctgg gttcaagcag ttctcctgcc tcagcctccc 120
gagtagctgg gattacaggc atgtgccacc atgcacggct agttttgtat ttttagtgga 180
gatggggttt caccatgttg gtcaggctgg tcttgaactc ccgacctgag gtgatccact 240
gcctcagcct cctaaagtgc tgggattaca agtgtgagcc accacgcccg gccttgtgtg 300
gttttaattt attaaaaatt gttaaagttt actttatgac ccagaatatg atctatctgg 360
gtatatgttc tgtgggcact tggaaagaat atgtattctg ttgctcttga gtagagtgtt 420
ttataaatgt ccgttatatt aaaccagttg ataatgttat ccaggtttta tatatccttt 480
ttgatttcca tctatttgtt tatcagttat tgagaacaga gttattgaag tctcccagtt 540
atgactgtgg atttttccat gtctctttta gttctatcaa tttttgcttc atttattttg 600
ggatctttgt tagttgcata ctanatttca gtgtttatct tcttggtgaa ttgacccttt 660
tatcantatg taacttccct aaatttagat cttaaantta aaatagattt ccttaaaacc 720
atangacatt tgagaaggta aac 743

<210> 39
<211> 707
<212> DNA
<213> Homo sapiens

<400> 39
cccaacatct gtgctgatcc tgctaggtaa tgacgcccct tccttatcgt tctagagtca 60
agcctagatc ccctacaaat acccatgcac acttagagct cactctggtt aaatgttcca 120
agaaggatgt tggatggtca cttggtatca tcccatggag ttcaggatac ccccgccctc 180
tgagcagcca ttcctctcct gagcacattc ccctagagaa gctctgcacg tgtgcacagg 240
caccagctgc aggagtgcca tccacagcac agctgtttat gaaaaaccgt aatcaaccca 300
aacatctgta tgaagaaaaa cgaagaaatg cagagtggca tgttcacatg atggaatact 360
atgcagctga gaacatgaac aattggagcc atggcatgaa tgaagctgag agatttgaag 420
cgtcaaccaa gtaagctgta ggagattaca tgtggtggaa gactagttta taaatctcac 480
agacaagcct taaagaaaat gtatctcttg aaataaatgt atacacacaa ttatacacat 540

0052-0345-0-0-0-0

atatatgata aacccttta aaaggcaagg gaatgatcaa taaaaacata aactgttccc 600
tctggggcaa aggcggangg caaggcatca agatnaacaa ggaagttgat ctgggttttg 660
aatttggggt tgtgtgtgca ctgggagtca aacanttatt tttacag 707

<210> 40
<211> 752
<212> DNA
<213> Homo sapiens

<400> 40
agtgcgcgtg cgcgtgccct cctggggcgt gctcgcggct ataaggggcg gaggctgggc 60
ggcgttgctc tgcgctctgc ggctgacggc gcttttgtct ccggtgagtt ttgtggcggg 120
aagcttctgc gctggtgctt agtaaccgac tttcctccgg actcctgcac gacctgctcc 180
tacagccggc gatccactcc cggctgttcc cccggaggtg agcggccctg tgggcttccc 240
cggctccccn cccccatcgc tagagtgctc gccgcgctag cagcctcgcg ttccagggct 300
gggggtgcgc cgccgggatc ctctctgatc gcccacgccc catctggggt ccccattcag 360
ccgtcagccc tgttttgtcc taaggtggtc ctaactagga tccacgtggc ccatcccacg 420
cccacaggtg ctgagttagg cacccctgcc atgccctccc agagcacctt cacgatctcc 480
ttgctgtccc aacacttagc gtgttgcgtg ttaactaccc tttgtctata aggtttgcaa 540
tgtggcccta gtatcttcca gggtacctaa cacattgcag atattcatgg tatgtttgtt 600
aaataaatga acttgataga tttgaccctc aaanagttat ttggacttgc aaaaagtttg 660
tagttaactc caatctgtga tgtgggaaaa gacttctagg cangttcctt tctcaagggg 720
natgttctta tattttccaa taaccaacaa nc 752

<210> 41
<211> 545
<212> DNA
<213> Homo sapiens

<400> 41
ctcgaccctg gacgtctacc ttccggaggc ccacatcttg cccactccgc gcgcggggct 60
agcgcgggtt tcagcgacgg gagccctcaa gggacatggc aactacagcg gcgccggcgg 120
gcggcgcccg aaatggagct ggcccggaat ggggagggtt cgaagaaaac atccagggcg 180
gaggctcagc tgtgattgac atggagaaca tggatgatac ctcaggctct agcttcgagg 240
atatgggtga gctgcatcag cgcctgcgcg aggaagaagt agacgctgat gcagctgatg 300
cagctgctgc tgaagaggag gatggagagt tcctgggcat gaanggcttt aagggacagc 360
tgagccggca ggtggcanat cagatgtggc aggctgggaa aagacaagcc tccagggcct 420
tcagcttgta cgccaacatc gacatcctca gaccctactt tgatgtggag cctgctcagg 480
tgcnaagcag gctcctggag tccatgatcc ctatcangat ggtcaacttc ccccanaaaa 540
ttgca 545

<210> 42
<211> 791
<212> DNA
<213> Homo sapiens

<400> 42
tacaactgct atataaaata tttacctgaa acaaaagttt cagaaaacgt ctttaatagg 60

0956459-070800

tgtagtgtac tctttttatt ctattaatta aaaagttggt tacaattgct aaaggatttc 120
atgacttagt ttgaataaaa ctaagtaggc caggcgcagt ggctcacgcc tgttatccca 180
gcactttggg aggccgaggc aggcagatca caaggtcaag agatcgagac catcctggcc 240
aacatgggga aactccgtct ctactaaaaa tacaaaagtt agccgagcgt gatggtatgc 300
acctgtaatc ccagctactc gggaggctga ggcaggagaa tcgcttgaac ctgggcggca 360
gaggttgcag tgagtcaaga tcacgccact gcactacagc ctggacgaca gagcaagact 420
ctgtctcaaa aagaaaanaa aataaagtaa ttcagcccta tctctcccag cagaggtaga 480
aacagagggc ctgaggcttg catggcttaa cccgaaaaaa tcagcgcctg gaatagaagc 540
tagatttttt cctaatctgc tctctaccac cttgcatctg ttactgtatg aattcctctg 600
gaagtgcttc tgttaagaca gacatgttca agtangtgtt cagtacttat tgggtatcat 660
aaatatgttt acattgagaa aaaatggcta tgaagggaga gttgagatga cagaaatgta 720
catagtcaaa atcagnctct gggtgctggg ttgaaatatg antgaggana gttggggcat 780
ctgggttagc a 791

<210> 43
<211> 683
<212> DNA
<213> Homo sapiens

<400> 43
aataaataat aatcttgtac tctcaaaact ctcagatctg ctgctttaat ctacctttca 60
tatttgtgcc agaattttct tttgtttttc aataacctat tttaaaccac agtttcttca 120
ctaaaacttt catctttttt ttatttttct ctttatcaaa atacaacttg actctgaagg 180
ccttttataa agtagctcag tgttttctaa attgtgtttt agaatgctgg ttccaaaaaa 240
tattaatagg gatttcctgg gggaaagagg cacaaccaaa ctccaggata tgctggttta 300
tgcagtttgg aacttctctg gtacttcaag gtgctaataa gggctgaatc taaatgtggc 360
tagtgttttg tcctctcatt tcacaaaact ccctttagtg gaacatctca ccttgttaac 420
tttgtgtacc aggatcactg ctttgcacaa ctccagggga cgctgttcac atacaacaca 480
gaatgaattg tgtttcctgg agttgagagc tgtgttgcat actgtagtat tgctgactgt 540
ccactgtgtg acggtcttag agtctggtgg tccctcatcc ttttgttgtg aatgtgtang 600
tgtttttcct ctcacctgat angaccctta ngggccagat gctgtgcttg atgcctataa 660
gtcctagcac tttgggaggc tga 683

<210> 44
<211> 761
<212> DNA
<213> Homo sapiens

<400> 44
aaagacaatc gcggccaccg ccaggtggaa cggcaggtgg gttcaggtac cagcctggcc 60
gggacccggc tgtgggacca acgcttccgt tccccattcc cctaccgagc tgggcagtta 120
gccagcccac tccaactctc ggaaccatgt ttgcagactt ggattatgac atcgaagagg 180
ataaactcgg aatcccgact gtgcctggga aggtgaccct gcagaaggat gctcagaacc 240
tgatcgggat cagcattgga ggaggggccc agtactgtcc ctgcctctat atcgtccagg 300
tatttgacaa caccccagca gccttggacg gcacagtggc agctggcgat gagatcaccg 360
gtgtcaatgg caggtcaatc aaagggaaaa ctaaggtgga ggtggcgaan atgattcagg 420
aggtgaaggg ggaggtgacc atccactaca acaagctgca ggcggacccc angcagggca 480
tgtccctgga cattgtgttg aagaaagtca agcaccggct ggtggagaac atgagttcag 540

0050750450

ggaccgcaga tgctctgggc ctgagccggg ccatcctgtg caatgatggg cttgtcaaga 600
ggctanagga gctgggagcg gaccgctgag ctatacaaag ggattacggg acacaccaag 660
aacctcctac gggncnttta tgagctgtcg cagactcacc gggcctttgg gggacgtgtt 720
ctcccctgat cggggtgtcg ggaagcccca ancaatcttt c 761

<210> 45
<211> 757
<212> DNA
<213> Homo sapiens

<400> 45
ccttattttt ttaatgcagt aatagatatt tgaataatag ctttactgag atataattca 60
cataccatgc aattcaccca tttcagtggt ttgtaggata ctcagacttg tacgaccatc 120
actacaccag ttttagaggc tttaatcacc ccaaaataaa ccctgaaccc cttagtcatt 180
gtctctaaat tccccccaccc ctcacccccc ggaaatcact aatgtccatt gtgtctctat 240
ggatttgcct atcctgaata tttcatatac ggtaaacgga atcaggtaat atgtgatctt 300
ttatcactgg catctttcac tgagaataat gttttcaagg ctcacacacg atgttgaatg 360
catcagaact ttgtttcttt ttatgggtga ataatattcc attgtatgca tagaccacac 420
tctgtttctc cattcattaa tggatgcatg ctaggattac cttcacttgc tagctcttan 480
gaatagtgct gctgtgaaca tttgtgcatg ggtttttgtg tggacttacg tttcatttat 540
cttgggcaca tacctagagc nggnttgctg agtaactcag tgtttaacat ttttgaggaa 600
cagccaagac tgttttccaa agcaagctgt ancatttcac attcccacca gcagcatatg 660
agggntcttg atttccccac gnttagttag tgttaagtga tacctcactg tgggtttggc 720
ttccattttt ctgatggggn aatgagggtt gagcaac 757

<210> 46
<211> 747
<212> DNA
<213> Homo sapiens

<400> 46
tatctgatga ccatgtcctc atcctgccta ttggacacta ccagtcagtg gtggagcttt 60
cagcagaggt ggtagaagag gtggagaagt ataaggccac tctgagacgg ttctttaaga 120
gtcgagggaa atggtgtgtt gtatttgaga gaaattataa gagccatcac ctccagctac 180
aggtcattcc tgtcccaatc agctgctcta ctactgatga cattaaagat gccttcatta 240
cccaggcaca ggagcagcag atagagctgt tggaaatccc agagcactct gacatcaagc 300
agattgcaca gccaggagca gcatattttt atgttgaact tgacacagga gaaaagcttt 360
tccacagaat taaaaagaat tttcctttgc agtttggaag ggaggtcctg gccagtgaag 420
ccatccttaa tgttcctgat aagtctgact ggaggcagtg tcagatcagc aaggaagacg 480
aggagaccct ggctcgccgc ttccggaaag actttgagcc ctatgacttt actctgggat 540
gactaaaaca aagggaagaa ctttttatga actccacagg aagtagtaaa gctttttttt 600
ttttttaatt aaaagaattt tttttgagac gggagtctcg ctctgtcacc caagcangat 660
tgcantggca taactgtggc tcactgtanc ctcaacctcc tgggctccgg gagttcctcc 720
caactcagcc tcaatgaatg gctggga 747

<210> 47
<211> 721
<212> DNA

0052345-020200

0030203450 - 040202

<213> Homo sapiens

<400> 47
aaaaaaaaaa aaagattgtc aaccgggaga aagaaatcct gtcaaattag ttccaggaag 60
ggtttgctca ggattggtgg tatgagaatt taactttaga aacggttctt gtgactgtga 120
agtccttgct attggatctc ttctaaatgt actgttggca caaagcaaga tggcctcatg 180
aagattcaca tcatgactta tagcctggct gaagtttacg tgataatgtg ctgaagaatt 240
catgccatca ctgatactgc ctggaagagg agtatctccc aatgagaagc cctccgtgaa 300
ttttcaggct gtgatgaaag caactggaat aagtcttcca gagagaaata agtatctgtc 360
ccattcagat gtctctcatt tctagattca gtggtctttt ctgcctccca atcaggttcc 420
tctgctattt tgttttcatc atcattattc tgctgaagtg agttctcctt ctgggctgac 480
acccttttctt cattttcctc acgctgggaa ctatgatcca cagcttcgtg cttttctctt 540
agtacctcgt tctccccgct cgcacatccg ccagcgtccg gcacctgagc cgtcggttcc 600
gcgggtgcct tctcctcttc cccggggtnc aaggggccac tccgagccgc tcgggagtcc 660
ccgcagcccc cctgcanagc ctgggctggc cgccgtccac nctgggcgcc gggctccctc 720
c 721

<210> 48
<211> 705
<212> DNA
<213> Homo sapiens

<400> 48
gaaaagagat gcaccatttt cttcttgttc tttggataag ctaagctcat tcccatcttg 60
gagctgttgc actggccctt gtgtggctgg tccctcctca tcaccagggt cccagctcca 120
atgtcatctt ctctgagaag ccgtccctga ccaggcttag ttgcttccca ccccagcctg 180
acacactcca gcccatcacc cagtcagtgt tatttgcttc atttttacat tatggtctaa 240
aattaacttg ctagtttact ggtttactag tttattatct gtctccttcc attatccctc 300
tccttccctc cttcccttcc ccttccttcc ttccttcctt ccttccttcc ttccttcctt 360
cgagacacag tcgtactctg tcaccccggc tggagtgcag tggtgtgatc ttgcctcact 420
acaacccctg cctcctgggt tttagcgatt cttctgcctc agcctcccga gtagctggga 480
ctacaggcac ccaccacgat gccaggctaa tttttgtatt tttattggag acagggtttc 540
accatgttgg ccaagctggt ctcgaactct tgacttcaag tgatccacct gtctcggcct 600
cccaaagtgc tgggattaca ggcatgancc actgcacctg ggcctttta ttattcanag 660
taaggacaca caggggacca acaattggtc nccttccaac tccag 705

<210> 49
<211> 548
<212> DNA
<213> Homo sapiens

<400> 49
gtgataggat gttaaccacc atgataaaaa cttacaaaag aataaaaatc actaggaaat 60
cagatgagaa cgagaaagaa ataaaatctt atcattacaa aaaccaccaa actgcaaaga 120
tagacactaa gagaggaaga aaggaaaaaa ggatatacaa aatgacaaca aaataaaaat 180
catatcaagt atcttctcag accacagtga aactagaaat taataccaag aataactttg 240
gaaactatac aaactcctgg acacatataa cttaccaaga ctgaaccaag aagaaataca 300
aaacatgaac ggaccattaa tgagtaacga gattgaatga gtaataaaaa gtcccccaac 360

aaagaaaaga ccaggactgc atggcttcac agctgaattc taccaatctt taaaaagaaa 420
aaatactaac tcttctcaaa ctattccaga aacttgaagg cgggggtgt gggagtggaa 480
tttgtccaaa ctcattctat gaggccagaa ttaccctgac accaaancca gacaaggnca 540
caactaan 548

<210> 50
<211> 680
<212> DNA
<213> Homo sapiens

<400> 50
ggacatttta tccttaaaaa aaagaaaaaa aaagaaaata tttaattttt aaataccaat 60
ttttagagta agaaattggt ttgatagtta tctctaatag tgtcaaatga gtatttttt 120
tccttttttct ctttttgaa tatcatggac tttggatgtt ttaaaatcca atattttacc 180
ctcagttaca gtcactattc atttttttatt gagatataat tcagatacca taaaattcac 240
cttttaaaac atacaattca acatctaaaa atgtattcac aaagttgtgg aaccaccact 300
actatctact tccagaatat tcatcccctg ccccccctgaa agaagccctg ccctcttcag 360
caatcacacc ccattactcc ttcccttcag ccgcaggcaa ccgctcacct gctagttctg 420
tcttgcagat gtgcctgttc tggacatttc gtataaatgg aatcagacaa tatgtggcct 480
ttcatgtctg gcatctttca gcacagtgtt tcgaggttca tgcatgtttg tagcacttca 540
tttctaatat tccattggat ggatatacca cattttgtac atcagttgat ggatacgtgt 600
acgttttana tggaacagtt cccatggctt ttccactcaa gttaggggtt cctggggtta 660
aagccaaggt anggnaaaaa 680

<210> 51
<211> 788
<212> DNA
<213> Homo sapiens

<400> 51
ggaatctaaa atccttaaaa atactctaat agccttgagt gaccaacttt ttttttaaag 60
cacagatgta attgtctaat gttctgatgg gaacgtaaca cttatttta tataaaaaga 120
gactgagtaa acaaacatta tagaaaaaaa gtgaagtttt ttagttgttt tttgtggtat 180
tcaaccagca agttgttttc tttcagagtt tcctccttca aaaagttata ttgcatttac 240
aaatgtttta caaggcagaa agtttgactg gatagttagt gtaaaagctt catgttgaga 300
tcttcacgta tcattctgct aaaccagaat atgttcagct gtgttactaa tttttcagct 360
taatcctcag tgcttattat ttacataaca ataacttttt atcagttaca ttttatttt 420
atttaaactg gccaaaagca aaattatttt atgttaaaat gtgtgctaaa ctatcccagg 480
aaagtattta atccaacatt gtaaatgaag tatcttgtac atataaattt atttcttttg 540
cagagcatta tattactgga tgtttaattt acaaaatagt tgggtaaatg ttccaacaaa 600
ctttaaagta ccttgaagtc aaattgtctg tttttgtttt gttgttgttg ttggccgttt 660
tcctaaggtg gttacattaa aactcctaac caagggaaag ggttctttaa ggaacaattc 720
ccttaagggg gataaaagtt gaaaaaagtg gtgccntttt ttttaanggg cttgaaagtt 780
tcanaggg 788

<210> 52
<211> 718
<212> DNA

09529450 - 070200

<213> Homo sapiens

<400> 52
gatcgcgttt ttccttgatt gtgcggctct gaatacagaa cagctgttag ccttgagttc 60
gttcctatgc ttgtatctca acaccgactt ccacgtgaag cgggtactga gcgtgggttt 120
tgacgttcaa gagtgttaag taagcctggg caacctaggg aggcccgatc tctacagaaa 180
aaccaattag cccgacatgg tggctcccgc ctccagtccc agctactcgg gaggctgagg 240
tgggaggatt acatgagccc gggagttggg agctgccatg agctatgacc atgccactgc 300
actccagccg gagccacagt gagtctgcct caaaaaaagt gcagtggctg gaactccacc 360
aacattaaca gagattcact ggctcttcag agaatcacag gggtgaagac aagattcagt 420
gacagggacg gtgtcaacag cccaccgagt tgaattgggt gtcttgtgta atagccctga 480
gcctggagca tagcaggggc cagaacgacc tcaaagtaca gaggaggcct tggagcttcc 540
tgctggaggg atacatgggc tagacagagc tttggaaagc ttcctcctcc aagggcccan 600
ccggaggagc aagaagatgc tggtagcctg acttagtgaa agagggacca gctcaagtat 660
ggggtgacaa gacancaanc cttttaaggg gggaaaggga ctaaggctgg ttaatgan 718

<210> 53
<211> 732
<212> DNA
<213> Homo sapiens

<400> 53
tcaccaattt ggctggtctc gactcctggc tggtctcgac tcctgacctc aggtgatcca 60
cctacctcgg cctctcaaag tgttggagtt acaagcatgg gccaccgcac ccggcctatt 120
tataattttt tgaggaaact ttgtactttt tcccatagct gtaccatttt gcatttccac 180
ctacagtgtt caagagttcc agtttctcca catccttacc aatacttgtc ttttttttt 240
tttaatggcc atcctggcag atgtaaggtg atatttcatc acagttttga tttgcatttc 300
cctgataact aatgacattg gacttttttt tatatatctg ctggccacct gtatgtcttc 360
tttggagaaa catctattca agtttctagt tcatttttaa attggattat ttgctttttg 420
ctattgagtt gtttgagttc cttatctatt ttgaagctta accctatatc aaatgggatt 480
cttatatttt tgtttcatat tttgtagtat atcaggtcca tgaaattagc tatcttaagt 540
aagttgcttt tgtgttgttt cctatgacaa ttccgattag aatattaata caaacgtgaa 600
atgcagcttt taccaacaaa tgggctaagt tttaatgaat caataaaacc atattttgag 660
aagtttactc aaanagaacc taaaattcaa gttgaatata aagaaatggg ggttgnttgg 720
nttttttcct tg 732

<210> 54
<211> 820
<212> DNA
<213> Homo sapiens

<400> 54
tatatggttt tgtgtaagca gttaatgtaa atattgttag cattacaggt catacagtgc 60
tgtaacattt ttttaaatgt tgcacctact ttacaattaa aaaattggtc actcgcactt 120
caattttgcc catagagcca tttctttgtc tttgtattga agccaattca ttttttttaaa 180
tgaaggctag gccttctatg ttaccaaaat ttttattccc taaaataaac tttttaagaa 240
acaaatccaa gaatggaaac agatgaaaaa tttttttctt ctttaaagaa cataatagtt 300
cctgctggaa aaggaaatct aattttattt tgtgtccctt aacagtccta ggaagcacaa 360

09/13/2002 15:09 FAX

ggagaataaa ctaaacctct aagaaggttt taaaaattat ttcaaatgag tgaaaattaa 420
ctgagcagct tttgtgtgat ttgtcttgtt tgtagcatta aaagcaaacc agggttttta 480
tttatttaaa ggaacatttt tggcttgtac ttttcagtgc cattatgaat gaaaatgttt 540
taagaacatt catcccttgt gatatcatgg gccactttta gtcttttatt tggaccctga 600
ctttgagttt ttgctatgcc tgtttttttaa gtaaacacag ccttcttatc tgaacgtaac 660
actgcagaat tgcaggaaga gaaaagggca agttagttan ttcactttct gtaagtttta 720
gggaagantc ctaaaatcct acgaaggtga ccccaggttt tcattttaga ccaatgatag 780
cacattggtg gtnaaacttt tgggaaancc ttccaatgca 820

<210> 55
<211> 776
<212> DNA
<213> Homo sapiens

<400> 55
ttaaataatt agaatttcan gatcggtcaa aatactttgg catctgaaag caggagctta 60
gaaccagaat tccttctcag acataatccc agcatcccca gcccagtgct tttgctcttt 120
cgcaccaggc cagataactc tgtgatcatg gacgtatgca ggaatttgta aatatttggt 180
ggatgatagt cagattgcca aatggcagaa aggtttctgg ttttgcagtt tgaaaaggat 240
tatagagcgg ggaacaaggt aaatatctga aggtctgcat gatagtactt cttttcctat 300
tgctttggag ttatttttta tacctcttta cacaatgtgt gagactacca aatttacatt 360
gcactgttcc aggtgacttg tgcagttgac aaactatgac ccagcatagc aacctaggca 420
agaggagcct atataattca ttcttattcc tattttgcta tttcaacttg tttctgtttt 480
ataactgcaa atggcctccc aggggtagca actgttggca acttaaagtt aagccagtag 540
ttctcctcac tccatatcta tgctgcttgt ctttgcatat aaagtgagtg gatgctgggg 600
gcatggaaaa acaaaactat ttaagtgtgg gagaagcctg tgacttttgt agtcctttgg 660
ggaatttttc acatgaccaa gggccaaata gttctganng ctcctgtgcc aatcctggga 720
ataanagcaa tggggatgtt aagggagttg aaaaggggggg ccaatgggat ttaagt 776

<210> 56
<211> 770
<212> DNA
<213> Homo sapiens

<400> 56
aatagtggtg atgtcatgca ggcaatgatg gcggaagggg aggacgtggg atggtggcgg 60
agctggctgc agcagagcta ccaagcagtc aaagagaagt cctctgaagc cttggagttt 120
atgaagcggg acctgacgga gtttacccag gtggtgcagc atgacacggc ctgtaccatc 180
gcagccacgg ccagcgtggt caaggagaag ctggctacgg aaggctcctc aggagcaaca 240
gagaagatga agaaagggtt atctgacttc ctaggggtga tctcagacac ctttgccccct 300
tcgccagaca aaaccatcga ctgcgatgtc atcaccctga tgggcacacc gtctggcaca 360
gctgagccct atgatggcac caaggctcgc ctctatagcc tgcagtcgga cccagcaacc 420
tactgtaatg aaccagatgg gcccccggaa ttgcttgacg cctgccaacc agagctctgg 480
gcacagattc tggtggctcc ctgctggccc tcntgggcct ctgctcacac ctgggaaggg 540
gctctctaaa tcccggncaa aaactctgac ttgtgccaac aataggatga cccaagggag 600
aggaaaccta tcctcctcac cagaagaacc tgtgtttttc tgctgaacac ccactgttcc 660
tgaggactcc tgctgggaaa tcccaaggga tagttctagc ccttctgcct gtgtnaacan 720
aagctaaacc accaagtctc tctcgggggga aacctganac aacatactcc 770

0952948-0952970

0052945-072800

<210> 57
<211> 756
<212> DNA
<213> Homo sapiens

<400> 57
gtaattagct gggctcagtg ggcacactcc tgtagtccca gctacttggg aggctgaggt 60
gggaggatca cttgacccca ggagttggag gctgctgtga gctatgatga caccactgca 120
ctccagcctg ggcaacagag tgagaccctt ggcatcatac tcagatcctt ccaactgcta 180
ggatgaagca tacagacaag tgcccactct ggatataggt gttggtgttc tctttctgtt 240
tctatgggtc cagtctgtgt tcttttgtaa gatgtctggg caagccagac caaagtctcc 300
tatttttact tgctgatcag ggccatgaag aaaaatattt ctaggcttca gatctctgtt 360
tacaataccc atgttatgta tgtaaaacac accttccact aaatcttgaa aatttttgt 420
tgcaacactg gccataagga caggcaaact tgcccacaca ctcttggccc tgtttgtttc 480
tctcagctag ccagtcccac agctggagct tgcacacctg catctggatg tgcagcatca 540
ggtggtactg cacctcgatc cccaacaagt tgaagttttc tttggaagat tcctcagtgg 600
atgtgaaatt ctcctctaag agggaattac acctgagcaa caagggctgt ttcacaaatt 660
gaccaggtag acaaaccaag ccangccatt ttcctgggag ctccaaggga tgattcaaaa 720
ttcactgggg ggtccccctt aannaccggg aatttg 756

<210> 58
<211> 781
<212> DNA
<213> Homo sapiens

<400> 58
cttgaaaagt taacgtagaa aatatccaaa aagcagtatt tctagaaagt gtccaaaaag 60
cagtatttct ttcccttggt tgtgagagta actaattata taaatattac ctcaaaaata 120
catacactgg tatcacacag tctttctaca atgtttctgt attctgaaag ctaaatatta 180
agtactattt ttccattcaa atattcattt agaatttcct ttagaagatg gcagtgatta 240
taatattaat atgatttcat ttgttccagt gtttagacat gaaatcatct tccttgtctc 300
atgaaaacct aaatataaaa aaaaggaaaa tactggagtt tttatttctc ttgtctttgt 360
tacatcctct gtttattata attttagcac caacttcaca cctagctaat ttttttcat 420
cataaagtgg atgaaatgag caagtaccta aaaattttat ttcagacaaa agtcaggagt 480
tactgctaaa aaacagacat gtaggagaca ttcaacagga gtatgaaatg agagttagac 540
catatgggct gacaacacca taaataacaa gaaaagggag tgctgaaata ggagagaaca 600
gagcaaatgt tagctcaaag tatagactta gaaatatcaa agtaagagct atctggataa 660
atatataaga tattgagtgc ttgggaatcc tagcctacta aggtgaaaaa ttaagtccca 720
aatgtcagga ataacttaca ggaaaaatnn naaaatgcac aagctttaaa aatgggggca 780
a 781

<210> 59
<211> 643
<212> DNA
<213> Homo sapiens

<400> 59

ctttttgtga gatttgtgtt cttaagtctc atctctctga tcataagcca tgttccttca 60
caaaattccc aaatacatta aaagtgtaaa atgtgttaaa agcagacact taacataaag 120
taattcatac tcttctggca ttgcttaagt ccagtagtcc ccccgtcatg tggttttgct 180
ttcctgggtt tcagttaccc acaaccaact acagtcaaaa aataggtgag tacaggacaa 240
taagatactt agagagagac cacatcacat aactttcata gtatattttt agatttactc 300
tattttgttg ggaatctcat gttcctaatt tataaattag gtgnctaatt tataaattaa 360
actttagcac aacagataag tatgtatagg aaaaaaacat agtatgtata gggttctgta 420
ttatccaaat gcccatttca gccattcact ggggggtttt ggaacgtatc tcctgcaggt 480
aaagggagac tactgttctt agagacaaaa gatgataaga aatggtttta ggttgtattt 540
gtggcctcta ttgaagccca aggaaatcat aaaggatttc aacttgaata ccnccaaaat 600
gtcagggtta aatcnccata agtgcacata aaaaaatgtc naa 643

<210> 60
<211> 576
<212> DNA
<213> Homo sapiens

<400> 60
gataacataa tcaaagagga aaaaccaagc attggtgaat tcatcccttc ctttcaactt 60
ggcctctctc acccacttta cttttagtgc agagttcagt gatggctagc agctgtcccc 120
tgatatttgt tattccaagt atccattcat aggtctgggg agaggttgtg gcaagctttc 180
cctaaataaa tcacaccctt atcttctaag cttgagcagt ggagggagac ttttcattcg 240
aggtgggtgg ctgaacatca tcattcctgt tctggacttc ttgtaatcat gttggattca 300
gagggcacca ctctctcttg tacagatctg acctaacata gacatagact atagcagaga 360
tgaatccagg ctataacatt taacaagacc ttattaaaag cttcaagatg ttagccttta 420
tctgttccat atctagctta cttggttgtt tttgggggat cacatgtctg tcctccaaac 480
tggaaacgtc taactctcca ggagatgcag tagcattatt tgttggacag tggcacctac 540
tggnantttg taangtttat agcccaatgt gaaagg 576

<210> 61
<211> 462
<212> DNA
<213> Homo sapiens

<400> 61
cccgcctccc gcctcccgcc tccctccagc tgcgagtgcg gcctcggctg gcggcggcac 60
caggccacag ttgtaaggga tcttgtggct gtcaggatgg cagaggagca ggagttcacc 120
cagctctgca agttgcctgc acagccctca cacccacact gcgtgaacaa cacctaccgc 180
agcgcacagc actcccaggc tctgctccga gggctgctgg ctctccggga cagcggaatc 240
ctcttcgatg ttgtgctggt ggtggagggc agacacatcg aggcccatcg catcctgctg 300
gctgcgtcct gcgattactt cagaggaatg tttgctgggg gattgaagga gatggaacag 360
gaataggtcc tgatccacgg tgtgtcctac aatgctatgt gccaaatcct acatttcata 420
tacacctccg agctggagct cancctgagc aatgtacang na 462

<210> 62
<211> 824
<212> DNA
<213> Homo sapiens

09513045 - 070200

<400> 62
tgggtgccca ccgaccggcc tcgagcgccc cggcgggagg tttttctata tgagtggaga 60
agacagctgt taccagggag gtcatacaac attttttag gatgtctgaa gatgaagaaa 120
aagtgaaatt acgccgtctt gaaccagcta tccagaaatt cattaagata gtaatcccaa 180
cagacctgga aaggttaaga aagcaccaga taaatattga gaagtatcaa aggtgcagaa 240
tctgggacaa gttgcatgaa gagcatatca atgcaggacg tacagttcag caactccgat 300
ccaatatccg agaaattgag aaactttgtt tgaaagtccg aaaggatgac ctagtacttc 360
tgaagagaat gatagatcct gttaaagaag aagcatcagc agcaacagca gaatttctcc 420
aactccattt ggaatctgta gaagaactta agaagcaatt taatgatgaa gaaactttgc 480
tacagcctcc tttgaccaga tccatgactg ttggtggagc atttcatact actgaagctg 540
aagctagttc tcagagtttg actcagatat atgccttacc tgaaattcct caagatcaaa 600
atgctgcaga atcgtgggaa accttagaag cggacttaat tgaacttagc caactggtca 660
ctgacttctc tctcctagtg aattctcagc aggagaagat tgacagcatt tgcagaccat 720
gtcaacaagt gctgctgtga atgtttgaag agggaancaa anncttaagg gaaaggctgc 780
aaaaatacaa gcctgggaag ctccgccctg tggcaaggtg cacc 824

<210> 63
<211> 730
<212> DNA
<213> Homo sapiens

<400> 63
agtctgggtc tggagcctga gccctgcgga acctcggcgc ccggccccac cccgcccgta 60
cctgcactta tttattgttg ttatttctta ccgcggagcc ccgcagtcgg gtcctcccgc 120
ccgctcccgc gcagcgctag cattctccag tccctcagtc ccttcccgcg cggtgcgccg 180
cagccgaggc gatgcgccac attcagaaca tgtgcaccat cgccgagtac cccgcgccgg 240
gcaacgccgc ggcctccgac tgctgtgtgg gcgccgccgg ccgccgcctg gtcaagatcg 300
ccgtggtggg cgccagcggc gtgggcaaga ccgcactgtt ggtccggttc ctcaccaaac 360
gattcatcgg tgactatgaa agaaatgcag gtaatctcta tactagacaa gtccagatag 420
aaggtgaaac cctggctctt caggttcaag acactccagg tattcaggtc catgagaaca 480
gcctgagctg cagtgaacag ctgaatangt gcattcgctg ggcagatgct gtggtgatcg 540
ttttctccat cactgactac aagagctatg aactcatcag ccagctccac caagcacgtg 600
cagcagctac acctgggcaa ccggctgcct gtggtggtcg tgggcaacaa aagctgacct 660
gttgcacatc aaacaagttg accctcaact tggactgcaa ctaaccanca tgctangctg 720
ctcaattcna 730

<210> 64
<211> 746
<212> DNA
<213> Homo sapiens

<400> 64
aattataatg gatttgaaat ttgccctaac caagagtcac agacagaaaa aaggaagtta 60
atgtatctct tgatcactgt caagatgtgg tattgaacct tcaagatcct tttcagggaa 120
tatgtgagat caaaattttt atactggcac tatgatgtta tttgcctttt cctcatattc 180
acaagtgaac agtggagttt tacagaagct atataatgtc atgacatcac tgatgggtaa 240
tagaatgtgt gcttgtatat tccgaaactt tcagttccaa tttcttcgat caatgtaatc 300

0350250.0370000

ctcataagta aaagttattt gaggacctca gacattttta aaaatgtaaa gggggtgggg 360
tcaggctcag tggctcatgc ctgtaatccc agcattttgg aaggccgagg cgaacggatc 420
acttgaggcc aggagtttga aactagtctg gtcaacatgg tgaaaccccg tctccactaa 480
aacaaaaagt tttctggatg tggtggcaca catacctgta atcccagcta ctttggtggc 540
tgaggcatga gaatcacttg aacccagaag acaggttgca gtgagccaag attgtgcccc 600
tgcattctag cctgggtgac agtgagactg tctcaaaaaa taaaggtgta cagggantgt 660
atatttgaca acttggtatg tanggatgtg ctacctcnaa agttccatgc tgttacctaa 720
gttttcactc actactatat tttggg 746

<210> 65
<211> 836
<212> DNA
<213> Homo sapiens

<400> 65
agaaacctga attcagactg attaaagaag gtgaaacaat aactgaagtg atccatggag 60
gtgcgttcct tatgttacct ggggccgact accttcgctg tgattatttt gaaatagtgt 120
tggtttagaa atattgaaca tctgatattt tctcttagtt cttattttat aaaaattgtg 180
ggaattattt cctcagctat gagttcttat tagctggtca gaaataaaac atagttagct 240
tttaatggat ctagttggaa ttaatttatc tattaagtca ctgggcccaa caaaatgtca 300
tgatttttgc atatacaagt gaggattgtg gaataaaatt gtaacattaa tgtcagtata 360
aaaggaaata ttagaaacag taggaaaaaa tgaccattgt ataagtctct gtctaataag 420
ccactccact actaggattt atgatagggc tcccattcca atgatataga actccctggg 480
attctcacta agtatttatt ccacatccag aaaacaagta tggcatggag agttaggatg 540
tcaaatggcc ctctctctca accaagattc aggacatagc tattaccttt tagatcccta 600
ttgatatgat ttttgggggа tatgttctaa aaatgtttat gattgaatct taaatggtaa 660
tatttgtaga aatatagtta atcattacaa tgtcnagctt atgggatgta tagtcacaat 720
atgagggtaa aatcaaatgc atttgtantc ccctgctttt anaggccaat ttatttaaaa 780
aaatacacca aaaatcaatt ggatnggagt gccctgtggg aaataacttg aaaaaa 836

<210> 66
<211> 724
<212> DNA
<213> Homo sapiens

<400> 66
cttgaaaaaa gcgaattcaa agatgaaccc ctacttttcc gttttttttc ggatgaggaa 60
atggagggat caaatatgaa acatcgactt atgaaacatg acttaaaagt tgtggaaaat 120
gttatagcta agtcattatt gattaaatcc aatgaaggca gctatggctt tgggctagaa 180
gacaaaaata aagttccaat aataaagttg gtagaaaagg gatctaatgc tgagatggct 240
ggcatggaag tcgggaaaaa gatttttgct attaatggtg acctagtttt tatgagacct 300
ttcaatgaag tggattgctt cctgaaatcg tgtttaaaca gcagaaaacc tctaagagtt 360
cttgtgagca caaagccaag agagacagtg aaaattccag attcagctga tggacttggc 420
ttccagatcc ggggatttgg cccttctgtt gtgcatgctg tangaagagg aactgtggct 480
gcagcagctg gtcttcaccc tggacagtgc attatcaagg tgaatggatc aatgtcagca 540
aagagacaca tgccagtgtc attgcacacg ttacagcctg cangaagtac aggcggccaa 600
cgaagcaaag attccataca atgggtttat aatagcattg agaagtgctc aagaagacct 660
tcaaaaaatc tcantccaag ccccctggag atgaagcang ggatgcnttt gacctgtaaa 720

0950350-070800

agta 724

<210> 67
<211> 713
<212> DNA
<213> Homo sapiens

<400> 67
atgacaggtt cctgggccgc gccgcctcgc cctgcctggg cggggttggg acctttctgg 60
cacctgcgtc gaagccggcg gcaggatgga ctttgttgtc ccggtcccag accaccctcc 120
tccaccgtcg cctcccactg caaaaaggcc tggataagga acctaattcg agctaccctt 180
ctctgtgaag ctcgacggct gagaacgtca gggcttgttc ccaagtctct ttccagaggc 240
caggctttat gggagcatgg gttaccagcg acgcaccctg atcaagcaga gaaagagagg 300
ctggagaagg aagagtgaca gaagtaagaa gagagtgtct ctccacttcc actccagccc 360
cctacagctc atcctccagc aggcagccaa gggcactttt aggatctcac atcaggtcct 420
tgcctcacat tctgcactgg cttcccaagt aattaaagta aaatccaaat tccagctcac 480
agcttanaaa actcagcagg actggcctct gtcctatccc acaccccaac tcagtccctc 540
aagctcatct cctgtcattc ctgcccattt ctggacccca gccactcctc aaacanggtg 600
aggatcagtg tccaaggcac aatcttgaac tcatcatcgc caaatatgtg agcacttgat 660
gttggncttc caacctccan accgtaaggc agtacatttc cttgtaaaat tan 713

<210> 68
<211> 860
<212> DNA
<213> Homo sapiens

<400> 68
aaaaaactag caccggcccc gcatgcactc agcctgccaa gaccacagcc ttgtaaggat 60
aagttactta atttagtttc acttggtcat aaagcatgag acagcctcat ttactggctt 120
ctgcttttaa tgctttatca aggataagga ggaacttcta atcatttttt ttgaaacttt 180
tatatgtgtt aagttttcag ggcaatagac aaagacagat aatctacagg gtaacttccc 240
aacaagatag ttctgtcttg caagtcatca gtgggcctga aacatctgta caagaagaga 300
tatctgtgga tgctatgcat gtcttcattg atgaacatgg ggaaattaga tcctgttatt 360
taaaatctgg aaatcagaaa gaaggccctt tacagcctct accatcaaat aatgactgtc 420
tctctcaggc tcgagagatg caggtcagct cctccagtac cacaacttct gagagtcaag 480
atccgtcttc tggggaccct gccgtcagtg cccttcagca acagctgtta ctgatggtgg 540
ctcgcaggac ccagtcggaa accccacggc atgtgagtca ggatctggaa gcctcgtcat 600
gttcttcaac acaaggaaaa tttaaccgag agcagtttta caaatttatc attttccctg 660
gcaagtggat taaagtctgg tatgatcgac tgaccttgct gggcattacn tgatcgaact 720
gaagacatca agggagaatg tactggcgat tttactcaat ggcctggttt ccctccttgg 780
atttctgacc ttgagccaan ggttttgcaa agatatgtgg gtgctcccct tcngcctccg 840
tcaagggcaa gtggcantaa 860

<210> 69
<211> 806
<212> DNA
<213> Homo sapiens

0950450-050800

<400> 69
aataatttat agcctttccc ttaaatcaag atcgagttta aaattatagt ttgtcttttg 60
tcttaacagt tctgaatgct gtcctcaaag tatataatgt ttcatgtacc aagacccttt 120
tcacagtaca ataaacagat ctattcataa atttttgtta ttttataaat aaatgattac 180
ataatttag ttatatggca atggatttct tttagttggg ttataaattt ctattataaa 240
tttaaattac tgagttgtga atatatgcag ctttattaag agaatttaca aattcaatga 300
tataaaataa ggtaggcctt gattcacttg gttgtttttt acttatttaa tattccaaca 360
ttgctatctc taaaaatgca ttatcatgtt ttgaagggat ttgctcttga atttagctcc 420
agggagaaag tatcaaaata actttttttt ttttttttga gatggagtct ggctctgtca 480
cccaggctgg agtgcagtgg cgtgatcttg gctcactgca agctccacct cccgggttta 540
caccattctc ctgcctcagc ctcccaagta gctgggacta caggtgcccg ccaccacgcc 600
tggctaattt tttgtatttt tagtagagac gggctttcac catgttggcc angatggtct 660
cgatctcctg acctcgtgat ccgcccgcct cagcctcccg gagtgttggg gattacaggc 720
atgagccanc gcaaccgggc caaaataact tgagaaaaca gatngctctg cagtttaaag 780
gaagtataag tnccccgaac ctgaat 806

<210> 70
<211> 839
<212> DNA
<213> Homo sapiens

<400> 70
aaaaaaaaat agatgctgcg tccaagcgtt accgtggctg taccttggcc tctgcagcct 60
cctggtgggg gaggcagagg ccccgagccc cgtggatccg ctggagcgga gccggccgta 120
cgcggtgctg cgagggcaga acctggagtc cctgtcgccc aggctggagt gcaatggtgc 180
gatctcggct cgctgcaacc tccgcgtctg gggttcaagc gattctcctg cctcagcccc 240
ctgagtagct gggattacag tgttgatggg aaccattttc ggcatcctgc tggtgactgt 300
catccttatg gcattttgtg tctacaagcc cattcggcgt cggtgacagc cagacaagtt 360
cttcaatgag tatttgggaa taggataagt tgtgttgcac acaggccagt ggagaagttg 420
gaaccaaaac tttcctactt ggaaatgacc tttggtctgg acagttggta aatgctaaat 480
gaagtagaag aaaacatgta ctagacatta ttttttccta acactgtagc gcaaataatt 540
ggcccctgag tccgcttctc agtgtttctg actgtacttg ttaaaagtaa gacctgaaag 600
ctccaaaggt cagtgtaaag atggagtgtt catgagaaag aaaacatggt aaccttgtga 660
gtgcctgtaa gaaccacact gtaaagaact catcattaat gcttgaaaaa tgttattaaa 720
gaaaggagac ttaccaagca ggacattccc taattaaaga aaccaatttg ggtacagtgg 780
ggttaanaat cacaagattt tttttttaa acccaacctg aagtttancc taaaaatnc 839

<210> 71
<211> 793
<212> DNA
<213> Homo sapiens

<400> 71
agaaattttt tctgtgttgg acctaatgaa agtggacatg gccaactttg ctatcagtag 60
catcaggcct catctcatgc agcagtcagt tgaatacgaa aggaagaagt ttcaagagat 120
tttggagagg caaccaaatt ccctggactt tgtcacccag tggctggaag aagcctcaga 180
ggaccttatg actcagaagt ataaacacgc cctgccagtg gggggaatgg ctgctggctc 240
tggggacatg cccaggctga gccctgttgc tgtccagaat tacgcttacc tgaagcttct 300

0056456-0052000

gaagtgggac cacctccaga ggccgttccc cgaaacagtt ttaatggacc agtctcgctt 360
ccacgagctc cagttgcagc tggaacaact gaccatcctg ggggctgtgt tgctggtcac 420
cttcagcatg gcagcgccag gaatttccag ccaggccgac tttgctgaga aactcaagat 480
gattgtgaag attttgctaa cagatatgca cctgccctcc ttccatctga aggacgtcct 540
cactaccatc ggggagaagg tgtgcctgga ggtgagcagc tgcctctccc tgtgtgggtc 600
ctctcccttc aacacggaca aggagaccgt gctcaanggc cagattcagg ccgtggccag 660
tcccgatgac cccattcgca ngatcatgga atctcgaatc ctgaccttct tagaaaccta 720
acttgcctcc gggtcatctg aaagccaatt gcccacagtc cctgggggggg actcagtcca 780
gtttaanana naa 793

<210> 72
<211> 724
<212> DNA
<213> Homo sapiens

<400> 72
gcggtgcctg atggggccgt tgggcggccg gtagctgttg ctgttggggg acccccctcat 60
tcctgccgct gccgtccctg ctgcctcatg gcggccatcg gagttcacct gggctgcacc 120
tcagcctgtg tggccgtcta taaggatggc cgggctggtg tggttgcaaa tgatgccggt 180
gaccgagtta ctccagctgt tgttgcttac tcagaaaatg aagagattgt tggattggca 240
gcaaaacaaa gtagaataag aaatatttca aatacagtaa tgaaagtaaa gcagatcctg 300
ggcagaagcc agaaatgcgg tccttggacc tggcttctca gcttctccga aatcagatag 360
tgactgaccc agacaactta atggaggatg ctgcttgggc caagcactgt gatcagaact 420
tagtggcctc tgacgcccca ggggaagagg gaaccggcat tctaaaatca aaaaggactc 480
aggcagctga tcatcagcct atcttgaaaa cagttaaggc atcagatgag gattgtcagc 540
taaagaatca gtgaccggat acgagaaacc agtgaccttg aggactcctg ggatgaatcc 600
tcgggtgcag ggtgctctca agggacccca gctacagcaa gctcccacaa gccttttcag 660
angtgcaatt gctccctgtc agagcagccc atnggcaaac tggggtgtnt cccggggaag 720
ccaa 724

<210> 73
<211> 736
<212> DNA
<213> Homo sapiens

<400> 73
aagagatgac aaggtaacat ggacgtttag gctccaggaa actttaagac aaattaacgt 60
aaaaatggtt tctgggctgg taataccctt ggtgtttctg ttaaaaacat gaagaacggc 120
tgggcgtggt ggctcacgtc tgtaatccca gcactttggg aggccgaggc gggtggatca 180
cctaaggtcg agagttcgag accagcttga ccaacctgga gaaaccccat ctctacttaa 240
aaaattaagg catcctacat gcctgtaatc ccagctactc agaaggctga ggcaggagaa 300
tcgcttgaac ctgggaggcg gaggttgtgg tgagccgaga ttgcgccatt gcactccagc 360
ctggggaaca agagaaactc tatctcaaaa aaaaaaaaaa aaaaaaaacc tgaaaaacat 420
tttctggagg aaatttcatg gtttagatca caaggaattt cagataaagc aagccttgca 480
aaagatatgt tcatagtaaa ttgcagagct ttaggaaaca tttcactgaa atgagagtca 540
atgacaaata ggattagagc ctctaacagg ttatctgaga gaatattttt acgtttaaaa 600
ttgttaaaat aaacctaaag gaaggaatca accctaaaga tcaaggttgg ccgggtgcgg 660
tgggctcaag cctgtaatcc caaccctttt gggatcctga accaggtggn tcacctgagg 720

0003703-050220

ncanaagttc gagaca 736

<210> 74
<211> 651
<212> DNA
<213> Homo sapiens

<400> 74
cctacaattt ttagtttacc acttatctct tacagaagca agtgatttcc tacccctaga 60
tttttagtaa caccttaaaa atgtattgaa aacaaaaatt aagttacatg tcataatctc 120
agaagtagac atacagatat acctgtcaac atttttttctc attataaacc aatttcagct 180
cacatcagag ttataatttc aaagccagac atgatactgg tttaaaatga atgttatgtt 240
tttaatgttt cttctctccc caaaaagcag caatagtagt agatttaaca ataccataga 300
ctcatgacta tgaaatcgtg gctatttgtg ttaacatgtt gttcctgttg ttgatgtgat 360
acaaagctcc tgcaaaacag ctggcacagt ccagtgcact ggcttccctc actggactcg 420
gtaagtgttt tccatatttg tgagagggcc taaagggaaa aatcacacat acattgtctc 480
tctgcgtgtt ctattttgaa actgtattag tcctactcag tttataaaaa cctaggtctt 540
agggttatgt catcctgtct aaaaaggttt gcctattttt ttgactaacg cattcacagt 600
gagaaattta taaatgtgat gggtaattca tagnttaatg ggggcangnt a 651

<210> 75
<211> 691
<212> DNA
<213> Homo sapiens

<400> 75
gagtctgcga acggagcagc tgctgcagca gggcccatgg cggacaccca gtacatcctg 60
cccaatgaca tcggcgtgtc tagcctggac tgccgtgagg ccttccgcct gctgtcaccc 120
acagagcgcc tctatgccta ccacctgtcc cgtgccgcct ggtacggagg cctggctgtg 180
ctgcttcaga cctcccctga ggcccctac atctatgctc tgctcagccg cctcttccgc 240
gcccaggacc ccgaccagct gcgccaacat gccctggctg aaggccttac cgaggaggag 300
tatcaggcgt tcctggtcta tgccgcgggt gtttactcca acatgggcaa ctacaagtcc 360
tttggtgaca ccaagtttgt tcccaacttg cccaaggaaa agctggaacg ggtgatccta 420
gggagtgagg ctgctcagca gcacccagaa gaagtcaggg gcctctggca gacctgcggg 480
gagcttatgt tctctctgga gccaaggctt cgacacctcg gactggggaa ngagggaatc 540
accacctatt tctctgggaa ttgtaccatg gaagatgccc gggtccgcct cgaccgcatc 600
aagatccggt ctgtgggcaa agcctgctct aaangcgctt cctgcggana cttcaaggtg 660
ctgaaagtcc aacangggaa tttggccggg a 691

<210> 76
<211> 781
<212> DNA
<213> Homo sapiens

<400> 76
atcttcaaca aactttacaa aaacaagcaa tggggaaagg aatccctatt ttaacaaatt 60
gtgctgggag aactagctag ccatatgcag aaaattgaaa ctggaccctt tccttatacc 120
ttatacaaaa attaactcaa gatggagtaa agacttaaat gtaaaatcca aaactataaa 180

WO 2005/045050 PCT/US2004/036800

atccctagaa gaaaatctag gcaataccac tcaggacaca ggcatgggca aagattgtat 240
gatgaaatcg ccaaaaggaa ttgcaacaaa agcaaaaatt gacaaatggg atctaattaa 300
actaaagacc ttctgcatag caaaataaac tgtcatcaga gtgaacagac agtctacaga 360
atggaagaaa atttttgcaa tctatccatc tgacaaaggt ctaacatcca gaatctacaa 420
ggaacttaag caaatttaca agaaaaaaag aaccccatta aaaagtgggc aaaggacata 480
aacagacatt tctcaaaaga agacatacac atggccaaca aacaagaaaa aaaggtcaac 540
atcactaatc attagagaaa tgcaaatcaa aaccataatg agataccatc tcatgccagt 600
cagaatggtg attattaaaa agtcgagaaa caacagatgc tggcaagggt tcagagaaac 660
acttttacac tgttggtggg aatgtaaatt agttcaacca attgtgggaa gacangggtg 720
gtgantcctc aaaggattta ggaactggga aatatcattt gacccagcaa tcccantact 780
a 781

<210> 77
<211> 838
<212> DNA
<213> Homo sapiens

<400> 77
cagaaaagca aaaaccaaga ggtcaagaaa agcagtccag agatggagga tgctcgcgtg 60
ctttcaaaaa agcagcctga cgtgtcctct agagaggtca ttctgctgag ggaaggagag 120
gctgaaagaa agcctgtgag gaaagaaatt cttaaaagag aatctaaaaa aatcaaactg 180
gacagactta atactgttgc cagccccaaa gactgtcagg agcttgccag tatttctgtt 240
gggtctggct caaggcccag ctcagaccta caagcaagac tgggagaacc agcaggtgaa 300
tctgtggaaa atcaagaagt ccaatcaaaa aagcccattc cctcaaaacc acagctcaaa 360
cagctgcagg tattagatga tcaaggacca gagagagaag acgttaggaa aaactattgc 420
agtcttcgtg atgaaacacc tgaacgtaaa tcaggccaag agaaatcaca ttcagtaaat 480
actgaagaaa aaattggcat tgacatcgat cacacgcaga gttaccgaaa acaaatggaa 540
cagagtcgta ggaaacagca gatggaaatg gaaatagcca agtctgagaa gtttggcagt 600
cctaaaaaag atgtagatga atatgaaaga cgtagcctcg ttcacgaggt angcaaaccc 660
cctcaagatg tcactgatga ctctcctcct agcaaaaaga aaaggatgga tcatgtcnat 720
tttgatatct gcaccaagcg agaacgggat tacagaagtt cacgccaaat cagcgaagat 780
tctgaaaaga ctgggtgggt tcnccantgt ccgacatggg tccctccant gaagatta 838

<210> 78
<211> 800
<212> DNA
<213> Homo sapiens

<400> 78
gtgttactga tgtcaacctt aaataacaat atccangata atattgttac cagcggtgag 60
tccagctatc tggagaaact ccagaatggc aactttgtgg caatttcagt tctttgtctt 120
ctggaaggaa agatttcaaa tgagagacac aggcaaggtt taaagcagga gggagaattt 180
attttaagca aagcgagaat ttattagaga gagtacactt gaaggagagc catgtgggtg 240
acttgaaaaa tcaagtgtgt tgtttgcttc agtcacgccc cccacagcca tgcctgggca 300
gttgtttaaa ggtattttgt tcctaactgc ctcccccatt atcttcatgt acctggaatt 360
tgtgatacaa tgaacaataa tatagccaat ccatagctta tgttatttta atgtaaattc 420
tttgtaaaca acttaggaac agcctcttcc tttatcttta aaatcccact tgtaactgct 480
actaattgaa gtgtatattc agggcacttg aatctatgct cccactgagc tgttcttaag 540

0502050-0502800

ttttgggctc aggtgaactc taaacttagt catagaatan ggtgttagac atgagcaggg 600
caagagagag ggcccccaag aatgttgggc agttgtcaag ccatggtcag gcaattataa 660
atctgtcccc ctgaaataat gagcaagaga agggaggaac cccaganctg tctgggtcca 720
ataaagtaac ngncaagcag gcataaaacc gtccctccaa agataataag ttgggcatga 780
ctgggtgcct ggaaatgaca 800

<210> 79
<211> 808
<212> DNA
<213> Homo sapiens

<400> 79
tattgtacaa attcgccaat attcaacagc gttcttaaac tgaacaagca tatcaaagag 60
aatcataaaa acattccctt ggccctgaat tatatccaca atgggcagaa atccagggcc 120
ttaagccccc tatctcctgt ggccatagag cagacatctc ttaagatgat gcaggcagta 180
ggaggtgcgc ctgcacgtcc cactggagaa tatatctgta atcaatgtgg tgctaagtac 240
acatccctag acagctttca gactcaccta aaaactcatc tcgacactgt gcttccaaaa 300
ttgacctgtc ctcagtgcaa caaggaattc cccaaccaag aatccttgct gaagcatgtt 360
accattcact ttatgatcac ttcaacgtat tacatctgtg agagttgtga caagcaattc 420
acatcagtgg atgaccttca gaaacacctg ctggacatgc acacctttgt cttctttcgc 480
tgcaccctct gccaggaagt ttttgactca aaagtctcca ttcagctcca cttggctgtg 540
aagcacagta acgaaaagaa agtctatagg tgcacatctt gcaactggga cttccgcaac 600
gaaactgact tgcagctcca tgtgaaacac aaccacctgg aaaaccaagg gaaagtgcat 660
aagtgcattt tctgcgggtg agtcctttgg cancgangtg gagctgcaat gccacatcan 720
cactcacagt aagaagtaca actgcaagtt ctggtagcaa aaggccttcc aatggcgatt 780
aattttggtt agnaaaaaca ccttgnga 808

<210> 80
<211> 741
<212> DNA
<213> Homo sapiens

<400> 80
tttttaaata cagattttta tttaaccctc ttgcatatac atataaaata acaaaaaaat 60
aaaatattga gatatcatca agaaatttct acagcttcac attcaaactc ttcagcactt 120
tcagagctat tgatatgcat atgtccacct agtaccatct tctgtgcttt cagaattatt 180
ggtaaggctg catttcctga gtgctctacc acacttatgt ctggattttt tttacccagc 240
tacagaccca cactcctgca agatttgata cccttctatt tggcaaaact cagtttcact 300
tttctttcag tttaatcaca ggtccttaga agatcggacc tgtgattcta ttcaaagtca 360
gaaagagatt tctcacaaat tgatgtcata ttaacatgtc aatatgaaaa ttattgtttg 420
gtaaaccaga agtgacctgt ctgaagccct caattgtggt atttgtgtgt ttgtttttc 480
tttttcaaga ttctttttaa agaaaatata tggtagctgt tgtttaacat ttatctactt 540
acagagcgtt cagaggatgt tatatgttta ttaagtgctc aatactgtat tttaacctaa 600
tctgaatttt aatcataatc ctgcacaatg catggattct ggntgctttg aaatggttct 660
gttcaaagga cttatcaatg tctcntgctt tgagatgtat tgcntgggtg tgtagtagca 720
caaacgtacc accaataatg t 741

<210> 81

0956450.0700

0052946.0720800

<211> 889
<212> DNA
<213> Homo sapiens

<400> 81
aaattttagg agattctttg aataaacctc atttagtctc tctcctataa aaggaaaagc 60
agaacctcaa gtccacattt attttgcatt tgctctcttg ttcacattct tctctatgtc 120
aataaaagtt agatggcatt ttttatagct gtgtatcaaa tatgtgaata tagaattcca 180
actaaaatag caatagatgg gaaaactttc tagttcattc attgtcaaaa gtgagtgctg 240
agaggacatc tgaagcccca cctaaaagta aatcctcagc aggaaagata atgcagataa 300
attttgggtc caaattctta atctgggcaa agaaagaaaa caaacacact tactagatgg 360
atttttcata aaagttcctt tccatgctgt ccaaagtgat taaattagtc atccattctt 420
ttatctcttc tgttgataat catataagca actcctgaat ctatatgagt attcagtctt 480
ctttattatt cagaagattt gccattttag tcaactcaaa tatcagtact atttcatagc 540
atgctagttc aggttacaca aagcccacca ggtacacctg gaatctagcc agaatgcagt 600
ccaatcatga gcactttaaa catttacctc attttactat ttgtcttaga gctatggnaa 660
cattantctg ttctggagta tctcacactt cangagcatt agttgaagca gtacagatac 720
agttaagtgt cctctccgga cattcatttg ttaactttgg aaacaactng gattcaaaga 780
cccttaaggt taaaaacaaa ccttaatggc ctattttatg ggaagaaaaa acctggttaa 840
ttttaatccn gggtttaaaa agttaaaaan cggttggcct ccnaccaac 889

<210> 82
<211> 810
<212> DNA
<213> Homo sapiens

<400> 82
agaaacatcg agaaaaagaa gctcaaactg gaggattata aggatcgcct gaaaagtgga 60
gagcatctta atccagacca gttggaagct gtagagaaat atgaagaagt gctacataat 120
ttggaatttg ccaaggagct tcaaaaaacc ttttctgggt tgagcctaga tctactaaaa 180
gcgcaaaaga aggcccagag aagggagcac atgctaaaac ttgaggctga gaagaaaaag 240
cttcgaacta tacttcaagt tcagtatgta ttgcagaact tgacacagga gcacgtacaa 300
aaagacttca gaggggttt gaatggtgca gtgtatttgc cttcaaaaga acttgactac 360
ctcattaagt tttcaaaact gacctgccct gaaagaaatg aaagtctgag acaaacactt 420
gaaggatcta ctgtctaaat tgctgaactc aggctatttt gaaagtatcc cagttcccaa 480
aaatgccaag gaaaaggaag taccactgga ggaagaaatg ctaatacaat cagagaaaaa 540
aacacaatta tcgaagactg aatctgtcaa agagtcagag tctctaatgg aatttgccca 600
gccagagata caaccacaag agtttcttaa cagacgctat atgacagaag tagattattc 660
aaacaaacaa ggcgaagagc aaccttggga agcagttatg ctagaaaacc aaatctccca 720
aaacgttggg atatgcttac tgaancagat ngtcaagaag aagaaacagg agtccnttaa 780
gtccctggga ggcttctggt aagcacaaga 810

<210> 83
<211> 789
<212> DNA
<213> Homo sapiens

<400> 83

tagaggggaa gtcctatact gtgtgcttca tagtggtatt tctaatgata acttttgtgg 60
gaaagcagcc tcgttatagc tggatcctag attagtccag tgaattttaa taagaaatta 120
cactgttgta aactcacctc ttatgcattg gtcagtgatg agatatatat ataaatagat 180
agatagataa aatttgctct tatatagcca tttattcatc attggccctg tttggcccat 240
cctcagtgtg gctgtgagat tattgataac tggtcactgt cagataaatc acattctatt 300
aggaaacacc tatataggtt atgcagaaac atgcagaaat gccacctgtc catacttacg 360
tggctttaca taaacaaaag actgtcttgt ctttgtggtg actgaattta caacgtcctc 420
ccctggaaat ggaaaagtac ctatcaggag atgtatgaca aaagaaatta tcaagcctga 480
cttcatatat attatgaaca gtctagagga agcatctttc ttagaactaa ggaggtctgc 540
tgaacattgg ccacattctg gactttcatg aaaatcatgg acccagagtt ggggttaagc 600
cacttagaaa aagctgttga aaacatctca aagggcactg aacaattttt aaattacact 660
taacatgcca ggtatctang tatctagtgc ttttagcaat attatcaata ttatcaaggg 720
cccagcttct ttgngtcctt ccccttgcg attcccttt ttttttttt tttgcctttt 780
taaaaatnn 789

<210> 84
<211> 696
<212> DNA
<213> Homo sapiens

<400> 84
atttgacatg ctgcttcctt tctgatgggc tctaacttca gcttttcggt ctcattcaga 60
gtagagaaat taacagattt tactggcggg tgttttcaga ttaagaaact caaagggcag 120
ctggaggaga gacagaagat tggcaaacta gacaatcttc gatctgaaga tgatgtcttg 180
gaaaacggga cagacatgca tgtaatggac ctacaaagta aatgtcaatt cttgtgtaga 240
agtaaatgct ttcacatgtg ctgttttagt atacttgtgc tggcagagaa aactgtcacg 300
gcaaagaatg ccctcattcc ctcacatccc cacaaaagcc cttaaaaata aaagcacaag 360
gaggggtagg tagacagaac aatggtgttt ctctctgagc ctatgaaata gaacaggtac 420
ccaaaaacgt gcaccaagat accaccacat gttgtgccga tggaaaccac atttactttg 480
ctggatacag caatctttcg atctgttgat tgtatgaaaa aaaaaaaaat gaaaggcttt 540
tttcatgcta ataaactana aacagtctta agggagataa aattatgccc agtctctctc 600
cgccctttc cctacccct acnatctctt tgtcttcttc actcataagg cactctcttg 660
cctganggtt ccngccccaa gcacaagggg cgggaa 696

<210> 85
<211> 498
<212> DNA
<213> Homo sapiens

<400> 85
atttttagta gagatggggt tttgccatgt tggccaggct ggtcttgaac tcctgacctc 60
aggtgatcca cccgcctcgg cctcccaaag tgctgggatt acaggcgtga gccaccgcgc 120
ccgcccttct gtctttgtct ttcttattca ctattccagt tttcttcacc ttctcccttc 180
tggaaggcca ctcttctggg tggaggggac cagacttcag aaggtactga cctcttcttc 240
ttgttctctt tggggcactt ccttcctcct agccaacttc acgttgccag atgttgggga 300
cttcctggat gaggttctgt tcattgagct gcagcgggag gaagcggaca agctagtgag 360
gcagtacaac gaggaaggcc gcaaggctgg gccacccct gaaaagcgct ttgacaaccg 420
aggtggtggt ggcttccggg gccgcgggg tggtggtggc ttccagcgct atgaannccg 480

09629459.070800

aggacccccct ggaggnaa 498

<210> 86
<211> 750
<212> DNA
<213> Homo sapiens

<400> 86
tgagaagaga tttaaatttc catgtcttct tggaatataa tcaagatttg agtgtgcgag 60
gaaaaaataa aaaagagaaa cttgaagact tctttaaaaa catggttaaa tcagcagatg 120
gagtaatcgt ttcaggagta aaggatgtag atgatttctt tgagcacgaa cgaacatttc 180
ttttggaata tcataaccga gttaaggatg catctgctaa atctgataga atgacaagat 240
cccacaaaag tgctgcagat gattacaata gaattggttc ttcattatat gctttaggaa 300
ctcaggattc tacagatata tgcaagtttt ttctcaaagt ttcagaactg ttcgataaaa 360
caagaaaaat agaagcacga gtgtctgctg atgaagacct caaactttct gatcttttaa 420
aatattactt aagagaatct caagctgcta aggatctcct gtatcgaagg tctangtcac 480
tagtggatta tgaaaatgct aataaagcac tgggataaag caagagcaaa aaataaagat 540
gttctacagg ccgaaacttc ccaacaatta tgttgtcaga aatttgaaaa atatctggag 600
tctgcaaaac aagaacttat ggattttaag acaagaagag ttgctgcatt cagaaaaaat 660
ttagtgggaa ctggcagagt tangaantgg aaagcaattg caaaggggta atcctacaag 720
ttggcctgca anaaaactgg ccttggcaaa 750

<210> 87
<211> 696
<212> DNA
<213> Homo sapiens

<400> 87
ttcaagatgc ttgtaaatga tatcaaccgt ttatttagtc cacccctgaa gaactgaggg 60
tcctgggaac tgaaccatat caatgcaatc ttttctacat tattaactga agaaaaatgg 120
gtacttttta aacttttttt ttttaagatt aggaaacaaa aagaagtcag aaggagccaa 180
atctggactg taaggtgcat acctaatggt ttcccatcaa aactcttaca aaatttctct 240
tttttgatga gaggaatgag tagaggcatt gtggtgcaga agtctctagt gaagctttcc 300
caggcatttt tctgccgaag ctttggctaa ctttctcaaa acactcataa taagcacgtt 360
atcattcttt gttccttcag aaagtcaaca agcaaaatgt cttgagcatc ccagaaaact 420
gtttccatga tctttgctct tcatctgtct gcttttgctt tgactgaatc acttctgcct 480
cttggtggcc attgccttaa ttgtgcttta ctatcttcag gattatactg ggaaaagaat 540
gctttangta tcctgggccc tacttgttga aaaatttcca ttgaaaagct ctgcttttgc 600
aagctgatcg gggaatgcaa gtgggttttt gggtacccca tcnaagtngg aaaggtttac 660
tcaaacttta aattcctcaa gtcaaaaaat tggttn 696

<210> 88
<211> 660
<212> DNA
<213> Homo sapiens

<400> 88
attccgaaag aaacgtgtca ggcaagaagc gctagttcac gcctgtcatt ccaccgcttt 60

0356250-0356250

gggaggccaa ggcaggggga tcacttgccc cagaagtttg agaccagcct gggcaacata 120
gtgaggcccc tgtctctaca aaaaacttaa aatcaataaa caggtctcct tccttcctca 180
atagtcctgt tggtggctca cctctctgcc tctccagatg tgaggcagat ccacacgttt 240
agctattgag ataaggctgg gcgtggtggc tcacacctgt cattccggcc tcagatctct 300
tgtgcccagg agttttaaga ctagcctggg cgacctggct ggcaacatgg cctccacaaa 360
nntaaataaa acattttaaa tatataaaca ttgagataat agcatcttga tgcctgtctt 420
catttttgt cttctgtttt aaggactatt agagacaaac taaccaaaga taattctccc 480
ctcccacgtg gctcgtgctg ggacgccggc accgtgagat ggcgcccgtg gccanataga 540
agggtggcgt gtaaagcagg tggtcacccg tcactcgact tttcgcgtgc tggtgagggt 600
ggtcccatgt ccatggntaa ggctcacacc tgggcccatc tggtggctgt gncatgggna 660

<210> 89
<211> 639
<212> DNA
<213> Homo sapiens

<400> 89
gtgccagagg gccacgacca ggtgtcctgc caagcccacg tgaatgagct gatcaaaacc 60
atcatcatcc agcatgagaa catcttccca agccccaggg agctggaggg ccctgtctac 120
agcagaggag gaagcatgga ggattactgt gatagccctc atggagagac tacctcggtt 180
gaagactcaa cccaggatgt gaccgcagag caccacacga gcgatgacga atgtgagccc 240
atcgaggcca ttgccaagtt tgactacgtg ggccggacag cccgagagct gtcctttaag 300
aagggagcat ccctgctgct ttaccagcgg gcttccgacg actggtggga aggccggcac 360
aatggcatcg acggactcat cccccatcag tacatcgtgg tccaagacac cgaggacggt 420
gtcgtggaga ggtccagccc caagtctgag attgaggtca tttctgagcc acctgaagaa 480
aaggtgacag ccagagcggg ggccagctgt cccagtgggg gtcatgtagc cgatatttat 540
cttgcaaaca tcancangta agctctgctt ttcattttct gctcccctga aatgacttgc 600
ancaacccaa gcctcacccc tctgggccta aacccccaa 639

<210> 90
<211> 789
<212> DNA
<213> Homo sapiens

<400> 90
gtacgctttc ttagaaatgt gagcaaagag gagtgcctta aatgtatgaa aacaactgaa 60
attgaaataa tatgatgcat aagaactaat aaagcatttt cttatttttt aaaaatttgt 120
aggctgggtg cagtggctca tgcctgtagt cccagcactt tgggaggctg aggtaggagg 180
atcactgtag cccaggagac cagcctgagc aacatagtgg gacaccatct ctacaaagaa 240
ttaaaaatta gccaggcatg ggtgacatgt gcttgtggtc ctagctattc gggaggctaa 300
ggcatgagga ttgcttgaac tgcagtgagt gaggctgcat tgagccatgt tcatgccact 360
gcattccagc ctgggcaaca gagcaagacc cagtctcaat gtttttttaa aaattttatt 420
ttatctgtat ttgtatttta ttaatttttt ttctagacta gggtactgat aattatagtt 480
aactcttctt actaggtaac ttgtttttaa tactctaaat ttcatactat attactcaaa 540
attcagaatg taagccaaag agagataaag tatattaata aatgttaggt ttaaacttgt 600
atgatacatt tccaaatagg tattatatat ttttaaaata tataaatgtc catcttttct 660
gtattgatgc ctatacaacc ataaccccag aagtactctc atactgtgaa agtcantgct 720
aaattaggta ntcacttcct aaacacattt ctgaaaaaaa gggngtcctt ttagggcaag 780

0956fe3.0120000

atgacctaa 789

<210> 91
<211> 570
<212> DNA
<213> Homo sapiens

<400> 91
gagtgttcgg gacgcgggcc tgcaggcgcc atggtcttcc tcaccgcgca gctctggctg 60
cggaatcgcg tcaccgaccg ctactttcgg atccaggagg tgctgaagca cgccaggcac 120
ttctggggaa ggaaaaatcg ctgctacagg ttggcggtca gaaccgtgat tcgagccttt 180
gtgaaatgca ccaaagcccg atacctgaag aaaaagaaca tgaggaccgt aagcgtggac 240
ccgggacacc cgccggccag cgcactcgcg gcccctgcgt ttctgcgccg cgacccagct 300
agtgtgcagc cgcccggcca ccctcagccc cttcctttca taccttgctt cgaaactccg 360
acaaattatg tcgccccgca ggcaaactgt gggacatccg ttctcccgcc ccgccgccac 420
ccccactgtc acccccctgct ccagcccctc gcccgggcca ctgcagagcc gccttgacac 480
tctccctgcg tcgccagcca ccgccctant cgctgctgct ctcatccctc cggtggcttc 540
ccttcncttt ggnagctgaa gtcaacccag 570

<210> 92
<211> 640
<212> DNA
<213> Homo sapiens

<400> 92
ggctccgtga cctcctcggc ctcaggccct gcccaatctg ttgccaagat gttcagggca 60
gtggaggagg gcctgacgta caaattccat gcggcctgga gctccgtgtt gcagctgctg 120
tgtgtcttct tcgaggcgtg tgggagacag gcccaccctg tgatgaggaa gtgcctccag 180
tccctgtgtg acctgcgcct ctcccctcat ttcccccaca cggcggctct tgaccaggca 240
gtgggggctg cggtgaccag tatgggacct gaggtggtgc tgcaggctgt gcctttggaa 300
attgatggct ctgaggagac tctggatttc ccacggagct ggctgctgcc tgtcatccga 360
gaccatgttc aggaaacgcg acttggtttt ttcaccacct acttcttgcc cctggctaac 420
accctgaaga gcaaagccat ggacctggct caggcaggca gcacagtgga atctaagatc 480
tacgacacac tccagtggca gatgtggaca ctcctgcctg ggttctgcac aaggcctaca 540
gatgtggcca tctccttcaa agggctggca cggacgctgg gcatggccat cagcgagcgt 600
ccaanacctg agggtcaccg tngtgccang ccctgcgcaa 640

<210> 93
<211> 687
<212> DNA
<213> Homo sapiens

<400> 93
tgatattttg accttctcct ttgaattatg aatgttctta atggcatcta gaatggttaa 60
tactttcgca gaagattgtc aatttatttt gcccagatcc atcggaggaa taactgtggc 120
agctttagcc ctaggaaatg ttatttctta aataataaga ctttaaagtc aaaattactc 180
cttaatccat gggctgcaga ctagatgtat cagcagacat gaaaacatta atcgttttat 240
acatctccat cagagttctt gggtgactat gtgcattgtc aatgagcagt aatattttga 300

0962946.0972000

aaggcatctt ttctaagcaa taggtcttaa cagtggactt aaaatttcag taaaccatgc 360
tgtaaacaga tgtgctgtca tccagacctt gttgttcccc ttatagcaca taggcagagt 420
agattaaaca taattcttac aggccctaga atttttagta tggtaaatgt gcattgactt 480
caacttaaag tcaccagctg cattagcccc aaacaagaga gtcagactgt cctttgaagc 540
tttgtttcca tgcattgact tctctctagc tataaaagcc tcagatcgca tcttcntcca 600
atggnaagct attttgtctg catttaaaaa tccgttgctt agtgtattag tccattttca 660
agctgctgga taaagacnta cccaagg 687

<210> 94
<211> 597
<212> DNA
<213> Homo sapiens

<400> 94
agctttgtgc gctctgttac tatggacaag tggaaggaca ttgagcttga gaagatgaaa 60
gctggtggga atgctaagtt ccgagagttc ctggagtctc aggaggatta cgatccttgc 120
tggtccttgc aggagaagta caacagcaga gccgcggccc tctttaggga taaggtggtc 180
gctctggccg aaggcagaga gtggtctctg gagtcatcac ctgcccagaa ctggacccca 240
cctcagccca ggacgctgcc gtccatggtg caccgagtct ctggccagcc gcagagtgtg 300
accgcctcct cggacaaggc ttttgaagac tggctgaatg atgacctcgg ctcctatcaa 360
ggggcccagg ggaatcgcta cgtggggttt gggaacacgc caccgcctca gaagaaagaa 420
gatgacttcc tcaacaacgc catgtcctcc ctgtactcgg gctggagcag cttcaccact 480
ggagccagcc ggtttgcctc ggcaaccaan gagggcgcta caaagtttgg attcccaagc 540
gagtcanaan gcgtccgagc tgggccacag cctgaacgag aacgtcctca agcctgc 597

<210> 95
<211> 752
<212> DNA
<213> Homo sapiens

<400> 95
aacgttttgt tttaagttta ttttggcatt gagttaaata ttaacgccaa gattcagaag 60
taggtgacag acctagacta ttggttaaat tattcagatt gttttaattt taaatatgtt 120
tcttaaacat ctgagcaact ttttgtttga tacagatgat gtctaccgta gaaaagcctc 180
agaaagacag tatcagagaa ggctggaaga tgaatgagac tgaacttcag cagtcaataa 240
agtcaatatg aatttttact attggtttca gtgcctttta aaatatactt ttcagatctc 300
ttgttctgac acagcttgtc ctttatcagc tgcacaatat tccaataact gtttttgcaa 360
agaattttta tagttctgtc tctgcttgag tacttcccaa gtcactgctg gacagcactt 420
gtgggaaaat tatttcctcc taaaacactc actcgatgaa tctagtccat gaaatatttc 480
ttaaacaatt caaggatcaa tcaggatgct tttcaagtga agcccgaatt gttttcggca 540
atctttgttt ttaggcaact aattataacc ttatttactt ttttgcagaa ttcaaattaa 600
attatggaca cattctctaa tgccagatca tttaaaccag ggataattat gcaggttgta 660
tttccgccag ctactaagac tataaacttt ttgccnaggg tgggtgggaa aattccntga 720
nttggaccta cggcaatttc ctcaatggcc aa 752

<210> 96
<211> 808
<212> DNA

0050450.0042000

<213> Homo sapiens

<400> 96
atgcaattac aaatccaata ccattgangc ccttttggga cctatccctg gaattccctg 60
aacgctatca ctgcatagaa aaggggtttg tccctttgaa tcaaacagag tgcttgctca 120
ctgagatgct ggccaaattc acagagacag aggccctgga agggagaatc tacgcttgtg 180
accagtgtaa cagtgagtgc tgtgtggagg agggggcgta gtggggaaga ataattggaa 240
tatcagttta aggtgctgct ttgtcctctt tagtcaaaag taacactaat gatattgaat 300
ggttctaaag catcttttaa agatcttttt ctcccatttt tctaaaaaca aaaaaacatg 360
gacttgtttt aattatgtat taaaaaacaa aacaaggctg ggcgttgtgg ctcacgcctg 420
taatcccagc attttgggag gccaaggcgg acagatcact tgaggtcagg agtttgagac 480
cagcctgacc aacatggtga aaccctgtct ctactaaaaa tacaaaaatt agctgggcat 540
agtgggcana tgcctgtaat cccagctact cgggaggctg aagcangaga atcggttgaa 600
cccaggaagc ggaggggtgc aatgaagcca agatcgcgca ttgcactcca gcctgggcaa 660
cagagcaaga ctccgtttca aacaacaaca acagcaacaa atggaacaan gacctaggag 720
ttgattgacc tccctgaatt gcattangtt gtcaaccttg gtaagggatt ttaaaagttt 780
gngggctcct gaaatggggg actctgaa 808

<210> 97
<211> 681
<212> DNA
<213> Homo sapiens

<400> 97
ggaaacatgc agcatgtagt aatttatgac agcttctttc acttagcatg aggttttcaa 60
agttcattga tgtggtagca tttgtcagta ctctgtgcct ttttatggct gaataatatt 120
ttatcatatg gatttaccac attttatcat tttatttatc catcatcagt tgattgacat 180
ttgagttgct tctacttttt gagtattatc aataattctg ttatgaacat tcttgtacaa 240
ttttttggta gacatttatc ttcatatttc ttggatatat acctaggagc agaattgctg 300
cgtcagatgg taatgctgtt taacctttc aggaactgtc agactgttct gaagtgggta 360
cattatttta cattccaacc agcagtgtat gagaattcca gtttccccac atcctcatca 420
acagttgtta ttgtctgtct tttttattat attcatctgt aatgtgaagt gtttatctca 480
ttgtggtttt gatttacatt tccctgatgg ttgatgattt tcaacatctt ttcatatact 540
tattaggcat tatgtatcct ctttggagaa tgtctgttca gatcctttac ctactttaga 600
attggtttat ctttttaata ttganctgga atagttttta aaaaatatat ccnaanatac 660
aagtctctta tcaagataat a 681

<210> 98
<211> 549
<212> DNA
<213> Homo sapiens

<400> 98
agctggcccg cttgaggcgt agggggtggc gctctccgtt cggcggcgct cccatggcgc 60
acattaccat taaccagtac ctgcagcagg tgtacgaagc catcgacagc agagatggag 120
catcttgtgc agagttggtg tcttttaaac atcctcatgt tgcaaaccca cgacttcaaa 180
tggcctctcc agaggagaag tgtcaacaag tcttggaacc cccttatgat gaaatgtttg 240
cagctcattt aaggtgcact tatgcagtgg ggaatcatga cttcatagag gcatacaagt 300

0962946.02780

gccagaccgt gttagtccaa tcattcttgc gagtgtttgc caataatgca gatcaacagt 360
tggtaaagaa aggaaaaagc aaagttgggg acatgttggn aaaggcagca gagttaatga 420
tganctgttt ccgggtctgt gccagcgaca cccgtgctgg tatagaggac tctaagaagt 480
ggggcatgct gtttctggtg aaccanctgt ttaaaatcta cttcaagatc ancaaactcc 540
atttatgtn 549

<210> 99
<211> 738
<212> DNA
<213> Homo sapiens

<400> 99
ctttatcaag gaaattagca caccaagtct gacagaagag tagattgtgt ttgtgcttac 60
ccttcttctc ctaaaattaa gtgttagctt tcaaacttgc ttttgaagtg ctaagaaccc 120
tgatgataaa tgatgaacaa agcctcctgt ttacattgga agcatcaaaa cagcaggact 180
gggccaattc acccattcct gttgatcatt agacattaac tggttgtcca acttcaacca 240
catcaactac aaaatcctga agtgaaacaa agtctaagtt agttgacttt tctttgatta 300
gtctctagtg catttatcac tttctatgaa agaagcatct aatttagatg gcagttgatt 360
tgtgtcatgg gatttcttct gacaggaggc agagttatgt atgtgtttat ggcttctttg 420
cctttaaaag attaatgttg ggcaaatata aatcacaaga cctggatagg gggctgggaa 480
gatggagcag gagcttgcca gggtgatgga ttgagacgta ttttagagga ttttcattgc 540
tagaaaaaac actgggaaga tgtggcagag gggtggtggg gcagggacag tgaagagaga 600
tggctttttc tccctaagca cagagaaagg acaggatggg gcacttgagc cagggcaagt 660
ggctttctgg ctctgtttca gaagcaaaat gganattgaa attgggtaac ttcctgangc 720
ttctttcctg ncctgata 738

<210> 100
<211> 759
<212> DNA
<213> Homo sapiens

<400> 100
aatattttcc cctgtcttat tttctatcat ttcacatctt cttaaacaca tatattttta 60
aaagaggttt tgactcactg gtgaatttgt cttaaaatgg aaaaataaaa tcaaatataa 120
gaattttgtt atgaatcttt ggggaaacac aattagggaa tctaccttaa taggtaaacc 180
catgtaattt cttatttccg tctagttata ggaaaatact gagatacttg tgagatgttt 240
tctttttttt tttttccaac ttgtatacac gttgttctat aagtggttga ttgtttttta 300
ggaaaaaaaa attcagcatc tcaaatgtac ctttaatatt gcttctgatt tttgttgttt 360
tgctatcata gcgttaccta cctcacagag atgttttagg tcataagtat ttttcattta 420
atttttttc cccttcattt cctttttttc cctcctaagc tataaatata cagccttaaa 480
aaaaacactc agaaatttaa gtccaagaag cctgcttttc ttgatacctt tcaagtgcta 540
gattaataac atttttgtca ngtggttacc agaatggagg atacttgagc tgagttttgc 600
tagagtccaa gaatcatcta ttccaatttc tggggacaca tattttgtcc tggttaagag 660
agatatatna tgatgcctat ctgattccgg tgggtgggct gggctttgat gtatggtana 720
tgtgggcggg aatntgtgtg cgtgtgtgtg tgcatgtgt 759

<210> 101
<211> 579

0356350-020000

<212> DNA
<213> Homo sapiens

<400> 101
aaaaagagcc gagtgggaca aagcctgggg ctgggcgggg gccatggcgc tgccatcccg 60
aatcctgctt tggaaacttg tgcttctgca gagctctgct gttctcctgc actcagggtc 120
ctcggtaccc gccgctgctg gcagctccgt ggtgtccgag tccgcggtga gctgggaggc 180
gggcgcccgg gcggtgctgc gctgccagag cccgcgcatg gtgtggaccc aggaccggct 240
gcacgaccgc cagcgcgtgc tccactggga cctgcgcggc cccgggggtg gccccgcgcg 300
gcgcctgctg gacttgtact cggcgggcga gcagcgcgtg tacgaggcgc gggaccgcgg 360
ccgcctggag ctctcggcct cggccttcga cgacggcaac ttctcgctgc tcatccgcgc 420
ggtggaggag acggacgcgg ggctgtacac ctgcaacctg caccatcact actgccacct 480
ctacgagagc ctggccgtcc gcctggaggt caccgacggc cccccggnca cccccgccta 540
ctgggacggc gagaangagg tgctggcggt ggcgcgcng 579

<210> 102
<211> 769
<212> DNA
<213> Homo sapiens

<400> 102
tttaaaatta tgaaaagtaa ggaaattctt atttaagcaa ggttattaat tggacattac 60
tgtatttttg gtacctattg tatctgagag tctagagaga gtaatagaat cataacatta 120
ctattctaaa atagtatctt cattgtttaa accctattca cctccttttc ctattgcatt 180
tgacttttтc atagataaat ctgaagttat tatttttta aataatcctt tctacatggg 240
agcagtgtat attaggaaat tttcaattac tttggacctg caccttgca ttgtaggtca 300
gaacctacaa aaattccatc ttggaaaaca ttttagattt accttgtatt cacacacccc 360
tgcaaagtgg gtctttgcaa acaggaaagg taaaagattt atttttactg caaaatcatg 420
cctttatata ggattagtct gtggattatt tcaggcaaca atgagtagat ttttgaagga 480
aacttcataa cacagttttg gagccctatc ttctgtaaca catttccaac ctttggaaat 540
aaccttgatt ttccaacttt taacctgata ccaacanaaa tggacaaaga taatatcaca 600
tggaattatt ctgaagagcc agctgctgag aagttccagg agctgtaaat tagacaaaag 660
catccattta tttgggagta agttacaata tggcntanct taaaaaatat ataatgattc 720
agggaggtat tttaatggaa ccttatgtgg caatttatgg gngaactaa 769

<210> 103
<211> 686
<212> DNA
<213> Homo sapiens

<400> 103
agttaagtaa atgtagtatt ggctaagtta ctgtaagtcc tcatcttctg gtaggtcctg 60
taactctaat taggcatttg tacattttta gcagcaaaat tgcctcagca gagctcccag 120
ttttattccc agttgtggct gaaaagcaaa gccatggcat cagtatcctt gtgcaatcgg 180
aggttgctgg gctttcacca cctgtgttgt taaccttatt tcctggagga agaaacagat 240
gaaacaagtg cctaactccc tttatcaaac acagccaagg acagcctctt ttaacatgtg 300
acttcatact tgaggaaaag gagagttgac agctgtattt aaaaacccat ggagccgggt 360
gcggtggctc acgcctatga tcccagcact ttgggaggcc gaggcaggcg gatcacaagg 420

0502946.0270000

tcaggagatt gagaccctcc tggctaacac cgtgaaaccc cgtctctact aaaaatacaa 480
aaaattagcc gggcgtggtg gcgggtgcct gtacaggagg ctgaggcagg agaatggcgt 540
gaacccgcga ggcggagctt gcagtaagct gagatcgcgc cactgccctc cagcctgggc 600
aacagagcaa gactccatct caaaagataa atagataaan taaaaaccca tggaaatggn 660
ttaagaaaat ggntctgggt acacca 686

<210> 104
<211> 817
<212> DNA
<213> Homo sapiens

<400> 104
gattaaatgt tctgagtaag tgagtttgta gacattttct tgtaagaaaa tgttccatgc 60
tttactctgt tttggacatt ttcttttgaa aaattttgag atagaaacct taatatcatt 120
tcatatattt acagcatata gttaatttga gtagagtcaa attaatctta ctttagaatt 180
tgattactaa gtattagcat ggataataat gcttcttttg cttaaatgta aaaattaggc 240
cgttttacta ggtgtacttt gtcttaatca tattcctatt tttttataca gctgtgcaac 300
catattgctt ctgggaaaaa atgtcaatat gtgggaaact gttcctttgc tcatagtcct 360
gaggaaagag aagtttggac ttacatgaag gagaatggga tacaagatat ggagcaattt 420
tacgaactat ggctcaagag tcaaaaaaat gaaaaaagtg aagacatagc cagtcagtca 480
aacaaggaaa atggaaaaca aattcacatg ccaacagatt atgctgaagt tacagtggac 540
tttcactgct ggatgtgtgg gaaaaactgc aacagtgaga agcagtggca gggccacatc 600
tcctccgaga agcacaaaga gaaggttttc cacaccgagg acgaccagta ctgctggcag 660
caccgcttcc caacaggcta nttcagtatt tgtgataggg atatgaatgg cacctgccca 720
gaagggaaca gctgtaaatt tgcacatggg aatgccgaac tcatgaatgg ggaagaanga 780
agagatgncc taaagatgaa agccaacaan gcacgaa 817

<210> 105
<211> 773
<212> DNA
<213> Homo sapiens

<400> 105
ctggtttcaa gcaccccaga gggagttgta tcctttgtg tgtgccctgt ggaattttca 60
tggcaacata agttgtattt cttcatgact cactgccata ggaagaccac ccaaaacata 120
ccctcttctg taacccaaat ctcagcgtgt gtccttattt tccttgtttt cagcatgtcc 180
aagtgaagcc attaagtagg taatatactg ttagacacag atcatggtgc ttgggaaaac 240
aacacccaag cctcgtgatt aataagcact gttaattgtt aagctgctct tgctggtgtc 300
tgacctcacg gggtttgtgc tgtgacagct ctttcatgtt gatgaggtaa atgagtctct 360
gccatgatgg ccgggagaag ccaggacaga gtatcagatc gtgtttcacc aggaaaacaa 420
ggttgattta ctgtgttaca cgagggtgaa gtggacccag caccactgca ccccgtgctt 480
tgattccctt gtatgctaaa tatgcaagca caaaacagct ttaacacaat tttttaccta 540
gaaaggagcc tggggctgca tccaagtaca tttaacatgt gaaaattgag ctgctttgaa 600
cttgtatgtt tttgataact gcttggtatg cttcctggan gatcacctgt aggcttttct 660
ttccaaatcc taaatccctt tgattgaagt gccaagacaa gatagctcct cattgaataa 720
ctccaagtcc canaantcct ccctcaatca agaagtttga aaggggnaac aag 773

<210> 106

0562946 - 070208

<211> 776
<212> DNA
<213> Homo sapiens

<400> 106
gaaagtaaat aaggaaatca gctctctaag gcaatgctat tctttttata ctctcaggat 60
agaagatctt ggcgttgtgg tagattgcct tcctgtgctc accaattggt aaaaacaata 120
tttttcagaa aaaaaataag attaaaggag gtcaaattat ggcccatcca tatttttata 180
acttggtatt tattttagtt tacaggaaga aaaacaatat atctcacttg gctgctgtgt 240
tgacttgttg cctctagtaa agtcactact taaaagcaaa tttgaagagt aagtgctaat 300
ctgaatcttg attcattttt ctttttcagc atccttgatt ttgtgctttg tgagtacata 360
gtagattggg ctccatgaga catgcaaggt ttctgttttc aagaagctaa tagtacaatt 420
aggaaaagaa tatgaaatga ctaaaggaca attataaaag catctctaaa caaattacat 480
gaaatatact tttgtgtaat agatcatgaa ggtaacaatt ttttaaaagg gaagggacca 540
atgtgtgtgt gtgtttttg ggagggaaag tatcatcttt tataagaagg gctcttagat 600
gaaaacactt gaattttgta acaaaatgtc atttcagata tgttatagtt ggtttaaact 660
gggcttcaag cagtcattaa aaaggtggtg gtcaagaact atcatccaaa nacaggaaat 720
tataaatgat ngggtgaggt aatacctta aangattaaa cctcaatgcc ggaaaa 776

<210> 107
<211> 794
<212> DNA
<213> Homo sapiens

<400> 107
aataagtagc ctccaggcat tcccttccac caagaggagc aattgttttt taaatagccc 60
tttggcgccc agtctattac taaaccatat gagtcatttt ttaatattac tgcatgtgag 120
ttaacatagt cttcccaaat taaagtttta gatgggccct caaaattttt agggcatggt 180
tttcctgcag gtttatatgg aaagtatggg gtccctgact tctcgcaaca gtggcctaca 240
ctgcctttca gttctgtacc taggcctcca aagcacttta gcctgtgggg cttgccagaa 300
ctcgggttcc agctcctgga atggacagtt cccctctggc tagggttgat ctaatgttcc 360
ctctgggtta ctggctgagt tctgccctgt gtggctttct gctgtgccag ggctgcactg 420
agttcaaatg cagagtctca caatcattgt attcttcctc ccccaggagc acccattctc 480
tctttacacc aattgggcac tgccagggga tgaanangga tgatgttgac aattcaagac 540
tatttcttac cctcttcagt gcctgtttcc ttaatatgat aataaaccag gtactgcgat 600
cactcacctg attattggnt cttaagaagg ngcttttta atggaattgg tcagtttgat 660
aattctgtcc ggagggatga ctgctggagg atctantaag ccatcttgct ctgccttctt 720
ggaacacata aaaatcacag ttttgggcaa ctgtaagtca aagtgttgga anttaattat 780
tcantttttc cttg 794

<210> 108
<211> 717
<212> DNA
<213> Homo sapiens

<400> 108
atctctttgc attattacaa gttgttgtta tttttagttc tatttatatg aaaaatgtac 60
tttttagccc acaaaaatag catagcagca gcttatcaaa atgtcccaga caagtttact 120

0950450.0972000

tcaacaaatt agtaacacct tcatgcttcc tgtggtggaa gaaatgcaga gtccacttcc 180
tcccagtgaa catctgagcc agatttctgc tccactcggt ccccccttccc acctcttaca 240
gccatgaaat aatgtgagag tatttgtttc ccctgcaaag ggaagagggt ccagagacaa 300
aagggaagtt agtattcact ggaagcctcc ctgtacaagc aacagtgtta ggacttttat 360
acacattttt acaattatta cagcagttct caattattga aacagagggt aggcatttcc 420
ccttttcag aagggaaaag tgagaattaa gttaattcca aagtcacaca gctagtgaga 480
gaaaaagcct ggacaggaac tcagactgta tgactccaaa ggctaagtgc attctataca 540
cacaggccgc cctcctggca gtgagagttc aagatctgtt ggagaaaact cagaccatgg 600
gtttcttgca acttctgctg ggngaacaat taaggtgncc gttcccccgt ggggaagtgt 660
ttcaaagtgg aagcaaccac ccaaggggga aaaagtcctg gggcccttgg gngttta 717

<210> 109
<211> 836
<212> DNA
<213> Homo sapiens

<400> 109
tctctggaac agttgagaga caaatgcata agcattttag aaagaccaaa tgtgaagcca 60
tactccaaat attcaacatc actgcagtta tttttgagtt tatcaagatg tgattacagg 120
agagtcttac tgtagtcctg cttttatgtt tccaaggtgt ttgtgcatgg actttcctct 180
tttccaatag ccaaacttgt ttggatgtga tccaagatgt accaaaaggt attgaaaatt 240
aaatgtaaga gtagtcttct agcaatattg caccattccc aggcagtttc caacgtgcat 300
cagcatgtct gtctccagtg gaacaagata acttccagcc cctgaacccc tggggaaact 360
ccttccctct ttactgtatg ttgttgccac tgtaggagaa atctctcctc tgcctgactc 420
tgcagctgct ttacccagaa cctcaggagg aactctgagt ccagagccag gctgagttca 480
gccaggcaag tctggccttg gggctgtata tatctgtctc agacatcgtc tgtgttttca 540
tatatttttt gacttttaa aagatgaccc agaccacaat agtatgttct atttttgttt 600
tgttgtgttg tgtttttcca ttacattgct taagtacagt atttctagga tagaaaattt 660
gctttcttgg tctgccttgg gaacatacct ancaattaca acattgattt tcataaaaat 720
tgagtttaaa gttccaactt gcaaatgaac ttttggataa ccatcaattg ttanggggaa 780
atgtgtccgg attaggaatt tcctaaggaa ataaccacnn aaatgaaggt ttaaaa 836

<210> 110
<211> 759
<212> DNA
<213> Homo sapiens

<400> 110
tgaacaagaa atctttttc tttagctggg catggtggct tacgcctgta atcccagcac 60
tttgggaggc taaggcagga gaatcgattg cgcctaggag tttgagacca gcctgggcaa 120
tatactgaga cctcatctct acacaaaata caaaaatcag gtggttatgg tggtgtgtgt 180
ttataacccc agctacttgg gaggctgagg tgggagaatc acttgagccc aggagttgga 240
ggctatagtg agtcatgatt gtgccactgc actccagcct gggtgacaga acaagacctc 300
gtctcttaga agaagaattt ttgtctctaa tgctttgcta aaagaaaagc aatatctaat 360
atcttttctt tgttcaaaga aaagcagtat ctaaaagtgc agagttttct gcattttcta 420
aagggaactt gttgggaggt gctctctcct gatgcgctgt tcttgagtgc catccatgat 480
cagggttagg tttggaacag agagggagga gaagacagag aggctctttt gggataagtg 540
agcaagaggt gggatggatg aggaaatgag gttaaacgag acccgttctt gtaagagcaa 600

0052045.0052000

ggagagtgcc tggcgtggct cctggttttc catggtgggt ggagggnccg ggcaaccgct 660
gatgccctgt tgggggaagg aacnggaggc cactctgcaa aaggggctc tcgcttcccc 720
aatgtcctca tnctcgaaaa agcaaggcaa ntccagtta 759

<210> 111
<211> 508
<212> DNA
<213> Homo sapiens

<400> 111
atgaaaatca atatgaaatt atatgactgt ttaaaatggc ggcttcaagg cgtttcacgg 60
gtgtcccgga caggcgtgga ggtggggcgc aggcgaggat gaagcttgag ttggccagga 120
gtcggaaaac gattgcaggc gggaccgcgt ccgtcggggc tgaggaaact tagcgtggca 180
gaccctaaac tgggataact ttagggatat ggccttcttt tcccagttgc ctcaaactta 240
gagcagcgtc gtctttagcc gaagattcat tttcccagca ttttccttct ccaggcggag 300
tagttggaga cagagggcaa gccagaaact gaccttccca tctcctcatt cccttccatc 360
aagaactttt catcgttcnt tccccaccct ggtttgtaaa tggtatttgg cttcataaaa 420
acgtttgtcc acaggtgccc tgctccanca gttcgctcca gcantatagg aagttaccag 480
aaaanaaatt ttttttatt gaccttgg 508

<210> 112
<211> 879
<212> DNA
<213> Homo sapiens

<400> 112
acctaaacat ggagacagcg ggcgctgcaa ctgggcagcc ggcctctggg ctggaggctc 60
cggggtccac gaatgaccgg cttttcctgg ttaaaggtgg aattttcctt ggtaccgttg 120
ctgcagcggg aatgctagct ggatttatta caacattatc attggctaaa aagaaaagcc 180
ctgaatggtt caataaggga agtatggcca cggctgcatt accggaaagc gggtcttccc 240
ttgccttgcg agctctgggc tggggctccc tgtatgcatg gtgtggggtt ggtgtgatta 300
gcttcgcagt ctggaaagct ttaggagttc acagtatgaa cgactttcga agtaaaatgc 360
aatcaatatt tccaacaatt cccaagaact ccgaatcggc tgttgagtgg gaggaaacat 420
tgaaatccaa atgagatgag catggatgaa tttcaaaatg cttgttacag aaaggggtgg 480
ctctggagac accatgacag caaaaggact gggactgatt tctcccagga acatgggcag 540
attgctgact gaaccagtgc actggatagc attcagcctc atcacaggaa agtatgtgtg 600
tgcgtgctgg gggaaggtaa agttttccca cagttaagaa gactatttaa aaatagtaat 660
tacaggaata acttccttat gttgggggg acccatagga aatgattctg tttgtaacag 720
ttgaagcaaa tttcatacta aaaaaagttt ataataaaag tatgataaga aaatatttat 780
aaaacaganc ccccaatagc aatatactgc aatgtgtcca aattaaangg agtttcaaaa 840
agccnttcct tgtcaaatat attgacaaga accttggaa 879

<210> 113
<211> 649
<212> DNA
<213> Homo sapiens

<400> 113

0052456-070800

gatgaaccag tatggatttg cttttctaag cctcctgttg gttactaatc tcacttggca 60
cattataact aaaggaatcc cctcaattca aaagcataga tggatacaaa tgtcagaccg 120
tgggtttaat ttgtttagaa cacatggcat ttcttcacaa ggtaacctgc tgtatttatt 180
tattttcttt tggttaaata taatttccaa actttgtggt caggcagcgt ctaaggttac 240
gttaccacag actgacagtt ggtatatgta ccagccaatc ccttcattaa atgtatacag 300
atttagttaa gtagcattaa ataggattct tagaagtatg tcctcataga acttttaata 360
cttaaggctt tgtaaaaact atccatgaag ggaaagctcc tcagcataac tgctcaggga 420
aatagggcta aataactgaa cattaaataa ttggttaaag gtgctgttag tcgagcctca 480
atgcttgcta caaggatgta tgtacaagga ctgactttaa taatttgcat tatattgtcc 540
caaccagtag tttatttttt gccacggaga tgtanaagat attacaagct actggatgca 600
ctggtcagat taacntattt cattaaagaa gttgggagaa caaaatang 649

<210> 114
<211> 709
<212> DNA
<213> Homo sapiens

<400> 114
attgttttta aaggaactaa ggtctttgta gctgcatgtc agctagtcat cagttacatt 60
ttagagacag gatttttgtt tatacttaaa cttcagacaa attggcagca tataattgtt 120
cctttataca tgagataata tgatgatata actgatgttt aagaacattc ttattgtaag 180
acagtttctg ttttgccaca gcaacccaaa ggacagttaa gatatgtacc atatgacctt 240
tttgcatata taccaatgtg aatttacttt tacattaatc atttccccca aagagttcac 300
cctatgtttt gacagaacag ttggcatttc aactgataag gtatttctag ttttaaaata 360
atttggtgtt tgtattttgt tttgaatatt tttaaagact aattttaaga atgcactttc 420
tataaagtat atgcatctta gaaaaccagg aactggggag aaagtttttt aaatgatgat 480
tgaagataga ttttattgga gaaatgcttt actgatgtgt attttagtgc attttaaaaa 540
cctaagtatc tggtagtgtt ccccttgtag tgagcatgag attaaagttt agaacttttt 600
aagacaattc ctttttgtg ggtgtgtact cattaatgcc tggtcgtcct ttgcaattta 660
gataaatgat ataacattaa actcaanggg ggttganttg cantaggga 709

<210> 115
<211> 734
<212> DNA
<213> Homo sapiens

<400> 115
attgagtttc tcgctacttc tgccactcat cacacttgct tcccagagct ttgctgggtg 60
tgctgaagtc tccagagaaa gtggggaata tgggtgccta gagacttcta gggggtgttt 120
tcagccccta gagagtagag aagtgtgaga aggggttggt ccccgaatat tctgtagttt 180
tggggaagaa gcaatgggga cagtggagtt ggttgcctta agagaggcta tggtcccaag 240
agatgggact tggagagtct ctacttgcat tcctggctaa gcccttaata ttctcgcacc 300
cctccttgca agactagttc cttttgaggt ggttcttggc tagcttttga gaggctgcag 360
tggctgtgtg cccaggctta agtcctagct ttctccccac tctttacctc ctaggaaccg 420
ggcccatcct gggggaggca gggaggagct ccttttata gtccacatgt aggctttgtg 480
tataggctct gctgcttcct tccggccctg gcccttcctg gtgttggccg gtggccctgg 540
cttcagcaag actcaggatg cagagtaaac ggggcaaggc gttctcctac agaagactgg 600
catccctttt tactgagccc aagcctggca cagaggangc tggagttagg aagcaagaaa 660

0960450-040800

acgaggtgac ccagtccttg atcctgagaa accttgtgaa tctggnccaa tgcaagaaaa 720
ccgctaatgn ccaa 734

<210> 116
<211> 677
<212> DNA
<213> Homo sapiens

<400> 116
aagcccggcc tggcggcggc ggtggcggta gctgccgtgg cggcctctgc gcatgctccg 60
tcgcctgccc gccctggccg ctcgccgccc gcccgcccga cggagacgca gtcccagcta 120
tctgacttca tgtgaaagat ggctaatgca gaagtgagtg tcccagtggg ggatgtggtt 180
gtggtaccta ctgaaggaaa tgaaggggag aatcctgaag acactaaaac ccaagtgatt 240
ttgcagttac agcctgtgca acaagggatt tatgaagctg ggtcggagaa caacacggca 300
gttgtagcag tagaaactca cacgatacac aaaattgaag aagggattga tacaggcact 360
atagaagcaa atgaggatat ggaaattgct taccccataa cttgtgggga gagcaaagcc 420
atcctcctct ggaagaagtt tgtatgtcca ggaataaacg tgaagtgtgt caagttcaat 480
gatcagttga tcagccccaa gcactttgtt catctggctg gcaagtccac tctgaaggac 540
tggaaagaga gctattcgtc tgggtgggat catgctcaag aaaatgatgg actccggaca 600
gattgatttt tancaacatg acaaaagttt gctccaatac ctgcaaaanc accaaatttg 660
atcttccgat naacaat 677

<210> 117
<211> 659
<212> DNA
<213> Homo sapiens

<400> 117
aaagccttgg cactagcggc gtccgggcgc ggagtgcgca gggcaaggtc ctgcgctctg 60
ggccagcgct cggccatgcg atccgccgcg cggaggggac gcgccgcgcc cgccgccagg 120
gagctgaggc acgctcggca catgagttcc tgtttcatta ctgtgggcag catcttcacg 180
cagcacgctg gcaccagaag gacaaaaggt agtagatcga cgctgaacag tttcaacaca 240
ggggaaaggg gaagaattaa ggaacctcta tgattctgat ttctgaaagc agccacagtg 300
agcgctctgc aatgagtccc tttgcctggg gcatgcaatg cagagacaca aacggacaca 360
catgggcgca cgcgcgcaca cacacatgct ctgactttgc aagctgaagg ctgtgattgt 420
gtggactgcc tcgtgtccct cctcctttc actgaatang gaggttcatg ctgataccac 480
agggccgaca cctgcgttct gcgttcacac ctgcgtggat ttctgccacc ctgactccct 540
tcttgtctgc atccaggtgg aagcgtctgg aangttcatt acacgacccc gcagttccac 600
cccganggaa cgggggcctg ctacgggcga ngcgtctgcc catgctccgg ggaaggcgt 659

<210> 118
<211> 698
<212> DNA
<213> Homo sapiens

<400> 118
ttaaaatgct attatgaaac agattcattc attcattcat gttgcccacc tggtccccat 60
agtcatcgga gttttccact cttgacgaac gaatacttgc cctattttcc aagctaagtc 120

0052045 0072800

ttgaatacct tgtaatgttt tacttcttgt ggcatcctgc actttgtgta aaatcaggag 180
tggggagtgc caataaatat ttgattgact aattgacagc ttgagtcaag gttctggaag 240
agaataaata caagggaaag gcattccctt tttcatttag accatatttt gcctaagcca 300
aatggacgat ttacagctaa tcattgcgtc ttaaccaggg acagctggag cttactgctt 360
gcctcctgcc tagtcgtctt tattccttct ataaaggcag aaaacagaag ggctctgcac 420
acagcagtca cagacgctca tcaaagacaa accactgaca tggaaactga acaagaaaag 480
gcttcctggt tcaaggctgg cttttgggag ccatgttcaa gcatgcccta agtagcacag 540
tcagcagcct ttttccttca ctctttangg gctggggttg aggaacaaga ttccctcaat 600
tttccaacaa ataacctaat tcagtgaaat aaaaaaangg ggggtggggc aatggtgcaa 660
tcagtcantc atatgccaag ttgtanccat gttaagta 698

<210> 119
<211> 697
<212> DNA
<213> Homo sapiens

<400> 119
tgtaaaatgt ggacaataat aataatgcta acagtaaaaa ctacctcata ggattgatgt 60
gaggattaaa tgagctatga aaacctctta gaaggtacct gttagctagt actcagctca 120
gtgagtatta actgttttgt tattaagacg tgtgtgtctc tgccatttgt atttaacacg 180
tgtccttgtg cctggcttac ctccctgtta tactgtaacc tccgtaagga caggcatagt 240
gccccttct tccttatctc tttactgctt gtattagtcc atcttgcgct gctacaaagg 300
tacacctgaa gctaggtaat ttataaagac atgagattta attggcttat ggttctgcag 360
gctgtgcagg aagcatattg ctggcatctg cttctggtga agacctcagg aagttgcctt 420
atggcagaag gcacagggga agcaggcagt cacatggtga gagagaagga gcaatagaga 480
gaaacaggag gttctttcaa ccaaccaaga tctcacgtga gctcattacc acggggagtt 540
caccaagaca aggatgaagg attcgcccct atgacccaat acctcccact aaggcccaac 600
tccaacactg gggatnacat ttcaacacaa ggatttggan ggganaaaca tccgaacaat 660
atcactggct tttccgggct gtaaaacaaa tttgggg 697

<210> 120
<211> 634
<212> DNA
<213> Homo sapiens

<400> 120
tcagataaag cccaaactcc tatccattct tcccaggtgt gatggggcac cccgtgccct 60
ccagcctcct cattcccact tttctcacta tgttggcttt cgtttaggtc tctgaaccct 120
ccaggctccc tctggccaca gacttgccac ctggctagct ccctctgcct acccctagcc 180
tctgagagcc tttctgcctc ctctgatgag gcccaatccc ctagtaaatg attttattta 240
cacagtagac aatagaggct agatgcatat tttttttctt aaaatattgg actactttta 300
ttttcttaca taataatgat atttatttaa agtgctttag gatagttcct ggatatcatt 360
atgtacagat taaagtttaa aaattaaact tctgaaccat gagatagatt ggttcccatt 420
caagtaatcc attcacattt tacctactgt aatgactggg aatgtgctgt aacatacttt 480
gcancctgg cctcccttcc tgtctcctaa aanaatggag ctggtgtttt caagtttggn 540
aggatggctt ctgttggaaa tttgcccttt taagttagga agactgaccc ccatcttacn 600
gctctctttc gaagctagtc taatggnaca agta 634

09/13211

<210> 121
<211> 740
<212> DNA
<213> Homo sapiens

<400> 121
ccctgggacc tcatcaggcc acggattgtg tgaatcagca gaaaatagga ctttcctaag 60
caaaacagga aggaaagaaa ggatggagtg tgaaacagat gaacaaaaac agggctctga 120
tgagaacatg tcagaatgtg aaaccagcag tgtgtgtagc agcagtgaca ctgggctctt 180
taccaatgat gaagggcgac aaggtgatga cgaacagagt gattggttct atgaaggaga 240
atgtgtccca ggattcactg tccctaatct tctgcccaag tgggctcctg atcattgttc 300
tgaagtagaa agaatggatt ctggattgga taaattttca gattccacat tccttttacc 360
ttctcggcca gctcaaagag ggtaccatac tcgcttgaat cgtctacctg gagctgcagc 420
tcgatgcctc agaaaggggc gaagaaggct ggttgggaag gagaccagca taaacacttt 480
ggggactgag aggataagcc atatcattag tgaccctcgg cagaaagatt tctggttacc 540
atcagctggg aaaagagaac gaaatcagtt caatcccctg tctccccttt actccctgga 600
tgttcttgcc gatgcttctc accgaaggtg ttcaccaagc acactgctct gccanacaag 660
gcaaatgtac actgggggac caccatgttc acgtgtcatc aagaggaagc ggaaancaat 720
gggcacagna tctttgtcaa 740

<210> 122
<211> 584
<212> DNA
<213> Homo sapiens

<400> 122
ggccgaggga aacacaaccc caagcagcct ggagtaagtg gtcccgaggc agctcaagac 60
agtttggttt tattcatttc agagagacag gaattgcagg gaaaatcatg aatcagtgcc 120
tggaaggtgt aagttccatt ggcagaaagg gtgggacctg tggaaggggg gttagaaggc 180
acaggtagtt gagggattct gtaggtggca gctggttgag agtgttgaat ctttgtctaa 240
agtttggagg aggtaggaag gaatgctgaa ggaagggggt ctgttatctg ccacttcatt 300
ccatcccagc caaaaaacag acctgtttct cgagatttta tgaattctaa ggcgtaactt 360
tacctttgcc ttgcgtggcc ttaggtcttg tttgtaattt ggtatcttgt tgccacaagg 420
agtctgtttt tccagtcaga taatgtctgt ttttacatga atgtgcgtca gttgctgcat 480
gtaaactcct aaagggagan ggtataangg agacctgtct caactcccat cctgtcatac 540
agaggcactc aattttcang gttttttggg ggttcccttg gcaa 584

<210> 123
<211> 730
<212> DNA
<213> Homo sapiens

<400> 123
accaacgcct actccccggt gcagcaggga gtcatcatca aaaggaagag tggggagatc 60
ccatgcccct tggccgtgga ggcgtttgcc gctcacctga gctacatctg tagatacgat 120
gacaaataca gcaagtattt catttctcat aaaccaaaca agacctggca gcaggtgttc 180
tggttcgcca tcagcatcgc catcaacaat gcctacatcc tgtacaaaat gtcagacgcc 240
taccacgtgg agaggtacag ccgggcgcag tttggagaga gactcgtcag agagctgctg 300

0505305 0720000

ggcttggagg atgcctctcc gacccactga tgctgggggc gcaggactcg gtcaagggag 360
gggcaagagg aggaggagag cctgccgttc caacttgccc atcagagacc cggacacggc 420
ctggtgtgtg gcttgctgcc tgggganggat gcacagggcc tctggaggga caggatggac 480
ctggtcagag gacggttgct gtcctcattt gcattccaag aagagcatgt cctccctcga 540
gaaacagtgc cgccggtgtg atgagcactt acacccacgt tctcaagggc aaattctctc 600
atgacatccg tggagcttgc gangcaacgt ggactggtga ctgtgaagga aggccccntt 660
gtaaaatgag ctggagcacg ctctaagaga gatgctgctt cctaaagatn tacagcaatc 720
tgggacntgg 730

<210> 124
<211> 752
<212> DNA
<213> Homo sapiens

<400> 124
aatgctgctc tggtttcttg cgcgcttggc gctacaggga gtgcgggcgg cgactccttg 60
cgcaagtcag cttgcctggg aaagggcttt gtggctgaaa gcgactggtt ccttgccaca 120
aaggctccgc tggcgtttgc ggttcagcgg ccgtccctga gtaagatagc cacttttctc 180
cgacgctgcc aatagccttc tccaagtgct gcaggctttc atcgctttgc aggagccatg 240
cctcggggac ggaagagtcg gcgccgccgg aacgcaaagg cagctgaaga gaatcgcaac 300
aatcgcaaga gccaggcctc agaggcttca gagaccccga tggcggcttc tgtagccccg 360
agcacacccg aagaatacct gagcggcccg gaggaagaca caagcaccct ggagaaggnc 420
tccagtaccc cttcanaagc ttcgagcact ggcctantgc aaaagccggt taccggagca 480
attttcaagg caacaagaaa agtctcctaa tgtccatatt aagccctcat cttcatcatg 540
ggcaacaacg caaaggaggg cctggtgtgg aaagtgctgg ggaagttagg gatgcaacct 600
gggangcaac acaacatctt tggagattcg aanaaggtcg ttacagaaga atttgtgccc 660
aaaagggtat ctganttata agccagtgcc ccgcaacaat ccaatggagt ataagttctt 720
ctgggggcct ccaacaanac ntgggaatcc aa 752

<210> 125
<211> 796
<212> DNA
<213> Homo sapiens

<400> 125
cctactatgt aattctgtaa ctttttttcc tgaatgttta ggtctatttt ggcatgcagg 60
gattaagaaa atagctatct gagcatatat tttatagttc actaatgaac cctactttga 120
ccctgtgggt taatgaatga aaagtatctg ctattatggt gtggtttcat cttatcaatt 180
acatattttt gttttgaaat ttgtcacctt tgtcttcacc attcttttct cttggacaga 240
ctgttagccc cttaactcat gtacttgcct tgacttaagt taccagtctg tccaagagaa 300
aagaattaca ttcatggcaa atgcccccag tcaggcacaa cataccatat acataatatt 360
cttgatgagc ttaaagtagc cacacagcac tcagggcagc ctccactaac tgattggnaa 420
taagcctatt tgccatatct ccctgaaact ttctattaac aaagncacaa aacgcttaaa 480
caaagaaaaa ttagataata tcaatagccc atcttctaac acattgccta gctcaatact 540
ttcaatacat attttccaaa ctaaaaatta aaatctcaac tctttaagag aagtttcgta 600
antttggagt ataaagagan tatcctgggc aatataagtt ttaaatgcca atataattgg 660
aaacttacaa tgacatttca agtgggtttt ggcaatggtt ttcccaaagt anggggaacc 720
tttaccaacg gaanggtaca caagtggatt ttccgggggg gttaaaacaa gattgaacaa 780

0952946.0720.00

tttttttaant tttaaa 796

<210> 126
<211> 644
<212> DNA
<213> Homo sapiens

<400> 126
aagaccgtcc cggatggcct cggggactgc cagtgtgtgg aggtgagctc cgggattgcc 60
ggcattcccg cttctgctgg ttgcttcatg ctgcaggctg cggccgtcag ccctcgctcg 120
cattggtggc gctgaggtgc cggggcagca agtgacatgt cgtcgggcct ccgcgccgct 180
gacttccccc gctggaagcg ccacatctcg gagcaactga ggcgccggga ccggctgcag 240
agacaggcgt tcgaggagat catcctgcag tataacaaat tgctggaaaa gtcagatctt 300
cattcagtgt tggcccagaa actacaggct gaaaagcatg acgtaccaaa caggcacgag 360
ataagtcccg gacatgatgg cacatggaat gacaatcagc tacaagaaat ggcccaactg 420
aggattaagc accaagagga actgactgaa ttacacaaga aacgtgggga gttagctcaa 480
ctggtgattg acctgaataa ccaaatgcan cggaaggaca gggagatgca gaaagagctt 540
gcagaagcag caaaggaacc tctaccaant cgaacaggat gatgacattg aggtcaatgt 600
ggatgaaact tctgatnaca cagaanagac ctctcctgtg cgaa 644

<210> 127
<211> 505
<212> DNA
<213> Homo sapiens

<400> 127
aaaaaaaaag taaagggaaa cagacatgaa cactaggtga catggagtgt taggggcgct 60
atggtagaag tctgcagaga gtgcaatggg cgtccaaatg aggaagtgat cacttgcaca 120
agagtgggag gcttggctgg aaaggcttct ctgaatagga tgacatttga tctgtgtttt 180
gaagggcatc gttggcaagg taagtaatcc aattaaagga ggttgcctca gctaaagcac 240
agtatgctca aaggtgcgga tcatttgaaa atttgagttc aggtgcagta ggggtaaggt 300
aagtatccaa cagaatttcc tacaatgatg gaaatgttct atattgtcac tgtccaatac 360
ggtagcctct agccacattt ggccaataca actgaagaat tgaatattaa ctttcattta 420
attctagcta atttaaattt aaatagtttc atcagttagt ggctaccata ttgaacantg 480
caagnttaga gataaacaga ggnca 505

<210> 128
<211> 772
<212> DNA
<213> Homo sapiens

<400> 128
gaaaaatcac aaagaattgc atggcaagag tgcctgtctt tcacagcttg aactgttgca 60
ggaactttct ttttttttt tcttttgtga tgcactccag cctgggagac agagcgagac 120
tgtctccaaa acaaacaaac aaacaaacaa acaaaaaaac cctgtagctt gggatcagcc 180
ttctcttctg ttgtttttct ttaaaaaata aaaattaaaa ataggcttca agtgatcctc 240
ccgccatgac ctccaaaact gctgggattg taggtgtgag cactgcaccc agccgtatgt 300
ttttttctac ataaaaaaca gcacaggatt atcttccaaa gctaacaaat atgttcaaat 360

WO 2004/050850 PCT/US2003/038211

aaccacaacc ccacccctgc tccttggagg acaacgtgat cactgtattc agctctgtca 420
agaatggtcc aggttcttca taaattcccc aagtttccaa gtagttcttt aanagcagtg 480
tgaaaacaag actaatggga cccttcctgg ttgaagggaa tgtangccaa ttccggcttg 540
gtttaaggta tttccctttc caattcaatc ccccaatttc cccggggaag gggtggttta 600
aacccaaaag ttgcaaatta agggagaata atttgggtgg aactggcaaa aagttccccc 660
ctcaaatggt tccnggccaa nttaaaataa gtttaaaagg gttgattcaa gtggattctc 720
ccaggcaant tttcaaatcc ggggaatggg aaaaagcccc ccaatggtta ac 772

<210> 129
<211> 678
<212> DNA
<213> Homo sapiens

<400> 129
agagcacaga agagggagaa gtggctgctc tgcgcctcac ggccagatcc caggtgagtg 60
agtgctgatt attggaatta caccttgttt cttagagtac agatgcactc ccttctttgt 120
gatgtggagt ttctttatcc actaaagccc atctgcagag ctgagttcta aatctaagag 180
actagtcagg agactaatgg actcagaaga aaatgttttc tacttataac actggatgga 240
tttcttccct atttagtgtt tattgtccct caacagatag gtaagcagca tttccctttc 300
ttagcctcct atgctcattt ctgtgcttgg taatgtgaga aactatttta aatataatgt 360
ggtacatacc tcttaaaact tgtttctcta gaggaaacag catgtatgtg accttaagtg 420
gcaatctaag aaagcactta aatgctgaag tgattgtaaa aataataaat actcacatag 480
ttcaaagaaa tactggaaaa ggaaagccta tgaaggcgta atttaaagag ttacagttag 540
aatccaaccc tctgagatga tgaaagctaa ggtatgatca tgtctgcaac ttacttttat 600
attgttgggc cctctctccc aaaaggnaaa tatgacaaat attacnaatg tttgggctgg 660
gantacaagc atgagcca 678

<210> 130
<211> 666
<212> DNA
<213> Homo sapiens

<400> 130
gggcaaaccc tttgaaaaat attctaaatg aaaatgacat agtattcata gtggaaaaag 60
tgcctttaga aaaggaagaa acaagtcata ttgaagaact tcaatctgaa gaaactgcca 120
tatctgattt ctctactggc gaaaatgttg gaccacttgc tttaccagtt gggaaggcaa 180
ggcagttaat tggactttac accatggctc acaatcctaa tatgacccat ttgaagatta 240
atctgcctgt tactgccctt cccccccttt gggtaagatg tgacagttca gatcctgaag 300
gtacttgttg gctaggagct gagcttatca caacaaacaa cagcattaca ggaattgtct 360
tatatgtggt cagttgtaaa gctgataaaa attattctgt aaatcttgaa aacctaaaaa 420
atttacacaa gaaaagacat cacttgtcta ctgtaacatc caaaggcttt gcccagtatg 480
agctctttaa gtcctctgcc ttggatgata caatcacagc atcacaaact gcgatcgctt 540
tggatatttc cctggagtcc tgggggatga aattcttcaa atccctccaa tctcttcaaa 600
ctggcaaatc cggaatattt aaaggtggga atcaagggag aancccaaaa ggggcccttt 660
tggnan 666

<210> 131
<211> 753

0302460.02720000

<212> DNA
<213> Homo sapiens

<400> 131
gctcagcttc tctcaccgcc tctgggtgtc tttgctttcc tgaccacagc ctctctgccc 60
aagcctgtgt cctctccttc cgttctggtc tccttcatct cacgtttccc cagcctccaa 120
gctcttgaag agccgtgtca cactgagagc ttccctgacc tggtctcatt tccctctgac 180
agtgacctcc agtgtgctgg gttgaccaat gccaagcctc tttttaaacc aaagtagttc 240
accatgggtt gggatgatgt caacaagcag tattcatgtt aaaaagcaat gagggactcc 300
ttccctggtg cacaattttc ttcacttgtg atctctaaac tgttttcaaa ttggaagact 360
gggaagcatt gctacagccc cagccagtct cagccactgc tcagcccagt ggtggaaagc 420
tgagcacaca gcgggtgctt actgccccca cttgccgtct gctctccagt agatcaaggg 480
acctcagaca gggatctgag aagtggcagg ttccaataaa ctgatcaaca gaatgaagtc 540
actctgggaa gccatgaggt gactttacaa gcccaagcat gtaaatatac acacagagga 600
taatatatat tctttttttt ttttttttt gagacagagt ctcgctctgt caagccaaag 660
ctggactgca gtggcgcaat cacnggccat tgcaacctcc aactcctggg gttcaaggca 720
ntcctcccaa ccttaagnct ccccgagtag ccc 753

<210> 132
<211> 772
<212> DNA
<213> Homo sapiens

<400> 132
gagtaaaggt gacttttgtt atgttttaga agagactggt ggcattttgc ctctgcccta 60
gagatttgtg gaactttgaa cttaagaaag ttgatttagg gtatctggca gaagaaattt 120
ctaagcagca aagcattcaa gaggtgattt ggatactgtt aaaggcattt agttttataa 180
gggaagcaga gcataaaagt ttggaaaatt tgcagcatta ctatgcgata gacaagaaaa 240
acccattttc tggggagaga ttcaagccag ctgcggaaat ttgtgtaagt agcaaggagc 300
ctaatgttag tccccaagac catggggaag atgtctccag accatgtcag agaccttcac 360
cacagcccct cctatcacag gcccagaagg aaaaagtggt tttgtgggcc tggtccaggg 420
tcccttgct gtgtgcaacc tagggatgtg gcaccctgtg tcccagctgc tgcttcagct 480
gtggctgaaa ggggccaatg tacagctcag gttgtggcct cagagggtgg aagccccaag 540
ctttggcagc gtccacatgg tgttgagcct gcaggtgcac agaagtcaaa gaattgaggt 600
ttgggaacct ctacctagat ttcagatgta tggaaatgtc tagatgccca ggcaaaagtt 660
tgctatgggg tggggccctc atagagaacc tctgctaggg cagtgtggaa agggaaatgt 720
ggggtggagc ccccacacag agtccctact gggcactggc tatnnactgt na 772

<210> 133
<211> 606
<212> DNA
<213> Homo sapiens

<400> 133
tttaaggcgc cgggtttccg gggctcctgg ccccgcttat tccgcggggg tcggcggggt 60
cggcctgggc gcccgcgccg ccgctgcgct ttgtccgctg ggcacactgc ttctgggagg 120
ggcgggcaga catggtggcg gccgccgccc cctcctcggc cctagcatgc cgcggccgcc 180
tcgcggctac ccggcttgcc ggtcccgagc ggcagccccg gggtggcgat ggggtcgcgc 240

0562545.02600

cgaggcagcg gaggttctgc gggcgactgg aggttggcag tgggcgggag aaagaggaag 300
gcaggcgcgg ctgggcctcg gcctctggcg ccgcggtacc ctttgtctcg gcagcctgac 360
ggccccgccg ggctctccgg agaggggaac gggcggcgag ggtggcgggt cctgggcgcc 420
ctgtgctgcg gggccgagag gcgctcgggt cgcggcggga ccggccggac cagacagggt 480
taatggaaga gcctggccag tcccgcgcgg ggcccccgca gcgacagcct tggccgnggg 540
gactggagtc ctgaggggga gaagcctgcc gttctgaang ctcgggactt ctgncccaaa 600
gacttc 606

<210> 134
<211> 843
<212> DNA
<213> Homo sapiens

<400> 134
ttcatatttt aaccagttta gccagagttt ttagtactag tattaacttt tgaattatgt 60
ttaaggtctt agactttaca gcatgtttag tttattttca tttcttatta gtatttttca 120
gtacttaata gtctcttgcc cccacctcca acaagaactt tcctctctgt tcaacatcag 180
aaacattttc cttttggcat gtgctttcta gttccccaaa cagtataagc aaattggaaa 240
gtttagctgt cattcttgga aggttacaga tcacactagc agcctgagta atccaagagg 300
ttttaagtat catagcattt agtttaaagt gaaatttgct ctgacagggc tggcagacca 360
ataggaaaaa gaaatatttg tgcttggaga agtgcatatg tagagaccaa aagtataact 420
gatggctgga agtgatttca gtctaaaaaa acaaatcatt aagagagtgc ataggggtaa 480
aatacacagt tcatatttta aagagtctca aaatgaacca gcaactaagg ttagcattac 540
atagtaatta gttgtggtgt tcaggcttta actcactcag taccagacag tatagttaaa 600
ctgtcgctga aaaaacattg ctacttacat gatattctct agtttaaacc tatagcagta 660
atttttgacc ttaaaaaacc aaggtattat gacagattat ataaatgttg aaccagtaac 720
agacaaacaa ttatttaaaa ggacgtgcta atggctcaag tttattggcc ctaggggtta 780
tttaagcccg ntcacaagnt cccttaacca tttggnggta tgaaatgaag catggcttga 840
tag 843

<210> 135
<211> 860
<212> DNA
<213> Homo sapiens

<400> 135
aataccatta tttaaattgc ctttgggatt agccccttcc ctttccttat aaacacaggt 60
agcaggaact gtgctgctca tttttctgtt agtagtgtgt acttcatgcc aggacattgg 120
gtattttctt taaagtgaat atagaatctc aagatatacg tagcttcatc attgacattt 180
cccagagcca atagtcagcg gatcggtctt gtgaacacca ctgccagctc ctgtgtctac 240
atctcagagg agcccatgtg ctctgcttct ctccaccaga gcaagctctg ctgggcgtgc 300
ttctgggaag aaaacaattt tctttaagaa gaagatgaat gtccaggaat ttaaagaaag 360
gatcgattgc cttttattta tgagtttcta gctcttgaag ttattcacat gcagttcagt 420
tagtcaagta aaatttttt tcaaataaaa gtatccaagt ggtgcagtta ttattatatc 480
cctctttaat aattttgctt tttatttttc ccctcttctt tttctgttac ttgaatttta 540
tttcctgtaa tttatagtgt gtagctgtaa attgaaatat ttataactgt gaaattgact 600
taattcatat gttgtctcat aactttattt tttttaaatg catattcagg gaaatatatt 660
actcatattt acaattgggc gatataggaa cttcaattta gatttaattt gcaactctta 720

0050045.0042000

gcatttttta atccttgata aaattttccc ttttggtgtg aaacttcaaa gaaaattgnc 780
atctcctctg acatttagga gcagcatctt tctacccctt gngaataaat cattgaagga 840
acaggtaaaa ttaantttaa 860

<210> 136
<211> 716
<212> DNA
<213> Homo sapiens

<400> 136
cacttgggct cgcgtcctcg gccgcgccgc gcggcacccg ggcccagcag ccgggaggcg 60
gcagctctcc tctacgcccg tcccctcagg gcggctgtgg atgttgccag tattgtcgat 120
gcttcagagc gacgtttgcc ctgcgacaca ggcgggccgg ctctcctctg tctttatttt 180
cctggaggcc gacaggagcg gggcccgagt tcggtggtgg tcgtgagcgt gggggcact 240
caggcccgga cgggctctca ggtcgccgac ggcggcggct ggaggccgcg ctggctgtcc 300
caggtcgtcg ttagctttag ggagccgatc tccgggcggc cccacagagg acgcccgcga 360
ttcgatggcg atgatgcccg ttttaaatgg tgtccctgca gccgggtgga tggatggatc 420
gtacaccttg ccttttgaga gccgggacct tacgcccgac tgcgtgttat ttctgcggaa 480
taagaacgca acctttggag gtgaagacga ctgtcggctg gattgaattg gaatcgtgtt 540
tgtgatgatg cgtttatttc tggaaatacg cggtctccgc tgcttttgct ttttgtcggc 600
agaggtttgg gttcttctct aacggtcagg ataaaggcct gtagggcgac gctgcgcgag 660
cgagaagctc gncccgcggn tggcccgggc cgccccccct ttaggtgtgg ntggaa 716

<210> 137
<211> 868
<212> DNA
<213> Homo sapiens

<400> 137
ccaactgttg atgcatcttg aaaatcattc ctcaagttta ttatcacttc cattccccat 60
gtcagtggca tagctaatta tttagaaggc aggtgtctct aggtaattat agttagttct 120
gtatgcaatt atcctttctg aaatgtgtgt tgtatgccgt aaaaatacct gttacgttat 180
agaatataac aaatagctaa cacaatagtt aatacttagt tgatgctgac tatatataat 240
tctctagttt attatcataa taatacacct cacatcattg aagtctttta cagtttacca 300
agttctttca ttcacggtgt ttcatttggg tatcccaaca acattttcaa ggcaaacgtg 360
ttaccatcct tagtttgaag aggaggaacc tgaaacttag gaagactaaa taacttgtaa 420
aagatcacag aagtgatatc taatagagac gagcttcaaa ttcaggttta ttgaactcag 480
aatcaatgct cctgcccccc acctctcagg agtgataatg gtaaagattg ggggactgta 540
ggccaaatag gtcctctgac ctcttttata attgtcagct tatctaacgt gaatgactta 600
gataggcctt gcagattgag tccttgggag atttcctgcc tctgtctagt attataccca 660
gcccaatttg tacctgctga ccttccaagt tcctgtgggc atttgagttt ctgacctttg 720
cctttgaata agcctgccat ttcctatagc atatgngcat tttttgttcc tggaactttc 780
tactacttta aatttggtct ggatacttat cagcaaacaa atcttttaga ctggcntgga 840
ngtctattat gggaaaaggg gngaaatt 868

<210> 138
<211> 773
<212> DNA

0562940-0705800

<213> Homo sapiens

<400> 138
ttctaatgca gcctgaactc caaagtccat gggcaggtct gtactgatgt agcttctgtg 60
gtaaatcctg catccttccg ttgggatgga gggtcctcac gtagaggttg gggcctgcaa 120
aggggcacag ggaagctgca gggacctctg tgcctaccct ccatgctgag tccattctca 180
tagccagggt gatgtgttta cagcctagat atgattcctc actaccctgt tccatggttc 240
acccccaccc ctggggctac gtatggcagc tgaacactgg aagtcctggc cagggcctgt 300
ggagtcctgt ggggcctggt tctctctggc tctgctctgc tctcttgtct tcattgcacc 360
tgcagcctcg ctgatctcct tgccgttctg cagatgttga atcccttcag tgtcagggct 420
gtgtgcctgt ggttctttct ctctgcctgg gacatcttgt ctccagctgt ctgtagggct 480
ctttctctca cctccttcag gtctcccact ctgtgagcct tctctcacca ttctgtccaa 540
aatagcagcc ctagctctac ccctttgttg cattctgtcc ttatccggga tggcattcat 600
tgctacctga caccatcctg catagctact tgtctgttga tttgttgtct gactcctcaa 660
ttagaactaa agtgctgtgc agggtgggag tggagtgtac ccatcgncag cccctgggca 720
agcacctgct cactgnctgg ctcaaatgca agtnccgaaa agtcttccac tta 773

<210> 139
<211> 710
<212> DNA
<213> Homo sapiens

<400> 139
ggtttccttg cccgtacttt taacttacct tattttcccc aaaacggtgg ctggcgttga 60
gactcccggg agcatgtcca ggttccccgg ccttagggtc ttcccaggca cttgttctgc 120
ttgtcccttg ccttccccca cctgtgaggc ccagcttcgg catcgtacgg ggtggttctg 180
ggccgggtgg cgcatcaggg tcccccagtg cctgtgacca ggcccgcccg ccccatctta 240
cagcaccact gccgggcgtg tgggcagata ttctgtggaa agtgttcttc caagtactcc 300
accatcccca agtttggcat cgagaaggag gtgcgcgtgt gtgagccctg ctacgagcag 360
ctgaacaggt gagtccccgc cccccatttg ggctgcaggt ggggcaggct ctccaggctg 420
ggttttctgt ccctcttggc catggtgcct gaggcctgca gaccccagag gaccctcaca 480
gcacagcagc tggaaggtca agggaaaccc agggtggccg catgccctcg gaccctgccc 540
cacactaggg caggtgggtg tgagagacag ggcgccgcgg ctccagggac cgaggctgcc 600
cgacaaacct gttgcttggg tttgggtttg ggtttggttg catttcaact ttcggaataa 660
aacttacaga aaagttgcaa gagtancaca gagaaacttc ggggccnngg 710

<210> 140
<211> 790
<212> DNA
<213> Homo sapiens

<400> 140
ctagaggcag gcagagggaa gagaaagggt ctgttgtttt tctctcctgt ttctcgctcc 60
ctctctgctg atcacaaagc tgctgaccgg gtcagaaagt cctgatggaa atccaccagc 120
gctgggcagg cccctcctcc tccagggagc ttgtccttgc ctaatttttc ttcgtcctga 180
tgagaacaaa aaagagagag agaagaaaag aaaaaccaca aacttccttt gaaaaccagc 240
ttgtagtcag ggcccggagc gcatgccata gactcggcga ctcaggaatc ctgaagactc 300
tctgagcgac ctggagcacc ttggctgtgt ccctgcctgc cttcaccctc ctccagtgcc 360

0052456.0702000

cccagtactg ggcgtgagtc cggaagtggc cacaacccag cctggaccgt cgcttataaa 420
gctgtgtaaa cctgtataag ctcaggcgtt gacagctgga aggcagctgg cactggcagc 480
ccccttcatt gcacctatct cccccatctc attgccacgg ctgaaccctc cttctcaatc 540
ttggaacagc acccccttct ttaaggtaaa aactttattt taatcatctt cttcacctct 600
tctcccaccc ttctctattt cctctccagc tttggggagc tgacacctgc tgnccttnca 660
cctttggtct gcaagtctgg attgcttaaa ggagctaagt caggagagac atgtaaaggg 720
gatgctgctt ggtccttctc ctttaatgaa agcccgaaac ctttcccctt ttccttgnga 780
gcaagtntnc 790

<210> 141
<211> 814
<212> DNA
<213> Homo sapiens

<400> 141
tttttagat gaagtttcac tcttgttgcc caggctagag tgcaatggca caatctcagc 60
tcactgcaac ctctgcctcc cgggttccag cgattctctt gctttagctt cccaagcagc 120
tgagattaca ggcatgagcc accatgcccg actaattttg tatttttggc agagacaggg 180
tttcaccatg ttggccaggc tgatcatgaa ctccttacct cagatgatcc acccactcga 240
cttcccaaag tgctgggatt acaggcgtaa gccactgtgc ccagcccatg aaactattta 300
aacaacatgt gattacttgg ccacttttct attcaaaaat atggtttatt agtcctgatt 360
atgtgccctt cttggcagac agaatgatac tgtgtacttc tgctgaaaga aatagaaact 420
ctcttccatt ttctagataa gagagtccta aaacagaatt tccaaaaact ccagttagtg 480
gaggtaactt aaaatcctct ttaagaagga taattatctt taaaggttga ttcccaccct 540
ccctccccag ttacttaagg aactaagtga gtacatctcc agttgcccat gaaagcataa 600
gtttgttttc ctcagctgag gcaagtggta gagtatacag gataacgaag taacatgtaa 660
aaggcaggac gcacataaag gtgacatggc tattggttca cctggagaaa ccacatgatt 720
gggacctgaa ggttactgac tgctacaggg gctgattgtg aacacganga accccatgtg 780
tgtgganctg tanggtgaga gccccccatt ttta 814

<210> 142
<211> 727
<212> DNA
<213> Homo sapiens

<400> 142
agctgagagc ccaatcgcat caggggagca cggcccagca gcaggagctc caggctggct 60
ggacacctgg gtccccacgc agactgtgag tagagggagc tggaccacag tgggacaagg 120
acacctccag acaggttgcc agggccccac atggaggagg caggtgggcc catggcccgg 180
gccaaggccc aagtggtaag tgccacattg acatggcggc agtggccccc cacccaggaa 240
gagatcaaac atggttttca caaggtgtcc ctggtgtcag gggcccagat ggaagccccg 300
cagaaggaga tgtttgagtt cagccgtcga gaggaagtgg aagtcaatgg ctttgcaaca 360
caggaagaag agactgtgaa ttgccagggc cctcgggata cagctggctc caagaacttc 420
cagagccatg gacccatctt ttccaagaag tacataccac ctcccaagga gaaaaggcct 480
gaggggaggc tgaaggaggc tgtggaccag agtgatggca gccgccaagc tcccaggact 540
gagcccccat gtgtgggagc tatggccagg actgagcttt tggttccct gctgggcccc 600
gagagccaag tccccaccca ggtgtaggtc tcaccagtgg tagcttccgg agcctnnagg 660
aataccgagt gacacgcact gtgcggacca ccacatggtn ggaggtatgt tgaccggcgg 720

0956450.03000

ataacaa 727

<210> 143
<211> 661
<212> DNA
<213> Homo sapiens

<400> 143
gttacggcca ccactgctgt gtataaggac cactggcgta cggaggcttc tgcctctccc 60
actgaccaca gtggctacgg cacgggccac taccccgag gcgccctccc cgcccaccac 120
ggcggctgtc ttggacaccg aggccccaac acccaggctg gtcagcacag ctacctcccg 180
gccaagagcc cttcccaggc cggccaccac ccaggagcct gacatccctg agaggagcac 240
cctgcccctg gggaccactg cccctggacc cacagaggtg gctcagaccc caactccaga 300
gaccttcctg accacaatcc gggatgagcc agaggttccg gtgagtgggg ggcccagtgg 360
agacttcgag ctgccagaag aagagaccac acaaccagac atagccaatg aggtggtagc 420
tgtgggaggg gctgcggcca aggcatcatc tccacctggg acactgccca agggtgcccg 480
cccgggccct ggcctnctgg acaatgccat cgactcgggc agctcagctg ctcagctgcc 540
tcagaagagt atcctggagc ggaaggaggt gctcgtagct gtgattgtgg cggggtggtg 600
ggcgccctnc ttgctgnctt ttggtcacac tgntcatcta tcgtatgaag aaaaaggatg 660
a 661

<210> 144
<211> 775
<212> DNA
<213> Homo sapiens

<400> 144
agcattagtt tttgtttttt atctgacagg tagctatgga tattctgagg gagaagccag 60
gattaataca catttttttt ttaagttgct gaattgtagt ggctctcctt tctagcattt 120
ttgtcactat tgagccctct tagtttatgc tagacgtgtt tttcttattg gttgatattt 180
taaattatta aagccatctt ctgaataagc tttattcgca ctttgtacct agtttctcca 240
tcagaaggat ctattgctat accattgtat acattttctc attggtcttc gggttacttt 300
cagagtgtaa agactcctta tgccacaaaa ttaagcttag atttccccca aatcaaatac 360
tataaatcag attccttagt ctagccacaa ttgacatatc ttggagtgga taaatctttg 420
ttgctggcat tgttctgtgc atcataactt gtttagtggc atgtcatcac tgtcttctac 480
tctctagatg ccattagtat actcttcaca gttaggacaa ccaaaagtgt ctccagatat 540
tgccaaatgt ctcctgatgg gcaaagtcta tcccagttgc gaaccattat tgtaaattaa 600
acttggtttc aaatttgagc tttattcctt agctctggga acttgggcaa gttacttccc 660
ttcgagcctc aatggcctca tttgtaaaat gacattaata cctacttta gctgtgggaa 720
atgagtacca tgattatncn agcagttgga tgggctggta catganagtc aaagg 775

<210> 145
<211> 670
<212> DNA
<213> Homo sapiens

<400> 145
atattctatt ctttttttcc ctcccgcaag agggggtctc actctgttgc ctagtctgga 60

09/25/2003 15:40 FAX

gtgcagtggt gcgatcatgg cttactgtag ccatcatagc tgacttgaga catcgacctc 120
cctggctcaa gtaatcttcc cacttcagtc tcctgaatag ccgggaccac atgagccacc 180
aagcctgtct aacttttaa ttttttgcag agatggggtc tccctatgtt gctcaggctt 240
gtctgaaact cctggcctca agcaatcctc ctgcctcggt ctcccaaagt gttgagatta 300
cagatgtgag ccaacatgcc caaccatgtt ctgttcttat atgaatccag gtcaaaaaga 360
ttaagaacct aggattatca tagacatccc ttctactttg aatattcttc taagtttgtg 420
attatatgct atgtataatc ttagacaatc ttctaaacaa tgattgaaaa gaattataat 480
gataggcaca tgaaaaagca atgccttggc ccggcacagt ggcccacacc tgtaatccca 540
gcactttggg agaccgaggt aggcagatcg cttgagccca ggaatgtgag gccagtgtga 600
aacctgggca tggcaagaca ccatctntac aaaaagtcaa aaattggcca ggcgtggngg 660
cncatgcttg 670

<210> 146
<211> 841
<212> DNA
<213> Homo sapiens

<400> 146
caagttatgc cctgacctgg aaattcccca gagttgctaa aagaactgaa tgggggatac 60
tgtacataag agcacttaag caacttaaaa tgtcacatgt agggacatat gcgtgtcatg 120
tgaatagcag ctgcattttg aagttgcaat aagtgtgagg aaaatgtgct tgttagctca 180
gctctagaca gatccatgga tagaaagaca tagacatgga tccccatcca gctaagtatt 240
tgcaatccgc aggtgaagcc tggaaaccca gagaaatgga cctgttccat ccgtgacaga 300
agcgctccca ggacctaaat taaagggatg ttagaatgtt ttgagaatct tggcagggcc 360
attaggtagt gtttgtagct tttggatgct tttggtggag ggaaaatgag atgggctcac 420
ttgggaggtc tgcctgcagt ttccatccaa atttctaatc aacgttgtgg ttttatcatc 480
catttccgga atcattaccc cttaaaatgt gaggaaaacg actctccttt tcttcaactc 540
cccatctttt ccaaataccg ctgcgagttt ttgttgccaa cagcttttcc caatgtgcgt 600
gtacttacca acgtccagac tcctccctcc catcggccag ccttgcttgg tctagctatt 660
attcaaaggg gaacatgcgt gagatatcac tttggttttg ccatctaatg gattccaccc 720
cccaaagtnt ctgactttgc acttaggctc atctgcanga ccccnagggt ggcttccctt 780
cccttccgtg gctggcttaa aggggttaat tgaatccatt ctcttttcct tttccgggnt 840
t 841

<210> 147
<211> 764
<212> DNA
<213> Homo sapiens

<400> 147
ccccgtcata ggacttgtga cttactacca tcatacatat ttgattcaat tattatttat 60
tgcttaaatt gttatgatca tttattataa atcatgtatt acggctaatt aacatacata 120
tgctcagtca tttacttgat tagttattag cctcaattat attatttttt aatatatatt 180
tttatttgac aaatagaaag tatatagatt ggtacaatat gatgtttgga ataagcata 240
tattgtggaa tgactaaatc aagctaagta acttatgcag taccttacat gcttatcttt 300
tgttgtgata agaacacttg aaatctattc tactgtctta gaaatttaaa aatgggcaaa 360
ggacttgaat agacatttct tcaaaaaaaa atgcaaatga ccaacaggta tatgaaaagg 420
tgctcaacat cactaattat cagagaaatg caaatcaaaa ccacaatgat atatcaccta 480

0562040.0N2000

acacctgtta agatgtctat tagaaaaaca aaatgtaaca agtgttgata aggatatgga 540
gaaatagaaa tctttgtgtg ccttgtacac tgttgcaaga gcattagtag aactactttg 600
gaaaactctt tgnaattatc tactaaagat gaatatatgc ctactatatg acccagtggt 660
tctactttga agtgatcagg caacagaagt acatgcatac atgcccaaaa gacatatccn 720
gaaatggtat tagacntctg ggttcaggtn cacatgtagg gagc 764

<210> 148
<211> 873
<212> DNA
<213> Homo sapiens

<400> 148
aataataaaa ttatgtctaa tgaaattcca aattaaggca aaataaacaa cagaagaatg 60
acagcaaacc aaactagtgt actggttatc actatcaata attaacagag gtctggaagt 120
ttgaaatgct acaagtttta actgtataca gttgataata ttgctttctt taggaatcaa 180
ctgaaaacat actaaaatta attggtatga ctaagagagc agaaataaga ctaaaaataa 240
aaacacaatg gatttcttct atgtaaagag cactcagaga ctatgatgaa aatattacat 300
accaatgaca gtagaagtag aaaaaaacac caaaataata gtgtgaaaag tttaattgga 360
attcttaaca agaacatgta agattttcat gactaaattt tatataaata aaaacttgta 420
taaataagtt gtgacacaat tttctgaatg agaaaagaga gatgaaatat tgtctttcta 480
tttgcatata gatttactat caatctgaaa gtcttaactg aatctttctt ggatcgtcac 540
aaaaatatac aaaaaaaact catcttaaaa taaaaatcag ctaagaacta gtggaacagc 600
aagtttagta attttcctac caaattttaa tgtcatttta aagccctact aaatatttta 660
atattttata tattgctata atagaacaaa ttgtatatag catgcttcct gaattggata 720
gattttaata tcatgagagt agatagatat actaacagaa ataaattcat ttactnataa 780
tgcttggcat ataaaaacca tactttgggg ggatagaata ggagcatgaa aatttgggct 840
aatncatttc cttctaaatt actggaaaat ggn 873

<210> 149
<211> 850
<212> DNA
<213> Homo sapiens

<400> 149
aacaatgctc attgaagctg caaagggtgg ccatactaat gtagtttctt atctgttgga 60
ttatccaaat aatgttctgt cagttcccac cacagatgtg tctcagctcc ctccaccttc 120
tcaagatcag tctcaggtgc cacgtgtgcc aacgcataca cttgccatgg ttgtacctcc 180
ccaggaacct gacagaactt cacaggagaa ctctcctgcc cttttaggag tgcaaaaagg 240
tacatccaag cagaagtcca gttccctcca ggtagcagat caggacctac tgccatcttt 300
tcacccatac cagcctttgg agtgcatagt agaggagact gaaggcaagc tgaatgaact 360
gggacaaaga attagtgcta ttgaaaaagc acagcttaag tcactggagt taattcaagg 420
tgaacctctg aacaaagata agatagaaga acttaaaaag aacagagaag agcaagtcca 480
gaagaagaag aaaatattga aagaactgca gaaagtggaa aggcagttgc agatgaaaac 540
acagcagcaa tttaccaaag aatacttgga aaccaaaggt cagaaagaca cagtgtctct 600
acaccaacag tgctctcata gaggagtctt cccagaaggg gaaggagatg gtagtctccc 660
agaggatcac ttttcagagt tacctcaggt tgacacaatc ttatttaaag ataatgatgt 720
tgatgatgag caacagtctt caccatcggc agaacagatt gattttggcc cagtccagcc 780
tttatcatct tccacagngt aacttttcc agtgacttag gntctaatgg gacaaantct 840

0 0 5 2 0 4 5 3 . 0 7 2 0 0 0

ttttgacttt 850

<210> 150
<211> 739
<212> DNA
<213> Homo sapiens

<400> 150
ggaaaaaaag ttaaggatac agttgaccgt tcgataatgt agcccactgt tgaccagaag 60
ccctacccac aacataaaca ggcaataaca catattttgt atgtgtatta tatagtatat 120
tcttaacaat aaagtaaact agagaaaaga acatgtacca agaaaatcat aaggaagaga 180
aaacacattt acagtactgt actgtattta ttggtaccat acatttatgt tgctgtttac 240
aagatgaagc atctgtctga aatggccagc agctacagct gtacctatct actgtacata 300
tcaagcaagt cgctttattc ttataatgtc tatgacttct ttctttgaaa gcgcttccat 360
catcactgtt ggcacttcat atgggtctca tggtgttaag gtttacggca ttgcactaga 420
cacaatgaaa actacacaag agggccgggc acggtggctc acgcctgtaa tcccagcact 480
ttgggaggcc gaggcgggcg gatcatgagg tcaggagatt gagaccatcc tggctaacac 540
agtgaaaccc tgtctctatt aaaaataaaa aaattagcca ggcatggtgg cacgtgcctg 600
taatcccagc taatcgggag gctgaggcag gagaatcgct ttttcccaga aggcgtaggt 660
tgcagtgagc cgagatcgtg ccactgcact ccagcctgga tgatagaggg agactctgtc 720
gcaaaaaaaa aaannngaa 739

<210> 151
<211> 783
<212> DNA
<213> Homo sapiens

<400> 151
gaanactcac agataaagtt atagttattt cagggttctg aaaagacgca gaacatgaag 60
ggactcagaa gtctggcagc aacaaccttg gctcttttcc tggtgtttgt tttcctggga 120
aactccagct gcgctccgca gagactgttg gagagaagga actggactcc tcaagctatg 180
ctctacctga aaggggcaca gggtcgccgc ttcatctccg accagagccg gagaaaggac 240
ctctccgacc ggccactgcc ggaaagacga agcccaaatc cccaactact aactattccg 300
gaggcagcaa ccatcttact ggcgtccctt cagaaatcac cagaagatga agaaaaaaac 360
tttgatcaaa ccagattcct ggaagacagt ctgcttaact ggtgaaaata tactggatta 420
tgtttaatta tggttctatt ctctttgaaa acatgaacca tgtgaataaa acctttggac 480
ccttttattc catttgtaat cttaagaaca cacacagata gttttattct ttcagaaaca 540
gaatatatat aggatgctta gctgagaaca tcatcttctt tcattgcttc aggtcctgtt 600
tagatgacca aaaatgtttt cagatcacct tgtgtcttac tcttgagttt cttagaatat 660
ttataattat aaggctgaag actaaagtgn tctttccttt taactatagc cagtacctgg 720
cttgatctta ntggggnttt tttttttca ttttggtacc cacttgcatt ttggtttcac 780
tta 783

<210> 152
<211> 777
<212> DNA
<213> Homo sapiens

0952945.0972800

<400> 152
ctgcacgtcg cggacaacac cttcgtcttc ttcacgtcgg acaacggcgc tgccctcatt 60
tccgcccccg aacaaggtgg cagcaacggc ccctttctgt gtgggaagca gaccacgttt 120
gaaggaggga tgagggagcc tgcccccgca tggtggccag ggcacgtcac tgcaggccag 180
gtgagccacc agctgggcag catcatggac ctcttcacca ccagcctggc ccttgcgggc 240
ctgacgccgc ccagcgacag ggccattgat ggcctcaacc tcctccccac cctcctgcag 300
ggccggctga tggacaggcc tatcttctat taccgtggcg acacgctgat ggcggccacc 360
ctcgggcagc acaaggctca cttctggacc tggaccaact cctgggagaa cttcagacag 420
ggcattgatt tctgccctgg gcagaacgtt tcaggggtca caactcacaa tctggaagac 480
cacacgaagc tgcccctgat cttccacctg ggacgggacc caggggagag gttccccctc 540
agctttgcca gcgccgagta ccaggaggcc ctcagcagga tcacctcggt cgtccagcag 600
caccaggagg ccttggtccc cgcgcagccc cagctcaacg tgtgcaactg ggcggtcatg 660
aactgggcac cttccggctt gtgaaaagtt anggaagtgt ctgacacctt ccggaaatnc 720
attcccaaga agtgcctctg gtcccactaa cacctgggca aactcaggcc angccta 777

<210> 153
<211> 691
<212> DNA
<213> Homo sapiens

<400> 153
tctacatttt tgaaagacaa gaattaagtt tgattgagaa agatgttttt aaaactttga 60
aactcataat tgctctgttt ttgctgttgt tagtggcata agaagggact ggctgtgtta 120
ttctgcatat tgcagttctt gtcaatgacc tggtaagtct ttccttaccc tagtgaagtg 180
ttaaaattgc ctgagatgtg acgagcattt tgtttgggac ctgtgaagcc ctagcatttc 240
gtctggtgtt ttggagccag acaggccctg cagggtcaga ggaggggagg tctgcgatga 300
gtcctgttgc acttgacagc gtggctcagt ggtactgttc gggagaagta tggggtgctg 360
tgctcgtaga gttacatagt gatatgttct gctttttttct aatgtgagaa agagaaataa 420
taagaaaagt aggtgatgcc atgtgagtac ataaaagtga gaccaaatca cagggtgagt 480
ccaagggaag atgagtttac ctgcattctc cactctattg ctggataaat acaacgtgga 540
atttatcctg atgttgactc tgtggccctg tgatatctgg agatgtcttc tgaattggca 600
gngattaaat acttcttaag ttactggttg agcatccaaa tcccaaatgc ttcaggatcc 660
caaaactttt ttttttttt tttgaggcnn a 691

<210> 154
<211> 740
<212> DNA
<213> Homo sapiens

<400> 154
tttcagaata ctgtataaaa ttaaatagaa tattgtaata gtttaaggtt ttgcatatat 60
tgggttaaat atttctgaaa agcaaaatta tttcaagttt tcaaatatct tgacatggaa 120
cactgccttt gctaggagtc atttctagaa attacttaaa ataggagaca agcatcaatc 180
atagggattt cagctttaga actattggaa caaatctagg ttagacaacc agcttatatt 240
attaagcaag attacatata ataatcatct ttttttaaag gagagacttt tgcaaatatt 300
atacagcaat caaaaggtct tagcttagtg tatcatcctt attagaaacc aagatgttgc 360
attttatttc agtgctttct gtagtcatag ctaactcttt tacctcagca atttcaatca 420
aaaagcttct ctatcattct atacataaaa tgcagacaca ttagcagtca acattatgaa 480

0502303.0042000

tgcctttaca ggtaaacaaa caaaatcact ttattactgg attttataac caattcccat 540
tctttttgt gactattcag gagaatactg ggttgaccct aaccaaggat gcaaattgga 600
tgctatcaag gtattctgta atatggaaac tggggaaaca tgcataagtg ccaatccttt 660
gaatggtcca cggaaacact ggtggacaga ntctagtgct gagaagaaac cccgtttggn 720
ttgganagtc catgggatgg 740

<210> 155
<211> 761
<212> DNA
<213> Homo sapiens

<400> 155
gaggatggca ggaggagtgc ttgcatgttg agcagtcctg agagtagctt gacaccacct 60
ctctcaacca acctgcatct agaaagtgaa ttggatgcat tggcaagcct ggaaaaccat 120
gtgaaaactg aacctgcaga tatgaatgaa agctgcaaac agtcagggct cagcagcctt 180
gttaatggaa agtccccaat tcgaagcctc atgcacaggt cggcaaggat tggaggagat 240
ggcaacaata aagatgatga cccaaatgaa gactggtgtg ctgtctgcca aaacggagga 300
gatctcttgt gctgcgaaaa atgtccaaag gtctttcatc taacttgtca tgttccaaca 360
ctacttagct ttccaaggta ccagtgaaat aattgatttt tggtgttgat tttcataagc 420
taaaaataaa taacagaaga atgttcaggg cagatggcct tctaaccagt gcatagtatt 480
tctataaaac agggagcctg ttattctttt ggtattagct tccagagaaa ctaacaataa 540
aatatctaag atctaagtag tacattaatg ttaaagagta gatttcatct cctggccttt 600
agtttatatt cagtataagg aaaatagata aaactctaaa ttaatagggg gctaaggtta 660
caaaacctgc agtctggttc taattctgta gtaagcttga caattcacta attatcaggg 720
atcagttttt gcatctacaa gtggtanggt ttggnttanc a 761

<210> 156
<211> 737
<212> DNA
<213> Homo sapiens

<400> 156
agtctgggtc tggagcctga gccctgcgga acctcggcgc tcggccccac cccgcccgta 60
cctgcactta tttattgttg ttatttctta ccgcggagcc ccgcagtcgg gtcctcccgc 120
ccgctcccgc gcagcgctag cattctccag tccctcagtc ccttcccgcg cggtgcgccg 180
cagccgaggc gatgcgcctc attcagaaca tgtgcaccat cgccgagtac cccgcgccgg 240
gcaacgccgc ggcctccgac tgctgtgtgg gcgccgccgg ccgccgcctg gtcaagatcg 300
ccgtggtggg cgccagcggc gtgggcaaga ccggtgagtc gtcgcgctta gccctgggtc 360
tggtcttgga cgacccctga cgggagttga ggctgaacaa ggcgtgggga gcggtgggag 420
ctgcagcccg accgctctcc gtccccgcgc agggagccgc tgccccttgg gagtgggctt 480
agccgttgtc tacgccaccc gcctgcttcc acagacgggg gaaacaagga tcaagaatgg 540
ccaggcagct ttctggggac caccggcacc gncgccatca gaactttggg gtgtttgagc 600
ctctggcaat gcctggcaca gaaaggggag ttagtgaagc tagcccccct gggaggtctt 660
gaaggttagg aagacatggg tctactggaa ggcttangtg tggnttaanc cgggcttaaa 720
aggaaggggt gggccca 737

<210> 157
<211> 680

0305345.0470000

0030250-050800

<212> DNA
<213> Homo sapiens

<400> 157
gacaccctct ccgcgatgac tgtgagtggt ccagggaccc ccgagccccg gccggccacc 60
cccggggcca gctcagtgga gcagctgcgg aaggagggca atgagctgtt caaatgtgga 120
gactacgggg gcgccctggc ggcctacact caggccctgg gtctggacgc gacgccccag 180
gaccaggccg ttctgcaccg gaaccgggcc gcctgccacc tcaagctgga agattacgac 240
aaagcagaaa cagaggcatc caaaggtagg ggaatggtgg gccctggtgt ggagctgtag 300
ggcttctgtg gtgggcaagg actctgggac cgctgcaccg tcacattctc ctcctttggc 360
cccagagaca catctgcctt ctttctttcc cactgcctcg ggcctttcct tttctgcagc 420
taccctcacc ttttctgagg ctgaagcacc gagccccaca ttcgtccccc ccaccttctt 480
ctggcctttc ctcgagatct ttccctactg ctcttgcctg gagacagtgg cctcatgggt 540
gctgacagcg ctcctgtttg tgctcagcca ttgaaaagga tggtggggat gtcaaagcac 600
tctaccggcg gagccaagcc ctaganaact gggccgnctg gccaagctgt cttgacctgc 660
anagatgtgt gagctttgga 680

<210> 158
<211> 765
<212> DNA
<213> Homo sapiens

<400> 158
agagggagac ccgcggcaac cccggcaacc cagggctcgg cgtcgctgcc accatgacgg 60
gaagcaatat gtcggacgcc ttggccaacg ccgtgtgcca gcgctgccag gcccgcttct 120
cccccgccga gcgcattgtc aacagcaatg gggagctgta ccatgagcac tgcttcgtgt 180
gtgcccagtg cttccggccc ttccccgagg ggctcttcta tgagtttgaa ggccggaagt 240
actgcgaaca cgacttccaa atgctgtttg ctccgtgctg tggatcctgc ggtgagttca 300
tcattggccg cgtcatcaag gccaagtgtg agaagccatt cctggggcac cggcactatg 360
agaagaaggg cctggcctac tgcgagactc actacaacca gctcttcggg gacgtctgct 420
acaactgcag ccatgtgatt gaaggcgatg tggtgtcggc cctcaacaag gcctggtgtg 480
tgagctgctt ctcctgctcc acctgcaaca gcaagctcac cctgaagaac aagtttgtgg 540
agttcgacat gaagcccgtg tgtaagaggt gctacgagaa gttcccgctg gagctgaaga 600
agcggctgaa gaagctgtcg gagctgacct cccgcaaggc ccagcccaag gccacagacc 660
tcaactctgc tgaagccctc ttgcgcagct gcctctcggc cccttcgctt ctnccccttcc 720
gnttgtccat gcttggcccc ctcgtcccca tncacctgtg ccctt 765

<210> 159
<211> 879
<212> DNA
<213> Homo sapiens

<400> 159
gtattcatta aaagaaaact aactggaaaa caggttagat taattcagta ctattaaaaa 60
agaattcaga gctgttaata ttttatcaca ggataggata cttaaaatat agcattctgt 120
gctgagatct aaggtgaagt ctataaagat taaagttccc ttttttctga tgttcaagtt 180
gattgttgtt cagtatggca tatatgacaa aagtatattt gagtcaaatg tggctttcta 240
aaatggatgc aacatgtaga tccatacaag ttggggtagg atatacccaa gcgtgtatat 300

atttgctcag catgtgaaat aataaaaata atacaaaact actcattctt caaggtagtt 360
acagtttcaa tgccactctt cctgtcccca tattcattaa gacagaagct tgatgcttaa 420
acacacactg gtatgaaaat gttttgtgtt ttctgttata ttgtcagaag tgacattgat 480
ttgaaaggat gagagcctta ttttcttgca acccttactg aaaggcatga tttcaggtga 540
aaatcttcag tgatttttaa catatgtcac atgtttgcag taaggtcagt ctttccaatc 600
acagatagag ttatgcatct atattctacc aaatattagc aaaaccaatg caatacgtgt 660
ctggctttgc aatataaagt aagcttggtg attatattta agtggagtta cttgaaatan 720
gtcatttagt ttacatacag tttaattctc atgccacaat taataaggna tcacatgact 780
gcaaaatccc tgcancaaac ttctagctct gatattggta agatacttgg ctgaagtgga 840
nataactggc tgtgctgcac ttaagctgtc tgaggtgng 879

<210> 160
<211> 779
<212> DNA
<213> Homo sapiens

<400> 160
ttccaggtgg catttgttag ctggtagaca aggactttgc cgtgaatttg ttagtagcaa 60
ggaatgattt cttccagctt ccttgaaatg aataattagt aaacttctaa gcaaagtcaa 120
tgactaggag tttcacatgt ttgtgaggtc ctaactaatt ctcttaccca gatgccacct 180
ccatgaatga tggtgcttta ggcttctgga atatgtaaaa acagcaaagg gaaccaagtc 240
tagactgcat actggtaaac cagggaagac tcagaactgc atatgcatcc tcatgcattc 300
ctttgtaaag accaccagta ctaaaataac tggacactca ttgtacctcc cagcgataag 360
tatgtgtaac aggccagtgt gttgtcccca tgatcatgaa ttaggcttgg gatgcttcca 420
aatatattca aggtgttgga acaggatagg cagctgtgac tccctcaaga gtccttagaa 480
ttctaaataa aatgcagagc catcctaaga cacaggggta tggacaaggc ctggtgacac 540
caaaggtgct tgtatccaat tgaaaaggtg cctgtctcaa tttcatacca cctttattgc 600
agttaaaaaa aaatcacact ctggggacac ttggtggaat tacagagcca ccatcatcat 660
tccaaccact atttcatttt ctgnagtttt acctgtgtgc aattactccc cctncattct 720
ggtccacttc ttacttctta gtaccaaatc ctctggttgg gattgagcgc tgntcctgg 779

<210> 161
<211> 691
<212> DNA
<213> Homo sapiens

<400> 161
tcttgaactc ctgacctcaa gtgatccacc caccttggcc tcccaaagtg ctggaattac 60
aggtgtgagc caccgtgccc agccaaaatt cttaaagaat aaaccaaatc ttaaacaatc 120
ttccaattag aattattttc agccaaatta tcatttaagt gtgagagtaa aataaagaca 180
ttttcttttt tcctttctct ttttttttt ttttttgaga tggagtctcg ctctgtcgcc 240
caggctagag tgcagtggtg caatctcggc tcactgcaag ctctgcctca ggggttcatg 300
ccattctcca gcctcagcct cccaagtagc cgggactaca ggcgcccacc accatgcctg 360
actaattttt tttctatttt tagtagagac agggtttcac cgtgttagcc aggatggtct 420
caatctcctg acctcgtgat ctgcctgcct cggcctccca aagtgttagg attacaggtg 480
tgagccaccg cgcccggccg ataatgtgtt gttttaaggc attaattttg tggtacatac 540
aaaagtaatt tgtgtgtaca tacatgcata tatacntata tatgtacaca cacatatatt 600
tggtaaacct acacacagtg tttattttat tatttcgata aaactattat tcacagctga 660

0538045.0076000

gccttgnggt gcactggaat agnnctttтc g 691

<210> 162
<211> 661
<212> DNA
<213> Homo sapiens

<400> 162
ctgttggttg attgaaaatt ctctttcatt gtcaactgaa cgctggactg ccagacagtc 60
ccaaatggcc tccctgaaat gcctgactgt tggtgccact tgccatctgg gagatcagct 120
ggagcttttg agcaggactt catttgtcct tcctcttggc ttctcctcat cactacttgg 180
ccttcctcac agactgatgg ctaccatcca acaaaggacg ttccaatggg tgctgaaaag 240
ctgtgtaact cttaagaccc agacctcaaa gttacacagt gttacatttt tccaataaaa 300
caattaaata aaaaaattaa ttttatggat acataatagt tgtgcctttt atgcgataca 360
tgtgataaat tctatttaga tattttaccc atttttaatc agatctattt gctattgagt 420
tgtttgagtt ccttatatat tttgattatg aatcttttgt caggtgaaga gtttgcaaat 480
attttctccc attttataga ttgnttcctc actttggtaa ttgtcactct tacaagattc 540
aatttgttga gtttgtgaga tgagattata gtcaaatagg taaatctacc tnctgntaac 600
tactcaataa tataatttat ttattcaaaa aatggtaatt gctgggntga agatatagat 660
g 661

<210> 163
<211> 741
<212> DNA
<213> Homo sapiens

<400> 163
gaataaaatg tacaaatttg ttgtgttttt ttatgttcta ataatactga gacttctagg 60
tcttaggtta atttttagga agatcttgca tgccatcagg agtaaatttt attgtggttc 120
ttaatctgaa gttttcaagc tctgaaattc ataatccgca gtgtcagatt acgtagagga 180
agatcttaca acattccatg tcaaatctgt taccatttat tggcatttag ttttcattta 240
agaattgaac ataattattt ttattgtagc tatatagcat gtcagattaa atcatttaca 300
acaaaagggg tgtgaaccta agactattta aatgtcttat gagaaaattt cataaagcca 360
ttctcttgtc attcaggtcc agaaacaaat tttaaactga gtgagagtct atagaatcca 420
tactgcagat gggtcatgaa atgtgaccaa atgtgtttca aaaattgatg gtgtattacc 480
tgctattgta attgcttagt gcttggctaa tttccaaatt attgcataat atgttctacc 540
ttaagaaaac aggtttatgt aacaaagtaa tggtgttgaa tggatgatgt cagttcatgg 600
gcctttagca tagttttaag catcattttt ttttttttt tttgaaagtg tgttancatc 660
ttggtactca aaggataaga ccgaccataa tacttcactg aatattaata atctttacta 720
gnttacctcc tctgntcttt g 741

<210> 164
<211> 781
<212> DNA
<213> Homo sapiens

<400> 164
gagcactgga tttggagtca agaaacctgg acacttggct ccacacttcc ttagctgggt 60

0502050.0407000

aactttgggc aaaccgcttg gtctctcaag cctaaggttc ttcagctata aaatgggaat 120
aatacttcac taactacctc acagagttgt ggtaagaata taatcagata actggataaa 180
aacactatat aaactggaaa gcgccgtaca aatgtgagag atcagtttta ttatcaaatc 240
actgttttcc actgcctctt gaatcggctt tattctaacc aaccattaca tctttctcat 300
cttttggagt atgggtaatt gaggcttggg tgtgtcatca gggactggag ttatttcagc 360
tcccatgtag aggtgggaga ggtggttgat ggggcagtgg aagttagata ccagcgatgt 420
atatggtagg acattttcct gggtcacttt gacagtacct tgggaaattg tcaatccttg 480
cagagggcct aggctgggca caagggagaa agcgaacagt tgactaagaa ttgaggggag 540
ggtctggagc gctactgccc tcctgtcatt gctgtgggtg ggagaggcta agactacagg 600
tttgactgga ggcctangag agaagagtgc cttagggttt caagaatttt aatgcctagc 660
agctgagtaa caggcattag tctgatagat agtgaaaggg gagaaagtgc ccctgntgtg 720
agancacctt ttcanggcaa caactggctt ggtatcacca gcaaccctta accctgggca 780
g 781

<210> 165
<211> 734
<212> DNA
<213> Homo sapiens

<400> 165
ttccttgtta accaagttac ttttaaaaag atcctttta aactgattct tcctcagctg 60
ttcttcagcc ctctatactt tttcataaaa gtcaccagtg actgcccagt tgccaaatag 120
aatgaatacc tttcagtgct cagctgtctt gacctctccg cagcatttca caccacccac 180
caaccctcag tgaaacaacc tcctccctta gcttttatga caccacaagt ctctggattc 240
tcagagaatc cagaaaaaca agtctctgga ttctctcctc ttacctctca gcccacacag 300
gctgagctgt ccttgaaacc tagatggggg aaatgtctgt ggctgtctgt ggtctcttct 360
tttcaggagt tgggtaggga ggaagaatca cagctgctcc tgcttcctct gtctgtctct 420
ctatttcctg agtcccttcc ttttcctgaa ctcagttctc ctcatgccaa ccatgtttat 480
gagctcctgc tgggaggaca gcatctgtga gtccttccct ctgtctctcc cagacaacac 540
agaggtttta gcctgtttgc taagagaccc catctaagtc agcccaaggg tgtggattag 600
gttttacagc atccaggccg cagtctggct aaactggatt accaggctgg tgggcagctc 660
ctnaccatga tcctgcacca gttagagcct gctgtagttg ggaaggacct gggattgtgg 720
naagatgtgn ttcg 734

<210> 166
<211> 738
<212> DNA
<213> Homo sapiens

<400> 166
ataggccagt gccggggttt aagggccagg aaaggaagca ttcagggaat ttaggtgtag 60
ccagaagaaa atcaggtcct ggctccccag aagcaagaga gttcaagtga aggaaggagg 120
aggttcctgg atgtggatgt catcatttct gggaacactc ttaaatggag actcagattt 180
cttagccaaa atttagggag gatccagaag aaaccaaaga cgaagcatcc cagttcttgg 240
gtatttcctg aaacagaaga aaatgacaaa ggcccaggaa tcactgaccc tggaggatgt 300
ggctgtggac ttcacctggg aggagtggca gttcctgagc cctgctcaga aggacctgta 360
ccgggatgtg atgttggaga actacagcaa ccttgtgtca gtggggtatc aagccggcaa 420
acctgatgcc ctcaccaagt tggaacaagg agaaccacta tggacactag aagatgaaat 480

0952345-020800

ccacagtcca gcccacccag aaattgagaa agctgatgat catctgcagc agcccttgca 540
aaaccaaaaa atactgaaga ggacgggaca acgctatgaa cacggaagaa ctttgaaatc 600
atatttaggt ttaaccaacc agagcagaag atacaacaga aaggacctgc tgagtttaat 660
ggagatggag cttttctnca tgataatcat gaacaaatgc ctacngaaat tgaattncct 720
gaagtagaaa acccatca 738

<210> 167
<211> 575
<212> DNA
<213> Homo sapiens

<400> 167
aaaaaggaga ggaggggctc ctgggaacag ggctcagagg caggcgaggt ccctgattca 60
ctcactcact cactcattca ttcgttccca cacacactaa gcagacatgt gcccagcacc 120
tcctttgtgc caggccccat ctggatgtcc atgccaggag agaggcaggc agacctgggc 180
ctcccaggat ggaggacgga cgaagaccac tgagcatgat gagaggggaa aagctgaaat 240
gtgagtggga agctcctgct caccacggca gccccctggc tagcacggcc tggcagagtc 300
catatggaag gaaggaacca ggttctatgg gatcatagag gagcggacgt gatgcagcct 360
ggaaaaggcg ccctggagct gagggtaggg atgccaatag gcattagcca ggctgtgggt 420
gggaggtggg gagaggggat ccctgcaaga ggcaccaagg cacaaaaagc agcttcctgg 480
aggggaggtt cggaggtctc tgagcatcct atgaaatccc atagtgcttg ccttggatct 540
tccaggaagc atgagaccca ccnagctgan gacna 575

<210> 168
<211> 868
<212> DNA
<213> Homo sapiens

<400> 168
caattactac catcttccag agattcttgt gtgtcctctc cttagaaaga aaatagagtt 60
tgagggtatt gactgctttc tttactgact gagtcttgtt gaagcagagg aaatgtaatg 120
agccactgaa aaggttttat gtaaattaac attgtaaagc cagtttcaaa ttttattctg 180
ctactggtta aagaaagtaa agcatagagt ataaccttgg aactatatgg ataaaaactt 240
aaagaatcca gtggatttca tgtaagtaga actctagtga gccatagatc ataaagattt 300
ttagggaagg tgaatgaaac agaataacca ctccaaaatg attcctccag ctggatacac 360
tgtcaacatt cactgtccat cttggctaaa tttctactgt aaaccaaaga tataaaaagg 420
gatatatgtg tactccttta ccccttttc tttcctagca gtagcagtcc agtagagtaa 480
tttgtaaaca taaaagcaac attaaagtat gaggaaattt gaatataaaa ctgtaagaaa 540
ataatgtctc acatttgtca tatactgaaa gtattaaaca ggacccttcc atatgtttct 600
tagcagtttg ctttcagtct taagtgctat ttcctcaggg tttcatacaa acttgacctc 660
tcaatcccag atcaattgat ttcctaggag tcatttgtat gtaataagca ggtgccccag 720
tataaataat gggtggatag aagcataata tctacatcag aagaccttgg tctatctgng 780
ctatcagcca actgcaggtt tctactagag ccatgactag aaagggntgc agataaatca 840
gatgntttca gaaaagaagt gtccacca 868

<210> 169
<211> 861
<212> DNA

0956450-090800

<213> Homo sapiens

<400> 169
agtgggctcg aaacaaaggg ctgtccggtg gggattcgtc gcggcgcctt ctgagtggtc 60
gggtcgaggc ttctcggcct agcagtgccc tcgctgcgcg atctcaggcg ggttctcctc 120
ggctccgcgc agcccgcgcc gcggtggggg acccggcgca gcggcacctg ctgccgaggg 180
accccgcggc ccgccccggt gctcgtgatg gggctgatct tcgccaaact gtggagcctc 240
ttctgtaacc aagaacacaa agtaattata gtgggactgg ataatgcagg gaaaaccacc 300
attctttacc aattcttaat gaatgaagtg gttcatactt ctccaaccat aggaagcaat 360
gttgaagaaa tagttgtgaa gaacactcat tttcttatgt gggatattgg tggtcaggag 420
tctctgcgat catcctggaa cacatattac tcaaatacag agttcatcat tcttgttgtt 480
gatagcattg acagggaacg actagctatt acaaaagaag aattatacag aatgttggct 540
catgaggatt tacggaaggc tgcagtcctt atctttgcaa ataaacagga tatgaaaggg 600
tgtatgacag cagctgaaat ctcgaaatac ctcaccctta gttcaattaa ggatcatcca 660
tggcacattc aatcctgctg tgctctcaca ggagaagggt tatgccaagg tctagagtgg 720
atgaccttcc ggattggtgt gagataactt ttttgcttga aagagactgc tctatttatt 780
ctgngacatg aacatttttt tctaagnacc ctttgctgnt aagcaacaac atgtttaatt 840
ataacaaccc aaaacctttg a 861

<210> 170
<211> 858
<212> DNA
<213> Homo sapiens

<400> 170
tttcttgctg taccccggcg atggaggcgc cggcttcgga gtgcgcccgc cgccgcagca 60
gcagcgctcc tggaggaccc cgccgtcccc cggctcaccg ctgcccttcc tgctgctgag 120
ctacccgagc ggcggcggcg gcagcagcgg cagcggcaag caccatccta attatctcat 180
ggctaatgaa cgcatgaacc tcatgaacat ggccaagctg agtatcaagg gcttgattga 240
atcagctctg aacctgggga ggactcttga ctctgactat gcacctctcc agcaattctt 300
tgtggtgatg gagcactgtc tgaaacatgg cttgaaagct aaaaaaactt ttctcggaca 360
aaataaatcc ttctgggggc ctctagaact ggtagaaaag cttgttccag aagccgcaga 420
gataacagca agtgttaaag atcttccagg acttaagaca ccagtaggta gaggaagagc 480
ctggcttcgt ttggcattaa tgcaaaagaa actttcagaa tatatgaaag ctttgatcaa 540
taagaaagaa cttctcagtg aattctacga acccaatgcc ctcatgatgg aagaagaagg 600
agccataatt gctggtctgt ggtgggtctg aatgtcattg atgccaattt ctgtatgaaa 660
ggagaagact tggactctca ggttggagtt atagattttt caatgnatct caaggacggg 720
aacagcagta aaggtactga aggagacggt cagattactg caattctgga ccagaagaac 780
tatgtagaag actgaacaga cattttaatg ctactgnaaa caancttcag gcaaagtaga 840
tgcnttagaa aaatccac 858

<210> 171
<211> 692
<212> DNA
<213> Homo sapiens

<400> 171
gtctctgatt ctctgacacc acctaggtgt cccctaattt ggttcagttc tgacactagc 60

0505050-050200

ttttcagggt tcgtgccggc ctcacaagtt ttgagggcta agtcccacaa gaccatcccc 120
atttccgtca ccagttgcat gtcctaagcc acctgtactt ctgatcaact ggctgtaaat 180
tggggttccc atgacctcac ttcaggttcc ataatttgcc aggacaactc acagaactca 240
gaaaggcact ttgcttattg ttagtggttc ctataaagct aggttgtcca acccgcggtc 300
caggatggct ttgaatacgg cccaacacaa atacttaaac tttcttaaaa catgatgagt 360
tttttttgaa attttctttt tctcatcagc tgcagttaat gttagtgtat tttatgtatg 420
gcccaagatg attcttacag tgtgtgtggc ccagggaagc caaaagattg gacacccctg 480
ttttaaagga tgcaacttag gaacagccca aaggaagtga cacacgggac gaggggtggg 540
agtccccatg ccccctgggg gagacacctt ctagtgcacc atcccaatga gttcatgacg 600
tggaggcttc ccacatccca tttttcaaga gtttttgcag cccagtcttc tggcccccca 660
ccccttccag angttggggt gtanggggtg cn 692

<210> 172
<211> 838
<212> DNA
<213> Homo sapiens

<400> 172
tagaagatgg agagtgttaa attatatttg tgataggaag cttagacata tcttttggtt 60
attagcttcc attgccaatt gtatttcaga tgcatagggt tttcttccca aaaatatatt 120
gttaactttt atagctaact agcacctgga aaaaatgtat ttgtacaact ttactattgt 180
atatagtttt ataataatga aaaataaacc caatggccat attagaatgc aatttcgaca 240
tacagcttat ctagatagtt ttccagagga ttttgaaatt tggcttaact gggaggataa 300
ctgctcagca caccactgaa acataaccac tgacaccatt catttatttt aactgagatt 360
cttgacattt ttctctccta tgccttgtta ctttagcata cttgaactca cataaatgct 420
tctttggatt acatgggcta tctgattcca ttttggatct gattgtccat cttgaattca 480
atatggtatt catctggact attcaaaaat tatgccattt ctagtctgtg aaataagatg 540
taaaaaatct ttatttttgc cctttggtaa aaacctatgt gacaactttt aaaatgtgaa 600
gcaacatcta atatagttga ctggtatact aataggaaag tgaaagtatt tcatgggtac 660
tttgtcacag aatgtgaaaa gaaacttggc atantggcct ttataatgag gcatccactt 720
actcctctga agtgaagtct ggtagcttaa cttgggtata ggtttttgn aaggaaatct 780
catgaatctt cgntcatttc tcttggcctt cncttttat ctcaaaatgg cacaagtt 838

<210> 173
<211> 872
<212> DNA
<213> Homo sapiens

<400> 173
aaagtcctaa aaaactcttt gcagtctaaa cctcccaagt tttttttttt tggaaccaag 60
gcaactttac ccactagaga taacctagaa aatttctatc tttagttcaa ctgaactctc 120
agtgttattt catagaaacc accccagtct atttatatta ttcaacacat aattttggtt 180
agagaatttt tttttttttt taaattaggg atgggggtct tgctgtgctg ctcaggctgg 240
tctcaaactc ctgggctaag tgattccctg actgtacctg gccaagagaa gtttttgtgc 300
tgtggcttac cttagcatat ttctctgctt cttctcttat atcttttgga acaatttcat 360
gtcttccatt agttactgta aattaagcca catgtgtaaa tgaattttaa attgagtacc 420
atattgtaac ttgcagtata ccataggatc tacccaatcc acatatctga ctcacctaag 480
gttgcaaagt tgtactatga gtaatactcg aatatttttg tgtgctgctt ctacatgaga 540

00827023.062960

ttatatgtgc ctacatatta agttcttatg gaaatgaaag taaattatgc tatttataaa 600
tcctgagcat taatttatag catagtatct taaaaccatg aaatggatgt ttcaaaaaat 660
aacgtgttca caacttaagt caattattaa gcagaacttt cccttcatta gacaacctag 720
taaatttgct ttagctttca ttatattaga aaggacactc agttgtaaat tagctgnggt 780
acagatcatt cctaaggcaa ataaatggtc cnaaaataac ttacattcac caacccagct 840
gagttctagt tcaaaagctt tatccttnac tt 872

<210> 174
<211> 816
<212> DNA
<213> Homo sapiens

<400> 174
tattatcatg gctacaaagt cttgtgtggt ctgggccaca tcctgtgcca ggctcccttt 60
cattgtctat attccagtca agctggcctt caaaatttca gcacattggg tctttctgcc 120
acaggccctt gcacatacat gcttttccct ctgtacatgt gattttcttt catccccgct 180
ttccaaagct aactctgact catccttcag actgcatctt aatgattact tccttctgga 240
agactcccct aattttcaca actagatgag ctctccctta tatgttgaaa acaagtattt 300
cttgtgtgaa cagaaatgtt taatgtctgc cttcccaact cagccacaag ctctgtgagg 360
atggggactc agtctttgca tccctcagag cctagcatag tctcagttaa tacgtgatag 420
ctggagcgtg acatttcatt aggaacagtg aggctagttg agaaattata cctcaccagt 480
atataggaga gtaccattag gaattcttaa tgggatgaaa acctgaattc atgtctagac 540
cctgccacct gctggctgtg ctgttttaaa taaattgcag atcctctcag agcctgtttc 600
ctcatatata aaataatggg gatcctaaca gccccctcat atggttgtag caggaattta 660
attaaataat atatggaaaa gcatttttt aactgnaaaa ccatacataa atatcctttg 720
ncacttttcc cagtgcatga cacactgggt cattaaacat ctattgggat gggtggatgg 780
gttggataga tggacnggac nggaattaac aggtta 816

<210> 175
<211> 834
<212> DNA
<213> Homo sapiens

<400> 175
agtggtagcg gttattcggc ggcccgcggc ggaccatggc cctggcccgg cgtcgctggg 60
ctttcctcac ggcgtccccg agcagcgtcg cagagcgggc cgacttccgg gaaggaactg 120
accagcgact gagcggcggc cggcgcgctt agcgccctga acatgcggca gtccctgcgg 180
gcgaccccgg gctccggaca ggcggcggcg gaggcggcgg ctcgggaggg aaggaggcgg 240
cggcgccggc ggaggtggcg gcggagacgg ccggcgcccg gcgcggagcc ctagggaggc 300
agttcagcgc ggcctcgggc ctcgtcgaga aggatgctgt cccgaaagaa aaccaaaaac 360
gaagtgtcca agccggccga ggtgcagggg aagtacgtga agaaggagac gtcgcctctg 420
cttcggaatc ttatgccttc attcatccgg catggtccaa caattccaag acgaactgat 480
atctgtcttc cagattcaag ccctaatgcc ttttcaactt ctggagatgt agtttcaaga 540
aaccagagtt tccttagaac tccaattcaa agaacacctc atgaaataat gagaagagaa 600
agcaacagat tatctgcacc ttcttatctt gccagaagtc tagcagatgt ccctagagag 660
tatggttctt ctcagtcatt tgtaacggaa agttagtttt gcttgttgaa aatggagact 720
ctggttcccg atattattat tcaagacaat ttttttgat ggtcanaaga aagccggcca 780
ctttggaaga tcgtgcccaa tgaaagacta ccggattntt tantgaaatt ccaa 834

0050-0050-0050

<210> 176
<211> 720
<212> DNA
<213> Homo sapiens

<400> 176
aaattgggag ggcttcttgc aggctgctgg gctggggcta agggctgctc agtttccttc 60
agcggggcac tgggaagcgc catggcactg cagggcatct cggtcatgga gctgtccggc 120
ctggccccgg gcccgttctg tgctatggtc ctggctgact tcggggcgcg tgtggtacgc 180
gtggaccggc ccggctcccg ctacgacgtg agccgcttgg gccggggcaa gcgctcgcta 240
gtgctggacc tgaagcagcc gcggggagcc gccgtgctgc ggcgtctgtg caagcggtcg 300
gatgtgctgc tggagccctt ccgccgcggt gtcatggaga aactccagct gggcccagag 360
attctgcagc gggaaaatcc aaggcttatt tatgccaggc tgagtggatt tggccagtca 420
ggaagcttct gccggttagc tggccacgat atcaactatt tggctttgtc aggtgttctc 480
tcaaaaattg gcagaagtgg tgagaatccg tatgccccgc tgaatctcct ggctgacttt 540
gctggtggtg gccttatgtg tgcactgggc attataatgg ctctttttga ccgcacacgc 600
actgacaagg gtcaggtcat tgatgcaaat atggtggaag gaacagcata tttaagttct 660
tttctgtgga aaactcagaa aatcgantct gtgggaagca cntngaggac agaacatgtt 720

<210> 177
<211> 240
<212> DNA
<213> Homo sapiens

<400> 177
ttttactttt ggtttaaact ttatgaagag accacaggac tctttcgagg ccctgtaatt 60
ggaatgagtc cactttaaat cctttaacga ggatccattg gagggcaagt ctggtgccag 120
cagccgcggt aattccagct ccaatagcgt atattaaagt tgctgcagtt aaaaagctcg 180
tagttggatc ttgggagcgg gcggncgngc ctcgnatacc aacatttaaa atgatggcat 240

<210> 178
<211> 809
<212> DNA
<213> Homo sapiens

<400> 178
ggtaagtgac cctcgggcct cgccatgaag agccgcttta gcaccattga cctccgcgcc 60
gtactcgcgg agctgaatgc tagcttgcta ggaatgagag taaacaatgt ttatgatgtg 120
gataataaga cataccttat tcgtcttcaa aaaccggact ttaaagctac acttttactt 180
gaatctggca tacgaattca tacaacagaa tttgagtggc ctaagaatat gatgccgtct 240
agttttgcca tgaagtgccg aaaacatttg aagagtcgga gattagtcag tgcaaaacag 300
cttggtgtgg atagaattgt agattttcaa tttggaagtg atgaagctgc ttaccattta 360
atcattgagc tctatgatag ggggaacatt gttcttacag attatgagta cgtaatttta 420
aatattctaa ggtttcgaac tgatgaggca gatgatgtta aatttgctgt tcgtgaacgc 480
tatccacttg atcatgctag agctgctgaa cctttgctta ctttggaaag gttgactgaa 540
atagtagcca gcgcacctaa gggtgaacta ctgaagaggg tgcttaaccc attacttccc 600
tatggaccag ctctcattga acactgtctt ttagaaaatg gattctcggg taatgtcaaa 660

0950305-020200

gtggatgaaa aacttgaaac taaagatatt gaaaaagtac ttggttctct gcagaaagcn 720
gaagactata tgaaacaaca tcaacttcag tgggaaaggg atatatcatt cagaaaagag 780
aaatannacc atgcttggga agccgataa 809

<210> 179
<211> 913
<212> DNA
<213> Homo sapiens

<400> 179
aggaagctgc atgcatgaga cccacagact cttgcaagct ggatgccctc tgtggatgaa 60
agatgtatca tggaatgaac ccgagcaatg gagatggatt tctagagcag cagcagcagc 120
agcagcaacc tcagtccccc cagagactct tggccgtgat cctgtggttt cagctggcgc 180
tgtgcttcgg ccctgcacag ctcacgggcg ggttcgatga ccttcaagtg tgtgctgacc 240
ccggcattcc cgagaatggc ttcaggaccc ccagcggagg ggttttcttt gaaggctctg 300
tagcccgatt tcactgccaa gacggattca agctgaaggg cgctacaaag agactgtgtt 360
tgaagcattt taatggaacc ctaggctgga tcccaagtga taattccatc tgtgtgcaag 420
aagattgccg tatccctcaa atcgaagatg ctgagattca taacaagaca tatagacatg 480
gagagaagct aatcatcact tgtcatgaag gattcaagat ccggtacccc gacctacaca 540
atatggtttc attatgtcgc gatgatggaa cgtggaataa tctgcccatc tgtcaaggct 600
gcctgagacc tctagccccc cagcataccc cggctcangg gacacggaca caggcccagg 660
ggagtcagaa acctgtgaca gcgtctcaag ctcttctgag ctgctncaaa gtctgtattc 720
accttccagg tgccaaagag agcacccacc ctgcttcgga caacccttga cataattgcc 780
cagcacggca anangaggtg gcattccacc agcccaaggc attcgacatt tgcanaatga 840
aaattccttc ttaatgggaa gaagaatccc ttaaaaatgg ggtcaaggat ccccnatgaa 900
ttnttctggt tcc 913

<210> 180
<211> 684
<212> DNA
<213> Homo sapiens

<400> 180
aaaacgctgc gctggagcgg ggccggcggc gagtcccagg gacccaacca gagcctggcc 60
tgggagccag gatggccatc cacaaagcct tggtgatgtg cctgggactg cctctcttcc 120
tgttcccagg ggcctgggcc cagggccatg tcccacccgg ctgcagccaa ggcctcaacc 180
ccctgtacta caacctgtgt gaccgctctg gggcgtgggg catcgtcctg gaggccgtgg 240
ctggggcggg cattgtcacc acgtttgtgc tcaccatcat cctggtggcc agcctcacct 300
ttgtgcagga caccaagaaa cggagcctgc tggggaccca ggtattcttc cttctgggga 360
ccctgggcct cttctgcctc gtgtttgcct gtgtggtgaa gcccgacttc tccacctgtg 420
cctctcggcg cttcctcttt ggggttctgt tcgccatctg cttctcttgt ctggcggctc 480
acgtctttgc cctcaacttc ctggcccgga agaaccacgg gccccggggc tgggtgatct 540
tcactgtggc tctgctgctg accctggtag aggtcatcat caatacagag tggctgatca 600
tcaccctggt tcggggcagt ggcgagggcg gncctcangg caacagcanc gcaggctggg 660
ccgtggcctt cccctgtgcc atcg 684

<210> 181
<211> 785

0050450 : 0050800

<212> DNA
<213> Homo sapiens

<400> 181
aatgaccata attaatttat gctctcaaaa aataagtaaa aggaagaaaa ttttttttaat 60
aaataaaaag acatcaaact taaatgtgta aattggtaca gcttaagtga atttgtgatt 120
tatgtctgct gtaatttttt ttatattagg aagtttcagc tatgaaggaa attttacact 180
tcaaaaagct gttcagtggc agaaaatatg ataatgacag attagatcac aatatgctaa 240
ttttttcaga gttacctctc gtgtaacaca gcttttgaaa atatttgaat agtactatat 300
tctttttttaa gtgaaaaaaa aaaagaaacc tgtaattgct ttataaagat tcagtgtgct 360
tcagcttcac tttgaatata tccacttagt ataatctaac attggttttc ttaataatgg 420
ttgtgtgact tacatgttag gaatcttcac agtacacatt ttacttttta tctgtttctc 480
agaaaatatt gactgttatt tatcactaaa ctcataatat gcttaggcac taaccttcaa 540
caatacagta acatctttag atttctaccg aattgtgaat atgttattag atgaatattt 600
acctctccat gtgtttctgg cacatatctt caaagcataa ctattatgaa taaaattata 660
catttataac cactgtgaat agttacgtat ttaattactc agaactgtcc atgagaaata 720
ctatagaaat tatttaccat gtggngnatt ttatataaat tcattataat tgggngaaag 780
attaa 785

<210> 182
<211> 699
<212> DNA
<213> Homo sapiens

<400> 182
accgttaccc ggggcaacag ctgagccgtc tgggaaggga tgcatctttt cttctgtatg 60
cttgagtcaa gaactctaag tcatcttggt aataccgggt tggatgctta aagctgcagc 120
aaaaagacca gaactttcag ggcttctcaa atttaataac tatggaatct tatcagaaag 180
tccattaaca tctcaaagaa caacgtggtt attgtatcaa tcaccatcct ttataccagg 240
atttgcatat ccttcaagat gcctgaagac aatcggaggg gtatacaagc aagcgaggtt 300
aagaacaatc acttttcaga tcctaaactt ttatatgtag tgtctgctga taatgcattc 360
cctgagaaaa tggacctgtg gataaaccat catgcttcat ctcatttcct gtctcctctt 420
tcaccatttt tctttctttt cttttctttt ttttttttt ttcttgagac aagctcttgc 480
tctgtcacct aggctggagt gcagtggcgt gatcatatct cactgcaacc taaaactcag 540
gctcaagcag taccctcacc tcagcctccc gagtggctgg gactaacagg cgcactccat 600
catgcccgaa taatttttgg taatttttttg anagatgggg cttgctttgn tgnctaggct 660
ggcttgaact gggctcaagc gatcctccac tttggcctt 699

<210> 183
<211> 613
<212> DNA
<213> Homo sapiens

<400> 183
gttcgcaccg cccccgcccg caagaaagat ggcagtggcc tgatccgggc ccgttggcgg 60
cgtcactgac gcttcgctcc ggtcctcgga tcccgagcgc ggggaggcag accgactgtg 120
agctgcttgt ccccatcctg cggccgtcct ggggacacag agccctccgt ggtgcccggg 180
gattggattg gagccaggac gcggagccgc ggcggagccg gaggaagctg atggtcatct 240

WO 2005/049800 PCT/US2004/038356

tttccaaggt ggatgtgaac actgaccgga agatcagtgc caaggagatg cagcgctgga 300
tcatggagaa gacggccgag cacttncagg aggccatgga ggagagcaag acacacttcc 360
gcgccgtgga ccctgacggg gacggtcacg tgtcttggga cgagtataag gtgaagtttt 420
tggcgagtaa aggccatagc gagaaggagg ttgccgacgc catcaggctc aacgaggaac 480
tcaaagtgga cgaggaaaca caggaagtcc tggagaacct gaangaccgc tggtaccagg 540
cggacagccc ccctgcagac ctgctgctga cggaggagga gttcctgcgt tccttcaccc 600
cgagcacagn cgn 613

<210> 184
<211> 682
<212> DNA
<213> Homo sapiens

<400> 184
gaccaggatg attttagcat acgctggtag gaaaatgaaa tttaaagtga ttttcttaca 60
tttttatcag tgtaggtttt ggtcattaaa aattttcact ccagttcttt ttatgtttat 120
tttgacttct gatttatcta ggaactagaa cctctggttg gtgaacagtt gctccagtta 180
tgggaacgtc ttcccttggg agaaaaaaac acaactgatt gacactcagg ttataccatc 240
ttgactttga gtattggcag tatttgtgat cattaggaac ctttcagatt atttatcttt 300
ttttttcccc tttcttctag aactcttagc tgtggaagaa catcatgcct atttataacc 360
actgaatgca ctgactttca aaaactgagg tggggtgtgt gttacgaatg ggctttttaa 420
cacttttaga gtgttgcttt agaactacca tcttcatata caggagaaag gaagcattta 480
aatttttata gtgattatag agaatgatta tatgatgttt gtaatgaata aaatagtagt 540
ttcattattt ggcacaatag cagtttattt taaacaaaca atttgaagtt aaacatttca 600
tttttaaaaa cactgaatta cagntcttat tgatgacttt ttaatgcana gnaagttgtt 660
taagaaaggc ctgaatatat ca 682

<210> 185
<211> 858
<212> DNA
<213> Homo sapiens

<400> 185
agaaaagagg atgttctttc ttgaaaataa gcgacgacat tgtaggtcct atgaccgacg 60
tgctcttctt ccagctgtgc aacaagagca ggagttctat gagcagaaaa tcaaagagat 120
ggcagagcat gaagactttt tgcttgccct acagatgaat gaagaacagt atcaaaagga 180
tggccagctg attgagtgtc gctgctgcta tggggaattt ccattcgagg agctgacgca 240
gtgcgcagat gctcacttgt tctgcaaaga gtgtctcatc agatatgccc aagaggcagt 300
ctttggatct ggaaagttgg agctcagctg catggaaggc agctgcacgt gttcgttccc 360
aaccagtgag ctggagaagg tgctccccca gaccatcctg tataagtact atgagcgaaa 420
agccgaggag gaggttgcgg cagcctacgc cgacgagctt gtcaggtgcc cgtcctgtag 480
ctttccggct ctgttggaca gtgatgtgaa gaggttcagc tgtcctaatc ctcactgccg 540
aaaggaaacc tgtaggaagt gtcagggact ctggaaagaa cataatggcc tcacctgtga 600
agagctggct gaaaaagacg acatcaagta ccgtacctct attgaagaaa aaatgactgc 660
tgcccgcatt agaaaatgcc caagtgtggg actggcctca tcaaatctga aggctgnaac 720
ccgnatgtct ttgccgctgt ggtgcccaga tgtgctacct ctgtcgagnt tctattaatg 780
gatatgacca tttctggcaa catccccgtt accaggagcc ccttgccagg aatggtcaag 840
atgctctntn tggaccga 858

0956250.02000

0950250.0420800

<210> 186
<211> 805
<212> DNA
<213> Homo sapiens

<400> 186
taattatatg gcagggtttt ggttagccaa aaaaaacttc tttttaaata atccagtgaa 60
ggatttttta agcttttaaa atgttaaatt ctgatagtct taaattgaag tcaaagcatt 120
tctttttttc tttttccctt agacttcttt atgatctaag acacttatga aggtaccagg 180
tgccctaatt gaccttaaaa ggttagaaat gaatctttgc cttgatgcaa agcatcagac 240
ttgatgcaaa tcaacatata aataactgca agcaaatata gagtcaactc tggactattt 300
aattttggtt tatctgtggc taatcttgtt ttcaaatgca tggacagaac ctattcaact 360
acaatgagta tgggctcaat cctaccttgt tggtatctca aatccccctg tttactttta 420
ggcagtaact gcctttgaaa acagaacatt tccctttccc agagcagacc ttacctcagt 480
ctctgaaatg ggttgacttt cagggaagac tcaacaggct tccaggtgtg aaaacaggaa 540
ggtcatctta aattagattt taatattatg gcctcattgc ttcatcattt tgctagaagg 600
aaattccctg aatatcagat acacccctat tcaaataaaa tcacaaaacc atctactaaa 660
gctaaacagt ttttcaaaac cattctgaat tatgcagtaa tatttccttc tgtaagaata 720
tgctctggtc tgtaaaccga gtattgagag aattgagaat naaaccactt cgcagatagc 780
atgaanagga aatgaggnat gaagt 805

<210> 187
<211> 805
<212> DNA
<213> Homo sapiens

<400> 187
ttaaaagaaa ctatttaatg taaaatattc tacatgtcat tcagatatta tgtatatctt 60
ctagccttta ttctgtactt ttaatgtaca tatttctgtc ttgcgtgatt tgtatatttc 120
actggtttaa aaaacaaaca tcgaaaggct tatgccaaat ggaagataga atataaaata 180
aaacgttact tgtatattgg taagtggttt caattgtcct tcagataatt catgtggaga 240
tttttggaga aaccatgacg gatagtttag gatgactaca tgtcaaagta ataaaagagt 300
ggtgaatttt accaaaacca agctatttgg aagcttcaaa aggtttctat atgtaatgga 360
acaaaagggg aattctcttt tcctatatat gttccttaca aaaaaaaaaa aaaagaaatc 420
aagcagatgg cttaaagctg gttataggat tgctcacatt cttttagcat tatgcatgta 480
acttaattgt tttagagcgt gttgctgttg taacatccca gagaagaatg aaaactggtt 540
ggaaactaaa ggttcattgt gttaagtgca attaatacaa gttattgtgc ttttcaaaaa 600
tgtacacgga aatctggaca gtgctgcaca gattgataca ttagcctttg ctttttctct 660
ttccggataa ccttgtaaca tattgaaacc ttttaaggat gccaagaatg cattattcca 720
caaaaaaaca gcagaccaac atatagagng nttaaaatag catttctggg gcaaattcaa 780
actcttgggg tctaggactc acatn 805

<210> 188
<211> 866
<212> DNA
<213> Homo sapiens

<400> 188
gcgggcgggc tgctgaggtg gctgtcgccg gccccgatgg acgctccccc gggcggggtt 60
gagtcggcgc tcagctgctt ctctttcaac caggactgca catccctagc aactggaact 120
aaagccgggt ataagctgtt ttctctgagt tctgtggagc agctggatca agtccacgga 180
agcaatgaaa tcccggacgt ctacatcgtg gagcgcctct tctccagcag cctggtggtg 240
gtagtcagtc acacaaaacc acggcagatg aacgtgtatc acttcaagaa aggcacagag 300
atctgtaatt acagctactc cagcaacatc ttgtccataa ggctgaaccg gcaaaggctg 360
ctggtttgcc tagaagagtc catttatatt cacaacatta aagacatgaa gctgttgaag 420
accctcctgg atattcctgc aaacccaaca ggtctatgtg ctctctctat caaccattcc 480
aattcttacc tggcctatcc tggaagcctg acttcagggg agattgtgct ttatgatgga 540
aactccctga aaacagtctg cactattgct gcccatgagg gaacactagc tgccatcacc 600
ttcaatgcct caggctccaa actagcaagt gcgtctgaaa aaggcacagt catccgggtg 660
ttctctgtcc ctgatgggca aaagctctat gagttccgga gagggatgaa aaggtatgtg 720
acaatcagct ctctagtggt caatatggat tcacaattcc tctgcgcctt cagtaacacc 780
gagacggtac acatcttcaa gctggacagg tcaccaacag tcgaccagaa gagcctttga 840
nctggagtgg cttcctnggg aaagan 866

<210> 189
<211> 760
<212> DNA
<213> Homo sapiens

<400> 189
gtaagattct tgttgggagc ttaagaatag attcctgagc taggcctttg gagactctgg 60
catgctgtgt ctaggaggga gtctgtaaaa caatttttaa tgaagaaatt taaaaattac 120
acaaaactag aatagtgcat tggtactcaa catccagatc tgacacttat cactatctta 180
ccatgtttgc ttcatttgtc attttttttgt ttgcttaagt atcttaaaat cccatacatt 240
gtgttatttc actgctgtga acactttggg tagataccac gatatcacac ctaacagagg 300
cagcagcagt ccttcggctt catctcatag ccagtcctta agcaaatttc cctgattatc 360
tcaaaaatca tcttctagtt ggtttgttag aatcaacaga atataagtca catgatgatc 420
tcgtttttaa caatcacctc agatgacttt gatgttagct actttgagaa ccactggaaa 480
ttattttgcc aacttgaaag ttcaagttag gataccacaa ttcttggcac gtttggtgga 540
ttataaatgt gattttgaaa tattagagga agcatttggg gttaatgaca ggatatgaat 600
ttatattagt aagtttgata agataaaatt tcctcagtga acggagaatc tcagccccat 660
gggctctaat tgattgggac ttgtgtaaga gcgtggtcac agnttaatcc aactggactg 720
tatgctgngg nctcactcat ggtggggctt atttacactg 760

<210> 190
<211> 850
<212> DNA
<213> Homo sapiens

<400> 190
gttcagtatt caaagaatgt cttaagatta tgataattaa agaagtccca ggacgagaca 60
aaatgaatca aagattttgt atgcaagtcc acaaagtctg tcagacatat tgtaaataat 120
ttaccattga ttttattttc aacaatgtta atgtattgac atttagcata tatctgttag 180
atagatattc tatcacaatg ttttattcct tgcaccagcc ctttactatt ttctaacaaa 240
aaaaaaaaaa cacaatttca gggcataaac aagaagtgtt tatttttccg tagtacatct 300

0356350-0N2000

ttgggttgac tagagattgg ctgttctaag atgtgctcat gcaggcttga ctctaaacta 360
tgcatttaga gtcattttgt tctggtctgg tctacacgta ggttattctt ttgaaagcag 420
tactctgtct taagcatgtt cttctcttag tggagtttgg agatgctaat atcgacaggt 480
ggaggcagaa tgctccttaa agtctaaact agaattgcca cactgtcttc ctaaggttca 540
taagccaaag gaaatctcat ggcaatttcc aacattagtg ggacaagaga ttatactact 600
cccaaggaag tggaggtggg gaaaggaatg attatttctg tatcataatc taccatagtc 660
cttaagtgac tgcctcttgc tacttcccaa tgntttacta atcacattga cttttaaaaa 720
atagattccc taggaattca agaaaaatac ttattttcta aataaatcac cagcaaggac 780
agacacaatt ggctcactac ccccaatatc ctaacaccac ttaccaaata ccgngtataa 840
tcatncncac 850

<210> 191
<211> 864
<212> DNA
<213> Homo sapiens

<400> 191
tttcatgccc ttgttttaaa aaaactactt tttttggcct caaaaaaatc aagggtgtaa 60
tttttaataa attgttaatc ctatgttttg taattttcat tttaggagct tgacttattt 120
ttttctctct cataaaaaca catttgtttt aattgtagga gaaattttct cagcattttg 180
catgttcttt ctaatctttg ttggtctgaa tatattggta gtaattactg taattattca 240
acaaaaagca tatccgttca aaaatttttc cactatgtct tttttctagt ggctactgtt 300
ttagttttct agttgaatat ctctgacaag ctttcgtatg gttttgttat attaagtgtg 360
tttcaaagtg aagactacag cacctcgccg gtactgtgtg aggcccaaca gtggaattat 420
tgacccaggg tcaactgtga ctgtttcagt aatgctacag ccctttgact atgacccgaa 480
tgaaaagagt aaacacaagt ttatggtaca gacaattttt gctccaccaa acacttcaga 540
tatggaagct gtgtggaaag aggcaaaacc tgatgaatta atggattcca aattgagatg 600
cgtatttgaa atgcccaatg aaaatgataa attgaatgat atggaaccta gcaaagctgt 660
tccactgaat gcatctaagc aagatggacc tatgccaaaa ccacacagtg tttcacttaa 720
tgatacccga aacaaggaac taatggaaga gtgtaaaaga cttcagggag aaatgatgaa 780
gctatcagaa gaaaatcggc cctgagagat gaanggttaa ggctcaaaaa ggtagcncat 840
tcggataacc tggacacctn actg 864

<210> 192
<211> 706
<212> DNA
<213> Homo sapiens

<400> 192
ggaaagatga ccgatggagt ccaaagccaa gtggcttcac cagctgacaa gccaccctcc 60
tgcagcctga gtttcacagt ccactgggtt cgttgtcatg cggtgtttga atggttaagc 120
ccttgcagta tttcagatcg ggcaaaaaat atcggatgca catagcagaa ccattggtgg 180
tatttatagc tttgctttgt actcctcact gtttctgcct acgcaaaata tccatgtttc 240
ctctgagaaa tctgttgtgg actgaaagcg ctgctggctg tgaaatttaa taaagtgtgt 300
atgctttgct agaaaattat ttcttggaca ataggaacag tcattgatct gtaaatcctg 360
gctcttaaca gtgagtggcc aaggacttga tcagcccatt tcttggtccc tcagtgcttt 420
aaaatttaag tagcactgca ttttgtaatg ttgaatatga ctctagtgac ttgtaggagg 480
cacttgtgag gagatgcttg cttcagtgta aaagatgctc atggcctgag tcagttgagt 540

0050250-0050800

tttctttcaa gaaaccactt cagagtgaaa tatccagggt ttccccgccc tggacatgtc 600
cagcctgccc aggcagcaca cagncctgta agtccacctc gtgtgggtga gatttcctcc 660
tgcgtgatga cctcatcgnc atctctgctg gctcattcca cagnct 706

<210> 193
<211> 719
<212> DNA
<213> Homo sapiens

<400> 193
ttttttttgc gagtggcggg ccgactgtgt agtccgctcc ggcagcgcgc tctgcccggc 60
ttcctcagtc tcctcgccgg gagcgtccgg gagcagctcc gaggccgcgg cgaaaccagg 120
tggagtccga ggttcggagg agtatcagag gttaggggaa ggccggagaa tgggctggga 180
ggctgcgttt cggagcttag ggttctgtcc ctgcgatcgc cgcgtctccc tcccttggtg 240
ggcgcggctc ccgggaagcg gctcgtctcg tctcccctca caggccgggt tcccgttctg 300
gaccttcgcc ctcggaacac agtgctgttg gccgggactc cttcccgagg tggacggctc 360
cctgttctca ttcctggctc tgccagaact gtaggaagtg ctcagtacac tttagggcat 420
gcatggcact ccctgggaga cagtgcttta gggccagagg aaagatcttc cctgaaggca 480
aacgcccgcg gagcccacaa gtccgggccg cactgaacaa gtcaggatgt tgccatcggc 540
aattctgcag aaggcagtaa cccatctgag agaaagagcc gctgtcataa ggtctcttgc 600
ttgagctgct gggttgagaa tggagctgga agagggaact gatctcggac tccttgggga 660
tcttggttat gtttgaccct tttactttca gggancangg atgggccacc ganacccca 719

<210> 194
<211> 826
<212> DNA
<213> Homo sapiens

<400> 194
tttagaatga atagcccttc tgggttttct ttttgacaat tcttggactt gaggtaaaac 60
aaggaggatt gtggccggat ttcagatccc aaagccagcc tccatcttag gcctttgcct 120
cattgtgcct tttaggtttt cttacccacc gtctcctgtt ttgtcttttt tttcttttct 180
cctaccccta tcttgggaca ttcagaaact gcctgggtgg tttgagaaga gacaacccag 240
tttgatctgc aatacaagga tccattcgta atctctctct cactgatgtt attcccccat 300
ctgccgtctt ggttcatctc accacagaag ggcatttagt cctacccagc catcggctgc 360
gtatgacagc aggatggcac ttcccatttc tctgtggtta gtgctcgagt gaaaacctct 420
ttcagctgag tcctctgagg ttctgctgtt gagtcctggg tggctgatgg aatgattgag 480
gaggtctggt caccctcaag cgccgtcatc gccttgtttc catgggcttc tgtcacacaa 540
aatgaagaac agaaatgtta ggacttaaga gaatgtttgg aattcacacc tctttgcagt 600
cctttcaagg ctgctgctct gtgctgtgtc ccatgcatgt gaaagtagag ctgtgatggc 660
tgctgggacg cttgcaaaga tcatgtgtga gaattgagca caagaccaca aantattact 720
gcttgatgcg cttggtaaaa ctctatctgc caggaaaccc aaattttctt ttctttcctt 780
ttttttttg agacagggcc cncttgttg cccaancttg aatnca 826

<210> 195
<211> 737
<212> DNA
<213> Homo sapiens

0050504-00200

<400> 195
ttttacttca tgccaacatg agaaaagaca aatcacattt ctttaggaag gaatcctaag 60
tgcctagcaa tttggacagg ataaatggag tttgggagaa gagttttgaa gccaattgtt 120
acctaaaatt gataaactca ataaacaaga gggttgtgct agcccacaga gatcttatgg 180
ggattgactg agattataaa ttcatgagaa agtgattttt aacccacaaa aggctataca 240
tatattagta tgttaggtac attcattaca gttagcatac actaatcctg tctttaattt 300
acaacttggc cttctccatt caagaatttc ttttttttct ttntttttt ttgctataat 360
actattcttt ctttaaccag tagtttattg agaaaaactt taacatgtcc aattttaaaa 420
atattaaata ctatggtaat gtgtcctaga atgtcctgtt tgtcatctgt ttctgtttac 480
tacctgctca gttccaacag gtatttaaat cagctagaac actgataaag cctattgcag 540
ctttctgagt tacctgtagt gagtcaggac aggtagcaga nagggaagga ataaatgtca 600
caaaaaatga ctcattcaaa accaattttg gttttagctg caggcagtga cataaatgcc 660
cagtgcttac tactccagat ttctggttcc ttcttttaac tctgaagttg atggcttata 720
gnctatagcn aaaacna 737

<210> 196
<211> 824
<212> DNA
<213> Homo sapiens

<400> 196
cattaaaaag cccagctttc ctccatgtta gatgtgactt ggaaaatgag aaagatttag 60
caaaattcca ccgtatcttt tgccaggcta gagacaggga gagcagggta aaaccctcag 120
gctgctgaaa tttctaggct gttaggaagc ccctcgaatt ctgtgaaaat gagggtttct 180
taactcacac tgagagcgga aaggggcaga ccctttttcat aactccctca agtgtgtgtt 240
acctttcttt accagcatgg taagcaacag gacatatccc agcctcggac atgtctgtat 300
gatccaaggt acccaaagtc agacagagta aactcaagcc tggcactggc tttctgccgc 360
ttcatgtgct ttggaaaaag caggagaagc aatagcagca ggagtcccca gcagctggag 420
ccgcaagaat gaaccgcaaa gagggaactg acagcagctg cggctgcagg ggcaacgacg 480
agaagaagat gttgaagtgt gtggtggtgg gggacggtgc cgtggggaaa acctgcctgc 540
tgatgagcta cgccaacgac gccttcccag aggaatacgt gcccactgtg tttgaccact 600
atgcagttac tgtgactgtg ggaggcaagc aacacttgct cggactgtat gacaccgcgg 660
gacaggagga ctacaaccag ctgaggccac tctcctaccc caacacggat gtgtttttga 720
tctgcttctc tggcgtaacc ctgactntta cccaatgtcc agattgatct ccgngatgac 780
ccaaaaaacc ttggcccgnt tgctggattg aaaagagaaa cctt 824

<210> 197
<211> 880
<212> DNA
<213> Homo sapiens

<400> 197
agatatgaca ggtaggctct ttcaggctac agggagaaga cactttagag aaaatgttag 60
ggagtaatag agtggctttt tcgtttttt gcttctctgc ttatagtatt ttgttttggg 120
agggatggga tctggccttg attttgcaga gacttcttgt gcccagcccg tagtatctac 180
ccaatcagac aaggagccag gaattactgc ttctgctact gatactgata atgctaatgg 240
agaggaggta ccacatactc aagagatttc agtgtcttgg gaaggtgaag ctgcccctga 300

0509203A1 I>

gataaggaca tctaagttag gccagccaga tcctgcaccc tctaagaaga aatccaatag 360
actcacctta agcaaaagaa agaaggaagc tcaagatgag aaggtggaga aaactcaagg 420
tggacatgag cacagacagg aagaccgact aaagaaaaca gttcaggatc attctcagat 480
cagggaccag cacaaaggag agataagtgg ttttggtcaa tgtctggtct gggtccagtg 540
ttccttccca aactgtggga aatggaggcg gctgtgtggg aacattgacc cctcagttct 600
cccagataat tggtcctgtg atcagaacac agatgtgcag tataatcgct gtgatattcc 660
tgaggagacc tggacagggc ttgagagtga tgtggcctat gcctnctaca ttccaggatc 720
catcatctgg gccaagcaat acnggtaccc ctggtggcca ggcatgatag aatctgatcc 780
tgacttaagg ggaatatttt ctttttactt tccatcttga ttccctgccg ctaagtacca 840
tgtgaccgtt tttgganaaa cagtttntng tcatggatcc 880

<210> 198
<211> 874
<212> DNA
<213> Homo sapiens

<400> 198
agagctcact ctccaacttt attaaatact atttgagcac aggacacatt cttaaacatt 60
ttgaaaaaca ttaacccaag atgtagaggc tactgctagt cgtcattcta gaatctgata 120
ttttactctg tatttgaaat gaatgattaa tgtcctagga aattagcttt agcagatgtc 180
caggtgccac atcaaaaaag tgcaataatt attgacagtt ttttagatta ggcatattat 240
tggaaaacaa ctttataaag agtgaacatt gtatactcta gtaaaacagc atcactttaa 300
aaatattcat ttatgaaatc tgttacctat agttgaagtc ttgagtagtg aacaagggac 360
tctaatacca atactcttaa tatctggcta ttttagatcc cttaaagggc ataattattg 420
gaaatttagg tatttcacta aagcatgtat ataatattgc caacaagaaa agtaaatctg 480
aagattaagg gaacttactt ctgcaaactg tcttgcgata gttaagcaga atttaaactc 540
tgttttaagc aggaaaccag aaagattatt ttgcagttgt agaagatttc ataacttatt 600
aaaacttatt aacattttgt gttgtttaga tataggcagt tgatacatac taacatccca 660
gcctttttcaa tatcagggtt aaattatagg aaaactcagt aaaatggtca aatctgaaag 720
tttgatggta gaaactgaag atttaacaga gaactgtgtt ttacccgagt gccaaaaatg 780
ctgtgagcct ncttgcacaa aatttatacc actttgcatt tttatctatc agtccagatg 840
gtggctccct tcttntccag gacctttcac cata 874

<210> 199
<211> 877
<212> DNA
<213> Homo sapiens

<400> 199
gaagactgcg cgtttgagtg tccctggcaa cgccacgctt ccgccttctg gaagcctgca 60
ctccagcttc gagtggaacg atgcctctgg aggtggtggt ggagctgcag atccgggcga 120
tttcttgccc aggagtgttc ctgcctggca aacaagatgt gtacctcggg gtctacctca 180
tgaatcagta cctggagacc aacagctttc cctctgcgtt ccccattatg attcaggaga 240
gcatgagatt tgaaaaggta tttgaaagtg cagtagatcc tggagctgta gtagaccttt 300
tggaaatgtg ggatgagttg gcctactacg aagaaaacac acgagatttt cttttcccag 360
agcccaagct gacaccttcg caccctagga ggtgtaggga ggtgctcatg aagacggctc 420
tgggttttcc aggcattgct cccaaaatag agttttctac aaggacagcc atcagagaat 480
gtgtgtttct gcatagaaac agatttcttg gctggggaaa caaagggaag atgttggttc 540

0502036-0502000

agcaagaaca cagaagctta aagaagaaac tgaacagaaa tgggacccag acctctggag 600
aagggctgct ttcctggatg cttcttcagg aattcgaagg aagaaagaca tgagtcacgg 660
aggcctttat ctacatcaca tgaaccaata tttcccttaa atactatnaa gatgaaacta 720
aaggagaata atctcaacag actggccaaa ngcatgcaag cccnggcgcc cttttagtat 780
tctaccagca tttctttcag gaccagccag ttcanttgac cttggaataa ttcaaaatct 840
tggaggaagc aagcctcctt tgtgtanacc ntgaccc 877

<210> 200
<211> 840
<212> DNA
<213> Homo sapiens

<400> 200
caaaaagaac aacctgtttg ttgttgaccg atctgacaag ttggggcgtg tgcaggagtt 60
caatagtggc cttctgcact ggcagctcgg cgggggtgac accaccgagc acattcagac 120
tcactttgag agcaagatgg aaattcctcc tcgcaggcgc ccacctcccc ccttaagctc 180
cgcaggtaga aagaaagagc aagaaggcaa aggcgactct gaagagcagc aagagaaaag 240
catcatagca accatcgatg acgtcctctc tgctcggcca ggggcattgc ctgaagacgc 300
aaaccctggg ccccagaccg aaagcagtaa gtttcccttt ggtatccagc aagccaaaag 360
tcaccggaac atcaagctgc tggaggacga gcccaggagc cgagacgaga ctcctctgtg 420
taccatcgcg cactggcagg actcgctggc taagcgatgc atctgtgtgc ccaatattgt 480
ccgtagcttg tcattcgtgc ctggcaatga tgccgaaatg tccaaacatc caggcctggt 540
gctgatcctg gggaagctga ttcttcttca ccacgagcat ccagagagaa agcgagcacc 600
gcagacctat gagaaagagg aggatgagga caaggggtg gcctgcagca aagatgagtg 660
gtggtgggac tgcctcgagg tcttgaggga taacacgttg gtcacgttgg ccaacatttn 720
cgggcagcta gacttgtctg ctttcacgga aagcatctgc ttgccaattt tggatggctt 780
ggttgcactt ggatggtgtg cccgtctgca tangcncaag atcctttcc actggnggga 840

<210> 201
<211> 674
<212> DNA
<213> Homo sapiens

<400> 201
agtgctgagc tgttttgaca acttggaccc cgggtcctct gtgggtagga aaatcagctc 60
cctctttgct cctctggggc agctgcacct cgggccagct ttctgcctgt ctgcctgccg 120
gcactgctgg gtcgctgtac ccaaacgcac agccggtgcc ccgtgctaga aggtcttcag 180
tttccagaag aaccaaagca tctttggacc tacctaggga aggacctgcc tgtgaccttt 240
gccctgtcct ggagggtcca gctttgggct gaatggcagc acccacgctg ggccgtctgg 300
tgctgaccca cctgctggtg gccctttttg gcatgggctc ctgggctgct gtgaacggga 360
tctgggtgga gctgcctgtg gtggtaaaag accttccaga gggttggagc ctcccctcat 420
acctctctgt ggttgtggcg ctgggaaacc tgggtctgct ggtggtgacc ctgtggaggc 480
ggctggcccc gggcaagggc gagcaggtcc ccatccaggt ggtacaggtg ctgagtgtag 540
tgggcacagc cctgctggcc cctctgtggc accacgtggc cccagtggca gggcagctnc 600
actctgnggc cttctaactc tggccttggt gntggcaatg gcctgttgta cctctaatgt 660
actttcctgc cctt 674

<210> 202

0002702-0946950

<211> 691
<212> DNA
<213> Homo sapiens

<400> 202
taattttctt agtaaaaaga ataacagaat gcatcgtggc aatccttaag caacattatc 60
tatgtggact gcttaaatca gcaaaacacc agaagtttgg ttaacttggg caatatgaca 120
agtattactt tttgggcaaa actactcatt aagcaatttc tctagtgtgt cggacacaaa 180
taggttcttt atttttggca tgtatgcctt tttattttca ttcaattttt tttttttctc 240
agacagacat agtagtaacg actagcattg gaaaatacat atcactattc ttggaatatt 300
tatggtcagt ctacttttta gtagaatatt tttggatagc gttgacacga tagatcttat 360
tccatacttc tttattattg ataatttttat tttcattttt tgctttcatt attatacata 420
ttttggtgga gaagaggttg ggctttttttg aaagagacaa aaatttatta taacactaaa 480
cactcctttt ttgacatatt aaagccttta ttccatctct caagatatat tataaaattt 540
atttttttaa tttaagattt ctgaattatt ttatcttaaa ttgtgatttt aagcgagcta 600
ttatggtacg gaacttttttt taatgaggaa tttcatgatg atttangaat tttctctctt 660
ggaaaaggct tnccctgnga tgaaaatgat g 691

<210> 203
<211> 714
<212> DNA
<213> Homo sapiens

<400> 203
gttttcattt ctaaatgcta atccttttttc tttcttcctg tctatgagta ggaactctct 60
ctccatccct gtagaatctc ttggacatgt ttatctcatg cttatggggt ccccatttct 120
tggagtggga ttgacattgg tggattctgc ttcagtgtat ccttcttgcg gtcttatttg 180
catgcatgag tcaactgtgt gcatcccatt gtgctttccc caggccagtc tctcatgccc 240
attccatttc ccctgcccta taggcctcct ttcatgtact ctgcccaacg gttttggggg 300
acaatctggg ccagaagggg agcgcagctt ggcacccccct gatgccagca tcctcatcag 360
caatgtgtgc agcatcgggg accatgtggc ccaggagctt tttcagggct cagatttggg 420
catggcagaa gaggcagaga ggcctgggga gaaagccggc cagcacagcc ccctgcgaga 480
ggagcatgtg acctgcgtac agagcatctt ggacgaattc cttcaaacgt atggcagcct 540
catacccctc agcactgatg aggtagtaga gaagctggag gacattttcc agcaggagtt 600
ttccacccct tccaggtgag gcttgaaagc cctccttgaa agaagggctg gggccttggg 660
gatgtggaga gaatactgct gccttttctt ncatanggct gtagttgggg anga 714

<210> 204
<211> 724
<212> DNA
<213> Homo sapiens

<400> 204
ataggcgacc ctaatgggtt ttgtgagatg tcgtattaag tctgtggtcc atagagtaat 60
gcccttcgct gtcagggaat gcaagggaag agcagggaat tccagaatgg gaaggtgtgt 120
gaatgtagac cttcaggttg gtcacaaaca gtgtctcgag attccactgg ggaagcgttc 180
acttttagaa tcaggccaag ctgagggttc tctgtcctca ggtattttcc tttgtagcag 240
tcactggctc gaaatggaga atgagagaaa aaggagcttg tttcaggcca gagacctcac 300

09825f50-0702-0000

taaccgaata acaacactaa ggccctgcag cagggggcac aaactaccca gcctgtttcc 360
gtgtggccta tgatggtttt tttgtttgtt tgtttacatt ttttaatggt tggaaaaaat 420
caaaagaggc atatctacct atttcataac atgataatta taggaaattc aaatgtgggt 480
gactataaag ctttattgga acacaggcac gcccattcgt tcctgtattg tctatcactg 540
cttttgtgct gcgatgacag aggctgcatg tggcctgcaa agccccaaat ttttatcatc 600
cagcccttta cagaaagagt ttgctggtcc ctctcataaa gtatcctttt ttttaaatgt 660
gacagagtct agctctgntg cccagctgga ntgcatggcg cnatctcgct tactgaaacc 720
tctg 724

<210> 205
<211> 853
<212> DNA
<213> Homo sapiens

<400> 205
aggatttctt cctggtgcag aagctggtga gctgggctct gtttcagggc aaatgagggc 60
caggagctgc ctgtgtgact ttggggctcc ctctgccagt gaccaatccc tcttaaaaag 120
cagtcaggtc aatgctactg agtagcctca gagagaattt cctaaacaat acaagaaaga 180
gaaagatagg tctcttttcc cttttggttc taagcatcct ttcctcactt cagggtaggg 240
tggccaagct ctggggtctc aatccagaag gaggcctaag tgggcatcag acttaaaata 300
ggcaggagga agatgcggag gagggtggca agtagaggtg agccattccc cagaggaaga 360
tgcaggggga gggcaccctg gggtgaaggc cactgagagc cagcaagtgc ctgcggagct 420
gacctggggg cctctgccca cttcctttga cccagagttg ccttccagta actcagctgt 480
tcaagcccac attccctaga tttatcttgt cctctctcca tattcttctg gaaaagcaga 540
tgctctgcta atccaaggaa ttgcatcttt ccagccctgt ctcacaaaat ctgggctgtg 600
gggagagaga attgtgtgga ctgccaaggg aaaagagttt ttaaaaagag catgcccttt 660
cctcttggga ttgtagattg nattgggaac agccctgggg actagacaaa gtgctgatga 720
tgaattccct acaaggccct gttgtgaaga agtcctttgc tgggtttaat aacacctatt 780
ccctgattgg gcaatcttgc nggaagtcca cncccgtgaa attacggagc gcccctaagn 840
ctaatgaaat gac 853

<210> 206
<211> 861
<212> DNA
<213> Homo sapiens

<400> 206
gaggtcagaa gataaccaga aaaataccat tacaagcaaa gaaaattaca gaccaatatc 60
catcataaat gtgcaaaaat tataaactaa attttagcca aatttaatga tttatacaca 120
tacatgctta cacacatgga cacacacacg tatcctttac atgcaggtat aaagaataat 180
attaatacat aatgaccaag tgtgtatccc aggttggtta acattcagaa attggtcaat 240
ctaattcact acattaataa actgaaaaaa atcacatgat tatctcaata gatacagaag 300
aagcacttaa caaagtccat tatttattcc tagtaaaaat tatcagtaaa ataagaacag 360
ttgagatttt cctcaaactg ataagaggaa tccatgaaaa cctacagctg tcatacttaa 420
tggtgaaaca gtgaatgctt tgtgcctacg atcaggtaca aatcaaagat gtcttcattc 480
atgtcttctt tcaccattgt acttgaaaaa gaataaaaga catccagagt ggaaaggaag 540
aagtgcaact atcttaattc atggacaaca tgaccattgt agaaaatctg atagaatcta 600
caaaaaaagc tattagaact agtaaacatc aaaaaattta aaatacatag ggataaatct 660

WO 2005/035000

ggtataaaga tgtgaaagac ctgtgtgcta aacactgcaa agcattccag agagaaatta 720
aagaggccta ataaatggag aacacttttg tcatggttgg aagatcctat tcagattcag 780
tctcctaatt atcttcatct ataattagca nttcaaaatg actgcaaccg tcaatcttga 840
tcagactgct cttgaangtt t 861

<210> 207
<211> 723
<212> DNA
<213> Homo sapiens

<400> 207
acagcggggc gtcacctcgg acatacgaac agcgggcggt gttcccggct ccgtggggcc 60
gtcttcccgg cgagtccgcg acggtcgccg cccacggcga gatgaaatct cgctctgtcg 120
cccaggctgg aatgcagtgg cgtgatctcg gatcactgca gcctctgcct cccgggttcg 180
ggcgattctc ctgcctcggc ctcctgagta gctgggatta caggtgcgtg ccaccacgca 240
cggctaattt ttgtattttt agttgagacg gggtttcacc atgttggtca ggctgttctt 300
gaactcctga cctcgtgatc cgcccgcctc ggcctcccag agtgctggga tttacaggca 360
tgagccaccg cgcccggcct gttttttttt tgttggtttg tttttgagac ggagtctcgc 420
tctgtcgccc agcctggagt gcagtggcgc catctccgct cactgcaagc tccgcctccc 480
gggttcacgc cattttcctg ccgcagcctc ccgtgtggct gggactacag gcgcccgccg 540
gcacgcccgt caaatttttt ttttttttnt tgnatttttt ggtagtgacg ggtttaccat 600
gttggccagg atggtctcga tctcctgacc tcgngatccg ccgctttgtc tccaaagagc 660
tgggattaca ggcgtgagac accgngccct gtccggcctg gtattatcat atgantgata 720
tct 723

<210> 208
<211> 833
<212> DNA
<213> Homo sapiens

<400> 208
ttttaaggag atgcctacat agaagagtga cagcagctag actaaatgtt taactgctga 60
actagttcct caggtatcct ggctctagag attgctatgg gagattggat gactgttaca 120
gatccaggtc tgtcttcaga aagcaaaact atctctcaat atacctcaga aacaaagatg 180
tctccatcaa gtttatactc acagcaagtg ctatgttctt caatacctt atcgaaaaat 240
gtgcacagtt ttttcagtgc cttctgcaca gaagataata ttgaacagag tatctcatat 300
cttgatcagg taacatgttt ttgtaaaaaa cagtagcata aatcatgtta tataatagaa 360
tgtatcaaaa ttatgagaaa aacatttgtc aaacacaagt ttgttgttta tgtagtgccc 420
ctgagactta gattttcaga gaaccttggt gattatctca tctagagata gcaagtctaa 480
ctttttttgtg tggagcacct tggcctcctc attgtcccag gggctcctcc actgagagtc 540
cagccatcac tttatggatg cagaaaccca agtgccttgc tccatgtcac agatttatag 600
cagagactaa aagagccccg tcctcttaac tctttgncct ttgggatatt gaccattttc 660
ttaactattt caaggatagn tttctatttt tctaaggaaa gatttctatc ttttgatttt 720
ttttttacta agttgnccag taaccacctt ttaaaataat cacatttatt tttaattttt 780
gacaaaattt ntatatttgg catgtcacat aaggtcatat cacantggga atg 833

<210> 209
<211> 756

09513400 - 09/13/00

<212> DNA
<213> Homo sapiens

<400> 209
agatgcggtg gtggccgccg agcgcctgga aggagctgct ggacaggccg agggagcctc 60
cgcccgagac cgcgcagccg ccgccgccat ggctacaaaa gaccccacag ctgtagagag 120
agcaaacttg ttaaacatgg ctaaactgag tatcaaagga ctcattgaat ctgctctgag 180
ctttggccgc actttggatt ctgactatcc ccccttgcag caattctttg ttgttatgga 240
acattgcctg aaacacggtc ttaaagtaag aaaatcattt ttgagttaca acaaaaccat 300
ctggggccct ttggaactgg tggagaagct gtaccccgaa gcagaggaaa taggagctag 360
tgtccgggat ctacctggtc tgaagacccc tctgggtcga gcaagagcgt ggcttcgatt 420
agccctcatg cagaaaaaaa tggccgatta cttacgttgc ttaattattc agagggatct 480
cttgagtgag ttttatgagt atcacgcact aatgatggaa gaagaaggag cagtaattgt 540
tgggctgctg gttggcctga atgtgatcga tgctaatctg tgtgtgaagg gagaggattt 600
agactcacga gttggagtga ttgatttttc tatgtattta aagaatgaag aagatattgg 660
aaataaagaa aggtatgatt ttcataagnt atttcacata ttggggtttt ttatatagct 720
ctttacaaat cattntngga tccatctatt tacaag 756

<210> 210
<211> 692
<212> DNA
<213> Homo sapiens

<400> 210
caaagaagcg gagaaagagc taccggagct tcttacctga gaagagtggc taccctgaca 60
tcggcttccc cctcttccca ctttccaagg gtttcatcaa gagcatccgg ggtgtcctga 120
cgcagttccg ggctgccctg ctagaggcag gcatgccgga atgcacagag gacaagtagc 180
tgccaggcac agaggaaaga gcatcaccgt gggagaggcc agccgccgcc tgctcactcc 240
cccccggaat cacccctctt cccatgcccc tctgtcccca ctgcaaaccc actgccctct 300
tctccccaag gtgagttcga tgctgaagtg caagaagtgt gttgagatgc tgccgtttct 360
attttgaagc gagctttcaa caggcgggtc ccctgtggca aagaaaatcg gaaccctgtt 420
gccgattttc catttgtcac cccagcagaa tgtccggcac ttgctccctt gctgcccctt 480
ctcaggtcag aggcgggtgt tccagggcct gccgcggggc tctctgggcc ggttccctgc 540
agacccgcag gagagcacat gtgccttgca tgaagtgtgg gttgcgccaa caattccctg 600
gtcctttca acctgtttag ttcaacttaa gccttcctgt gtccanaccc tctgctgcac 660
caccacccan gnccttccta gtccttcagc gt 692

<210> 211
<211> 815
<212> DNA
<213> Homo sapiens

<400> 211
tctaaaattc tcgctaccag cacagcagtc tgaagtcaaa ctaggaggat caagcttggt 60
gtggggaagg gcgtctgcca ttactgaggc ttgttttccc ctgacagcgc taaaaaggcc 120
tggaagttcg gactgggtgg agctcaacac agtgtggcaa agtggctgca gccagactgc 180
ctctctagat tcctcttcac tgggaagggc atctctgaaa gaaaggcacc agccccagtc 240
aaggggttat agataaaact cccatctcac tggaccagcg tatctggggg aaggggcggc 300

09513503 - 070200

tgtgggcaca acttcagcgg actttaaacg ttcctgcctg ctgactctga agagagcagc 360
agatcctgac aaggagggct ctcccagcac agcgcttgag ctctgctaag ggacagactg 420
cctcctcaac tgggtccctg acctccatac ctcctgatgg ggagagacct cccaacagcg 480
attgtcagac acctcatgca ggagagctct ggctggcatc agcctggtgc ccctctggga 540
caaagcttcc agaagaagga gcaacagcaa tctttgctgt tctgcagcct acactagtaa 600
tacccaggca cataaggtct ggaatggacc tncagcaaac tgcagcagac ctgcagaaga 660
cggcatgact ggtagaagaa aaagtacaaa cagaaagcag tacatcatca acataaggaa 720
cccccataca gaaacaccat ncaaagatca aaggtaggta aatccataaa gatgaggacc 780
aaacagccaa aaaccctgna aatttccaaa ancca 815

<210> 212
<211> 808
<212> DNA
<213> Homo sapiens

<400> 212
ttttaaatat gtggggagat acataaagaa cattgcttat ttgttcttga aaataacagt 60
gattcaaata tttcattcag atttacctat gcctaatgaa aaaaatgatg cagaacttga 120
ttctccacct tcaaagaaaa aaagattagg ttttttccag acttatgata cagaatattt 180
aaaagttggt tttattatct gtcctggatc aaaagaaagt tcaccaaggc cacagtgtgt 240
catttgtgga gagatcttat ccagtgaaaa catgaagcca gcaaatcttt ctcatcattt 300
gaagacaaaa cattcagaat tagaaaacaa accagtagat ttttttgaac aaaaatcttt 360
agaaatggaa tgtcaaaata gttctttaaa aaagtgttta ctagttgaaa agtcacttgt 420
gaaagcttct tatttaattg ctttccaaac tgctgcaagc aagaagccat tctccattgc 480
tgaagaatta attaaaccat atttagtaga aatgtgttca gaagttttgg gttcaagtgc 540
tggagacaaa atgaaaacta ttccactttc taatgttaca attcaacaca ggattgatga 600
actatctgca gacattgaag accagctgat tcaaaaggtc agagagtcaa agtggtttgc 660
ccttcagata gatgagtcat cagaaatctc aaatatcaca cttcttttgg gctatattcg 720
nttcattgat tatgattggc cgngatgtaa aagaagaatt attantttgc attgaaatgc 780
ctacttcaaa tactgggctt tggaaaaa 808

<210> 213
<211> 703
<212> DNA
<213> Homo sapiens

<400> 213
gttaagaagc ttcctgcagg gggtgagaaa ttggactcaa tgtcctcctg aaaagttcag 60
ctacagaaag gctgggtccc tttggtacac tcctcacctt gatccttagc accgttgtta 120
agtatactga ttaatccaat cagtaagggc ctgcggagtg agctgggctc tggagtagat 180
gtgattcaag acagaaaagc aggagggtac gccactcaga tctcaaggca cttaggatcc 240
agttaaaggt actattaaga cattatcagc tgaagagtca gactgaccta agtttaaatc 300
tgggctgagc cacaactaga ccaggctttc tcaacttcgg caccctgac ttttttttgt 360
gtgtgtgaaa tggagtctca tctgtctccc aggctggagt gcagtggtgt gatctcggct 420
cactgcaagc tctgcctccc aggtttatgc cattctcctg ccttagcctc ctgagtaact 480
gggacaatag gcgtccgcca ccacgcctgg ctaatttttt gtatttttag tagagatggg 540
atttcaccgt gttaaccagg gtggtctcga tatcctgacc tcatgatccg ccgcctcggc 600
ctcccaaagt gttgggatta caggcgtgag cctctgtgcc agccttttg natttttttt 660

09513603 - 070800

ttttggagac agggtctggn tctattgccc angctggaat gca 703

<210> 214
<211> 758
<212> DNA
<213> Homo sapiens

<400> 214
ttctagtaat gtaggaacac ttccatctaa gccgccattt cgatttggtc aaccttctct 60
ttttggacaa aacagtacct tatctgggaa gagctcggga ttttcacagg tatccagctt 120
tccagcgtct tctggagtaa gtcattcctc ttcagtgcaa acattagggt tcacccaaac 180
ctcaagtgtt ggaccctttt ctggacttga gcacacttcc acctttgtgg ctacctctgg 240
gccttcaagt tcatctgtgc tgggaaacac aggatttagt tttaaatcac ccaccagtgt 300
tggggctttc ccaagcactt ctgcttttgg acaagaagct ggagaaatag tgaactctgg 360
ttttgggaaa acagaattca gctttaaacc tctggaaaat gcagtgttca aaccaatact 420
gggggctgaa tctgagccag agaaaaccca gagccaaatt gcttctgggt tttttacatt 480
ttcccaccca attagtagtg cacctggagg cctggcccct ttctcttttc ctcaagtaac 540
aagtagttca gctaccactt caaattttac cttttcaaaa cctgttagta gtagtaattc 600
attatctgcc tttacccctg ctttgtcaaa ccaaaatgta gaggaagaga agagaggacc 660
taagtcaata tttggaagtt ctaataatag cttcagtagc ttccctgnat catctgcggn 720
tttgggcgaa cctttncagg ctagcaaagc aggtgtca 758

<210> 215
<211> 910
<212> DNA
<213> Homo sapiens

<400> 215
accaaactgc tgttctggaa tatgctcgca ttgaaaacta gaactgccac cctatttaat 60
actacatctg ccaactgccc ttcaaattta ggttagatgt catttgtgat tatcagagcc 120
tttgatctct catttctatt aagaaacctg aaagacatct aatcatttaa atacattctt 180
cctagattgc tggaacttac ggtagttata aatcctttca aatgtctgat accaagagca 240
actaactctt acccttaaaa ctaaaaagga ggtcttttta gaagggaaaa aatgaaggca 300
aggagcagaa aagacctcag ggtcactata tacacaacat ggaagaacca gggattagcg 360
ccaaagttgg ctttgtactg tgtcctttat ctctttctac cagacccaac gcagctggct 420
gacatttgac aaacaaaatg ctgcctcttt atttctctgc ctttggcata tttctgattt 480
tctattatcc tctcctccat taggacattg tagttcagct tgactttaga ttagaaacag 540
acttgtacag gtatagtata cttatgaggg cctgagaaga ataatgtctg agaatcattc 600
attcacttaa ctcatgttta ttaaatttgt ctgctatgtg ccaggcatca ttctaggtgc 660
tgagaataca gtagtgagtc cccaaagtcc ccagcttcta ggaaaggaga aagacaacga 720
acgataacaa atagacatgt aaatacctgg caatgctaag tgctttgcag acaaatattg 780
caaatggagg gagggtgata tttagttagg gagttgaacc ttctctgnag agatgcctta 840
gagcaaagan cangatggac cgagggacca acctgggaat tttgggcttc ctttttaact 900
ggccctaaag 910

<210> 216
<211> 457
<212> DNA

WO 95/05390 PCT/US94/09000

<213> Homo sapiens

<400> 216
aaggaaatgc agattaaaac ccatttctca cccatcagat tgtcaggggc ctaagagttt 60
agtaacaaac tctgtgatgg ggctataagg aaatggtgat acttagatat ttctggcagg 120
agattaaatt gttataatcc gggtgggcat ggtggcttat gcctgtaatc ccagcacttt 180
gggaggccga agtgtgcaga tcacctgagg tcatgagttc gagaccagcc tggccaacat 240
ggtgaaactc tatctctact aaaaatacaa aaattagaca ggcgtggtgg tgcactcctc 300
taatcccagc tactcgggag gctgagacag aagaatcgct tgaacctggg agatgaaggt 360
tgcagtgagc tgagatcatt ccactgcact ccagcctggg cgacagcgag actctgtctc 420
aaaaaaaaaa ggacaaagga aaggaggggg gaggnnn 457

<210> 217
<211> 813
<212> DNA
<213> Homo sapiens

<400> 217
taattaatta attaaaaaaa aaggccaggc acagtggctc acgcctgtaa tcccagcact 60
ttggcaggcc aaggcaggcg gatcacaagg tcaggagatc gagaccatcc tgactaacac 120
agtgaaaccc cgtctctact aaaaatacaa aaaaattagc caggcgtggt ggcgtgcgtc 180
tgtagttcca gctgctgggg aggctgaggc aggagaatgg cgtgaacccg ggaggcggag 240
cttgcagtga gccgagatcg caccactgca ctccagcctg gtcgacagag caagactgca 300
tctcaaaaaa gaaaaaaagg agaaaaggag gcgggctgca ttgaccctgt cagagagctt 360
gcagccattg aggctgccca atccttgggt gctcttgtgt gggtgtggac acaaggaccc 420
cacccagcgc acagccctct gacctctgct cacttgcccc agtgtcccca gttgtcctca 480
tccagggtgc tattcgagtc cagcctgaag ggccggctcc ctctctacca cggcctgaga 540
ggaagagcat cgttcccgct cctatgcctg gaaactcctg cccgcctgaa gtggatgcaa 600
agctgctgaa gcggcagcag cgaatgatca agaaccggga gtcagcctgc cagtcccgga 660
gaaagaagaa agagtatctg canggactgg aagctcggct tgcaagcagt actggctgac 720
aaccagcagc ttcgccgana gaatgctgcc ttcgcggcgg ntggaggcct gctgctgaaa 780
acacgagcta anttagggtc tggaaacagg aag 813

<210> 218
<211> 812
<212> DNA
<213> Homo sapiens

<400> 218
aaattagaac tcaagattaa aaagcccact caaaaccaca caactacatg gaaattgagc 60
aatctgctcc tgaatgaatg actcctgggt aaataatgac attaaggcag aaatcaagaa 120
gttctttgaa atcaatgaga acaaagaaac aatgtatcag aacctctggg atgcaggtaa 180
agcagtgtta agaaggaaat ttatagcact aaatacccac ataaaaaatc tagaaagatc 240
tcgaattgac accctaacat cacaactaaa agaactagag aatgaagagc aaacaaatcc 300
cagagctagc agaagacaag aagtaactaa gctcagagtg gaactgaagg agataagagt 360
catgaaaaac ccttccaaaa aaatcaatgc atcccgtagc tgtttttttt ttaaaatcaa 420
tgaaatagac caccagcgag actaataaag aagaaaagag agaagatttc aaataaacac 480
catcagaaac gataaagggg ataccactac tgacgccaca gaaatacaac caaccatcag 540

0509250 - 0509250

ataataccat aagcacctct atgcaaataa actggaaaat ctagaagaat ggataaattc 600
ctgcactcat aaacacccta caaagactga accaggaaga agttgaatcc ctgaatagac 660
caatacaagt cctgaaattg agcagtaata aatggcctcc aatcaaaaaa agcccagctc 720
cgatggattt acagctgatt caccagangc acaagaggcc tggaccattt gaacgattcc 780
aacattaaaa ngagagtant cctaccatta tg 812

<210> 219
<211> 769
<212> DNA
<213> Homo sapiens

<400> 219
gtatgttttc ttgtaagggc tttatagttt tagctcttat atttggtttt tggtctattt 60
tgagttaatt tttgaatatg gagcaaagta aagctttga aaactaacag atgtgcaaaa 120
ttatttttaa tttttgaata tggagcaaag taaaactttt gaaaactaat agagatttgc 180
aaaattattt tctttctgat tttaaatgct tttaaattag ataaattata tatagttcaa 240
tgttatttct tcattgatat attactagaa atgaatgtct ggcaaagcat aagcaataac 300
atctcataag aagaggagga atactgacta atactgtata gtaatacaaa gttttgaggg 360
gcaaagagat attctcttgt tttaaataaa agttacccag agtcattgga tactctcttt 420
tctcttatgc attgattttg gccttagcaa atatggtaaa tttcttaaag tgtgaatact 480
cttgaactaa agtaataatt atcaacttag taagagtttt gttaagtggt gaaactttc 540
ttcctcaata ttaattacta attcctgaat gataactaaa tatttcaatt agtagttcct 600
agcaaaggta gaattacaac acagtttggg aaatgctaag tagagagtcc cacagtctgg 660
atctgatgat accgattatg taactcantc atttacccct gagtatggat tggcataact 720
tgatcatgat agatggcatt ttttttattg ggggagaata aatntnaaa 769

<210> 220
<211> 695
<212> DNA
<213> Homo sapiens

<400> 220
taaaggactg tatctttggt acactggaga accaaatgat gcccttcgac attttaataa 60
agctcggaaa gatcgtgact ggggccaaaa tgccctttat aatatgatag agatctgttt 120
gaatccagat aatgaaactg ttggaggtga agtatttgaa aacctggatg gagacctggg 180
taattcaact gagaagcaag aatctgtgca actggcagta agaacagcag aaaaacttct 240
taaggaacta aaacctcaga ctgttcaggg tcacgtacag cttcgcataa tggaaaacta 300
ttgcttaatg gctaccaaac agaaatctaa tgttgaacaa gcattaaata ccttcactga 360
aatagcagca tctgagaagg agcatatccc agcgctcttg ggaatggcaa cggcttatat 420
gatcttgaaa cagactccac gagccagaaa ccagctgaag cgtattgcga aaatggattg 480
gaatgctatt gatgctgaag agtttgagaa gagttggctg ctacttgctg atatttacat 540
tcaatcagca aaatatgaca tggcagaaga cctgttaaaa cggtgcctgc gtcataatag 600
atcttgctgc aaagcttatg aatatatggg atacattatg gaaaaagagc aagcatattc 660
agatgctgnc ttgaactatg anatggcatg gnaat 695

<210> 221
<211> 706
<212> DNA

0502950 - 0502800

<213> Homo sapiens

<400> 221
aacaaagggc cgcgggcggc gggcagtggt gtcccagtct cccggtgctt ccctgaggct 60
gaggcgcccg gcctcccgcc cgccgcgctc cagatgaagt gtgagcactg cacgcgcaag 120
gaatgtagta agaaaacaaa aactgatgac caagagaatg tgtcagccga tgcaccgagt 180
ccagcccagg aaaatggaga gaagggagaa ttccacaagt tggctgatgc caagatattt 240
ttgagcgact gcctggcatg tgacagctgt atgactgcag aggaaggagt ccaactttcc 300
cagcaaaatg ccaaggactt cttccgcgtt ctgaacctta acaagaaatg tgatacctca 360
aagcacaaag tgctggtagt gtctgtgtgt cctcaatctt tgccttattt tgctgctaaa 420
ttcaacctca gtgtaactga tgcatccaga agactctgtg gtttcctcaa aagtcttggg 480
gtgcactatg tatttgatac gacgatagct gcggatttta gtatcctgga gagtcaaaaa 540
gaattcgtgc gtcgctatcg ccagcacagt gaggaggaac gcaccctgcc atgctgacct 600
ctgctgtcct ggctgggtcc gatacgccga gcgggtgctg ggtcgnccca tcactgncca 660
cctntgcacc ggcaagtccc ccacaggtca tgggctcttt ggtgaa 706

<210> 222
<211> 817
<212> DNA
<213> Homo sapiens

<400> 222
tgtttagtat gaaaagtatg ttttcatttt gcagatcctt ttctctctgc tccataaaat 60
gttatataaa acattctctt tatttctgtt aattttgata gtatgctact gtactaaagc 120
tgaacaatat aagtattgtc ccttctgttt atagacatgt ataggacacc ttcagcaggc 180
aaggccttat cctagggcca ggaatgtgaa gatgaatgag ctaaccaagc cccacctcgc 240
tgcccacaat ggggccaccg ctcactacta agtctaagcc ctcagagatt tgccttggta 300
ttaagaaatg catcagaggc atgcctaact tgaaccaaag caagcatctg ttcttattta 360
aacctagtaa ttgtttcttt acaaattgtg gagaaactta ggacaaatga acctcaaact 420
agatggtttg gagcaaatag catggaagta atttgaagac catattctct tcattgtcac 480
attgacattc accctgtaaa atcatgatac tcttttctgc catagaacca tttcttaaat 540
tcgcatttca tgattgtaag gtggtggtct cactgacact tgtcatggtg ggttggtgga 600
gaggaccggg ggtgggaatc acggcagacc cagtctgtct gcaacagcgg agcctttgga 660
gggtgctcaa ggaaacactg gtagaaatgg anggaccaac tgaaggaaaa ttttgaattc 720
aaaattgaag agtttggntc tgggttccca taatatgctt gataggagaa gcaacctttg 780
naactggctg ggaaatcgga atacatnttg gaggtct 817

<210> 223
<211> 747
<212> DNA
<213> Homo sapiens

<400> 223
attgattcat ttaatctgca tgttggcggt gtgaatagta gaaaactcac agttgaaaat 60
gcctcttgtc agccacggag cgcacaggca tttgtgtgcg taaccccggg tagcgttcat 120
gtgcacctaa agtgtgacga cagcctatgg gaaaccaagg gaagggtcac ctgtagaggt 180
ccggacattc ggttttgcct ttaagacaac tattanatcc taagcgactg tgttgtggct 240
gagttaaaaa tgtgcctgtt tacttgcaga gcttcttcca ttaggtgaac aatctgttgt 300

09513650 . 020200

gattttaatg tgtaagacct ttggtaatgt gaggaattga ttagatagtg cagcccagtc 360
tctagaggat cagatctgtg ggattggttg gggtggttgg gcaaagtcca tggtgagtta 420
nnaaatgact ttggaagtga ctctaatgtg tacacnaaca acacacaagc acacaccaca 480
catacataca cacacgaaca catacctcca tgctgcatat acacacacag gcatacacac 540
actctaatgt gtacacanac ncacatgcac ataccacaca tacacacaca cacatgaaca 600
catacctcca tgccacacag acacacacag gcatacacat actctaatgt gtcacaacac 660
acatgcacac accacacacg aactcncaca ttcatgccac atatacacac acggncatac 720
acacatgcag gcacatacac tacacan 747

<210> 224
<211> 857
<212> DNA
<213> Homo sapiens

<400> 224
tccaatattg actgggatga ttgttgcaca tatctgaatg tatcaaaaat gattagcttc 60
aactaaatgg gttaattata tactatgtaa attatatata aataaatttg tataaaaata 120
taaatgaaac tattgcctgc aagtagttcc agaaagaagt tgacacattt caagaataac 180
aaatgttatt aaacatgtga aattgatgaa tgagaaaata tactatttcc atactcttcc 240
ttaaagatgt atcagtccct aatgtatatt cctattatgg tgatattatt tatgctcagt 300
caatcattaa catatgctta tgaaaatctt attttactta aagaggaata ctttaaataa 360
attttattca attgccttag aatttaggcc tactcctaga caggaagaaa gatttccaag 420
aattcacaat cttctaaaac cattacctat atttattatt tatgctctta cataaccctc 480
agtagcacat tatttttctt gtacaattga tcagatatta tttgaaatta aagtgtctgt 540
ccctttcagt cagcgtgttt ctaaaatatg acaactaatg aaatcgcata gtaaatgcta 600
caaactaaag gctataataa gttgtaacac tttttcagaa tcacaataaa atttttctgg 660
atatgctgnt gtgtaaggaa ttcctcagtg atatgtgcat ttgaacttca gctaatattt 720
ctattctctc tgagtttggg aagttatttg aattccccta cttctanggt ttttatttat 780
acccttaata ttcatggttt ttgnccttte taaggtatat tttaaccgat ttattcactc 840
antggtgggg ttctatt 857

<210> 225
<211> 635
<212> DNA
<213> Homo sapiens

<400> 225
gggaccccag gcttcctctg agacatccac cagcggtgat gggttgggac caatctcccc 60
cactcctctc caccctagca gtctgctacc gctgccacgg ccccccctgc tgccccggct 120
ggggagggtg gnccncctgc acccccctcca aacctcacca gtaacaggag actgnagcag 180
acccaggccc aggtggatga ggtggtggac atcatgaggg tgaacgtgga caaggtcctg 240
nagcgagacc agaagctgnc ggagctggac gaccgtgcag atgcactcca ngcgggggcc 300
ttccagtttg aaacaagcgc agccaagctc aagcgcaaat actggtggaa aaacctcaag 360
atgatgatca tcttgggagt gatttgcgcc atcatcctca tcatcatcat aggtgagtan 420
ggtgagaatg gccggggccc tttccctgga gaggtttccc cagtggattc taggttttga 480
aggtcattaa tctagttntt actcttcagc caaaaacaca tatagctgct aatggcaatt 540
ctgattcatc tagagccaaa aactttgatg ttatttancc tgcattttgc ctagttcttg 600
gcagtcttgn taacatttgg aaatangaaa gctgg 635

0956750 : 09NOV00

<210> 226
<211> 698
<212> DNA
<213> Homo sapiens

<400> 226
atccaaatgc attagtctta gatgaacaca cctggaatct cacttttatg agaatttcat 60
agactatact cttgaattcc agttgtacat ttttgcttgc aaacacaggc atttcagagt 120
ataatgagag gaggctggtg ctcataaaga agactgactt tacagtaaac cacctcccag 180
gagaactgaa gatggggctt gagctgaggt ggggtctctt ctccactatc ccgagcagca 240
cctgggcccc aggtcttcac ctagacagtc aaggacctca gcctaaacag catccagctc 300
ttagaagtcc tgtgaaattg ggccaggcac tgtgggtcac gcctgtaatc ccagcattta 360
gaaggaggct gcggcaggtg gatcacttga ggccaggagt tcgagaccag cctggccaac 420
atggcgaaac cccgtctcta ctaaaaatac aaaaattagc tgggtgtgat ggtgcatgcc 480
cgtaatccca gctattgagg agactgaggc aggagaattg cttgaacccg ggaggtggag 540
gtagcagtga gccaagatgg cgccactgca ctccagcctg ggcgacagag cgagacccca 600
tctcaaaaaa aagaanagaa aaaagaanag aanaaaaaag atttcttgta aaattgaaaa 660
caaaattcag actttggcta cttgaatctt ggttaatg 698

<210> 227
<211> 819
<212> DNA
<213> Homo sapiens

<400> 227
tactagatgg acaggctgag gtgtttggca gtgatgatga ccacattcag tttgtgcaga 60
aaaagccacc acgtgagaat ggccataagc agataagtag cagttcaact ggatgtctct 120
cttctccaaa tgctacagta caaagcccta agcatgagtg gaaaatcgtt gcttcagaaa 180
agacttcaaa taacacttac ttgtgcctgg ctgtgctgga tggtatattc tgtgtcattt 240
ttcttcatgg gagaaacagc ccacagagct caccaacaag tactccaaaa ctaagtaaga 300
gtttaagctt tgagatgcaa caagatgagc taatcgaaaa gcccatgtct cctatgcagt 360
acgcacgatc tggtctggga acagcagaga tgaatggcaa actcatagct gcaggtggct 420
ataacagaga ggaatgtctt cgaacagtcg aatgctataa tccacataca gatcactggt 480
cctttcttgc tcccatgaga acaccaagag cccgatttca aatggctgta ctcatgggcc 540
agctctatgt ggtaggtgga tcaaatggcc actcagatga cctgagttgt ggagagatgt 600
atgattcaaa catagatgac tggattcctg ttccagaatt gagaactaac cgttgtaatg 660
caggaatgtg tgctctgatc catatggtca aaaaggactg aaaaattgtg atggatttga 720
tcctgtacaa agttgtggac nagctggccc ctcttaacat tcggagaccc agtctgcagt 780
ctgtgagcct tggcgggtat ttgncataat cggngtgca 819

<210> 228
<211> 816
<212> DNA
<213> Homo sapiens

<400> 228
aggaagtcat gccatacagg aagccatcag aagttgcctg gtaaggattt aagaaaaaag 60

09613450.030200

gaattaagtg gttatttggg tcataaattt tagggcatca ggttatgggt atctgatgta 120
tttatattaa taattacagc ttaccatggg ccagtcactc ttttaaatgc cacagcaaat 180
ttatgaagta ggatatatta ttatcctcat ttgcacatga ggaaactgtg cacaaagacg 240
ttaaatggac tgccaaaaat cctaaagcta gtaagtgcca gtaccagtat tcaaacctag 300
gcagtctagc tcttaaccgc tatactatat cttccattga aatggacagc tggttatttt 360
gactaaatat cctaagatat gtttggaagg gaattaccat cactgacctc ttaaatctcc 420
tttttctgta cttccaagct gatcaactct ttttttgtga aagactcaaa ttgttgtgtt 480
gtattacatg aatcgatata tgggataatt gctaaacatt atagacctga gagtcattct 540
atctctttta gaaatctttt tctttattcc ataatggata atgacaaatt caaaagcttt 600
aggaagtagg cagataacat aagtgaggga gatggcttgg tataagtcaa tttgaaatgg 660
cgagaactgt ggcaaaccac tactcactcg tcacttggct tcagctgctc tgtgcaaatg 720
tggatccaat ggtatcagat atttaaggnc aggaatggng gcttatgcct ataatcccag 780
cactttggga ngccaggtgg gaggatgctt gaccta 816

<210> 229
<211> 772
<212> DNA
<213> Homo sapiens

<400> 229
ggatttggga taagtctaaa acttcagact taaagctttg aagcatgtta actgcatgaa 60
atattaaaca tttcgaactt ctttagcctt tgtcattttg tgacccaggt ttttcatagt 120
ctgctctatg tctcctgctt ttccttgttt tgctaatcat cctccttgag ctccactgtt 180
ttcactctgg gcatccaatc cagcctttca tggtgtgtgc ttcatcaggc ccctggttca 240
catgctgagt gccttataag cctggccagc actagtatat tctcattaac aaacaaacag 300
tcagcttcgt ttgggagggt gcttcacttt caaagctacc cagtataatg catacaatgc 360
agtacaagcg gaactcactc agaagtagca cctgagcttc aaatagactc tcctgatcat 420
tctactgagt aagattctcc acatttaaga atcaatacag gatttacttg cgaggatagt 480
gtataaaaat ggaatagttt ttctatttct ggactgaaac caaactcctc atatctaatt 540
gtagttattc aacattatca gaatccctat ttattttggc agaacagaca aaaggacgtg 600
gaatgtactt tctgctacag ccgttacagt caactagatt tgagtgctgc cgctggtaag 660
ttaattgaat agccaagtta tggtgcctta cccaagtaga cagtggaaag gaataatggc 720
agangccatg atgcgagtct gggcacagcc atgcatccca tctgnggnga tc 772

<210> 230
<211> 818
<212> DNA
<213> Homo sapiens

<400> 230
aacatttata gctttaaaaa taccttacgt acttcaataa ctatgtggaa gcactaagaa 60
agattctgta taaaacatcg caagtttgga aaaaatacat ctttacatct tttcctccag 120
cttcattttc tcagaggcag gagcaggcca gtggtttcca tactgcggct cctctaggag 180
ccacctgaga accaaaccac caatccagca tctcccaccc catcatccag atcctcccga 240
tgccctctca tatgtgggtt ctgtgaccca gaagcctcca taatgaacca caggagaaca 300
ccatgggcca gccaacagtt aggctcttca cataccaaat aaaccaccac aggaaccctt 360
aacctcatct actgcctgat ccaaacatca ctgctttgaa ctcaatggtc tttcttgagc 420
ctttatgatc aatacatagt gcacttttag tccctctgaa gcagattatg ttgtcacaat 480

0956045 "0 2000

tatgactcaa ctttaatagt ttcaaccaga aactgtttag gatccaacat acaagagagt 540
caactacatt tcataatatt agcccattta agagtatttt tcaaagtgtg ttctgtggat 600
gttaataggt gatactgttc cagaagttct gtggcaaact aatccaggac ttctcagaac 660
ctttaatata tgnttcatat acatttacat ttcangcctc tgaaaggcag aatcctcaaa 720
tttatttatc catggaagct ttttttccct canagcaact tacaggacta ctttgggaaa 780
cactggctaa gggtcctaag anctcatgaa ancccttа 818

<210> 231
<211> 899
<212> DNA
<213> Homo sapiens

<400> 231
tcggttaaaa gccagaagtt atgagcttca ggaaagcaat gtacggctga agttaaccat 60
tgttgacacc gtgggatttg gagaccagat aaataaagat gacagctata agccgatagt 120
agaatatatt gatgcccagt tcgaggccta cctgcaagag gaattgaaga ttaaacgttc 180
tctcttcaac taccatgaca cgaggatcca tgcctgcctc tactttattg cccctactgg 240
acattcacta aagtccctgg atctggtcac catgaaaaag ctggacagta aggtgaacat 300
cattccaata attgcaaaag ctgacaccat tgccaagaat gaactgcaca aattcgagag 360
taagatcatg agtgaactgg tcagcaatgg ggtccagata tatcagtttc ccactgatga 420
agaaacggtg gcagagatta acgcaacaat gagtgtccat ctcccatttg cagtggttgg 480
cagcaccgaa gaggtgaaga ttggcaacaa gatggcaaag gccaggcagt acccctgggg 540
tgtggtgcag gttgagaatg aaaatcattg cgattttgtg aaacttcgag agatgctgat 600
ccgcgtgaac atggaggact tgcgagagca gactcacacc cgccactatg aattgtaccg 660
acgctgtaag cttgaagaga tggggttcaa ggacactgac cctgacagca aacccttcag 720
tcttcaggag acatatgaag caaaaaggaa tgaattcctg ggagaactgc agaagaaaga 780
agaagaaatg agacaatgtt ggtatgagag tgaaggagaa agaactgact taagaggcan 840
aggaagactt acgagaagtt gacctttaag cggcccccag aagaaagaag aagggagca 899

<210> 232
<211> 846
<212> DNA
<213> Homo sapiens

<400> 232
gctcaaatat attatgctct ctcttgactc tgtgcctttg caagtgacat tcacttggcc 60
tgaacactgt tccagctccc tctgttcttt ccaggtgatg ccttctcgcc ttccaaatct 120
cagtttagac gtgctcttct ctgggaagtt tattcattta ctgtgtgtta gatgttgttc 180
taggccctgg ggatgtagca gagaagaaga caaagtcact gcatttggtg aggagctgtc 240
atcttcagaa tcaaaacttc cccctagtgc agtgtccacc tccagatact gcttcatttc 300
tctgctctct ttgttcatga aacttttca ataattgctt tttcatttct tcatctccag 360
tttttatcta attccaattt agtttctctc tccatgactc tgctcacact gatttttctc 420
agacaccaac tttttttgc cgcctaatac aatcgccatg ttttttcttc atgttatttg 480
atcctttag tggcactggg cataaatgac cacacgtttc ttttcgaaac attatcatga 540
cttttctgat gccacattct cctggctttt cttttgcccc acaggaattc ctgtagacat 600
ccactgcctt actagatgta gggagcacct cagggcccag ccctggccca ctcctctctt 660
tagccctcat acttttccta agtggtacca tctgggccct tgcttgaaat gccaaatggc 720
attaaatgcc aaaaggatat cttcagccca actttgnttt aaccccagca actggatggc 780

WO 96/39500 PCT/US96/08800

cagatccttt ttctncctta atggataagg attaaggaat catatgagga tgcttaaacc 840
aaagtn 846

<210> 233
<211> 719
<212> DNA
<213> Homo sapiens

<400> 233
ccgcgctgtc cgccgccgct gcctgagtcg actctgcgcc gcccgccgcg atggaggccg 60
ccgcccagtt cttcgtcgag agcccggacg tggtctacgg ccccgaggcc atcgaggcgc 120
aatacgagta ccggacgacg cgcgtcagcc gcgagggtgg cgttctcaag gtgcacccca 180
cgtccacgcg cttcaccttc cggaccgccc ggcaggtgcc ccggctcggg gtcatgcttg 240
tcggctgggg cgggaacaac ggctccacac tcaccgccgc ggtgctggcc aatcgactgc 300
gtttgtcctg gcccacgcgc agcggccgca aggaggccaa ctactacggc tcgctgactc 360
aggcgggcac cgtgagcctg ggcctggacg ccgagggcca ggaggtgttc gtacccttca 420
gcgcggtgct gcccatggtg gcgcccaacg acctcgtgtt cgatggctgg gacatctcgt 480
cgctgaacct ggccgaggcg atgcggcgcg cgaaggtgct ggactggggg ctgcaggagc 540
aactgtggcc gcacatggag gccctgcggc cccggcttct gtttacatcc ccgaattcat 600
cgcggcaacc agagcgcgcg cgcggacaac ctnatccaag ctcgcgtgcg cagcaactgg 660
acagatccgc agggacatcc ganactttcc ggtctancgc gggctggaca aaagtcata 719

<210> 234
<211> 772
<212> DNA
<213> Homo sapiens

<400> 234
ttgcggggag ggcccgaggt cgctgtgtcc ggggcagagc ggccggttcg tcccgagtct 60
gcgctctttc gggtccgctg ctgtgtcccg gtccgctctc ctcagcatga gcggccggta 120
ggagtgaggt ttcatcggtt ccctcgcact ggaggaggca gcggccgctt cggcagcgac 180
agctatggcg gtagagacgc gggcagagct ggtgggtaag cggttcctgt gtgtggcggt 240
cggcgacgag gcacgttcgg agcgctggga gagcggacgc ggctggcgaa gctggcgagc 300
gggggtcatc cgagccgtgt cacacaggga cagccgcaat ccggacctgg cggtgtatgt 360
ggaatttgat gatcttgaat gggataaacg agagtgggtt aaagtttatg aagatttttc 420
aactttcttg gtggaatacc acttaatctg ggccaaaagg aatgacccta gccagactca 480
gggatcaaag agcaaacaga ttcagtggcc tgcattgact ttcaaacctc tggttgaaag 540
aaatataccc agttcagtca ctgcagtaga attccttgta gataagcaac tggatttttt 600
aactgaagat agtgcctttc agccctacca ggacgacata gacagnctaa acccagttct 660
canggacaac ccgcacttca tgaggaantg aaagtctggg taaaggaaca aaagggtcag 720
gagattttta tgcaaggtcc ttattcctta aatggatccn gantgagagt tt 772

<210> 235
<211> 714
<212> DNA
<213> Homo sapiens

<400> 235

0950450 - 070600

aaataaaagc atattttgag ggaataaaga agcagaaaaa caaagaagaa tctggggaag 60
atgggcataa atctccacca agtgctgcca aggcttccca ggcgaggctg ctgaaaagac 120
cctgtggagg tagagggaca atttgtcatg gatgggaatg ggcttgaggg ccgggaagca 180
gggcatgatg gggcctcatt catcattttc ccgttatccc agcggcgtgc aggggagcag 240
gtacagcacc tgccaagtga gtgaccagag ggggactggg aatggaaagg acctcaagga 300
aggacaagct gagctctggg aggccacctc ctccaggaag ccttccctga ttcatccttc 360
acaggcagtc tcaatttgca gtcagatatc cactgctctg attcttagat cggcaagtat 420
ctccctaccc agactgcagg ctctgctggg gccgcggctg tttctgactt gtgcacaatg 480
gcatccctgt acctagcaca ggactgagtc cagagaaagt gctcagtgat gcttgttggc 540
cttgctctcc tctgtgggca gcactggaca gggcacccgg cgggtcctga nggtgtggac 600
atcccacggc agagcctgcg gttgatcccg accatgaacc aaggcctggg gcgggggtgg 660
ccacatcagg ccacttttg ccaggaaana tgtggcttgn naacctgggg gtct 714

<210> 236
<211> 636
<212> DNA
<213> Homo sapiens

<400> 236
aacgtaatga aacctcgtct ctacaataag tagaaaaatt agccatgtgt ggtagtgcat 60
gcctgtggtc ccaggtactt gggaggctga ggcagcagga tcacttggac ctgaggggtc 120
gaggctgcag tcagccctga ttgctgccac tgcactccag tctgggcaac agagaagact 180
gtctcaaaac aaaaacaaca ttactcagga atgaaggaaa tggtggaatt gagaagacgg 240
gactaaagcc aattaatggg gtatggcaat agtctagttg gaagaggtta aggtcatgca 300
gtaggacata atagggctga agaagtatgg atggaattga caaactttta aagggtagaa 360
ttcacaagat ttgatgaaca aatgcatgta agagaacata tacaatgcat tgtaagggac 420
ttactgctat aattaaccat tgtatgtttc caaaatgtat gtgtataaat agtcaacagt 480
gataacagga tccaatcatg gacaaccagt ttgattggat ataaattttg aaagaaagtg 540
tgtgtgtgtt tgtgtgtgtg tatgtgtgaa tgtgtctggg gaagttaaga aaaattttga 600
gtttgnccta ttgatggcaa gcanctgcng caggga 636

<210> 237
<211> 703
<212> DNA
<213> Homo sapiens

<400> 237
tctgtcgctg actccgcgcc gcgcgccgac cgcgcgcccg cccagccggc catgcacgca 60
gtgccgcgcg gctttggcaa gaaagtgcgt gtgggcgtgc agtcctgtcc cagccccttc 120
tcgggccagg cgtgccccca gccctcctcc gtgttctggt ctctgctgaa gaacctgccc 180
ttcctggaac acctcgagct gattgggtcc aacttctcct ccgccatgcc ccgcaacgag 240
cccgccatcc gcaactcgct cccaccctgc agccgcgcac agagtgtcgg ggactcggag 300
gtggccgcca tcggccagct ggccttcctg cggcacctga cgctcgcaca gctgcccagc 360
gtccttacgg gctccgggct ggtcaatatc ggcccgcagt gccagcagtt gcggtccctg 420
tcgctggcca acctgggcat gatggggaag gtggtgtaca tgcccgcgct ctcagacatg 480
ttgaagcact gcaagcggct gagggacctc aggctggagc agccctactt cagcgccaac 540
gcccagttct tccaggcgct gagccagtgc ccctcgctga gcgcctgtgc ctggnctctc 600
gcagcggcac cctncaaccc gatgccgtgc tggccttcat ggcttgcttg cctgcaggtt 660

WO 98/22588 PCT/US97/20850

ggcatgtgcc accttgttca ccggggaagn cccttgncac ctg 703

<210> 238
<211> 791
<212> DNA
<213> Homo sapiens

<400> 238
tgggcagcag cagaagcagc agcagcagct ccagcttctt ccctccctcc ccaaggagaa 60
gagttccctc ctcctcctcc tcctgcttct cctgctcaga gttcctgcct ccagctgcca 120
gggggggacag ccagccagca gcaggagggg ggctagagag ctgaaggaga gccagtttcc 180
ccaaaattgc tgcagtgaga agaggagttt gttactttaa acagaggctg aagaaactat 240
agaattagca gagaaagtgg agaaggtaga ggatggagtt gcagactcta caggaggctc 300
ttaaagtgga aattcaggtt caccagaaac tggttgctca aatgaagcag gatccacaga 360
atgctgactt aaagaaacag cttcatgaac tccaagccaa aatcacagct ttgagtgaga 420
aacagaaaag agtagttgaa cagctacgga agaacctgat agtaaagcaa gaacaaccgg 480
acaagttcca aatacagcca ttgccacaat ctgaaaacaa actacaaaca gcacagcagc 540
aaccactaca gcaactacaa caacagcagc agtaccacca ccaccacgcc cagcagtcag 600
ctgcagcctc tcccaacctg actgcttcac agaagactgt aactacagct tctatgatta 660
ccacaaagac actacctctc gtcttgaaag cagcaactgc gaccatgcct gcctctgtgg 720
tggccanaga cctaccattg ctatggtgan ccgccttaac agtcanaagc tgggctcaac 780
acttgatgtg c 791

<210> 239
<211> 797
<212> DNA
<213> Homo sapiens

<400> 239
gataccctta agggagaact ctggagcact aactgtgtgt tccctacaga tgcgtccacc 60
acctcccccg ccggctaaag ccccggatcc tggccaccca gatcccctca cctgaaggcc 120
agggaagcct tgacccccag tgatgctgct gtccctatct tcaagctgtc agaccacacc 180
atcaatgatc cagagcaaca cagccaaaag ctggaatcgc ccttatttcc accctcacct 240
ccaagggtgg aaacttgccc cttcccattt ctagagctgg aacccactcc ttttttttccc 300
attgttctat catctctagg accggaacta ccttctcttc tgtcatgacc ctatctaggg 360
tggcgaaatg cctgaaatct ctggggctgg aaaccatcca tcaaggtctc tagtagttct 420
ggcccacctc tttccccacc ctggctccat gacccacccc actctggatg ccagggtcac 480
tggggttggg ctggggagag gaacaggcct tgggaatcag gagctggagc caggatgcga 540
agcagctgta atggtctgag cggatttatt gacaatgaat aaagggcacg aaggccaggc 600
cagggcctgg gcctcttgtg ctaagagggc anggggccta cgggctattg ctttangggc 660
ccaccacggg caggggcctg ttccagctgc cacgctctat catatggagc gaggtgttgg 720
ggaaggcngg gcaagcaagc ctgttgangc aggggaagga gaagagactg agggctttga 780
cctttctgag gccccan 797

<210> 240
<211> 771
<212> DNA
<213> Homo sapiens

0502680.0502680

<400> 240
attagcttaa atgttacggc cacttaaaaa ttctacatat gactattgtt taaatacatt 60
tttcatgtct ctgatgtagt ccttatttga cataagtatt ttattcactg cttaattgtt 120
agatagatta tagacagctg ttactaagta atactgctcc attagggcag aaacagaaac 180
tttattttaa ttaaatgtgt actaatgttt gagtttctat attttgctac agtgataatt 240
ccagtaaaat aaactgtagg cctctagttg ttttagaatt ttaaaactgt aaatggactc 300
agagaatcag tttcttatta gacgtcatga gagtatattt ttttcattat gctttaagag 360
ggaatttgta acttgctcag gtaacattca agttttctgg tttgtgtttg tccctacaat 420
taaacacact gaactaacag gaaaaggtta catacattta ggaacaattg cacttttaaa 480
gggagagaat gcatagttgc tcacatatct cagtgtcagt cacctaacat ggatcagtgc 540
tttatttgag attacaaaac tagaaaatga cggagtcaag gctaggacca atattctgtt 600
cagtcttaga taattataga atacacatta aaatcagata tttgaatttt cttaattttg 660
taactatttg gcattgaaag gagatactaa aaaaattata tatcgcctag aaagtncatg 720
aactaataat gcatttctaa aggtgaaaaa ngaataggna tttttctggt t 771

<210> 241
<211> 686
<212> DNA
<213> Homo sapiens

<400> 241
aagacctctt agaccagctc ttgtccatca tttgctgaag tggaccaact agttccccag 60
taggggtct cccctggcaa ttcttgatcg gcgtttggac atctcagatc gcttccaatg 120
aagatggcct tgccttgggg tcctgcttgt ttcataatca tctaactatg ggacaaggtt 180
gtgccggcag ctctgggggga aggagcacgg ggctgatcaa gccatccagg aaacactgga 240
ggacttgtcc agccttgaaa gaactctagt ggtttctgaa tctagcccac ttggcggtaa 300
gcatgatgca acttctgcaa cttctgctgg ggcttttggg gccaggtggc tacttatttc 360
ttttagggga ttgtcaggag gtgaccactc tcacggtgaa ataccaagtg tcagaggaag 420
tgccatctgg tacagtgatc gggaagctgt cccaggaact gggccgggag gagaggcgga 480
ggcaagctgg ggccgccttc caggtgttgc agctgcctca ggcgctcccc attcaggtgg 540
actctgagga aggcttgctc agcacaggca ggcggctgga tcgagagcag ctatgccgac 600
agtgggatcc ctgcctggnt tcctttgatg ngcttgccac angggatttg gctctgatcc 660
atgtggagat ccaagtgctt ggacat 686

<210> 242
<211> 726
<212> DNA
<213> Homo sapiens

<400> 242
aagatgaaca agagccgcca gcgcgtgcgc tacgactcct ccaaccaggt caagggcaag 60
cccgacctga acacggcgct gcccgtgcgc cagacggcgt ccatcttcaa gcagccggtg 120
accaagatta ccaaccaccc cagcaacaag gtcaagagcg acccgcagaa ggcggtggac 180
cagccgcgcc agctcttctg ggagaagaag ctgagcggcc tgaacgcctt cgacattgct 240
gaggagctgg tcaagaccat ggacctcccc aagggcctgc agggggtggg acctggctgc 300
acggatgaga cgctgctgtc ggccatcgcc agcgccctgc acactagcac catgcccatc 360
acgggacagc tctcggccgc cgtggagaag aaccccggcg tatggctcaa caccacgcag 420

0050450-0050800

ccctgtgca aagccttcat ggtgaccgac gaggacatca ggaagcagga agagctggtg 480
cagcaggtgc ggaagcggct ggaggaggcg ctgatggccg acatgctggc gcacgtggag 540
gagctggccc gtgacgggga ggcgccgntg gacaaggcct gcgctgagga cgacgacgag 600
gaagacgagg aggaggagga ggaggagccc gacccggacc cggagatgga gcacgtctag 660
ggcagaagcc cttgccnaga agcccgtgct tgccttgctg gagcccgnct tgcanacccg 720
gtcctt 726

<210> 243
<211> 756
<212> DNA
<213> Homo sapiens

<400> 243
aagccattca acaaatctct aggaagttcc atactttccc acattttcct gtcttcttct 60
gagccctcca aactgttcca tcctctgcct gttacccagt tccaaagctg ctttcacatt 120
ttcgggtgtc tttttagcag taccccactc tcggtaccaa tttactgtat ttgtctgtta 180
ttatgctgct gataaagaca tacctgagac tgggcaattt aacaaaagaa agaggtttaa 240
ttggacttaa cagttccatg tggctgggga ggcctcaaaa ttatggcgga aggtgaaagg 300
cacatttcac atggcagcag acaagagaag agagcttgtg cagggaaatt ccgtttttta 360
aaacaatcag atctcttgag acttagtatc acgagaacag cacaggaaag acatgcctcc 420
atgattcaat tccctcccac aacacatgga aattcaagat gagatgtggg tggggaatac 480
agccaaatca tatcaatttc taagcaacat atttggatat ttactctgga aatgtagtta 540
caaatgagca gttccaaata gaagagtgca atttacttca gctttgcaca aaagcaggta 600
aagaggtatg cctatatttt gaggctagaa caactagaat atcatatttc ttttcttagt 660
ggtgatagga aagcctactt tcctggacca gagaagcaga tgtaagtagc cttangaatt 720
gctgngcttt ttctgctgnc agtcccctgc tcatga 756

<210> 244
<211> 820
<212> DNA
<213> Homo sapiens

<400> 244
ttttgcttga ggccttgaag catgcattct cagggtacgt cctaccccta caagtcctac 60
tgacttctta atcagtaatt ccggctgggc acggtgggtc acgcctgtaa tcccagcact 120
ttgggaggct gaggcagggg atcacctgag gtcaggagtt tgagaccagc ctggccaaca 180
tggtgaaacc ccgtctctac taaaaatata aaattagccg ggcatggggg cgcatgcctg 240
taatcccagc tacttgggag gctgaggcag gagaatggct tggacccggg aagcggaggt 300
tgcagtgagc cgagatcgtg ccatcgcact gcagcctggg tgacaagaac aaaacttcat 360
ctcaaaaaaa aaaaaaaaaa aaatcagtaa ttctagattg gccctagggt gcttttagca 420
ttggaaacct aatgcacaaa gtgatggtta tattggactg atctgtaatt cactgttttc 480
tgttattatt ctatctctta atcttaggct aaagtaaata atgccagcct gattggactg 540
ggttatactc agacccttcg accaggtaag taaaggaatt agtaacagag gggttgaggt 600
ggaaggtgat agagaaaaca atgaaaataa cctgcagaac aacctgtagt cactgtaagt 660
tgatttggac cattttgtaa catttggttg ttcagacaga aaacaataca gatcaaatac 720
ttttgcatta aaaaagtatg natttctgac tataatgngg cactttggcc tttgagtttg 780
gttgatcact cattgcctta accctgaact ttanagaaag 820

0960230.0076000

<210> 245
<211> 763
<212> DNA
<213> Homo sapiens

<400> 245
gctctgcttt gtaagcagga accgcagtcc cctgaggagg gtgtgtgaag actcgctcat 60
ttgagttctt tgaaatgggt cccttggtcc tgctgtcaca ttgccttgag ctaacggatc 120
ctgttcccat cataggccgg tccttggggc attgggcagg tgggggcttt gtgcctctgt 180
ggctgctgct gtctgttctc taacaggcag aactgtggga ttctgaactc aggatgtgca 240
gctctccaga ctgagacccc aaggctgact ccaggtggat ccattgtctc tttattctca 300
ttacgattta tcagaaaagt gagacaaatt caggattctc aaatgctgag gcagccccgg 360
aattgggggg atctttctgt tgttagtcca cccatatttt caagcaggca ttaaaggaag 420
gtcagccact gcgcctagaa taagtaggtc aggcctgctc catccattgt ccccggcccc 480
gcaccctcct cctgagaaga ctgtggctcc tgacacgtct agagaggaag ggccccgggc 540
tgctgagcga acacagtatg aagattgctt actgatccaa atgtccattt tattgcatgt 600
ttggtacttt ttttggtana tgtaatggaa gattctctta tcacatccat tccctctgac 660
attagttttg agttaattga gattctttaa gcgttaacct ggggaangta agtctttatc 720
ttncattaga cattttaaat ttaagaatct aagnaaaaca cca 763

<210> 246
<211> 836
<212> DNA
<213> Homo sapiens

<400> 246
attaaaatga gaaatacata agatgataaa taaaatgaag gtgaaggtat tccagatcta 60
ccgaaaagat tttcagtatc acagattatt cataagaaat tgagaaaagg aacaatcaga 120
agttgcaaaa gatggtatag ccgaatataa tggaaatagg aaaaattagt cgaaaataaa 180
ggttgattta gaaatgaaga aaatgaatat atttcttaat acaaaataag tgggaaatga 240
gaagttatac caataaaaag catttacaaa tttaggggat attgtaaccc agtataattt 300
tctgacaggt tggactttga ccctaatgga cttactggtg aacttttca aatgtttaaa 360
taatgtctat ccatgtatca tgaaggacag tatgcttcaa attgtctttt gaggcagaca 420
tgttctcagt actaaaagac atttttagaa ggattttatt ctcaacagat gcaaaatgca 480
aaataaaata ttgacaaaca atacagcaac aaataattta ctatcactca ggattataag 540
gctggtgtta agcagaacag ccattaaatc agcatcaaaa gaacaaatag taaaatccaa 600
agtattaatt acagataact tttcaaaaat tcatcattca cccttgattt aattatttct 660
ctggcaatta tttaatagac ttctcggagt ctggtaagtc ttaaaccaag aactccatta 720
ttcctactgg gaaaacttaa catttctcaa gtggaagtaa acatgttgca ctattttata 780
tatggttaag agcctgtatt gcataaagcc annttcccaa atgagganat aggaag 836

<210> 247
<211> 680
<212> DNA
<213> Homo sapiens

<400> 247
agagacccat gcattaatat cattattaat tccatgcatt aatatcatta ttaattctat 60

09/15/2003 10:09:00

gcattaatgt tattaattcc atgaatgtgg caggtatttt tttaacattt attgtaggct 120
cagctgtcta ctgggtgttc tgagaaaata caaggaagct atagtaatgc agtgtataca 180
tacattcttt cctgcatatt aggaacctat agtctaattg gggatgtaag ctttcacgca 240
tgaaaagaca ggtaaatgta gaagacaatt tcttatgagt ttcagtgagt catgcagaca 300
gtactggagg agttcacagg tggaagggga tgcagggaat gagagttatg gagaggaact 360
aggagatcag gaaagtcttt ctgggggagt gaagatttga ctggacttta aaaaatgggt 420
aaaagaaggc aggatttcta gtagggaatc ttagaaacac aaggacacaa agaacatgca 480
tggaccattt gagggatggt gaagaaatca ccccaactgg aataaatgtg ttgggtagtg 540
ggagatgaat ctaggaaggt ggtttggagt tatattttga aggatcttgn tgggtgaagt 600
aaggatccat ggacttgctc tttggagcag gagagagtaa ttaaaatatt ttaagcagcn 660
naatgatgca tcagattcag 680

<210> 248
<211> 826
<212> DNA
<213> Homo sapiens

<400> 248
attaagatgt ggccttacat atggcattcc ttgtgttcgt aatgtgagat ttttgattta 60
gataaatcaa gattcaggat taaagtttca ttgtaagttg aaatagaaaa tgtattaaaa 120
tgtctaggct tctgggagga agttcttata ctcttctttc ttggcattag aaagaagcaa 180
tatgaatttt tgtgaatatt ctaaatattc aggcaacact gttcagattg atttaggttt 240
gtcttaacca atgttctttt tttagaattt caggtagtgg cattcactga gtatgcagct 300
actatggttt ttgtatggga cgtataaata cttgattata tacgacagat tttaatgtct 360
ttaaagactt cctgctgtat taacatattg taatggagtc ttttaaatac taggttgaat 420
ttaattgaag tcacacacat cttgaagtgg taactgcata gtaaatacta ccaagagttt 480
ttttcacgtg ggagtatcct aaaactctgc catgggtgta aatgttttac attaatttca 540
taattggaca gaccctgcat ttagcgaaaa cattttgttt tgaaagtgtg ttctttttgt 600
cgcactgtta ctgcgtaaca cttctcaaca ttctgtaagt taaattattt taaaataact 660
atggtgaatt catgtttatt ttttttactt tgaaaattgt agtactcang tggtatttaa 720
tggggaaagg atcctttggg tataaatcat aatgnatttt aaggaatgca tctattacca 780
ttgataacct ttaaccttaa aaaaaaangg nctaattaat tccctt 826

<210> 249
<211> 779
<212> DNA
<213> Homo sapiens

<400> 249
ttgcctttta aatagcaata aacatggtgt aattggttta ggaaggctgt gctccatgga 60
gaagagctgg tactacattt aatttatctt gtagcatagt gttttctcaa actatgctta 120
gaagaatact ggttcctcga ggtgttgatt ggtgttgtct ggaaatacaa ggagcttctg 180
aggccaagta atgtggcaaa cactggggta ggccagttac ctggggttaa ctttccggca 240
ggacttctca gagtctttaa tatgctactc tgcatcataa attttcaaga gcttgccctg 300
tacctatttg tctttccctt ttcatagtgc tcacagggtt tcatggatct cagcatagaa 360
aaggctgctt tagggtagag gcagctgcca gcagtcttta gaaagtgagt gatttctatt 420
tcagaaaggt aacactgagc acctgggaag gaaaacgcca aggatgagaa actagaccca 480
aggcaaccta taatgaggct gttaaaattt tctaggcaca agaaaatgag gctcagaatt 540

0002045205

agggcagtga aaatgtgagg gaagagatag aattgagaga tgcttaggag gtagaatgga 600
tactccataa ccacaaggat ggtgaatgag agaataaaat agttgaaggt gaatcccaag 660
tttctagctg ggaagcttgg acagagaagt gttgggtaga agatgaaaaa caatttaatt 720
tgggacatac ngataaagat ggcaactcat anccagcaac tggtgatact aatgaanca 779

<210> 250
<211> 799
<212> DNA
<213> Homo sapiens

<400> 250
agagacgcca gaggtgcagc tccagcagca atggcagtga cggcgttggc ggcgcggacg 60
tggcttggcg tgtggggcgt gaggaccatg caagcccgag gcttcggctc ggatcagtcc 120
gagaatgtcg accggggcgc gggctccatc cgggaagccg gtggggcctt cggaaagaga 180
gagcaggctg aagaggaacg atatttccgg tgaggctcac cgggtcccaa gtccagccct 240
ggatctccca atggccttcc aatccttaaa ctgccaatcg ccccacccgt tcctacctgg 300
tgccttgggc gccccatccc ccaacagaac tcccgggccc caatccagta taccctaacc 360
cttgatgtcc cgaccgttgc cacgtatagg gcactcccag ttacctgcac aacagtttca 420
ggcccccaaa ccgtttccac cggcgggtct ccaaaacaac ccacggctca actcctcctt 480
tatcattacc atctcccgcg tggagttctc ctcaggtcgt gcgaaacacc cccagattct 540
tcgcacagtg tctagatccg accgcccaac gtttgcctcc cagcctgact ccctcggccc 600
ttacccacct gtcacccccc ctacgctctc cttcctcgcc agcacgcctt agctttgcaa 660
gcctgcatgc attcangctt ctcagtgttt ctagaccccc gacttcgcaa gagtgangat 720
gatgggaact ggtcatggga actacttatg gntggacacc atcttctaaa ggctttggcc 780
tatnaaccca actaaactg 799

<210> 251
<211> 758
<212> DNA
<213> Homo sapiens

<400> 251
tttttggagg tttatttcat tgtttgccct tgatactgta gtctttcctc aactatctga 60
tgattctcag acaactcatt atttaagagc taaggcttcc tgggagcttt gcatatatgg 120
acaggcttat tgacggatat attttgtttt aggatggctg ggtgaacagc caaatcttag 180
ctggggtcct acaaattccg gaattgtgag gagtttgctc ttctcaccag tgtccatagc 240
aactagtgta gttctcagtt tgttcagctt ctttagggaa gaaccttatc tttttctttt 300
tttcatggag tgtaaataac tgccaatgtt gtggggctgg tggcagaatt gacgcttcta 360
attattcaac acttcaccct tctgatttca aaccctctga ctgctgttta acattgttcc 420
cgccttctct gagtctgaag cctctgaatc tgaagggacc aaacaaacct cttgactatt 480
acaggttgta gcttatttct ttctgcttca ctcttcctta tatattttgt tttgtacaag 540
tttctagaaa tctttcatca cctcatggcc tgtttctctt ttcttccttg ntaagggttt 600
atacgtttta taatatttta tttttaatga tttcagtaag gtttcttgtc aaagtggatt 660
tattgaattg gaattccagc atatttatca ttaagctgag aagggaaaaa tgcagggctt 720
taccagtaga atgtcttctt aantganggn ccatgggt 758

<210> 252
<211> 786

0050750450

<212> DNA
<213> Homo sapiens

<400> 252
agcgcgaccc gacagcctgg gaaacggaca gccgtgtcag aagggcaggt gccagtgggc 60
aggaggccgg agagaaagcc gcagcttcct tccacctcgc gccgggcccg cggccgcgca 120
cggggaccgc tccgagttcc tcccggcggg aacccccgc cccagaactt tggtctcgtc 180
ccacccaccc ccgcccgcgc catggtctcg ccctagggag ccatcgataa ctctacgctc 240
ggcctcgatc gactcgctcc ggctcccctc gccgtcctgg acacggcgga gtgcggagcc 300
gcccgtaaga tgctctgacc tttgaccctg ccgttcagct ctagggcccg tgcaggccac 360
accatgaaca cctccccagg cacggtgggc agtgacccgg tcatcctggc cactgcaggc 420
tacgaccaca ccgtgcgctt ctggcaggcc cacagcggca tctgcacccg gacggtgcag 480
caccaggact ccgtgaatgc cttggaggtc acaccggacc gcagcatgat tgctgctgca 540
ggttaccagc acatccgcat gtatgatctc aactccaata accctaaccc catcatcagc 600
tacgacggcg tcaacaagaa catcgcgtct gtgggcttnc acgaagacgg ccgctggatg 660
tacacgggcc ggcgaaggac tggacaagcc aggatcttgg gaacctcagg tncccggaac 720
ctgcaatggc caaccggatc tttcangtga acgcaaccca nttaacttgg gtgtgccttg 780
aacccg 786

<210> 253
<211> 805
<212> DNA
<213> Homo sapiens

<400> 253
tttatatata aggaatgcaa ttacctctca aaatttatga gaacaaactc aagtccatag 60
aaacctctgg agctgagcat cctcagttca aatgctggct ctgccactta ccagctgcat 120
gatcttgggc aagttaatct gcctcaaggc tttggcaaga tcaaagggtt gctatgacct 180
gatgcacaca tggtacctga cttcaggtag gtactgagtg catgtcactg gtggcagatt 240
gcattgccca aaggcgtctg aacaattaaa gatgtcccag acctcctgct ctaacaacat 300
gactgacatt gctctcactg agaggtggcg tctatgttcc tcccgtttaa tctgggaaga 360
gaggagttcc caggctaggt catagaaggt gatgcaggtt ccactcagct cacctgtgct 420
cactccctct tctttttttt cctctctctc tctctctccc tccaactccc catacctctg 480
tctctctctg ctcacccttg aatgcagcta ccatgctgtg aggaaacctg gactaggcca 540
gctggaaaga ggacatggac aggcctattt ggggaggagc tgagtgaggc cccagtgaca 600
gcaaacatca gttgtcagat gtgcaatgga tgagccttca gcaggctctg ctgtgccctt 660
ttcaaatgca tatttattat gcagccagag ttggcagcaa gcactaagct gtgacagtgc 720
aagtaattta attggtgang cccattcttg caactacctc tgngactagt ggagacaact 780
tagatcccag atnaagggat ggggg 805

<210> 254
<211> 749
<212> DNA
<213> Homo sapiens

<400> 254
catatttgtg taaaatttta ctgctttcat ttgtttttct ttaaatagac catctttaat 60
atatatgcat tctttttttt tttaaaaaaa agaagcattt taaaaaagga aacatttccc 120

0950205-0050205

ttattatctt gtcacttgcc aaaaatagaa ggtaacttaa aaataaatgc aatcaaacca 180
aaacgatgcc attacattct agctagagtt gtatcataat atctcacaaa agagattgtg 240
aagcagagca gatgtgttaa aacggagatg ttctacttgg tgtgtcaagg atttaaagac 300
ttggaaaaga aagaattatc tcactatgta agttaatatc atttgacaac ctcacctatc 360
aaattaccta taaaccaccc tatgtcatct tatgggccac tgctggtaag agtcccagac 420
attgggaaac aacgtggtca gaaactttca acatgaagct ttcaatatga tcaagctgga 480
tggttgcggg tgggagaggt atgaagcagt catcaaacaa gacatgcttt ttggctgaaa 540
ttcagtggta tttttgttac caggattctt agttttcaga atgaggtacc aaatgtattt 600
ttgcaatgtt ttaattccct tccttaggta attcttagtg acttatttgg gcaacattag 660
tgttgctata tagaataagt ttcattttag atgacgtggn ctttctgntc tggtgngctc 720
ttcgaatgac ccattaagca cattctagg 749

<210> 255
<211> 790
<212> DNA
<213> Homo sapiens

<400> 255
agtctttttc cccctccctt actcttcgtc cccggtccct cccctcccca cccctttcct 60
tctagctccg acgtttgcgg ccgcgggggc ggcggaggat atggagtaaa gccagagtca 120
gtggccaggc acgaaggcag agcaggaaca gccaggaggc gtttattagg ggggcggggg 180
gaaagagccc cagcaccgcc cctcctggaa gaaggaagag gaagtggcag tttttgtctt 240
tgataaaaaa ctgattgaca agtatcaaaa atttgaaaag gatcaaatca ttgattctct 300
aaaacgagga gtccaacagt taactcggct tcgacaccct cgacttctta ctgtccagca 360
tcctttanaa gaatccaggg attgcttggc attttgtaca gaaccagttt ttgccagttt 420
agccaatgtt cttggtaact gggaaaatct accttcccct atatctccag acattaagga 480
ttataaactt tatgatgtag aaaccaaata tggtttgctt caggtttctg aaggattgtc 540
attcttgcat agcagtgtga aaatggtgca tggaaatatc actcctgaaa atataatttt 600
gaataaaagt ggagcctgga aaataatggg ttttgatttt tgtgtatcat caaccaatcc 660
ttctgaacaa gagcctaaat ttccttgtaa gaatgggacc caaatttacc ttcattgngt 720
cttncaaatc ctgaatattt ggctnctgaa tacatacttt ctgtgaactt gtgaaacagc 780
cagtgatatg 790

<210> 256
<211> 788
<212> DNA
<213> Homo sapiens

<400> 256
ctaaatatag ttccctcctc gggacaacaa agaagccatc ctctgaatga ctgcattccc 60
catggccagc ttctgggctg tttgtcagat tcccccagca ggatgggagg gaggagtggg 120
ggcaaacagg agtggccagg gctggagagg agctgctgaa gtccatgcag cagggtgctg 180
tcttccagcc atatgacatt tgggcccaga cgctcagtgg ctatggcctt gaccgtgagt 240
tcctgccttc tgtctctggg gatgcatggg gcccagagcc ctgtcccggg caggtgctac 300
taagttgtga ctgaagaaga ggagagagaa atggtgatct ccccagcagg aaatgaaaag 360
tgtctgtcgg ctccagtcca gtcaagctgg gtgacctctg ggcagattct atccttaagt 420
ctcagtttcc acatctgtga agtagggata aggactatgt caaggagact agagagaaat 480
tgtgccaggt ggcgggcact agtggtccta tctggccagg gctctgtgcc tgcatgtgat 540

0505250-020200

ggattgcagg catagccttt gaagtgcttt ttgatgtgcc tttcacttca ggatggagtc 600
cctcttctgg tcccagggct aagaggtaga tagaggccct gcaaggtact cattccttac 660
taaaacaaga ccccaagccc agagcccctg ccttccttcc agcctcttat ttctgatctc 720
aacttctcag ncatccagag cccanttggg tgctgangcc ccctttaaaa agccccagag 780
cccccccg 788

<210> 257
<211> 800
<212> DNA
<213> Homo sapiens

<400> 257
acaaaaatac ctggaaaaaa tatgggttat tactgaggaa atgtacgagt attccaaggt 60
ccgctcatgg ggcaaacagc ttctccataa ccaccaagcc actaatatga tagcattact 120
cacaggggcc ttggtgactg gagtagataa aggatctaaa gcaaatatat ggaaacaggc 180
tgtagtggat gtcatggaaa agacaatgtt tctattgagt catattgttg atggttcttt 240
ggatgaaggt gtggcctatg gaagctacac agctaaatcc gtcacacagt atgtttttct 300
ggcccagcgc cattttaata tcaacaactt ggataataac tggttaaaga tgcacttttg 360
gttctattat gccacccttt tacctggctt ccaaagaact gtgggtatag cagattccaa 420
ttataattgg ttttatggtc cagaaagcca gctagtttc ttggataagt tcatcttaaa 480
gaatggagct ggaaattggt tagctcagca aattagaaag caccgaccta aagatggacc 540
gatggttcct tcaactgccc aaaggtggag tactcttcac actgaataca tctggtatga 600
tccccagctc acaccacagc cacctgctga ttatggtact gcaaaaatac acacattccc 660
taactggggt gtggttactt atggggctgg gttgccaaac acacagacca acacctttgg 720
tcttttaaat ctgggaactg gggggacnag ctgtgtatga catagtcatt ttcagncata 780
ttcctggatt gacgggtttn 800

<210> 258
<211> 770
<212> DNA
<213> Homo sapiens

<400> 258
ttgcgtacct attgcggttc cttcacgaaa tttcattctg cttgcttctc tgttggtctg 60
ttgccacgca caacttaaaa tatcagatgg ctattagctg ttgcattcat gatgattaag 120
caaggataat tctagcatat ttttttctcc atgtaagtga gttgctcttg cccctgagtt 180
gggccacaat ttaaaacaca agcaaataat cagcaccgta gaaaacaagg attcatacac 240
tccctcccca gccccctttc aaggcaaaat tgagtcttcc aaacatttat acagcgctct 300
gatttagaag gtcaataaag ttcgttgtcc ttcagtcaag ccatggcttt ataaaagttt 360
gatttcagat aaattcattc taatacagct ttttttctta aagatttttc ccccaaaaaa 420
aactacaaag aaaagaaatt ataaaaatgt gaacccaaga cctacccatg ttaactcagc 480
tgtccagcca tagcaaagtg gacaagagtt tcaaatgaat cagccatacc cactgtaatg 540
tttacaatta tgaaattaaa tcacaccacg ttcctatgat gcaactatat ctcccaatga 600
ggcaacgccc ctcagttaca ctgacaccat cattcacatt tggttattga tttcccttgt 660
gctaacgact aatgccaagc tatcctataa gcaggtncca ggtcaatttt ctttctttgg 720
atcgttaagg atggaaaacc atcggagact gnatcctcgn agtatgtctt 770

<210> 259

0962045-070200

<211> 763
<212> DNA
<213> Homo sapiens

<400> 259
tgttagcgtg cacagttctg catacttgct tcccctcacc tgccaggaac aggttagtgt 60
tccccattct gcacactttc ttcctctcac ctgccgggat catgttagcg tacaccattc 120
tgcacacttt cttcctctgt gtacgtgtgt gtggttttcc tttcagaaat gggtcatact 180
ctgtggacat ctttttccac ttaaagtgat ggcacagcca ttttcccagt caagtaacat 240
gaatgtacaa gtttagcaaa cttcctcctg agagatggag agatcaaggc ttctgctccg 300
tggcagccat ccgtgcacat gcatcactgt gcgtgagttg gtcccagtgg cttgctgaga 360
catgctctgc acaggggaga tttcttatac cagcagtgtg ggaggcagtg gggcaggtag 420
agccacaagt ggggatgagg gagcagagtc tagggcaggc tcctggatgg acaccagcta 480
cactgtctat tggatgtggg acttccctca ctgatgaaat gaataagaga atcttcctca 540
tcctgctgtt gttggcgtta aaacgggtta atgcatgaaa gcaacaaagc ccggcctgca 600
gacagcactt ggtaagtctc ctcttcccag catgttcaac aggaagccct cattccctct 660
agaatgtagg agtcttgcca gcantggctg tttggtctct ggctgttgcc gacctgatga 720
gaacctaaaa atggggnctt ctggatagat tnccttctta ttg 763

<210> 260
<211> 707
<212> DNA
<213> Homo sapiens

<400> 260
tacaaccatc cattcctctg cccttcctcc attcatccac ccatccctct gtctattctt 60
ccattctttc ctccatccac ctattcaccc atacaacctt ccatcccccc atccatccaa 120
acatccatcc atccactgaa caaatccatg gcactgcccc actggccttc ttttatttcc 180
tctgtgaacc ccttctctcc tacctctgag ccttcacgta cttcccctcc cattcccata 240
tacaccccta gggaatacct actcagctta agaaaagcct cacctaaatc ccagtctgaa 300
gtaggtcctc ctgctattcc tctcctgaag aacctcattc cctccttttc gacagttgtc 360
atagacatca ccaaacgttt gcttttgggt tgatttactt attcctgtct ccctgaccag 420
actggaagct ccaagagggc aggcattagg tcttccttca gtgcctaccc cagagcctac 480
ctggcccaca gtaggggctc catagggaag tggtgaatgc tggcattgag tgaacttaga 540
aagtactgtg tgcagggcac aggcccagat gtcttgtcag gatttgcttc tgaatgtgac 600
tgcctctcaa ggcttagcat ctatagaaag agataaagaa tgtgtatgca ggattgcaat 660
gcangatgcg actcaggaag gaggcangga gggatggcat ttnggag 707

<210> 261
<211> 795
<212> DNA
<213> Homo sapiens

<400> 261
atatacccca cttcccccat gttcctttat ctcaatgaat ggcctcagta atcctgaaac 60
caaggtcggc tgcatcttct tcctccctgc accctccagg agcaatccat cagtaagtcc 120
tatcagcgtg acaccgtgaa tgcctctcct cctcgcttcc ttccagttgc ccctgcctgg 180
tcacaggcct catcctccct ctctggccca attggatgcc ctctgcttgc ttgcctcgtc 240

0956450-070200

tctgactgta tcctgtgggt gacatgcatg catacccggt accacttaaa ccccccatgg 300
gctccagggg ccccacttgt ggtgtaccaa gccactctat ccccttggcc ctgtgtccct 360
tccttttcct ctcttgctcc agccttactt gtaattcctc agttcacacc tccatcatgt 420
ctgtgagtct caagatctcc tagcccttct ccagacctgt tcaagacacc cctagccctt 480
ctccagacct gttcaagaca cccctagccc ttctccagac ctgttcaagt gccccttca 540
tcactcccca tgtgcagttc catagttgtc catttcacat tgacttccat gtatctggag 600
ggcaggagcc agctctgacc caccttgcca ttcccagagt accctctcag tgaatgtgga 660
tgggtccccc tgccttggta ataagtcatg tgattgagca gatggtgtga cttgcccctc 720
ttgcttggaa ngtcatctgc ccagaacttg tgaangtgca gtggcctgag ccaggctttc 780
aagaggacaa ccggn 795

<210> 262
<211> 328
<212> DNA
<213> Homo sapiens

<400> 262
agaaagatgt gactactttt gacaacgcct caaacttttc taaccataaa agtaattata 60
ctggtgagaa atcctagaaa tctgaagagt gagataaagc ctttaaatgg ttgtcacact 120
tcattgtagg taagataatt catactggag aaaacgccta catgtgtgaa caatatggca 180
aaacttaatg ctcacacttt attgctagga aagcatttat acttgagata aattatacaa 240
atataaagac tgtgaaaaag ccatcattat ctgctcacat tttactcaac accagagagt 300
tcctgcttaa taaaagcatt ataagtgc 328

<210> 263
<211> 879
<212> DNA
<213> Homo sapiens

<400> 263
gcatcattcc tttaattgag cagagttaac tggatcaaat tatttatggg agagagagga 60
aaagttataa agaattatag taatttttaa tttccaccaa tatactcttt gtaagtgaat 120
cactctataa ttactttctg ttgcactgaa tgcagcaaca ataacacaat agtattttaa 180
ggcactggtt tttggcatac tctaaccttg taattattta aataacagcc aagtttactc 240
atgtttttga ttctgtcaag aaaaaaaaaa agttccttta ctcgaaagtg atggccgaaa 300
cagaatcgga aatttgtttt cttgaaatta cataaataca cagaaaatgg cacttattag 360
cttttgttaa aacattacct tacctaatca ctgcataaaa gtccagattt gtagaaaatt 420
gtaattttct cagtatctaa aactattttg ctttccatta agtttctatt tgctattttc 480
tcagaatttt acaattaaag ataaatcaca aactgtttgt ttttcttaaa gttctttgag 540
aaaatgtcta attatacaat ccttggacaa tactgtgttt ttttggtgct gtgtttttta 600
agaagtccta cttactggaa ttttgactat ttggatattt ttgtttttaa aaggggaggg 660
gaatttgctt aatacttcta aagatgtgaa ttgataattg atattaaaat agaattactc 720
tcaactcacc agaattaaat tttatatctg catatttaac actattagct catataaatt 780
ataagaaaaa ttttcaaagg actgggttta atttttgga tatgaaatga attgcctttc 840
tgcctttctt aagactattt tgnacctata ttgcactac 879

<210> 264
<211> 693

0956946.0720

<212> DNA
<213> Homo sapiens

<400> 264
acactgcgcc gcggctgcgc agtacacggg aggcttttaa ttccattgtg gagaggacgg 60
cgttattttt attaactgga ggcgacggcg gctgcggcgg cggcgggacc cgcctcctcc 120
ggggtatgaa aatcggcagt gggttcctga gtggcggcgg aggtaccggc agtagcggtg 180
gtagcggctc cggcggcggt ggtagtggcg gcggcggcgg cggcggcagc agcggcagga 240
gggcagagat ggaacccacc tttccccagg gtatggttat gttcaaccac cgtcttcccc 300
cggtcaccag cttcacccgg ccggcggggt cggccgcccc tcccccgcaa tgcgtgttat 360
cctcctctac ctccgcagcc ccggccgctg agcccccccc tccgcagccc cggacatgac 420
tttcaagaag gagccggcgg cgtcagccgc ggccttcccc tcgcagagga cctcctgggg 480
gttcttgcag tctttggtta gcatcaaaca ggagaaaccc gcggatcctg aggagcagca 540
gtcccaccac caccatcacc accaccacta tgggggggctg ttcgctggag ctgaagagag 600
gtctccaggc ctaggaggcg gtgaaggggg gagtcacggc gtcatccagg acctcagtat 660
tctncaccag catgtccagc ancaaccagn cca 693

<210> 265
<211> 809
<212> DNA
<213> Homo sapiens

<400> 265
tctgggtgat cttggcaaac taacttctga gcttctgtgc attataggca ttcagcacat 60
attcgttgga tgaaaaatac ttttcttgaa agtttatgaa gttgtaggat gcccagcagc 120
ccccttttct ctatttcctt cctcttgaag caagcgttga ctatacctct ttccctaacc 180
cttagtgtac catagcttct tccaacctct ctccaatcca ttacttttt ctgagctacc 240
ctgtctcaaa tctaactcag gccttttgc aagaggaagt ttaagccatt gtttactcat 300
taactcactt gacccttaga acaatcgtgg gaggtgttta tttcggaaag gaagctaaag 360
cacaggacag aaaaataagg tcatagcgtg aactagtaag tagcagaact gggaacatag 420
gactgttatt ttcaaacact ctaaacttca ctgcagttgc aaatttgcaa ccaaaatggc 480
cgccttgaaa gggtcttttg cagtaaaatc tcagtgtcca acatcaaaga cagttcttca 540
gggcctccaa ttaactatac atcctgcccc cagctgctca tctctgcacc tctaacacgt 600
acttcacaga gtaggaaatt gggctttctc cttcaaaaag aaaagtagag aaggcctgag 660
ggcagtgtaa ttaaaatggg agaagtagag accacgaatt acttggatga attcataact 720
gggtggtctc tgaggcangg attattattt ttcctggatt ttaagcntaa aagtagtgat 780
ttttgcattg gtaccaaaaa caaaatngc 809

<210> 266
<211> 800
<212> DNA
<213> Homo sapiens

<400> 266
aacaggcacc gctgcgggga ctggagtcgg cggagaaaac cggggtcccc agcgctgggg 60
cccgcggcgc catggctcac gtcggctccc gcaagcgctc gaggagtcgc agccggtccc 120
ggggacgggg gtcggaaaag agaaagaaga agagcaggaa agacacctcg aggaactgct 180
cggcctccac atcccaaggt cgcaaggcca gcacggcccc tggggcggag ggtgaggacc 240

0005726850

acaggcatcg gggagaggag gcgcagttac tacccgggga agtcgggcga gcagtggtcg 300
gggacgctca gtcatgcctc tgtgcagccg ggcctgagat gtgagggcca ggcgccgcag 360
gagccaggaa ggggctcctc tgggaagctc catctctgtt ctggaaagcc cctcaggaag 420
cgctcaccct gtagccggcc tgtgcctgcc ccaggccaga gcaggggacg aaggtttacc 480
tcttcccctc ctggctttcc agcctcacct tctccctgca tcacagagag aagcaagcag 540
aaggcccgga ggagaacaag atccagctcc tcctcctctt cttccagttc ttctagctcc 600
tcttcttcct cctcgtcctc ctcctcttcc tccagtgatg gccggaagaa gcgggggaag 660
tacaaggaca agaggaggaa gaagaagaag aagaggaaga agctgaagaa gaagggcaag 720
gagaagcgga agcacagcag gtggangctt ttgccgggcc ccttngttgg accagtggca 780
ccgatcaact tgggnaggaa 800

<210> 267
<211> 829
<212> DNA
<213> Homo sapiens

<400> 267
agctggcgtc agggacttcc tcgggctccc taaggacctg ctctcccagt tctctactct 60
tccctctgag gcagaggctg ggcaggaccc acaggcagcc cttagtgacc cgcactccac 120
accctgtctg ccttaggaga aatggggtct gtgaatctgg gctctccctc catgctgccg 180
tgtctgcgga gccaggtgcc ggcgtggcct ctgctagcca gcagagtgag catgcacagc 240
tggtccaggg cacggtgttt tgtttgcact gttccagaca tcgtcatctc catctgatga 300
tgatcactcg gcagctttga gccctggcac agcttcgggt cgaagcacgt tccctttca 360
ggagagttga gccgagcttt ccttcacgca gacttaattt cctggactta gtgctaacgt 420
caagaccaaa cctgtaggaa aagagcttta actacacaaa cacatactga cagattcagc 480
caaactccga gagtcccaga ccggagcctg tgtccctagc gcaggtgtgt ctgtcgggca 540
gccgacggtg cctgtgcagg cagtggctgg acaccactac tcccttctct tccctccctg 600
cttgatcgcg ctgtgggatt cctgatgctg tgtgggtctc tggctccccc tgctgtagaa 660
ngggagtact ggccctggga cacagaactg caaggccagt ggcgccaggt accttccaca 720
ggaagaagat ttgaggacat ttaaaggtac ccacttttac ccgtgccacc ttctacccca 780
gttcctggca gncatccaaa atttgnctcc aagacatgtt nacagacaa 829

<210> 268
<211> 847
<212> DNA
<213> Homo sapiens

<400> 268
tacgaatgtg gccggtgtgg gcgagccttt actcacagct caaatcttgt tctgcaccat 60
cacattcaca ctggaaataa accatttaaa tgtgatgaat gtgggaaaac ttttggactc 120
aattctcacc tccgtcttca tcggagaatt cacactggag aaaaaccctt tggctgtggt 180
gagtgtggga aggctttcag tcgaagctca actcttattc aacatcggat cattcacaca 240
ggagagaaac cctacaagtg taatgaatgt ggaagaggct ttagccagag cccccagtta 300
actcagcatc agagaattca cactggagag aagccgcatg aatgcagtca ctgtgggaag 360
gccttcagtc gaagctccag ccttattcag catgagagaa ttcacactgg agagaagccc 420
cataaatgca atcagtgtgg gaaggccttc agtcagagct caagcctttt cctccatcat 480
cgggttcata ctggagagaa accctatgta tgtaatgaat gcggcagagc ctttggtttt 540
aactctcatc ttactgaaca tgtaaggatt cacacaggag aaaaacccta tgtttgtaat 600

0005305-0005305-0005305

gagtgcggca aagcctttcg tcggagttcc actcttggtc agcatcgaag agttcacact 660
ggggagaagc cctaccagtg cgttgaatgt gggaaagctt tcagccagag cttccagctc 720
accctacatc agcgagttca cactggagag aagccctatg actgtggtga ctgtgggaag 780
gcctttancc cggaggtcaa cccttantca gcatcagaaa gntcacagcg gagaaactcg 840
taagtgc 847

<210> 269
<211> 848
<212> DNA
<213> Homo sapiens

<400> 269
aaactagaat aataaaaggg aaattataat attcacaaac ttgaagcaca ctggaattct 60
gctataaatg tttgttatag aatagaattt ggtgcagggt gaatttgatt taagagggtt 120
taaattatat gaactgtgtg aaaacattta gatctaaggc tgaaaacaat tatcaactca 180
atgaaatttt aatatggtat ttcacaactg tgacttcatg acagctgtta caagtgtcag 240
gaatggtaaa tatgtactat ttactaatgc caacactgta cagaagtgct ttatatacaa 300
taaatcattt attactcaca gcaatcctta ccagtagatg ctatttctat ctgaggtttg 360
tggttaagga aaaagagtga actgagtaac tggtgtgagt tcactcagtg agtaagtacc 420
agagcgttgt caagagaacc aagtgtagca tccttcgtac catagtcaca gtcctacagc 480
agaaatttaa gagagcatca agagagatgc ttgcttaccc gctttgtatt tacttgctct 540
ctgagaagtc tacttctcat ttatttctgg aacacaatta ggtaaactct atctatttca 600
aatgttctct tcagttgtct agtttgaagc ctttgaggat tagcaccttc cagtttattc 660
aagggaattg gacaaagaaa tgagaatgaa ctataggatt aaaggataaa actaaagaan 720
gtgagttaga agagtttgag ttcatgggcg cagatttaac atanaataat cgaataatta 780
gtaggcataa aaaggnggat atcgacctaa ctagtagcct ggganaaatg gggatttggc 840
taaactca 848

<210> 270
<211> 831
<212> DNA
<213> Homo sapiens

<400> 270
ttaatactct tgacaaaagt atgagtggat atctctcagg ttttcaagct agaaatgccc 60
ttcttcagtc aaatctttct caaactcagc tggctactat ttggactctg gctgacattg 120
atggtgatgg acagctaaaa gcagaagagt ttattcttgc aatgcacctt actgacatgg 180
ccaaagctgg acagccatta ccactgactt tacctcctga gcttgttcct ccatctttca 240
gaggaggaaa gcaaattgat tccattaatg gaactctgcc ttcatatcag aaaatgcaag 300
aagaggagcc tcagaagaaa ttaccagtta cttttgagga caaacggaaa gccaactatg 360
agcgagggaa catggagctg gaaaagcgac gccaagcctt gatggagcag caacaaaggg 420
aggcagaacg taaagcccag aaagaaaagg aagagtggga acgaaaacag agagaattac 480
aagaacaaga atggaagaaa caacttgaat tagaaaaacg cttagagaag caacgggaat 540
tggagagaca acgagaggaa gaaaggagaa aagacataga aagacgagag gcagcaaaac 600
aggaacttga acgacaacgt cgcttagaat gggagagaat tcggcgacag gagcttctca 660
atcaaaagaa tagagaacaa gaagaaattg gcaggttaaa ctctaaaaag aagaatcttc 720
atcttgagtt ggaagcactg aatggcaaac attancagat ctcangcagg actttcagga 780
tgtnccgact tcaaaaagca aacttcaaaa agactgggcc ctggaagttc t 831

0050450.000200

0050250350 - 06-12-2008

<210> 271
<211> 783
<212> DNA
<213> Homo sapiens

<400> 271
cttacgagcc cacaggcccc ggagtagcag cggggaggcc gggagcccgc gggccggagc 60
cgcccggccg aggcgtgggg gctgcggggc cggcccatcc gtgggggcga cttgagcgtt 120
gagggcgcgc ggggaggcga gccaccatgt tcagccagca gcagcagcag cagctccagc 180
aacagcagca gcagctccag cagttacagc agcagcagct ccagcagcag caattgcagc 240
agcagcagtt actgcagctc cagcagctgc tccagcagtc cccaccacag gccccgttgc 300
ccatggctgt cagccggggg ctccccccgc agcagccaca gcagccgctt ctgaatctcc 360
agggcaccaa ctcagcctcc ctcctcaacg gctccatgct gcagagagct ttgcttttac 420
agcagttgca aggtaacctc cgaggctatg gcatggcatc cccaggcctc gcagcccccа 480
gcctcacacc cccacaactg gccactccaa atttgcaaca gttctttccc caggccactc 540
gccagtcctt gctgggacct cctcctgttg gggtccccat gaacccttcc cagttcaacc 600
tttcaggacg gaacccccag aaacaggccc ggacctnctc ctctaccacc cccaatcgaa 660
aggattcttc ttctcagaca atgcctgtgg aagacaagtc agacccccca naggggtctg 720
aggaagcccg canaagcccc ggattggaca caccagaaga ccaagattta ccgncttgcc 780
aaa 783

<210> 272
<211> 775
<212> DNA
<213> Homo sapiens

<400> 272
aacactacaa aattttcaag cacagcctat cggccataga tagtatcaac tagaggcaat 60
gtctttagtt tttattattt ttgaacctgg agcattttct gttggacgtt acaggatctt 120
actgctttaa atcatacatt attaaaaaaa atgagggttt attctttgaa ttacccтttt 180
gtatgcagga gtgaagactg ctttttttagt tgaccattca aaatcgttga attttagttt 240
ttgcagacta ctaaaatttg cagtgacttt ttttttgtaa ggggggtaaa tgaaacattt 300
agcagccttt gaaatcagca agttgcttag atagtacttt agattttgaa actgaatata 360
acagtgttag aaaagtatgt gtaaggaatt gtatttacat gcatactagt agtacaatac 420
ttatagctga atttggttgg caaaagtatg ttttcatttt attacgactg ctagtcaggt 480
aagatatggt gggattcttt ctgtagtgtt ttcagtgtct gggcaagggg aggagctcgc 540
ctgtgttata tgaggggtta ataccaatag gataggaaca gtttttagac tgttaattgt 600
gaattttaca tttgggtcat cactgttgtg tagatttgtt cacctattaa aataatgaaa 660
accctcattt gagtgtgtgt gtgtggtggg atcataggaa ttgatttgtg gagtgatctt 720
tcaatagcac tgaagacaga antttggtat ttggnatagn ctacaccaaa gctta 775

<210> 273
<211> 783
<212> DNA
<213> Homo sapiens

<400> 273

gcatcgagta atccatgaat gggaagatgg ttcccaggaa cattcaccca gcaacaaaaa 60
aattaaacac aaattggggc ttgaattttt gtggcaatca atgactgaaa aaaaaataga 120
aaaaagaagg acatgacctt tttaaagaca aatgaagact cattttcagt aactagagtc 180
ttaaaaacta ttttaatctg aatgcagatc attgtttacc cacagagagt tttatgacaa 240
tgatttcact gacatgcaga atcaaatatt atgatcacca ccagcagcca aaaaacccta 300
ttctttgccc aaggagtagt agaaatgtag actagacaga caaacagggt ctcctatttt 360
gcctcattag tgccacactc tatacaacta cagtcacgaa ggggtcacat ttggttataa 420
ttactattag aataatatgg gagtgtgatg tttgtggtgg aaacttgccc atgacttatg 480
taaccatttc tgctgacaaa ttttaggatc taaaaacttt gtgggttttt ttgttttgtt 540
tttgtttgtt tgtttttggg acagtctcgc tctgtcaccc aggctggagt gcagtggcac 600
ctccgcctac agtgttcaaa cgattctccc acctcagcct tccaagtagc tgggaccaca 660
ggcacacgtc accatgccct gctaattttt ttgnattttt agcagagatg gggtttcacc 720
atgttggcca ggctggtctc aaactnctga cctcaagtgg cccctgctna gcctccaaat 780
gct 783

<210> 274
<211> 800
<212> DNA
<213> Homo sapiens

<400> 274
ttttttccag aaatacttgc agacttgaag gaattatcag tctttcattt tctatcatca 60
gtgtcctatg atagtttgtg cttccctccc tcatcccttt gttcatgtca ctctgttcac 120
caacccactc tgctgaaatg tcgttatttc ttcaaggccc ggaggaaatg ctaccactct 180
catcagaggg ttcagagatg ggcagtgaga aggagcagag tccagaacca cacctgcctg 240
aggaagggga agggggtaag ccttggagag tggatgactc agagggttct tggatcccac 300
ctggggagaa ggagcatggg caagagagcc tgtcggatga actgcaagaa actcatccaa 360
aaaagccatg gcagaaagtc actgcccggg ctcgagagct aggggacccc attgctcatc 420
caaggcatga ggcagatgag aagcccttta tatgtgccca gtgtggcaaa accttcaata 480
atacctccaa cctgagaaca caccagcgga tccacactgg tgagaagcct tacaagtgtt 540
ctgaatgtgg caagagcttc tcgagaagct ccaaccgcat ccggcacgag cggatccacc 600
tggaagagaa acactacaaa tgccccaagt gccaggagag ctttcggcgg cgctcagacc 660
tnaccacgca ccagcaagat cacctaggca agcggccata ccgntgtgac atctgtggca 720
agagcttcag ccagagtgcc cgctagctgt gcattaccgg acccacctgg agcccagacc 780
ctacatttgg ttgngaatnt 800

<210> 275
<211> 865
<212> DNA
<213> Homo sapiens

<400> 275
acttgcactt actcatcttc tagccttatg accaggaacc tttgttttgg gctcaagtac 60
acatcctgat ttggtttctc cctgttgtaa tttgagattt cccaaattaa gtcttataat 120
gattaggttt tgttctgagt tatttctaga gaaagaaagt attttagtat gtgtaaattg 180
tacaataatt tttttgctgt tgtactcact gctaatagtg gattgtatag ggtggtgttt 240
ttatttcatt tattgtagac aaaaataatg aatttagtat acacataccc actaattcaa 300
gtatgtcaga gcacaaagtt ggcagctggt tatatttaat tcagcccctc tgaaaagcac 360

0090209450

atacagtcta tactttgttt ataaatatcc taggtcctcc ctgcccctaa atatatattt 420
tggtgaagct gtggtgcact attaattttc tgtttcaaaa tgcaatctaa agatgcaata 480
aatatgatga ccttgatagt tttaatgaaa tcttcaattc ttgcagctgt gttttggaaa 540
gtgattaagc aatatttctc aaacctgatg attcttggat atttagctat tgtcctccaa 600
agagtcatcg tttcacgttt tcaaacatgt gctttgtgct gaagattctt gtcagatatc 660
ctgtgcttcc agagtatttt tatcttcaat tttatttaat ttgnttcatt ttgntttcat 720
aagacaatgt ttcagatatg taatggggca aaccactata gatttctggt ggatagaaaa 780
atgaaatggt actaataagg ttaaaatgac ccttcgttga ctatcaagta ctggtgatcc 840
tttanttaga atgnatgtct canaa 865

<210> 276
<211> 775
<212> DNA
<213> Homo sapiens

<400> 276
gttacttaag aactctttgt gtccgtcctt ctaatggcac caatgcctcc catcaagcct 60
taaacctcac ctaaattatg tcattgggct ttttcatcca taaatgagca taccaggtgc 120
caagggaatc aatatgccat ttcacatgcc ttagaccagt gtccaaagaa agataaaatg 180
ttattctata aaagctttct cccagcattt ctattccttt acattttgtg ccatatacaa 240
ctatggtttt ttaatgatct tatttctgac agctgttttt cttcagaaca tcaacagctt 300
ctttcctaaa ttagttttag tatgagttcc atttctaatt agctcaaatt aaagtcctag 360
agagcagcga ggtaatattt aaaccctcag gctaaaattt cggagtaggt gcagaatgtt 420
gactctaaat gagttttcc tgtgacataa cacgcatgaa agcaggattt ctttcatgtg 480
tgaaatgtct taaatcagac ttacccttg tgattctctt ttagctttaa atgtcattta 540
agaagaaaaa agaaaagaaa attaagcatg acattcccca atatcctctg ctcactgtgt 600
tataatccct atcactccac aagtgaattg gagagagtga agacacaatg aacagaaact 660
tncctgagct tcacaganga gtgtctccgg gaccacacag ccttcaccat gtccatctac 720
gaaggctgtg gcaagccata tccacaaagg atgcctgntt cctgncttct cgggt 775

<210> 277
<211> 891
<212> DNA
<213> Homo sapiens

<400> 277
gataacattt agtaatttag gagagaaaat taaaggcatt gttgaaaata tgggaatcaa 60
cgcaaataac atgagtgact ttattatgaa agttgatgcc cttatgtcct ctgtgcctaa 120
gcgtgcatct cgatatgatg tcacatttct tagggagaat cacagtgtta taaagacgaa 180
tcctcaagag aatgatatgt tcttcaatgt cattgctatt gttgatccat taacaagaga 240
agcacagaaa atggcacagt tgttggttgt acttggcaag attatcaaca tgaagataaa 300
gttgttcatg aactgtaggg gcaggctttc agaagcccct ttagaaagct tttaccgttt 360
tgttctggaa ccagaactga tgtcaggggc taatgacgtt tcttctcttg gaccagtggc 420
aaaatttttg gatattcctg aatcacccct cctaatcctc aacatgatta ctccagaagg 480
ctggttggtt gaaacagtgc acagcaactg tgaccttgat aatattcact taaaggatac 540
tgagaaaact gttacagcag aatatgaact agaatactta ctactggaag gacaatgctt 600
tgataaagtg acagaacagc ctcctcgggg tctgcagttc acactaggca caaaaaataa 660
acctgctgtg gttgatacaa tagtgatggc acatcatgta agtattattt aattgatggt 720

0506203.0020001

gtttaatttg atgtttggtg aattctctgg tttcctaaga gtaaaatgaa ataatcttta 780
ttctgctgtg ctgaacagtt tgcagaaaac aaaattgatc tttgataaga taaataaaaa 840
tggggaaaat catactttaa taattttgaa nggtatggaa aactcttact t 891

<210> 278
<211> 813
<212> DNA
<213> Homo sapiens

<400> 278
aagaggctgc gcgctgctgt ttggggaggg ggtgtgtgga gccgggtcct gtgtccgcag 60
tggctgctgt cgggggggtcg cctgttcgcg gaggtgcgga gagactcctt gggggtcgag 120
cactgtggct ggcatgcccc agtgttttgg ataccaatgc ataggactcc atagtaatcg 180
aatttaccag aggcgaacgt catgagcata gtgatcccat tgggggttga tacagcagag 240
acgtcatact tggaaatggc tgcaggttca gaaccagaat ccgtagaagc tagccctgtg 300
gtagttgaga aatccaacag ttatccccac cagttatata ccagcagctc acatcattca 360
cacagttaca ttggtttgcc ctatgcggac cataattatg gtgctcgtcc tcctccgaca 420
cctccggctt cccctcctcc atcagtcctt attagcaaaa atgaagtagg catatttacc 480
actcctaatt ttgatgaaac ttccagtgct actacaatca gcacatctga ggatggaagt 540
tatggtactg atgtaaccag gtgcatatgt ggttttacac atgatgatgg atacatgatc 600
tgttgtgaca aatgcagcgt ttggcaacat attgactgca tggggattga taggcagcat 660
attcctgata catatctatg tgaacgttgt cagcctagga atttggataa agagagggca 720
gtgctactac aacgccggaa aagggaaaat atgtcanatg gtgataccag tgcactgaaa 780
ntggtgatga aggtcctgng gaattatata ctg 813

<210> 279
<211> 842
<212> DNA
<213> Homo sapiens

<400> 279
ccaaaatcca atagggcagt cattgagcct taaagttcca aaatgatctc cttagacccg 60
atgtctcaca tcgaggccat gctgatggaa gaggtgggct cccatggcct tgggcagttc 120
cacccccctgt ggctttgcag ggtacagccc ccctcatggc tgctttcatc atgggctggc 180
attgagtgtc tgtggctttt ccaggcacac ggttgcaaac tgtaggtgga tctaccattc 240
tggggtctgg aggatggtgg ccctcttctc acagctccac taggcagtgc cctagtgaag 300
cctctgtgtg ggagctccag acccacattt cccttctgta ctgccctaac agaggttctc 360
cttgagggct ctgcgcctgc agcaaacttc tacctggaca tccagggatt tccatacatc 420
ctctgaaatc taggcagagc tttccaaatc tcacttcttg acttttgtac accaccacat 480
ggaagccatt agggcttggg gcttgcaccc tctgaagcca tggcctaact ggaccttggc 540
ccctttttagc catggctaga gcagccggga tgcagggtac catgtcccaa ggctgcacag 600
tgcaaggggg actgggccca aaccacaaaa cctttttttct tcctagtctt ccaggcctgt 660
gattggaggg gctgctctta aggtctctga catgccctgg agagattttc cccattggct 720
tcgtgaataa cattcatctt cttggtattt aagcaaattc tgcancagga ttgaatttct 780
cccanaaaat gggttttctt tggcatcatt aggcttcaaa ttttncaaac tttcatggtc 840
tg 842

<210> 280

0507504.0507000

<211> 862
<212> DNA
<213> Homo sapiens

<400> 280
acagtctcca ctgaaaggct aaatgggagg atcttccccc gtgacctcaa aagctattgt 60
ggatgctgat ggaagaattt atattcggaa ctggcagggt ggcatcctgt ctgggggctt 120
tgagaagaac ccgaaaccaa ttttcactga gggcaagaac cagctggaga ttcagaatct 180
acaggaagac tgggatcact ttgagcctct gttgagttcc cttctgagga ggatgccaga 240
attagagact ctggagatca tgaagttggt gaactgccca gagaccttca caccagacat 300
gaggtgcatc atgggcgagt ctcctgcagt gcagggctac tttgtcctgg caggaatgaa 360
ctctgctggc ctttcatttg gtggaggagc cggaaagtac cttgccgaat ggatggtaca 420
tggttatccc tcagaaaacg tttgggaatt ggacctgaaa cgttttggag ccctccagag 480
cagccgcacc tttctgcgcc accgggccat agaagtcatg cctttgatgt atgatctgaa 540
ggttccccgc tgggacttcc agaccggtag gcagttacgc acctctcctc tctacgaccg 600
gctggatgca cagggagcca ggtggatgga gaaacatgga tttgagaggc caaagtactt 660
tgttcccccc gacaaggacc tcctggcatt ggagcagagc aagactttct ataagccaga 720
ttggnttgac atcgtggagt ctgaagtcaa gtgctgtaag gaagctggtg tgtcaattga 780
catgtcctct tttacaaagt ttgagataca tnccccttggg atcangcctt tanaagttct 840
acagtacctt tttttccagg ga 862

<210> 281
<211> 842
<212> DNA
<213> Homo sapiens

<400> 281
acactgactt ctggacgtgg tcagggtggc tttctctggc tggcatggac ttgagcagaa 60
actcattgcc ggcttcctcc ttgcacgagc accaagtgat tcccaggtcc cccatcctcc 120
cctgggacat cgaggacaca caaaaacctt gttcaccctc cactgagagc ggggctagag 180
atggatgctg agtacaggaa gggtgtgtga ggattccttt ggctccactc ttgtttccaa 240
ctattgctgg tcctaggcgc ccagtcctga gcaaccatga cgatggagac tctccccaag 300
gttctagagg tcgatgagaa gtctccagaa gccaaggacc tgctgcccag ccagaccgcc 360
agctccctgt gcatcagctc caggagcgag tctgtctgga ccaccacccc caggagtaac 420
tgggaaatct accgtgcccc tggacatgac aacatgactc taggggttag tcagctgaag 480
aagtttagtt cctaattata taatatttac atcagaggca gtggggtagg ctaggggatg 540
tcactgtttc cgcttgacct tatctttctc attgaccact gtcttctctg aacttgatca 600
ttagccaagg acaaaatgca tgttgcccta atttctttcc taccctgcc tctatctctg 660
catctagaac agctaaatgg aaagatacag agggatcctg taaggttggt ttccctttac 720
gtccatcaag atcaaaattg agagaatcaa gttccatatc tgaatgatct ggaggttcta 780
gagatggaat taggaaactg gacnggcatt gncttgacct nccagaggtt ttacttcatc 840
ct 842

<210> 282
<211> 856
<212> DNA
<213> Homo sapiens

0962946.0720

0956945-070000

<400> 282
cggtaatcaa acccaattat atcagaatac ctttctgaat ttgagatttt tgctctacat 60
tttataatga ataaggctat tttttgaagg tatttcattt tgaattctgt cattaacctc 120
aaaagctttc tactgctttg cggtgaaggc aaaatattcg ataactcaac ttaggcccca 180
ctgttcccca acttcatgga ggccagaaga ctttactttg ttccataatg aaatataaac 240
acagaacaaa gttgtaaaag tagcatggat atgttgaaac tttggacaag cttcttgtcc 300
tttggaatat gggatttata ttcatctcct caatatccca tgtatgcaca gaaacttcag 360
ttctatttct atagacacag gaacctagtg actattgaac gtaattgtaa taaaatgctg 420
ctcattgagc caaagagaag aaatgattta ttaacatggg gacaccaaga aaaacaaagt 480
atgcttttat tccctttgtc aagctcagtt ttagggtttt ttctttttt tatagtgaca 540
atccatagat atagacattc ctaaaagaaa aataaataat tcagtagata tatgtcactg 600
ttacctgaat atggaatgaa tttgatgttt tttattttgt tgagacaggg tcttgctctg 660
tcacccagac tggagtgcag tggcatgatc acacctcact gcagccttgg cctctcangc 720
tcgtgatcct cctgcctcaa ccctcgcaag tagcttggga ctacaggcgt gtgccaccag 780
tcctggctaa ttttttgnag atataagggc tcatgatatt gnccagctga attgaggtat 840
ttaagtgant ttcatg 856

<210> 283
<211> 735
<212> DNA
<213> Homo sapiens

<400> 283
agtggaacat ggcgacttgc gccgaaatcc tgcggagcga gttccccgaa attgacggac 60
aagtcttcga ctacgtgacc ggcgtcttgc acagcggcag cgcggacttc gagtctgtgg 120
atgacctggt ggaagctgta ggggaactat tgcaagaggt gtccggggac agcaaggatg 180
acgcgggcat cagggccgtg tgccagcgca tgtacaacac tctgcgtctg gctgagccac 240
aaagccaggg aaatagccag gtgctactgg acgcccctat ccagttgtca aagataacgg 300
agaactacga ctgtggaacc aaacttccag gactgctaaa gagggaacag tcctcgacag 360
tgaatgcaaa gaagttagag aaggccgagg ctcgacttaa ggcaaagcag gagaagcgct 420
cagagaagga cacgctcaag accagcaacc ctctagtctt agaagaggca tcagccagcc 480
aggcaggcag cagaaaggag agtcggttgg aatcatctgg caagaacaaa tcctagtcgt 540
ctcccacgac cgcaacttct tgaatgccat cgccacagac atcatccacc tgcacagcca 600
gcggctagat ggttaccggg gagactttga gaccttcatc aagagtaagc aggagcggnt 660
gctcaaccag cagcgtgaat atgaggcgca gcagcagtat cgccagcaca tncaggtttt 720
cattgaccgg nttcg 735

<210> 284
<211> 862
<212> DNA
<213> Homo sapiens

<400> 284
atataatgct gtattcattg atcatatttc tgtatttaaa taagtacatt ttttaaaaca 60
tcataaagtg gatcagtaat gctgtaatat cacatttcat gtattataca acatttttga 120
aatggagtac tccaaagtaa tttgcttctt atggttacca aagtttaaag aataccctaa 180
catgcactcc aagattttaa gaggaaaggc tttgtgtttt tcattactgt attatgaaat 240
ctgagagtgc aaaactagtt ttcttaggta aaccccgtaa tcagtttcca catttacctg 300

taaaagtcag tggagggcat acatctggaa gtagtagtgg cggtacacaa tgtgtgttaa 360
tatgatttcc aaggggtacc tagagtaaac tttcttaatc acagatctga tctgagcatg 420
ccactccttt cttaaaatct tttgttgatt ttccatttcc ctaaaaggaa ggcccactgg 480
agcatgggcc ttgcaaagtc ctctttctgg cttctgcctg cctgcctttt cagcttcatc 540
tctgccatct tccctgaatg aacttttgtc agtggcctcg ctctttctac ctatgagatg 600
ttgtttctgc atgttcttgc atggaattct cttcctccca accctgtttc attcctttaa 660
tctgtacaac tctttcttat cctgaagtct ttatgttaag gttgcctttt caggaagact 720
tttaattgna ttagctaatt aattaattaa tagtctgagg tatttggagc tgagattcta 780
tggggattag ttgctggagg tagnttagag ccngatgcga aggctttcta aactgngctt 840
tcaaggtttg aacaggaaat ga 862

<210> 285
<211> 839
<212> DNA
<213> Homo sapiens

<400> 285
tatggatatg cttattaatg cacttgtttc aaaatcccaa attgcacaaa tgtgttaata 60
ttttaagaaa caaaatgaat cctacaagga gaatgatttt tagccacaca tagggttgga 120
tcttgagagt gacctacaga ataaaagtac ttttaaaata aagtagtcag aggctattca 180
aagggtaaaa taatcatagt accacattgg tccacttgac actaaccaat cgatcatttt 240
tttttaatca agaaagctag attctatcag ataaaatcac tgcttctaaa gagtttaaat 300
ctagttagaa aaagttatag aaatgtttgc aaagataagt aacagataga gtcagtagag 360
gataagatca aaaacaaaac caagcaaaag atgagttcag gggagtttgc catcaagttg 420
gcaaaactga cttacttagg gaagaaagtt ataaaacagg aaaatatgag atgaaccttg 480
agtgatgtgg aagatttaga taaatggaaa ggaaggagaa aatggagttc tttaggtggt 540
tgtaattgga ggaggaaatg aatacacaca tcttgttgac ttaaacccag acattcagca 600
gctctctata catatctgga aaagactgca cagtcacctc ctgtctctca ccccaggtat 660
tacttagaat tattatcata tttcccttcc tttaaagtaa gtaagggtga ttggtggcca 720
atatgggaga actatggatt tttccattac ctaataataa ttgggattta ntggggtctg 780
gttaagcatt ttccntatta actcctttaa gccttttcaa cagcccttgc naaataggg 839

<210> 286
<211> 855
<212> DNA
<213> Homo sapiens

<400> 286
gtttgaaatg ctggtagttc ctgaacagga gtacccttta gtttgtgttg gtgtcagtag 60
aggtagagac ttcaaccaag tggttcgatt tgagacggtc aatccaaatt ctacctcttc 120
atggtttaca gaatcagata ccccacagac aaatgttact catgtaaccc aactggagag 180
agataccatc cttgtatgct tggactgttg tataaaaata gtaaatctcc aaggaagatt 240
aaaatctagc aggaaattgt catcagaact caccttttgat ttccagattg aatcaatagt 300
gtgcctacaa gacagtgtgc tagctttctg gaaacatgga atgcaaggta gaagttttag 360
atctaatgag gtaacacaag aaatttcaga tagcacaaga attttcaggc tgcttggatc 420
tgacagggtc gtggttttgg aaagtaggcc aactgataac cccacagcaa atagcaattt 480
gtacatcctg gcgggtcatg aaaacagtta ctgagaattg ttgtgctttg acagttaact 540
ctagaaagaa agaacactac cactgcaaca ttaatggatg cttgaagctg tacaaaagct 600

0956394.0720000

gcagtaacct gtcttcagtt actttgtaat ttattgtggc atgagataag atggggaaaa 660
ttttgnttta agtggtatgg atatatttag catattgaac cacacaagtg cttaattcat 720
tggtatgtaa tctttgtaca tataggcagt atttttctg ngaaacttca tattgctgaa 780
gacatacact aagaatttat gtangatatg nacttttatg agatgtacaa gtaagtggct 840
tatctgtaca gatgt 855

<210> 287
<211> 851
<212> DNA
<213> Homo sapiens

<400> 287
aaaataattt ctaggttaag ttggaaacat gtgataacat taaaaaattt aaaatgtctt 60
tgggcctgaa agattatgcc tttacattca acatgaaatc catggatgga gtttatataa 120
ataaccatgt aggcttacca atccttaacc ctcttgtatt agtccatact cacatggata 180
tttccatatc cacttttact cttgtgtcaa aagacaaaat taaaactcat ttagttatgt 240
atctaattgg cttttattct cgattcatga atcggtgcag cctccattct aatagaatca 300
cagcttctac tgggcaatgg cagactattg ggttttgtga ggtgggaatg aggaaacata 360
acaatgggga aaataagctg attagttaac aatagattac ttcagtttac ttttttttta 420
taagggttaa agcagagggg actttcttgt tctgactcag gtaggctaga atctcctgtt 480
tttaggaaaa actcgtctgt tttgggatct atctgctttc ttacagttgc agtttgatta 540
tatgacattt ggcatgagtg actccacttt gttaacactt gaaaggttat tattcccata 600
tggagtattc acatggatgt agccattggc agttatacaa gatcgtgttt cttttctttg 660
ccccctgccc ccgtcaccta agaacttgnt agatattcca tttcttttt taaaaaaagg 720
atccagtgag taaaggtgat agagagcata tggataaata gtgaagaagc ttgatgaggg 780
gagtgggtag ggttagaaac cccangggaa ttactcaggg ttaaaccctg ncatttatat 840
caagccatat t 851

<210> 288
<211> 858
<212> DNA
<213> Homo sapiens

<400> 288
agtagccggg tatggtggtg cacaactgtg gtctccacta ttgggaggct gaggtacatc 60
acttgagcct agcaggtcaa ggctgcagta aggtatgatc acaccactgc actctagctt 120
gggtgacaga gcaagacccc atcttggcag gtgggggatg caagaaaaat gcaaggaaca 180
gatagagata aatagaaaac atataagaag acaatcatat taaatgtaca tggtctaaat 240
acccccaatt aaaaagcaga ggttttaggc catatacatt taatgtgatt gtcttcttac 300
atgtttttat cagagaaata aaactatcgc cttcaagaaa cacaagttaa atacaaagat 360
gcaaacaggt taaaataaaa gaatggaata atatatacca tgcttacgct agtcaagaga 420
aagctagagt agaaatacta atatcaggca aagcatattt cagagttaaa cacaacattt 480
ttccactatt tgcagtcaaa agtatcgtta acactctctt tactctgctc aaagttacag 540
agttcttttg tataaacatt agaacactta tcacagcctg cctataatgg agaataattc 600
catgttgtat actatacaac actcttacta aagtccatta gacagaaata tgtagcattt 660
gagacacctt ccaattataa aactctatgc aaacaaaaat taacaacgca gatctgagac 720
tattatatta tcctgtgaag gaaggtctgc tgtctgcaca gtggtcctag gctggctttc 780
tgaggacttt gaatttcaag agggtcccct aactggtaat catgggttac tggatctaga 840

0002702-9450-0

ctatggaaat aatgnggg 858

<210> 289
<211> 847
<212> DNA
<213> Homo sapiens

<400> 289
aaaaaaaaaa aaaagaaata caccatccaa tcagaacaag tctgaaataa acatgtttta 60
aaagcctgta atgacagaga ggtggcaaaa atgaagagga tgctcaaatg aaaaggaaaa 120
agaagtttag gaagaactac ctgaagccaa gagacctctt actttgtcca ggtgggaaac 180
tgaggcccag agagggaaga aagctggtca aaggtcacac acccattgga agctgagtga 240
gtgacactca ggaggtgagg attccatggg aagagcacct agaggtgatt ctcccacctg 300
cagctcctgc atgggctcta gaagctggtt taacacatga ctcttctgag cctttgcctc 360
atctgtgaaa tggacacaat gacaactact acggggtggt ggtgagcaga aggcaggtta 420
tcctctggcg tgtgagatac tcagcccagt agagtgttag ggactcataa aggcttgcta 480
ttagaaatta gggccccagt ctcctaggac agggttttgt tttgtttttg tttttgacac 540
aaggccattg ctctccttta aaggtttggg ttgtttgtgg cagggatggg gaaaggatct 600
gcccttccca ggccctgccg tgcccagcac acctgccatg ctgaatctcc cctcaccctc 660
gcagggaccc tctgaggagg gtattccccc attttgcagg ggagggaatt cangctcaga 720
agtgaacact tcagaacttg cacctgccgt gcctgccgag ctgtgcctct tctgtgngca 780
tgcgttctcc atnccaggtt ccttacctct gatcttgaat ctttacggat gccctcggct 840
tacttct 847

<210> 290
<211> 860
<212> DNA
<213> Homo sapiens

<400> 290
atcgagtcgg ccttgttgga actggttaac atgctataaa aatggcactg tcatctgaag 60
taaatgtctt tgaacttaga actgccatat aagaatttgg actctttgcc acagagtgaa 120
gaggaagccc aggagaacaa tgagtcagtt ttttttttctt tttttctaca ttgcctacat 180
ttaatattct tttagagagt tttcaaagaa ttgcttatgc aacacctatc ccagtattta 240
tacagaggga gaaattgatc attttcagaa agtcctttat ttaggtatgt actacacctg 300
ggctgactct tatactgatt tctaagttaa ttgtatccta tgcacagatc tcaaaaggac 360
tgtgggtgaa gaaacaagat catcagccca agacccctat tcaaccctaa ctgggttcct 420
tttcctattt tccagtgcag cttatccttg tacctaaagt tgagtagccc cactaggaaa 480
gattggcaga aaggaatagt taagcacccc ttggagcttg ctgcctgcag gagcctactt 540
ctaggtactc agcttccctt ccactctcta gggatcctgt agaccacagt gtttgtgctc 600
aactgcagaa gcttcatgtg agaaaaaagt ttccttttct ccactgacat attcttccac 660
tttttcttta tataatttcc tgctggtctc tttaatcccc aggcttcttt caaactcctg 720
nttctctata tagtagcttc ctgtacaaat gtatgtcaca tttatatggt ggaaacttgc 780
ctaaataaaa ttaggcagat gtgtgatgcc nggatatccc catatgactt naccccggcc 840
cttcccttgc ttnatttagg 860

<210> 291
<211> 850

0962946.0972800

<212> DNA
<213> Homo sapiens

<400> 291
agaagcgcag cttctcgggg aagctgtcat ggctgctcct gtacgtagtc acggtcttgt 60
gctctaaggt gagtggagga cgagcttggg cttagcggca gcccgtatca catcctagac 120
tttttacttc gaggagaaga gtctcacgag ttgtcctgga agaaaacgac agcacgtgtt 180
ctttttcact agtagaagtg acgttggttt catgttgaca actttgaagc catttggaag 240
tgtttcagtg gagagcaaaa tgaataacaa agcgggctcc tttttctgga accttagaca 300
attcagtaca ttagtttcaa caagcagaac tatgaggcta tgttgtttgg gactttgcaa 360
accaaaaata gttcattcaa actggaacat tttaaataac tttcataaca gaatgcaatc 420
aactgatatc attagatatc tctttcagga tgcattcatt tttaaatcag atgttggctt 480
tcaaacaaag ggcataagca ctctaacagc ccttagaatt gaaagactac tttatgctaa 540
aagactgttt tttgactcaa agcagtctct tgtccctgtt gataaatctg atgatgaatt 600
gaagaaagta aaccttaatc atgaagtctc caatgaagat gttcttacca aggaaacaaa 660
accaaaccgt atcagcagta gaaaactgtc tgaggaatgt aattccctga gtgatgtgtt 720
agatgcattt tcaaaagcgc ccacatttcc tagtagcaac tatttcacag caatgtggac 780
aattgccaaa agactgnctg atgaccagaa gcgctttgaa aaacgactga tggttacccc 840
ctgcattaan 850

<210> 292
<211> 113
<212> DNA
<213> Homo sapiens

<400> 292
agacggccat ttgtggcggc gctggaggct gngttcggna ggcgntgcgg agacgcgtat 60
aggagcgcgc cccccggccg ctgccgcccc tggcccgtgc cgtcaccccg ctt 113

<210> 293
<211> 848
<212> DNA
<213> Homo sapiens

<400> 293
aaatataaac tagtaagtac tgtaaaggaa agaaacatgc ttctaataga aaaaatatat 60
taaaaaggaa cagtaccgtc actgggaaat acaggaagac ttctctgagg aattgatctc 120
tgagttggga ttaaagtgga aaaagcactg gaagaacatt ccattttgag ggaatagcat 180
gggaaggtcc ccatggaatg aagaaggatg atgtattaga aaaactgaag gaaggggata 240
atgctgagcc aggaaagtaa ggagcctagg cagtgtaaga tgattccaga gaggcaggca 300
aggggtagac ctacaactat agtataaata actaacttaa atgactatag aacatgataa 360
ttctgaaacg ttctgtaaat agtttttgta attaataatg gataatgccc tacattacaa 420
ttatgtttta gactagaaaa gcatttcccc tcttgataaa gtttcaaact attcagtgga 480
gaaacttgaa tctccatatt gtaggggtta tttctctttt gtgattatag ttttcaaatt 540
tcgtattgag tgttgcttac tgaattgagt ttagaatcat cagttatcat aagacttgtg 600
tcattaataa aaatgcagtt tgagtgcttc ttaacactag tccaaacatt tagacgtaag 660
atcaccataa aaaaattcaa taggaataat aaatcagcat cagaggatat gagggatatg 720
anggcctaag tgggaaatgt gtgtaccaac ttaaaacaaa gagcttgaaa atttaaaatt 780

0050456-0020000

acttaaataa ttaatttcat ttatgtgatg ntagccacca tgatgataat ctgaatgaag 840
acctccct 848

<210> 294
<211> 781
<212> DNA
<213> Homo sapiens

<400> 294
gatttagagg tgtggaaaat cttttaacgg ggagatcctg aaacacggaa acatggcagg 60
gaagttagaa tttcctgatg gtcattttta acattttaaa gtttactttt tggttgttgc 120
cattttcta gaatccgtgt ctttttggg gaaatacagt cctttgagga ctagaattta 180
atgatttctt tacacatcta ggatttttg agatttagaa aggatatggc tttattccta 240
aggaagtgga ggcagcagtt tctaggatac tctggtttca aggcatgcta acttggttgt 300
gatgtctaac ccattttggt ttacacagtc tgaccactag cacaatgcct ggcacatagt 360
ttacaaatca tttaaggcaa gcttaccatc ttaagacaat ttaatacata gaagtgtccc 420
tcctaaaaat ctgagtttga tttagaaatc cagttatacc tgcaggtact gatgactaat 480
tccttctttg aagacaaaat aagcagctgt gtagcttcag tggctctcaa atggataata 540
gattcagtgt atactcgctt tgaactttcc tgtttttga tcagctagat aaatgacttt 600
agtgggtaaa tgtctgcctc caaaaccaaa ttctgaccct gatctaagta ttctactgca 660
ccgctgtcac tggaatatca aagttggccc tcagactggt gcctggttcc ttggattggc 720
ttgagtattg aggtctgnct catcttacta gggaactaaa atgatgttga ttggtttggn 780
n 781

<210> 295
<211> 721
<212> DNA
<213> Homo sapiens

<400> 295
aggtttccgc agctgagggg gcagctccgc ggcggcgtcc ggggtctcca gtagggctga 60
cgctccggtg ctcgcacaat cccccgcctc ggctggcaac gggcgtccct ccactccccg 120
agtccccggc agccgccgcc accccagcgc gccccgatct ggccccctgc cccgcgaaga 180
tggctgccgt acgccgggcc cgcagttatt gccgctgcct ggtgcgcttc tccgaccgag 240
aactctgcta agctccgctg cagagacagg caggagtaga cacccggaca cccagcaccc 300
ctcctccggg gggcggtgca gaggggcac ggagagcccc tcgagcgcag caggccgccc 360
cgccagcatg gcagaagctg aggaagattg tcattctgat actgtcagag cagatgatga 420
tgaagaaaat gaaagtcctg ctgaaacaga tctgcaggca caactccaga tgttccgagc 480
tcagtggatg tttgaacttg ctccaggtgt aagctctagc aatttagaaa atcgaccttg 540
canagcagca agaggctctc tccagaaaac atcggcagat accaaaggaa aacaagaaca 600
ggcaaaagaa gaaaaggctc gagaactctt cctaaaagca gtanaagaag aacaaaatgg 660
agctctctat gaagccatca agttttatcg nanggctatg caacttggac ctgatataga 720
a 721

<210> 296
<211> 847
<212> DNA
<213> Homo sapiens

0502050.00700

0962945.0972809

<400> 296
aggagaggcg gagaaggaac cgagcgggca gttgagggaa atctcggagg aggttacctg 60
cgatcaaact ggggctgcgt agtgttaggg tcaggcagct ttgaagtgga atccggatcc 120
gccactctcg ctgcgtgata ttgggcatgc catcaaagcg ctctcaaccg aacgtctcgg 180
gtaaaatggg attagtgaag tctaccaagg tagttgtgag gatcaagaga gataacgcgg 240
aaaacgcctc acctggcacg ttatagatcc taaatgccta gctattatta tggagcccac 300
aacctccata ttttacaact gggaacacgg gactcaaaga gattaaaaaa ctaaatgact 360
cactcaaggt caggtagtgg tggagaccca ggcttcaagt tcaatactct ttgtcctaca 420
aagccttccc ttaagcaggg gtaataaaac atttcagaaa aaccacctta aagagcatcg 480
cttgtgatct gtggatcact tggtagtccc cacctccctc ccatccccgc aaaggtttag 540
agctggacat aagggccttg gtgcaacttt tggagggcag ttgttcagct tctgaatttg 600
catctgaacg agcaataagg aattttctgg gaagttaaga atttccaata aatcttggac 660
tactctaaaa tgcaccagaa attacgtggt cacactcgtg cagtgaaaga agctttggca 720
gtagcataag acattaagca gaagtaggaa atgcagtgag gaagaattgg aatgttttca 780
acagctgcca ctatggatct aggatgagag ctttncacat gntggtaaga atgagagacn 840
gattact 847

<210> 297
<211> 757
<212> DNA
<213> Homo sapiens

<400> 297
gtaaaggaat gtctttttaa ttcagctttt cttttctcca tgctagtgtt atcaggtttt 60
ggtatttatt tacttacagc atatgttatg aagctggttt gaaaattggt tttagatata 120
tctgcaagtt tactactttg actgtaaaaa aaaaaaatga aaaagtagtt gacatctgtc 180
ctcagaagaa gtttgcaggt tgcatatttg tgtgtaaata cacaggctaa aaggtaattt 240
atgttccttg ggaattgaaa tggtcagtgg cccgttacag aaacttatca gtcatatatc 300
agcaccagtt cattcttttg caccttaggg accatctgtc ccctgaggtg acctgagaaa 360
caaccagttg cccacagact gttatttctt caagtgagcc aggatttgat ttcactgcct 420
tatattctat ttttagtgta cagtgctttg atttttttgga aaaactaaat tttaaacata 480
tttgaaaaat gttataagac ttggacatta agtctgttga tagccaaagt cagtttacca 540
aagtaaaaca nataaattct atgcttcttc attgncaaag agcagtctgc catcatgtgg 600
atataaatgg actatgtaaa gtgacatggt gcttactctc tacctaataa tagcctccct 660
cctgttccaa caagataacc aacaggtata tttaatttac cagntaatat gttttggata 720
attgctgcct tgaaatgcta tatgnttata ggnccat 757

<210> 298
<211> 742
<212> DNA
<213> Homo sapiens

<400> 298
gaaggagacg ctattctcag tgatgcccgg gtaaggccca ggctggagcc cggggcaggg 60
gttgaccttt caggctacag tggctgatga tggtaccagc aggtggcctg aggccatgga 120
cctgagaatg gagcagctac actcacagga ggggcaaaga gacaagagcc ctgccatata 180
cccctgcagc tccggagggc actgaggagt tgtcccaggg acctaaccca ggtcactatc 240

ccatgcagga gacagtgtgg tttggagcta gctctgccgc taatccttgt gaccctgggc 300
aggcagctaa gtccctctga gcctcagttt cttcaccaat aaccagtact aatcatcctg 360
gcccagagtc agaaggctgg ggggagaacc caatgagaga gtgtagttgg gagcactttg 420
ccgtcagatg atacagtgcc ccccaagcac cccacaggac agcgctgcct acatagtgac 480
gtgatgttct gatgacaata gtgagaagct ggagagcact gttgacagca tgttaccagc 540
attctcttta gcgtatcctt ggagctttgc taaggagaca caagtcagtg gcctcaaata 600
ctgagcagct ggtgaataat ggaggcagaa ggccacctct tttgggtgag ggagctcact 660
gcttcacagt ggcctttcag ggacagtctt cagctttgca gatcacgang ggcgtncagg 720
aagggctgan gccctcgtcc tt 742

<210> 299
<211> 386
<212> DNA
<213> Homo sapiens

<400> 299
gagccgagcg gcttctgctc aatggcggaa aagccgccgg tgctctgacg gcctcgttcc 60
cctagcagtt gcgggggagt ttcctgccgg cgcggctgga gtctctgatt ctcagggttc 120
ggtggttgga agatgctcca gagagacgag gctgcggcgg aggaggtggc ggcggccgaa 180
tcggcaacgg cgctagggtg gagagaaggc ggcagcggcg gcggcggcgg cgtgaggggc 240
cgggcggtgt aaacagcccc ggaggcggcg gaggcggcgg tcgagacccc gaggggggaag 300
cggcggctga gtcagggtcg ngcctccggt ggaaacttgg gctgagtacc gcggnggtcg 360
cgagcgaggc gccctagaca tnttgt 386

<210> 300
<211> 880
<212> DNA
<213> Homo sapiens

<400> 300
aatgaatttt tggtcaggga tttttagtgc aatatagaag agtttagttt gagttttaga 60
tcccaagtat tcctttcttc ccaacctata ttatacttgg tcaaataaag tcagggtaat 120
caggcagcct gaaaggaagc agggcatcta cctgcctctc tggtcagatg gagtaattag 180
gaacaaaaaa ggccactctg ttgttagcca cacctattta tcaagaacaa aggagcatag 240
cattttaaat tcatttgagc tgaaaccctg gctggctcag actcttactt gtcttatcac 300
gcaagatcag ctttgtatat cattttaaag aggtcgtgtg gcgtgtttc ctgacttctg 360
tcatctcaag ttaaatatgt catcagaaaa tatatatcat ccagaaaatg gtggctctct 420
cttcctgtga gacactcttt ttagaaattt gtcttctagg tatttctatt ttaaaatgtt 480
cagtttctct gcaataactt tcaaatttca ttatttttac caagctagat tttgtatatc 540
tgtatacata tttatgtaat aatcacttca tatttgcaca tagtttttga acccagaaaa 600
gtaaaagaga aaactagtga cttgtctctg gtggcaaatt ttctctgtga ctaaattaaa 660
accatgaacc tgtccagtac agaataatgc cactggtgaa gtcaggctta aattcacttt 720
aattctagag aaactgtgaa tttagaagga ccaaaagtca aaatgcaaaa gataatgcag 780
acccattagc actggnctca tattcagntc aaatatttac tctagtaccg ataggatctc 840
tgaatatcct tatccttgac atcacaatac tttttcattg 880

<210> 301
<211> 806

0502504.0-0702000

<212> DNA
<213> Homo sapiens

<400> 301
aaatagatgt ttatcatttt ttatatagac tcattgaaaa aatgactttg tgttcttcca 60
gtacatacca tcatgtctga gagggcagag atctagacaa gtgtgggaaa gatgactttg 120
gatcaaaatt ttcttgtgaa tataatgtgc ttatgcgtaa tttaaagctg actgtattaa 180
agatacattt tttgtcaacc agatgattgt taaatacctg tgaagtatgt gtggcccggt 240
cctatttcct cacctgttta cagtgaatca gacgtcccaa tagatgtgga gacggtcaca 300
tcaacgccta tgccactcta tgacaatcag aaggcacgca gcgtgatgaa tgagtgtgaa 360
cggcatgtca tctttgccag gactgatgca gatgcccctc ctccaccaga ggactgggag 420
gagcatgtca acaggactgg ctggacaatg gcccagaaca agctattcaa caagatcctc 480
aaagccctgc agtctgaccg gcttgcccgc ttggccaacg aaggggcttg taatgagcca 540
gtgctgcgcc gtgttgctgt ggacaagtgt gcaaggagag tgcggcaggc tctggcaagt 600
gtgagctggg ataccaagct gatccagtgg ctgcacacca cccttgtgga gaccttgagt 660
ctgccatgct gcagcctacc tggatgcttt gcagacgctg aaggggaaga tcccaacctt 720
gattgaccgg atgcttgggc atcaacacaa agactgggct gcggaactga ngncttgctc 780
ttctactgaa naggcctggg accctg 806

<210> 302
<211> 882
<212> DNA
<213> Homo sapiens

<400> 302
gatagataat agtgtaaaat ggacttgcct tgcttctact gatgttttc acatgtttcc 60
cgtaactgat acttttcatc agttgtggaa ttcccataat tgcagggatt ccttttctgt 120
ccttaggatc ccctgaaggc cttttaatct tgttcaccaa atgtgtgttc cttgctgaca 180
caaaatggtc tctaccatca gtggtggtac tctttttcc ccctttgttc aattcaatct 240
caggaacgta tttcctacat taataaatat ttactgagca cctaccaaat gccaagcact 300
ttcctagaac aaaagttctt ttgaaacaaa aaagtatctt ggcagttaag gcaaaatgac 360
ctaaagaagt tttaaaatga aaggtctcct atatttcagg gtctttgaga tgaaaccctg 420
caagtagact tacgtgaatg atttttgctg tggtaagtat acaaatgcag tgggagttgc 480
cagactttaa aagacgtgaa taacaatcat ataaaatgcc agacattgtt gtggaaaaga 540
gaaagaagat accctactag ggggttttta cctcctttaa gaaacagact aaaactagtt 600
ttctcaagtg cctgaatata tatggtttaa ataacaatat acaacacttt caaaataaaa 660
tctaggaatg tttacatatg cttttaatct caaagtctaa tgtcttgaga aaagtaaatc 720
tgtgagatca ctgactcaca gaattttagc aaatagaaaa aatccagtat cttcagaaca 780
caagggctga tcttttgtcc cctacccgca agacattgct tggtaccaaa atagaaaggg 840
tatttttta agggggaatt atgggttttt ctgaaaacan aa 882

<210> 303
<211> 637
<212> DNA
<213> Homo sapiens

<400> 303
gtatcaacaa atgcaagtac accacaatca gtgagcagtg tggttcatta tctggcaatg 60

0956945 07/2800

gcactctttc aaatagagca gggcattgag cggcgttttc tgaaagctcc acttgatgcc 120
agtgacagtg ggcgttctta taaaacagtt ctggaccgtt ggagagagtc tctcctttct 180
tctgctagtc tatcccaagt ttttcttcac ctatccacct tggatcgtag cgtgatatgg 240
tctaaatcta tactgaatgc gcgttgcaag atatgtcgaa agaaaggcga tgctgaaaac 300
atggttcttt gtgatggctg tgataggggt catcatacct actgtgttcg accaaagctc 360
aagactgtgc ctgaaggaga ctggttttgt ccagaatgtc gaccaaagca acgttctaga 420
agactctcct ctagacagag accatccttg gaaagtgatg aagatgtgga agacagtatg 480
ggaggtgagg atgatgaagt tgatggcgat gaagaagaag gtcaaagtga ggaggaagag 540
tatgaggtag aacaagatga agatgactct caagaagagg aagaagtcag cctacccaaa 600
ccgaggaaga ccacangtta nattgccagt taaaacn 637

<210> 304
<211> 843
<212> DNA
<213> Homo sapiens

<400> 304
accaagttgc ttaacttcgt tgagcctctt taggggatga tccatgccct aagctgcctg 60
actgcccaaa agcagaacaa tgatgagcaa tcatttagac gagataagca cctggagctc 120
caggcattgc ctaataaccc tgaattattc aatccttcat ttcacagaca ttgattgact 180
gggatttaaa acaatttaaa aatgaatgtg acactggccc tgccctcaaa gagcttaaga 240
gccatctagg tacacaggac atgcccatgc acagctgcaa aataaggcag ggtgtgtata 300
atgtatgctg ggggtggaag aaccagggaa agttgtcttg gcagaggtgg catggcagaa 360
ataagcaggg aggctactcc aactggagga gatggctgga gcagggtttg ctcctgagtg 420
acgagtagat gaggttggct ggagcagatc tttggaagga cctgggaagg gtttgggggc 480
gggggtggac tacagagttg gagctaggtg gtaaggggcc ttaaatgtca ggctaagtag 540
ccaagattta atttagcaag tagcgggaag tcatgaagat gtttgagtca gagattcagg 600
tcagtaacct gaccaggact gggctttagg aagaaagtcc tctagcatca taagggacag 660
attggtgggg gagggtggat ttgaggtagg aagaccagtt gggagtgatg taattaagtg 720
aacaagatct aggactagga ttcccaaact ttgagcataa gattcccctg aagtgcccaa 780
ctttggagat caaattgana ngtcttgcat tttgcccccc aaggaaatgg ctttttttt 840
ttn 843

<210> 305
<211> 814
<212> DNA
<213> Homo sapiens

<400> 305
ttttgttgtt gttacttgtt tgtttgaaat aatattagcc taaatttgac attcacactg 60
agtatcagta agggtcatgg tttttaaacc ttgtgctttc ttatttttt caaactaatt 120
tcagacttaa atagaagtta caagaatagt acagggagtt tcatgtaccc ttcacccaaa 180
ttcctcaagt gttaacattt taccacattt ataggttttt ttctgataca cttgagagta 240
agtttcaggt agatgtccct ttacttctaa atatttcagt gtgtattttc taaaaaacag 300
ggatattccc ttatagaatc atagttttat tatcaaaatc aggaaattta ataattatat 360
gtctcatcta actatagatc ttattagtat ttcactattc ttctaatctc tttagagcaa 420
aatggaaaaa aatggttttt ctgttctggt gcaggatcca gcggaggctc acgtgctgta 480
ttggattatc acatccttaa tgttctttaa tctgaaatcg ttcccaagtc ttgttattca 540

09529450-030200

tgaccctgac tgacattttt ttaagagtaa aaacactagg ggggattttt tgttgttttt 600
tgtttcattt tgtttttttgt ttcgttttgt tttttgtctt ttgnttttttt ttgagccagg 660
gtctcactct gtcacccagg ctggagtgca atggtgcgat ctcagttcac tggaacctnc 720
aactnccagg ctcaagtgat cctcccacct cagccttccc aaggagctgg gactaccagg 780
cttacagncc aacatgcccc agcttaattt ttgg 814

<210> 306
<211> 834
<212> DNA
<213> Homo sapiens

<400> 306
tattagcaga ctggaatgaa gatatagaag catttgaaat gatggagaag gatgagctat 60
gacttgctaa acaatctgtt ggtaggtatt taaaaagaaa aggtaaactg tgtgtggtta 120
atagacatcc taatactaag caggctttct aatgggaggc tttaagtatg gtgatgaaca 180
accacgttct gactggcgta gttatcgtag gaatctggag catgctgtgt tagaattgac 240
cttgtttaaa actgtcccat caaaaatgga aatccacagt tccccccttca aatgcagcac 300
tgcaccaccc tgcaacacct caggccaggg aaagattact gagcattcct gcgaaccaga 360
tttctgttgt ctctggatag acaagaaaca aaattcattt agtagtggag tggggaatag 420
gagtttggat agccttctaa ttaaaggaag ctcgcctttc ttggttttgg gggttagagg 480
ctcttttggg aagatgcatc cgagtattgt ggcattctga ttatgctgcc ttcacaaaac 540
actctaagtg acctaagtgg ttatgaagca aatgcattta tggtgaaaac agtctttgct 600
cattgctttc tcttgtttca tttagtgaca aatgatcaag atgacttgat ttttttcct 660
tcttaacaat ggctttttta tttaaaccaa aggtgaagcc agtgtacttt ctcagtgagt 720
tctctgcata aagactaatc agtgggacca ggtaaaaaan ggcatataat acattggggg 780
anattgctta ctttaatact tctggaaaaa tgggganttaa gggaagaaac ctgg 834

<210> 307
<211> 769
<212> DNA
<213> Homo sapiens

<400> 307
gttcataaca actccaagca tggacggaga gcaagaagac tcgatccatc ggaagctacc 60
ccctgcatca aagccattag cccgagtgaa ggctggacca caggaggagc catggtcatc 120
atcatcgggg acaacttctt tgatggtctc caagtggtgt ttgggactat gcttgtatgg 180
agcgagctaa taacccctca tgccatcaga gtacagactc ctccccggca catcccaggc 240
gtggtagagg tgacattatc ttataaatct aaacagttct gcaaaggagc cccaggaagg 300
ttcatttaca cagcattaaa tgaacccacc atagactatg gcttccagag actgcagaag 360
gtcatcccta ggcatcctgg agatcctgag agattagcta aggagatgct gttgaaaaga 420
gctgcagatc tagtggaagc tctttatggc acaccacaca ataaccagga catcattttg 480
aagcgagccg cagacattgc tgaagctctc tacagcgtcc ccaggaatcc cagccagctt 540
ccagccctct ctagctcccc agcgcacagt ggcatgatgg gaatcaactc ctatggcagc 600
cagcttgggg tcagcatctc agagtcaaca caaggaaata atcaagggta catccgcaac 660
acaagcagca tctctncgcg gggatactct ttcagcttca cgccttnaac agtctaanta 720
cagtaccctt cagcaaccag tatgaatggg tacagcaatg gtcccatgg 769

<210> 308

0562030.00200

<211> 567
<212> DNA
<213> Homo sapiens

<400> 308
aaaaactccc tgctagagag actaggagat ttggggctgc ggccgtttcc tccggagcac 60
ccacgggact gtgtgctggg gtccctccac cggctgtgtc ctttattctt ctttctcacc 120
caacgattta cctgaacggt tataaagtgc acgttatttc cctaagcact ttgagtatat 180
tggcccactg cattctggac ttcaaaattt ctgatgcgaa atatgctgat acttttgttg 240
aagaaatctg ggctttgagc atctgtaaga tatttgttgg aaggttttgt ctggtccttc 300
ttactgatgt gttgctcttc ttcatggctc gtgaaaacta ttagagtcat ccaaggntgg 360
gaagagagat cagcaacgtt aactgggtgt caagaaaaca taccgagatt gaagccatcc 420
acttctgcag gaacaccgaa aagaaagctt acaatctgaa ggtgtccgtt cttacactgg 480
tcagaccact gtccttgggg cagctggggn ctttgggacc ctccaccggn ctcgccggtc 540
cgncggactt ttggctgaga tccgtgt 567

<210> 309
<211> 748
<212> DNA
<213> Homo sapiens

<400> 309
gtcgccgcgc ggccgccggt gagccgcatg gagccccggg cggcggacgg ctgcttcctg 60
ggcgacgtgg gtttctgggt ggagcggacc cctgtgcacg aggcagccca gcggggtgag 120
agcctgcagc tgcaacagct gatcgagagc ggcgcctgcg tgaaccaggt caccgtggac 180
tccatcacgc ccctgcacgc agccagtctg cagggccagg cgcggtgtgt gcagctgctg 240
ctggcggctg gggcccaggt ggatgctcgc aacatcgacg gcagcacccc gctctgcgat 300
gcctgcgcct cgggcagcat cgagtgtgtg aagctcttgc tgtcctacgg ggccaaggtc 360
aaccctcccc tgtacacagc gtccccctg cacgaggcca gctttccccg cctcctgagc 420
accctggctt cgacgccctg gatcaactga gccaggtgga actcctgggg gacatggatc 480
gcaatgaatt cgaccagtat ttgaacactc ctggccaccc agactccgcc acaggggcca 540
tggccctcag tgggcatgtt ccggtctccc aggtgacacc aacgggtccc acagagacca 600
gcctcatctc cgtcctggct gatgccacgg ccacgtacta caacagctac agtgtgtcat 660
agagctggag gcgccccgtc cggtcaagcc cttggcgccc ttttccttct ttgtgccctt 720
gaantggcaa naaggaaccc gtnccagg 748

<210> 310
<211> 800
<212> DNA
<213> Homo sapiens

<400> 310
atcttctcct ctctgcaaac ctctcctgtg ctgatgcctg ggcaccagag atgaggtggg 60
agcagtacct gccctaggcg gggctcacgg tctagtgccc acagcagctg tccagggagt 120
gcaggctgaa gcagtgagat ggcaggggg acggagtgag aaaagagcct ctcagaaggg 180
caggaggggc ggggaggggc ggggtggcac atggagctgc caggaacccc agaggcagct 240
ctgttcccag agttcagaaa cctccaagaa aagctggtgg cattgtccgt tttgttgttt 300
gcctatctgg cctttggcta ttgactggat ggcatcttgg gaatcctctg aagggctgga 360

0962946.0720800

gtttacccca agcacaggga cagagggagc aggtggagtc acttctcgtt gatgtccagc 420
tgagctgggc tggtggctgc ctcagaaggg agggggcagc tactaggagc agcagcctca 480
ccccagggct ctgtggacct ccttagcctg tgatggcctt ggcaatgggg atggcctggt 540
tgggggactg agcaaaaggc aggcagtagg gatgggtgtt cccagccttg agtcagatcc 600
tgagaagctc cagggcggng cacgttctgt ctctgccatc tggaaaccta ccagctacag 660
caattggcac cttcaacaag aacccctgag cccggaagct tggtgagagg aaccttcagg 720
tcaactnttc accacacaga ccaagtctgc tgatctgngc cattccctga tgcactgggg 780
catnccgtga cccagactgt 800

<210> 311
<211> 577
<212> DNA
<213> Homo sapiens

<400> 311
ggaatgcatg tacattctct gatattattc cttatatcct cgggggatgt gacttctaat 60
gtcacacagc gtgttctccc tgtgttctct ttcataatat cctagtgcaa ttgtactctt 120
aatgacgcag ggggtgtagg cattgtgata ttattcatgt tattctagaa ggatgctact 180
cctaatgtca caggggtgta caccctgtga tagtattcat aatttcccag gggtctatac 240
tcctaatgtc acagaagata acaccctgtg acattattcg taatattctg atgagatgat 300
tctcctaata tcacaggggg tgtacaccct gtgataatat tcttactcct ccagggggat 360
gtcactctta atgtcacagg tgtgttcctt ctgtgatatt attgaaaata tgctagctgg 420
gtactactac taatgtcaca atgcgtgtac accttgtgat attattagta atattgtggg 480
gggatgttac ccctaatgtt acaggggtgt acaccgngtg atattgctcc caatattgna 540
nggggatgct actcctaatg tcacaggtgg tgtacag 577

<210> 312
<211> 766
<212> DNA
<213> Homo sapiens

<400> 312
gtgttccggc cgatcccacc tcttctcgac cctggacgtc taccttccgg aggcccacat 60
cttgcccact ccgcgcgcgg ggctagcgcg ggtttcagcg acgggagccc tcaagggaca 120
tggcaactac agcggcgccg gcgggcggcg cccgaaatgg agctggcccg gaatggggag 180
ggttcgaaga aaacatccag ggcggaggct cagctgtgat tgacatggag aacatggatg 240
atacctcagg ctctagcttc gaggatatgg gtgagctgca tcagcgcctg cgcgaggaag 300
aagtagacgc tgatgcagct gatgcagctg ctgctgaaga ggaggatgga gagttcctgg 360
gcatgaaggg ctttaaggga cagctgagcc ggcaggtggc agatcagatg tggcaggctg 420
ggaaaagaca agcctncagg gccttcagct tgtacgccaa catcgacatc ctcagaccct 480
actttgatgt ggagcctgct caggtgcgaa gcaggctcct ggagtccatg atccctatca 540
aggtggtcaa cttcccccag aaaattgcag gtgaactcta tggacctctc atgctggtct 600
tcactctggt tgctatccta ctccatggga tgaagacgtc tgacactatt atccgggagg 660
gcaccctgat gggcacagnc attggcacct gcttcggcta ctggctggga gtctcatctt 720
catttattnc ttgctactgt gcaacgccca gatcaccatg cttgna 766

<210> 313
<211> 799

0062700.5450.2800

<212> DNA
<213> Homo sapiens

<400> 313
atcataaaaa cacgcctttc tcattcaact gaaaaacaca ctaaaatttt aaaagagaaa 60
aatgcaacat cttggaaagt aacgttttaa caccataaaa atttgcactt attcaactga 120
aaatttacac taaaatagac attaactgtg cttttacatt ccaaaccatc atactaaaca 180
taacaagtta attgccaatg ttttccttcc cctatacttt gaggtagttc tacgtaacca 240
actataacaa atttacttcc taacatcctc aatcttctgc tctcctttag ttttaagata 300
ctttatgaca tgggtaatac tctgaaatgg atgccttctt tggatatatt ttggggtttt 360
agtgtctgga ggactttgat ttctatatta gcatattggt ttatgaagtc tggacataac 420
ctaaggaaaa taatcacttg ttttaaagga cagttctttc aaattcccta caatgtcaga 480
tttagagcca aataccatcg aatatgttga tgctgtaatt cctagcaaat ttcaagaggt 540
cactctcttt tcaaaattat accgtgcccc ttctttgaaa atgagtttca ttttcgaagt 600
caaaacaagt cctttctctt ccactggcgg gcccttctgg tccccagatt agcctgttcc 660
aaaattggtc atgtgtctca ctgggccccc tcagttgacc cagcgtcctc accagctcct 720
atccatctct atctgctgga aaggctttga ggtttcagat ttangacagc accactcatt 780
catggnctct nctgcatca 799

<210> 314
<211> 828
<212> DNA
<213> Homo sapiens

<400> 314
cccttgaagt tttgtgccag ccttcttacc taattaaaca acacttcagc agcgtggttg 60
ctaatgccag gtaaccacca tgtgttatgt tagcctgctt ggatcaattg taattattac 120
tggaattgaa ttaattaata tgattttgaa cagttcatgt tcaaactaac atcctgtaaa 180
gtagacactg caaggagtta ctgatgaaag aaaagttgtt cataaaagaa gcctcctttt 240
ataattgact tgccttagac ttatttaata atgtttcata gtatttttta aaaagtatct 300
gaaccttgta catatttaca attatgagac atcctatcta aaaatttata ttttcgattt 360
aacatttgtg gctggcagtg ataatttta ctctctggta ctatgaatca tctcattaaa 420
atcctctcaa ctgaatgaca ttatcccaat ttgcaaatga aagagagaca gagaacctaa 480
tgatttgccc ctggtctata cctggtactt ggaggtagga ttcaaagcca ggcagttctg 540
actccagagg ctgtgctctt aaccactcta tacattacct ctcaaaatag aagattaatt 600
ggactcaagt gaaattgctt gtataatttt taatcaaaac tatatgctgg ccacattaac 660
ttctgtgctg tcatcatgat catagaataa taacaacact caatttattt ctctatacta 720
ataactttga taaaatgnta ttatttatta aatctatttt tcagaaacca aaaaacagta 780
aacatgagtc aagatgaatt aaaaggataa gccaattttt aaggncna 828

<210> 315
<211> 807
<212> DNA
<213> Homo sapiens

<400> 315
gtgggccaca aggctacagc tgccactgtc gcctgggttt ccggccagcg gaggatgatc 60
cgcaccgctg tgtggacaca gatgagtgcc agattgccgg tgtgtgccag cagatgtgtg 120

0050205-0050400

tcaactacgt tggtggcttc gagtgttatt gtagcgaggg acatgagctg gaggctgatg 180
gcatcagctg cagccctgca ggggccatgg gtgcccaggc ttcccaggac ctcggagatg 240
agttgctgga tgacggggag gatgaggaag atgaagacga ggcctggaag gccttcaacg 300
gtggctggac ggagatgcct gggatcctgt ggatggagcc tacgcagccg cctgactttg 360
ccctggccta tagaccgagc ttcccagagg acagagagcc acagataccc tacccggagc 420
ccacctggcc acccccgctc agtgccccca gggtccccta ccactcctca gtgctctccg 480
tcacccggcc tgtggtggtc tctgccacgc atcccacact gccttctgcc caccagcctc 540
ctgtgatccc tgccacacac ccagctttgt cccgtgacca ccagatcccc gtgatcgtag 600
ccaactatcc agatctgcct tctgcctacc aacccggtat tctctctgct ctcattcagc 660
acagccttct gcccaccacc ccctatgatc tcaaccaaat atccggagct ttttccttgc 720
caccantccc catgtttcag acacccnggt cgctggcacc canaccacca ctcatttgcc 780
ttggaattcc accttaacca tgcccct 807

<210> 316
<211> 846
<212> DNA
<213> Homo sapiens

<400> 316
agcgcagcta tggctgctgg cgtaccctgt gcgttagtca ccagctgctc ctccgtcttc 60
tcaggagacc agctggtcca acatatcctt ggaacagaag atcttattgt ggaagtgact 120
tccaatgatg ctgtgagatt ttatccctgg accattgata ataaatacta ttcagcagac 180
atcaatctat gtgtggtgcc aaacaaattt cttgttactg cagagattgc agaatctgtc 240
caagcatttg tggtttactt tgacagcaca caaaaatcgg gccttgatag tgtctcctca 300
tggcttccac tggcaaaagc atggttacct gaggtgatga tcttggtctg cgatagagtg 360
tctgaagatg gtataaaccg acaaaaagct caagaatggt gcctcaaaca tggctttgaa 420
ttggtagaac ttagtccaga ggagttgcct gaggaggatg atgacttccc agaatctaca 480
ggagtaaagc gaattgtcca agccctgaat gccaatgtgt ggtccaatgt agtgatgaag 540
aatgatagga accaaggctt tagccttctc aactcattga ctggaacaaa ccatagcatt 600
gggtcagcag atcctgtca cccagagcaa ccccatttgc cagcagcaga tagtactgaa 660
tccctctctg atcatcgggg tggtgcatct aacacaacag atgcccaggt tgatagcatt 720
gtggatccca tgttagatct ggatattcaa gaattaccag ncttaccact ggaggaagag 780
atgtggagaa ttttgaaaga ctcttttcaa agttaaagga atgaaagaca agcttgnacc 840
tttctn 846

<210> 317
<211> 785
<212> DNA
<213> Homo sapiens

<400> 317
ttactaaaat ctaaattgag tacttttac tgttgcagag aattaagtca ctaaacgtta 60
tttagataca tagatgctag ttgcaagtaa caccctttg taacataaaa gtaaaagcat 120
aataatttcc caacttttt cttcaaatta aaaaagaaaa tagcatataa ttaccattct 180
tcatttgaga aagctgaaga ttctgatgct taaaaacttc agaattctaa tattaaaaat 240
agagtggttc atgtgacatt gaaggcttat ctctgtaaaa tagtgacact ggtgagtggt 300
attatctcaa tatttttgtc caaattcacc ttaggaaatc actgtaaatc ttcattgttt 360
cctaaaagtc attattacgg cataaactta acatactttg atagtagtta gtactgatac 420

0956946.0720000

gtgacatatt ctaccccgtg tctctattac tctgtctcta ttactgtgaa aagtcacagt 480
aaatttaaca ttttcttcca gactgtgtat gatctttcat tgtaatagag acatggagta 540
ggataagtca tgtattaaca tgtaagattt ttttaacctg ctccctcagt tttatagatg 600
agacaaagat aaggttgtaa gagctaatct cttcaagtag gcagtactag taagttgtca 660
tgcgtggact gaactcctgg cacttctctc tcttaacttc aatccataga gaagcccccc 720
tnctgccttc cagtattatt tagcagagga gaaaatcnta ttangctgtt ggaactggtt 780
gccta 785

<210> 318
<211> 682
<212> DNA
<213> Homo sapiens

<400> 318
aagtctagtt aaactttaaa caaaggattt atgaacatct ctacttccct cagtgagttt 60
ttttttttt aacaagtaat attttcaagg aaaggaaaat ggacattatg atggctgtct 120
tttgtccttt tgtaaatggt ggttcttcta gagctgtgct atctaatatg atagccacta 180
gtcacatgta gctatttaaa ttaaattaaa aatttagttc ttcagtcaaa ataaccccat 240
ttcaaggttc agtagctaca aatggctagt ggctagcata ttggaccaca cagatacaga 300
ctgttttcat cattgcaaaa agttgtatta aactctattg tatagaatat tttgctgaaa 360
tatagtatat gtggctgggc atggtgtctc acacctataa tcctagcact ttgggaggcc 420
gaggcgggca gatcacctga ggtcaggagt tcaagaccag cctggccaac atggggaaac 480
cgcaactcta ctaaaaagac aaaaatttgc ctggtgtggt gacgggcacc tgtaatccca 540
gctacttggg aggctgaggc aggagaattg ctggaaccca ggagggcgga ggttgcagtg 600
agctgagatc ataccacttt actccagcct gggtgaaaga gcgaaactcc atcccatctc 660
aaaaaaaaaa aaaannagaa nt 682

<210> 319
<211> 847
<212> DNA
<213> Homo sapiens

<400> 319
accgtggtgc cgagtgcctg ctgccttggg ccgccttgaa cctccagggt ttccagctcc 60
tcctccttca ccccagtgcc actgccatga tggatgtgag tgaacttggg gagtctgccc 120
gctacctccg ccagggctac caggagatga cgaaggtgca cactatccca tgggacggga 180
agaagcgagt ctgggtgcct gatgaacagg acgcctacgt ggaggccgag gtcaagtcgg 240
aggctaccgg gggcagagtc accgtggaga ccaaagacca gaaggtgctg atggtgcgtg 300
aagccgagct gcagcccatg aacccgcctc gcttcgactt actggaggac atggccatga 360
tgacgcacct gaacgaggcc tctgtgctgc acaacctgcg ccagcgctat gcccgctgga 420
tgatctatac ctactcaggc ctcttctgtg tcaccatcaa cccctacaaa tggctcccag 480
tctatacggc ctccgtagtg gctgcttaca agggaaagcg ccgctcagat tccccgcccc 540
atatatatgc ggtggcggac aacgcctaca acgacatgct gcgcaaccga gacaaccagt 600
ccatgctgat cacgtgagtg tggggctctg ggggtggggt ggaaaatgct ggccatctgg 660
cagaaagang gcggtaccac agtcatttcc caggattgaa tncaaagtgc ttaagccagg 720
acttttacca cctggagcta gtgtccagct gaactaaaat tggnctgaca ctttcctggc 780
cccaattctg aacagatgtg ttcttgatgg gggaatangg aggggacacc cncaaacgga 840
atggccc 847

0509150.0209000

0050205450 . 07-12-2008

<210> 320
<211> 851
<212> DNA
<213> Homo sapiens

<400> 320
gattaatgta gacaaacgtc caggtagcaa ttttggggat aataaatgag ttcacccttt 60
ttttttcttt ttttccctga gacagagttt gctcttgttg cccaggctgg agtttaatgg 120
cacgatcttg gcttaccaca acctctgcct cctgggttca agcaattctc ctgcctcagg 180
ctcccaagta gctgggatta caggcatgtg ccatcacacc cggctaattt ttgtattttt 240
agtagagaca gggtatctcc atgttggtca ggctggtctc gaactcctga cctcaggtga 300
tccgcccact tcagcctccc aaagtgctgg gattacaggc gtgagccgtc atgcctggcc 360
gagttcagct tttattcaca ttttttcccc gaagtgattt attcttcaaa gtagacagtt 420
atgttctata gagtgttttg ttttttcttt aagaaaataa tttacataaa cagagattat 480
ggtaaacatt ttaaatctta ggctgttggt taaatttaat ggtttaagca ctgttgggtt 540
ctctttaatt aatatttgca gaaggagaac atatgtgttt cactgatatg tatggtccag 600
aaaaattact taattctcaa aaatatgttg cattctcata ttgtgttagg gaaaattcca 660
taagtagtct attttttttt ttcttttgct gactggtaac atccaaacac ctgaatgaaa 720
actgactcat ttctggattg gtgtttaaaa atattgattt gcagatgttc acagaacact 780
tgcatttttt ggattcacat tgctnaatca aatgtaaang gcaaatatgn atatttaata 840
aaatgagaag t 851

<210> 321
<211> 722
<212> DNA
<213> Homo sapiens

<400> 321
aaaattacag gagaaaattg agaaaaattt agagtccaag gctggcacca aagacctgag 60
acctaggaac atgagagtct gttttcttca tgtacaaaat aaagctacta acacctgttc 120
taacaagact gacatgatgg aaatggcaaa atattaacaa ttatgccagg cgtaactgtt 180
gaattgttgc tttctaacaa ttacttcagt gcccaataaa tatcttcacc agaaaactat 240
ttattcaagg ctggctgtgg tggctcaagc atataatccc agcactctgg gaggccaagg 300
tgggcagatc acttgggctc aggagttcaa gaccagcctg ggcaacatgg agaaacaaaa 360
tacaaaaata caaaaaatta tctgggcatg gtggtatata cgcctgtaat tccagctact 420
cgggaggctg aggcacaaga atcacatgaa ctttggaggc aaaggtagca gcaagctgag 480
atcatgccac tgcactccag cctgcgtgac aaagtgagac cttgtctcaa aaaaacacaa 540
caaaaacccc aaaaattagc tgggtgtggt ggcacacgcc tatggtccca gctacttggg 600
gggctgaggt ggaaggattg cttgaaccca ggaggtcgag gctgcaataa gctgtgatta 660
tgccactgna ccccagcctg ggtgacaaag tgagaccctg tcttccccca aaaaaaaaan 720
cn 722

<210> 322
<211> 813
<212> DNA
<213> Homo sapiens

0050350-0020000

<400> 322
aatgaagaac agctggaaga tatgagacag gaacttgtac gacaatacca agaacatcaa 60
caggcaacgg aattgttaag gcaagcacat atgcggcaga aggagagaca atgaccaaga 120
cagacaagag ctcgagtggg gctaaaaaga aggacttctc cagcaaggga gccgaggata 180
atatggtaac gagctataat tgtcagttct gtgacttccg atattccaaa agccatggcc 240
ctgatgtaat tgtagtgggg ccacttctcc gtcattatca acagctccat aacattcaca 300
agtgtaccat taaacactgt ccattctgtc ccagaggact ttgcagccca gaaaagcacc 360
ttggagaaat tacttatccg tttgcttgta gaaaaagtaa ttgttcccac tgtgcactct 420
tgcttctgca cttgtctcct ggggcggctg gaagctcgcg agtcaaacat cagtgccatc 480
agtgttcatt caccacccct gacgtagatg tactcctctt tcactatgaa agtgtgcatg 540
agtcccaagc atcggatgtc aaacaagaag caaatcacct gcaaggatcg gatgggcagc 600
agtctgtcaa ggaaagcaaa gaacactcat gtaccaaatg tgattttatt acccaagtgg 660
aagaagagat ttcccgacac tacaggagag cacacagctg ctacaaatgc cgtcagtgca 720
gttttacagc ttgccgattc ttcagtcact actggagcac tttaacactt gttcacttgc 780
caggaaccag gacatnactn caggccaacn ggc 813

<210> 323
<211> 836
<212> DNA
<213> Homo sapiens

<400> 323
attgttattc caataggaaa agcattttat ctcttcactt tagcctttgc tgagtattgt 60
acaaaaagaa tgatgctgca ctaaataatg aacttctttt tgaagaattt aacaactaga 120
tgcattttgc cttcctggaa tccttttgtc tgtctctttg catcgttgac tcttgcttat 180
ccagagatct cagcttaaat atttccttaa aggtaccttt cctgagattc cagctggaat 240
tgagtcccct tagtatactc tgccatatca cctcttgcag tttataatta cccagctgtt 300
tgtatgaatg ttatgtctgt gtctcacatc acactttgaa tttcagagag agcagtggcc 360
atgtctgttt cggtcactgc tctataactc cagtgtctct cataacagtc tgggaaataa 420
taagtactaa ttaagtattt gttaagtgga aatactgctg ttagagcttc tcctaattag 480
agtgttaaaa atgagataat gtgtgcatgg gggaagggga aggagaggga gaggaagtag 540
ataaacttgt gatattaccg tgagataatc ctcaagtaag tcctctcacc tccagggcct 600
ttgtttcacc ttgnctgtaa aataggacag actgggttca agatgccatt aatatcctat 660
attttgattc cagtaacaat gatgacagat tatgtaagct catttgaatg gaatatgtga 720
cagctagctn cccaaaagaa tatttgacag gtctaaataa acatattaga aatgcttgcc 780
aactagatga tattatttan agcctcgtac ccctggtaga aacaagcctn tntaat 836

<210> 324
<211> 809
<212> DNA
<213> Homo sapiens

<400> 324
ttttttcttt tttttaagag atggaagggg gtgggtctta ctttgtcacc caggctggtc 60
tcgaactcct gggctcaggc atgagccacc atgcctggcc caatttttga atttttttcaa 120
aggttctcac tgtattgccc agaatggtct cgatctccag atgtgaagtg atctttccca 180
cttggccgcc taaagtgctg ggattacacc gcacctggcc catgctttc tttaaggaag 240
atagattacc ttatttctct cagtttttat gatagccgta tacctgcaaa gttccatctt 300

ccatttcaga ttattttgtt tttatttta attctttcag tgtatgctgt gtctgttaac 360
ttgaagtaag gataataatt tcataccttg cttatgctct ccctttgtgg tgaaatcatt 420
atactacttt tctttctttt gtttttttctt caacttttat tttaaattcc cgggtacgtg 480
tgcaggtttg ttacataggt aaatgtgtgc catggtggtt tgctgcacag atcaacccat 540
cacctaggta ttaagcccag catccattag ctattcttcc tgatactctc tctccctctg 600
ccccttttgta ctacttttca ccattatgat ttttaccata tccacctgcc agttttacag 660
ttgataaatg caaggctggg gaacaaagtg agacccccca tctctaccaa ataaaaattt 720
ctaaattagc catgtgtggt ggtaaacacc tggggtcccg gctgcttggg gctgangcag 780
gangattgct tgagcccaaa gtcnaggct 809

<210> 325
<211> 844
<212> DNA
<213> Homo sapiens

<400> 325
aaaaaaaaat ggctcctccc agccttgtgc tgtcctcccc tggccaaggc ccggcttcac 60
catggagctg gtgccgtgct cacgggcctt cccagttccc acacctctct tctcatagct 120
agtggctcca gtgcccctgc aggccaaccc gtaacaactc agctcccaag ctgaccctta 180
cctgtctgta aaagccttcc cttccaatca gcatccggtg tttataacca catcctgagc 240
caggtgtggt ttccccagaa atgctacccc cttgacatgc tctatccacc ttgatcacac 300
ccctcaccgg ctctttgacc tcctcaaaac ctccctgcag aactcctcct tgtcttctca 360
ctctggcagc caccctgtc ttcacttcct tctttacctg gctccactga gagacctgag 420
ccctggggaa tgcaggtgtt gtgcccccct ctgccctccc actggcccag cccttggatg 480
catcattaga gatgggtgcc agctcacatg aggacccact accttggctc ggccctcttc 540
ctgcattcat ccttctaggg gccccagtga gcacacaggt tcttcaggaa aaatgcagct 600
ccttacccct cctcttcagc acctgctttt catagagaac cctncttcta tcttgcatgc 660
atgacagggg tcccgtgggg ccatgcaccc agcttccttc tctctcctgg catgttncac 720
ctgggggtgg aagaactgcc atttccatct cttcagagct ctttcccagg aacccttcct 780
tctaggcatg gttctgtgnc ctttgtcttc cttagcacag tgccaatctg attttctctt 840
tctt 844

<210> 326
<211> 831
<212> DNA
<213> Homo sapiens

<400> 326
atacgactat gactatttct gcagtaatta ttattgagac ttactataat aatgataagg 60
ctgtatataa attatacctt actaaaaatt taaaatctag gaatttactg agagagcata 120
aagtatggtt gtaatagaga aaacaaatga ttgaaatggc ttaaatgcaa gcctttaata 180
ttaattttga gtattttaac gcaaataaaa ccaattatga cagtgtgctc aaattggtaa 240
acaaccaatc tgtgacttta tgaaaatata tttatgacag tcatacttgc cttactctta 300
agtgtagtat ttgtccttaa gttgggagca ccataaatta attttaaagc aaaacatatg 360
accctcatcc aatgttttaa atgaattgct tcctactagg aaaacaaaac atctcaggac 420
atcaaatact tctagtaatc aagatgtttt gtttaaattt gctaatgtaa gcttcaactc 480
tatttggttg cactttaaaa aagcatacta gaaaatgggg aatatttgaa acatgcattt 540
ttaaaagcta ggtgttatct tactcagaag atgttaaaag cttctttata cattttattt 600

0962945.0002000

gaaagtaatt tccaaaaaag ggatgcttgg tgggtatatg aaaaggtgtc agtatcacta 660
atcatcangg aaatacatat caaaaccata atggaatatt acctccagct ggtaggatgg 720
cttttatcaa aaagaccaaa aatnacagta ttantgagac tgtggaagaa aaagaaccct 780
tacacccact gataggaatg natatcagta taggcttatt aaaaaccctt t 831

<210> 327
<211> 834
<212> DNA
<213> Homo sapiens

<400> 327
attctgaaag ttttctgact ccatatttcc aagaaacttg tcccactcct taatatttca 60
aaggactacc atgccaaata aagataaatc tttattttat gtagtgaaag caacaatgta 120
taatcttctc ttttctactt acggcttgtt aaagagaccg gtaactggtt ctaatgtttt 180
gaaatctgca tgcttaccaa tgatgtcttc atgagttagc tgtaggctaa tggaaaaagg 240
aagcttatca tacttttag aacttttat aattaaggtc agacctctat attattatta 300
atattacacc tcagtatttg caattaacat tgagacatcc ttgcaacaaa ccctttggat 360
attaacaaat attgacacac atataggaat atattaaaaa tccttattaa ggggaacacc 420
aattagaatc accataaatg atgtttatac atttcatcaa gcaccaagag gccataaatt 480
atttggatga gattagccac ctaaatgatt acatgaaatg accttagata ccaattttgt 540
tgaacaagct ttccacagta cttatcattt actcatacac tattaaaagt ttgacattca 600
ggatattagc tacaactctt ggttatatgt gagagaaact caactccaac tagcaaagaa 660
ggaaattaat ttattggctt atctaactgc aaagtccaca ctgtagggct gattccaagc 720
acagctagat ccagangcta acataatggc atcaggactc tgnctctctc tttcagtccc 780
ttgcaaggct acttccataa gcnttaatgg attgctcaaa ggcagccctg aagt 834

<210> 328
<211> 796
<212> DNA
<213> Homo sapiens

<400> 328
gaattgcaac ggcagctgcc gggcgtatgt gttggtgcta gaggcagctg cagggtctcg 60
ctgggggcca atcgggacca attttgagga ggtacttggc cacgacttat tttcacctcc 120
gacctttcct tccaggcggt gagactctgg actgagagtg gctttcacaa tggaagggat 180
cagtaatttc aagacaccaa gcaaattatc agaaaaaaag aaatctgtat tatgttcaac 240
tccaactata aatatcccgg cctctccgtt tatgcagaag cttggctttg gtactggggt 300
aaatgtgtac ctaatgaaaa gatctccaag aggtttgtct cattctcctt gggctgtaaa 360
aaagattaat cctatatgta atgatcatta tcgaagtgtg tatcaaaaga gactaatgga 420
tgaagctaag attttgaaaa gccttcatca tccaaacatt gttggttatc gtgcttttac 480
tgaagccagt gatggcagtc tgtgtcttgc tatggaatat ggaggtgaaa agtctctaaa 540
tgacttaata gaagaacgat ataaagccag ccaagatcct tttccagcag ccataatttt 600
aaaagttgct ttgaatatgg caagagggtt aaagtatctg caccaagaaa agaaactgct 660
tcatggagac atagagtctt caaatgttgt aattaaaggc gattttgaaa caattaaaat 720
ctgtgatgta ggagtctctn taccactgga tgaaaatttg actgggactg accctgagct 780
tgtcattgca cananc 796

<210> 329

0052946.0052946

0020070045950

<211> 692
<212> DNA
<213> Homo sapiens

<400> 329
actgggcggc ggaagttcga cggcgccggg cgagtggctg ttgagcggcg ccgcgggagt 60
tccgcaggtt tcccgtgttc gcagcggagc cggaggccag ctgaacccgg ccgtgggatc 120
ccggatagga ggaggagggg acccatagga cgcgttaaca tggacctgga aaacaaagtg 180
aagaagatgg gcttaggtca cgagcaagga tttggagccc cttgtttaaa atgcaaagaa 240
aaatgtgaag gattcgaact gcacttctgg agaaaaatat gtcgtaactg caagtgtggc 300
caagaagagc atgatgtcct cttgagcaat gaagaggatc gaaaagtggg aaaacttttt 360
gaagacacca agtataccac tctgattgca aaactaaagt cagatggaat tcccatgtat 420
aaacgcaatg ttatgatatt gacgaatcca gttgctgcca agaagaatgt ctccatcaat 480
acagttacct atgagtgggc tcctcctgtc cagaatcaag cattggccag gcagtacatg 540
cagatgctac ccgaggaaaa gcagccagta gcaggctcag agggggcaca gtacccggaa 600
gaagcagctg gcaaaagcag cttccttgca catgaccagg acccttcaaa gtgccatgag 660
ttgtctncca gagangtgaa ggagatggan ca 692

<210> 330
<211> 743
<212> DNA
<213> Homo sapiens

<400> 330
tgacaataaa tattctagtt aaaaatatgg gctatggcac agtggcccac gcctgtaatc 60
ctaacacttc aggaggccga ggcaagtaga tcgcttgagt ctgggagttc tataccagcc 120
taggcagtat agcaagacct catctggaca aaaatttaaa aaattagctg ggtatggtgg 180
ttcatgtctg tggtcccagc tatgtgggag cattgcttga gctcaaaagg tcgagactgc 240
agtgagccat gatcctgcca ctgcacttca gcctgggtga caagagtgag accccatctc 300
caaaaaaaca tatatataaa taaaatatgg gccgggcaca gtggctcaag cctgtaatcc 360
caggacttcg tgaggctgaa gtgggagggt catttaaggc cagaagtttg ggaccatcct 420
gggtaacata gcgagaccct gtgtttacaa aaaatttaaa aattagccag gtattttggt 480
gcaggtgacg gcggggacag gggtatcagt ggggtgaggt aggaggatcc cttgagccaa 540
gaggttgaga ctgcagtgag ccatcattgt gccactgtac tctagcctgg gcaacgagcg 600
aaactccgtc tcaaaaaaca agaacaacaa caacaaaaaa aaccatatgt aagggtaact 660
cgggaatggg aaaagccaag tacttaagga tcacaaagct ggttttgccc ttttgggggn 720
tctngggaaa tgncccttggg aaa 743

<210> 331
<211> 830
<212> DNA
<213> Homo sapiens

<400> 331
ttgcaatgta aaaatatatc ttggtctctg catgatgata tattaacatc tataccatgg 60
aacttttaaa aggaaaattg tgtggtataa ttaaaagaat attgcatgtt atagagaaac 120
ttcacctgtt gatttagcag gtgccattgt gtagatgcta agcaaatctt aatatgtttc 180
cttggatttt tgaaatttga atttgttgtg taactttgct agttaaaaga tttagaggga 240

tttggctggg cgcatggctc acgcttgtaa tcccagcact ttgggaggcc gaggtaggca 300
gatcacgagg tcaggagttc gagaccagcc tggccaatac agtgaaaccc tgtctcttct 360
aaaaatacaa aaattagctg ggcctcgtgg cgggcgcctg taatcccagc tacttgggag 420
gctggcagga gaatcacttg aaccagggag gtggaggttg caatgagccg agatggcgcc 480
actgcacccc agcctgggtg gcagagctag actctgtctc aaaaaaaaaa aaaagagtgg 540
gatttatcat agttttttt tcttaactgt tattgactat ttttaatttt tatttttaa 600
ttcagtggcc tctcaggatt attacctgca ttttttttc aggaaaatcc caattctgca 660
actaactctg nggccttaga caagtctctt gccttatcca gggctggttc cttggctgta 720
aaataaagag ttggctagat gatctctaag gtcccttta catctatagg ttnccttggg 780
acctatatta ggggttgatc caaaccantt taatatatct taancccgtt 830

<210> 332
<211> 891
<212> DNA
<213> Homo sapiens

<400> 332
ataatatgtg caaaatcctt aacatcgcat tgaaagattc tttggatctg atcttaccat 60
atatttctag cctaattaat cttctacatt taccctgcca gttctctgtt cctactcatt 120
gattccctaa caatgtaagc agagttcctt tgttaagtca ttcacagaaa gttttcccta 180
ttcttctcta tctgaaaaaa aatgtcctct atccttggag atctaaccca aagtccatga 240
agcattttac tgatactttc attttctgtt gcagcacttg ctatttcttt tatgccatgg 300
agtgggcaca ttttgtattt gtgtcttgta ttattgtgac ttgatccttg gattggatct 360
tattttactt ttgatgtatg tggtagtcag aggcctacca acagatagaa cccacacagt 420
aatttggaga aagttttaca taaagaataa gtagatataa tacagtattt atgtaatgga 480
agattagcta gtaataacta aagaggagtc taaagaatat agtaataata attataagga 540
gaaaccattg cctctgaagc tgagaggtac ccaaaaagaa cctcttcatc ccctgcaagg 600
ctgatatcca aactttattt gtgaggacat gcccgtggct cactggctgg tggacaaatt 660
gctgaggtgc tggaacagca ggacttgntg gaaatgtttt cctctgggat tccaaataag 720
tcacccatag gggaggatcc taacccagca agcactcctc ttcaaaggcc atcttaaggg 780
gtgccatctt cgtagaaggt gccttcaatt ggccaaccac tttnactggg ntaatgccta 840
tcctggaaaa gggtnaatgg gaaaaatgct attcccccaa gggagacctg g 891

<210> 333
<211> 815
<212> DNA
<213> Homo sapiens

<400> 333
ttttttttcg ctcgtgtccc gccgggtggc gctcaccacc tccccggaac acgcgagtct 60
cctgtcgcgg ttccggtcgg aattaccccg tggagcacgc cgatatggct gcgctgacac 120
tgaggggtgt ccgggagctg ctgaagcgtg tggacctcgc gacggtcccg cggagacatc 180
gatataagaa gaaatgggct gccacagagc ccaaattccc tgctgttcga ctggctttgc 240
agaattttga catgacttac agtgtgcagt ttggagatct ttggccatca atccgtgtca 300
gtctcctctc agagcagaag tatggtgcac tggtcaataa ctttgctgcc tgggatcatg 360
taagtgctaa gctggagcag ctgagtgcca aggattttgt gaatgaagcc atctcccact 420
gggaactgca gtctgagggt ggccaatctg cagccccatc ccctgcctcc tgggcctgca 480
gtccgaacct tcgatgcttc acttttgaca gaggggatat cagtcgcttc cctcctgcca 540

0050250 - 0050250

gacctggcag cctgggtgtc atggagtact acctgatgga tgctgctcct tgctgctgtt 600
ctggccctcg gcctgcagcc tggggacatc gtgcttgacc tatgtgcctg aagagatcan 660
ggatggaaat caagttcgag ttacctcatg ggatggcagg aaatggggag aactggaggg 720
ggacacctat gaccgggttg ctggtggatg tgccctgtac cacagaccgc acttccttta 780
tgangaggag aacacatntt taaccggnca aggaa 815

<210> 334
<211> 801
<212> DNA
<213> Homo sapiens

<400> 334
gaatactttg gatgagacgg gaggttttcc cattctgatg ctaggatctt gttcatgagt 60
taatgaagac agttgaggaa ggtaaggagc tatttctact tgattagtga ggcttcagtc 120
tatttcaaca tttcaaagtt tttcatgata atttgttcat gaaaaaaaaa agaaaacaga 180
ggagttgctc cagctctaaa aaaaatttga aaaccacacc ctgtgctaat tgcaagtcta 240
gtctactctg gtgctgctct gtggtattgc agacatagag tctgctctgt ggtacatatg 300
gaccaggtct tatgatgatg ataggccatg tttagtggct tcacacagag gtacttcaga 360
gcttttattt ggattcctcc cacttggata ctgttctgac tgctttatca aaattaagtg 420
tctttgcttt caccctcctc ctaaaagtca ttcaacctaa aagtaaaatt ttgggggca 480
ttgaggggg aagaagcaga aaatgttctg tttaacaatg agatctacac cagatatttc 540
attttgatta tttaaatata aaagatacct tttgctcaca gtagttggct taaagtactt 600
catgatttat gaggggtgat tgctgacaaa gtactgggag gagccgtttt gagtcaacac 660
gaccatttgc atctgccttc acttgctctc ctctcttatt aaattgagct atcctatggt 720
gtgggttttt atagtaatac tagaacactg tgagtcatac cagagcagtt gngccgnctt 780
cactacattc tcaccntgct g 801

<210> 335
<211> 821
<212> DNA
<213> Homo sapiens

<400> 335
taaacagagg cccacagcta gtttgcagaa ccactcaatt ttaagtgctg tttaaattgc 60
agagcaaata atcctgtgtg ggaactgtgg ttacaggaaa tggagcactc taacaatgtt 120
tacttctaaa cttcgttgaa tgataataga aagcacccta attgacttgg aaaaaaaaaa 180
cagcaaaagc aaaagtagca acatatgtca acatatgtca ctgaaatagg aaacagtcat 240
tggaatgttg cacagaggct aataactata gactgttgga tacagtggtg agaggagccc 300
cattttaggt ctttctttta ggtttttggt tttcattact ccaagtaatc cttgacccaa 360
gaacaaaggc ttgttgtatg agttccactg ccagatttat gggatgcctg gatcattcag 420
aaggatgctt caactattat ttgtcaggtc caaaggtcgt acttgataac cccatttct 480
atgtatgggg tagtctaata tattatttta tctactttat ttttcccttt tcagaaagtc 540
cttagtgcaa accaccattg gaatctagcc agaaatgtct gtcagatagt tagaattgta 600
acatctaaac ctgccacgga tcgaatggta cttacaggta cctctcttag ggactctgtg 660
atccctaaaa tatcagaaga aaatgtctgn ctttctgcca aatatctact tgacttgggg 720
gaagtcaaaa ataaaagtag gtgtccaagg attttacttt tggcgaaatc tgacgtctcc 780
tgagcttatt ttcattttgn ccttggacat acatanngct t 821

0302050.02000

<210> 336
<211> 688
<212> DNA
<213> Homo sapiens

<400> 336
gttggcctac tggtgaagga aaatctcaag ggaaacctta aggaatggct acctacagtc 60
cacctttaa ctgagaccca cacggttgca tgaccttcat gagttggcca tggctctttt 120
ccacgttcct ttcatcccag gactccggct gaaggacctg ccattctctg ggagactgct 180
atccttgtag cagaaggaaa gggcgatggt ggaatccata atggcttcta aagctgctgt 240
tttgaagtgc atgtttcact tcctgctcgc gtttcattag tgaaaataag tcacatggcc 300
aagcctgata gcagcggagt gggggtgatt aattctctca cagggagggg tagaaatcag 360
ttaggtgcaa gcaacaccct ctaactgcga gccattggag gcttttgagt gggtaatgac 420
ataatctagt ttgcatttgc ggaagatccc atgcagaaac aaatgtcaca ctgcagctgc 480
aaggacagtg aggagggaga tggccatggt gccttggtcc ccagagtgac ggcatgcgga 540
ggcgtcaatg catctacctc cagcacacca ggcatgatgt caggtgcagc aggaggtacc 600
tggccctttg ctacacagac cacatggtct tgctggggac aagacctang gaacagntca 660
ttttggtaca gtgtggttgg ntcctgga 688

<210> 337
<211> 803
<212> DNA
<213> Homo sapiens

<400> 337
ttagattatg acataaatct tgtaaaaacc tgtcagttat tttcatctat gagagaagag 60
gagcccaaac tctcgcccac ctgttcttaa ccagaaaacc cactgacttt gaaaatctca 120
cctctgccac ccatctactt gcattcgtct ttggcagacc tcaagataaa tatgggttaa 180
tgcctgcatg atgcctctga attcaggaat tgcagggaaa actcggggct ttgtgccagt 240
ctctaagttg gcaactttgg ctgaacaaat gagtagtggc ttcagtgtcc ttgcgtacac 300
attctgtgga ttgatttaat ggagttgtca gcatgatcat catcttctag ccaggggcat 360
agttgccaag gccatttacc tctttctaag aagaaacaga attatgtgta tatatgagag 420
aaagaaacaa gaatgcgtga atgaggatga agaaacattt accccatgta ctcaagacat 480
ttcagtttta aaagtcactt tcctattaga cttcttgaaa aagattctca catagcctct 540
atgtaatcag acaaatgaca tttgatttca agagcagagg ggtaaacatc ctctgctaat 600
cgacaggtag caggtgtcag aggaggcata atattaatag cgccaccttc tgttgggtca 660
gtggagatgg gtgaggagca gcacagagca gcagggatca tcacatgcag ncaaacttgg 720
cctctgaang gggaaggtag tgggaatang tggtgagaga actccatttt tctcttggcc 780
tgggtttata tttcggaggg aaa 803

<210> 338
<211> 790
<212> DNA
<213> Homo sapiens

<400> 338
aatttagtgc tactgaacaa ttcagtagtt atttctgaac tttgctgcaa agtgctcttt 60
agttaaagca cattaagaag ggtcactgct taattgcttt gtaaaatgaa gcaatggtat 120

0052-0052-0052-0052

ttttatccg atatagtgta atttaaaagt tttcctacaa agtgagttta tattgttgcc 180
taaactatgt tatgtaagca aaggttttgg aaaggcggga gggagtctag attcggcgag 240
agtgtgcgtt tgtgtgtgtg aatgtatgaa aagtttcccc attgggttat tcttaagatg 300
tgtttattgt aaagttttct acgttttgcc cacagtaaat gtacaacttc gcaattgtag 360
gatttaattg attgaattcc aaatttatac tgtctcttcc cttctgcaga gacattatgc 420
cactgtaagg tgcatgtaca gaaaatacct ctgaggttga cttgttaaat aactgatgaa 480
tgttatttca cactgaatct caaagcagtc atttgttttg cgggttaggg gaaagttttg 540
ttttttgctg gtgtttttttg ttgtttttaa ttaggcacac taagagtggc taaatttggg 600
ggaattggtg gataggaaag accttgaaaa gtgatgtgta gatgaaaaca caaggtatgg 660
atgttggtta cagagttcag ttttaacaag ggaaatttgg ggatttttttt ttttttactt 720
gcatggtcta tgggtagcta tcaaanggtg tacaaattat tccagctttt cccaatctaa 780
ntnatattgg 790

<210> 339
<211> 832
<212> DNA
<213> Homo sapiens

<400> 339
tggatcacca cctggtccag cttggccgaa ttcataaacc tgaccacagt tatggtgtga 60
agtttgtgaa gtcctttata aactcaatca ggcgtgcaat caacaaatat ccaccaataa 120
acttaaaaat aaagtgcaac agacttaact ctatagatcc aaagcagccc ccacgaccat 180
tccgaagctt tgttcctgga ccacttaaag ctaccctcaa agaagatgta ttacagaagg 240
caaaattctt tcaagataaa aaatatcttt caagagtagc aagaagtggc agagatgatg 300
ctattcaaaa ttttatgaga agcacctccc atacctttaa gaatggaagg atgatagaaa 360
gtgctcccaa acaacatgat taaaaaaatg cttgaacaac ttagccttag gaagcatggt 420
aagactctgg acttaaatag taactaaatc tgctgccaga actcaagcaa cagtttgtag 480
gttatcaggt gacttgaccc cctgcattca ttggtattaa gatatatctt gttcatttat 540
ttgaccactc ctgacaattc cagcactcta cgactgatat gtcgaagaac tgtttcatta 600
gaagacagaa gaatgaaaga agtgttttga aaagtctaat ggagatataa tttgaaggta 660
aaatttatat gatgtatgca tatgtgtaca tgggtcaatg ttaattcttt tatctctgtc 720
cagttcattt tctgcaaacc catcctnctt tcctaattaa gtaatgncta atgctcatct 780
atttagtcaa aggtattttt taatggttta agctacttca aaanttatcc ta 832

<210> 340
<211> 871
<212> DNA
<213> Homo sapiens

<400> 340
tggaagaata agtattttgt aaaaattcac ttgataccac attttcattt ctggaacagg 60
atagcaatca ttcatttcta tcttgtgtct gtgtccacca caaccaagac cagatgcatc 120
tgatgaacat tctggaattc tgaactgcag ctagcctgct gtgcaatagt acaagtggga 180
ggacgtcttc ccagggctgg gctggttctc aactagtgcc cagatgcaaa aggactgagg 240
catcactttc agactgcata tatttttatt catataaagt tctttataat actttatttt 300
gtggtgttaa gttccaccag ttatttacaa atgatgtaaa aagctttaag tgttgttaat 360
ttctaaagtg ttcttgcgtt ttcagaagtg taagtggatc tcagttgatc tgtcacccca 420
aacctcaaat gatccatcca ccctgcttgg ccatctaatt cacctgctct ccccagtgac 480

0952046.0720000

tattttggac ctttcctctc catagatgac tttgcaatct acagggaaaa tacttatgca 540
ggacatctta tatctccccc ttaccacgta cagttctctc cacagctgcc agcagcccta 600
acctttttgt ctctccacct gtgctttgga tgctcttctc ccagcctttt caggatcttt 660
gtctgtcctc ctatattaat gtattcaatt attctctcag ctagatcctt gctacttggt 720
tttaaattta agactaagat taaacaaaac tatctttcac aaccacaaac ccccttccgn 780
caagcaacta agaatttnct ctcattctca gccagttttc ttgcagcagt atctttagtc 840
attggcctca atcatctaat ccctatctta a 871

<210> 341
<211> 871
<212> DNA
<213> Homo sapiens

<400> 341
aggcttatca aagtcaagca ctgtgtcacc tggtaatgca aacccttcca gcatctctgc 60
ctttaggttt taggggggaa tcgtcaaaac agacatgcag cccactacaa agtacttgaa 120
agcaataggg caccattcaa gcacacgcct gcatttactg ggctacgttt atttagggca 180
ttcaggtggc tgtaattatt gtgcataaat agttttctaa aaagcataaa actaaaaact 240
tgatccatgg aaacacagtg tggtttagga tggagatcgg atttcactca cctcaaaata 300
actcctggtg tttgcctcca agacccatta atttatgtta tctcttgctc tgtagcagtt 360
tggatttgtc acacttagca aagtaatttg gtttcccaca ggttttgttc tgttttatag 420
aagcaagaga acggttttgt gtttcagagc atgaatacat tccttcagaa atttagccag 480
catttcagaa ggatatgaat ttttattttt agctatttac acctgcctga aaggttgatg 540
ctgctaaaca ttgatattac ttgaaaagtt gtgcccaagg catattgctt ctttcctagc 600
taggaattga aatgtttatg aagcttgctg aaaatttacc aggttaccaa aataagagtt 660
tatatctctt atgtagtgac taacagaaat agatttatgt attcaaccaa ccgtccaata 720
tttattaagc cactaatata tgcattgaat tatgctggat ttggggtgac atcagattat 780
tcaacataca cttctcctgg ttcagttcct tttaacatgg tattactggg cacttacaga 840
atggcaaaat cccnttaata agactcaggc c 871

<210> 342
<211> 870
<212> DNA
<213> Homo sapiens

<400> 342
tgcctcaacc ataagcgaca ttgaaactgc tgcagacaag tgtgaggaga tggaggaagg 60
ctacatccag tgctcccagt ttctatatgg ggtgcaggaa aagctgggtg tgatgaacaa 120
aggtgtggcg tatgctctgt gggactacga ggcccagaac agtgacgagc tgtccttcca 180
cgaaggggac gccctcacca tcctgaggcg caaggacgaa agcgagactg agtggtggtg 240
ggctcgcctt ggagaccggg agggctatgt gcccaaaaac ctgctggggc tgtatccacg 300
gatcaaaccc cgacagcgaa cactcgcctg aacttccttt tggagcaccg catggtcttg 360
ccagctacca ggagccactt aagagattat tgtgctgttt tccaggaaag ctgcagctag 420
aaaatggtct taatggtgct cactttagca gacagcgtcc acaatgtgaa tcctacagtt 480
tccaggtgag gccctttctc cagtttgccc attaactggg agaggtactt tcgcctccaa 540
ggactgaatt ttgccaatta ctataaatcc aaataaatac ccactttcaa aacacccacc 600
cctcttgcca ttaagaagtc ccataacccc cggttggttg ccagtgaaga cagaagctct 660
tactgacttg gccccgaggc catcaccccc ttcagcagtg aacactgtcc gccgctgtga 720

0950204.0020

ngcctgctcc cctgcgaccg cctgcccccc gtcaccgaat cggacactca tcctttctac 780
actttccaca catgatcctt ctttccttta tcaccaaagg agcctntgta tggnaacatg 840
tncatggttg cttgcccatg tgtatgcctc 870

<210> 343
<211> 869
<212> DNA
<213> Homo sapiens

<400> 343
gaattcaaaa gatgcctatg gttggttaca cagcttttga tttgcatagg tattcgaacc 60
caggttttgc tgacttcaat gctttacctt aaaagatgct tttttagaat ggtagatgtt 120
aatagatggt ctgtgtaatt agtttcctgg gcctcctgca acaacataga aaaaaatggg 180
taacgtaaca tttattctct cacaattcca gaggccagaa gtccaaaatc aaggtgtcag 240
cagggcgatg ctctctgaag gctctagagg agaatccttc cttacctctt ccaaacttgt 300
ggcagttctc agcagtcctt ggtgttcttg gcttgtagat gcatcactcc aatatctgcc 360
tccatcaccc cccagctgtc tttcctcata tgtttttgca tcatcttacc tctgcgtctg 420
tgttcaagtt ttcttctgct tatgaggaca tcggttatat ttgtttagga gcctacccta 480
ttccagtgtg atctcatctt agttacatct accatgacct tatttccaaa taaggttaca 540
ttttcagaca tggtagttaa gactttaacg tatatttttg gggttgagag gacacaattc 600
agttggtaac agctatgaca aaattgggta aattgatgaa catcttaaaa aaaacacagt 660
ggaagaggca ggcactgtag agtgacaaaa tacatcttta tagaaattcc atgttaaaat 720
tattttgngg tataataatc aaatttaaat acctaataca tatattacca ttaaacagga 780
tagtcagcac tacctagttt tttaactgaa tttgtaatgg ccatatggtt atggttcttt 840
agtaatactt gaactaaang gaattgcaa 869

<210> 344
<211> 861
<212> DNA
<213> Homo sapiens

<400> 344
tttaaaacaa aaatttcctg cgtgaaattc tggcttagtt aacttttgg tctttctctc 60
ggggcttttc ttgttcttat aaaatactgt aaattacaaa tggaaattta atgcagaatt 120
aaatttctag tgtacaatat ttgtaagaca agaagaaaat ttccttttcc cagatctcag 180
gaactacctt gttcctgtta acttcttgaa ctggctagtt gctcaaaggt atgtatacag 240
gcctttaggg aagagcagtt tttaaaattt tcctttctga tcattatata cctgtcagat 300
gacaatagat aatcttccaa agttgctacc taaaaatcct aggaaagaaa ctttggtgaa 360
catgactgcc attcccatta attgctaatg aaaaacatca gacttgctta gtagaaaaac 420
acctaatttg gtataacttt cttgcagttt atccatatta tgtgcttgtt acttaatgta 480
attaaaagca ttttaaaatt ctacttttt cgtatccact ttttatactt gctacttcct 540
aaatcctccc tcactgttta tttcatccat ctactcattt cccatcatcc aaagttagcc 600
tctccttgta taccaggcac tgtctgattt ccatgtattc cttttatttt tactgtgggc 660
ctttgtgctt agtatacttt tacttcatat aatgtgatta acaaatgaag tgattatcat 720
atggagttta aggaaattag atgtatcttg caattacttt gaaatctttg ggaaacctta 780
agaagatgga tctgtttcat tttattacca catcttggaa ttgntcatga ttcctaaaat 840
ttcttgccta cccacatntt g 861

0902045.02202

0002-0-2005-05-26

<210> 345
<211> 869
<212> DNA
<213> Homo sapiens

<400> 345
gaaacatatg aagctctatt agccagattt cccaatcttc gatttgcata caaggatcca 60
gagaagaact ggaatagaaa ttgtgtgaaa ggacttgtgg cttctctgat tagtgtgaaa 120
gacacttctg caaccacagc tttagaatta gtggctggag aacgactcta caatgttgta 180
gtagacacag aagttactgg taaaaagcta ctagaaaggg gggaactgaa acgtcgatac 240
actataattc cactcaataa aatttcagcc agatgtattg caccagaaac tctgagagtt 300
gctcagaatc ttgttggccc tgacaacgtt catgtggctc tttccttggt tgaatataaa 360
ccagaacttc agaaagcaat ggagtttgtc tttggaacaa catttgtttg tgacaatatg 420
gataatgcca aaaaagtggc ctttgataag aggataatga ctagaactgt aactctcgga 480
ggtgatgtgt ttgatcctca tgggacattg agtggaggtg ctcgatccca ggcagcttcc 540
attttaacca agtttcaaga actcaaagat gttcaggatg aactgagaat caaagagaat 600
gagctgcggg ctctagaaga ggaattagca ggtcttaaaa acactgctga aaagtatcgc 660
caactaaaac agcagtggga gatgaaaact gaagaggcag atttattaca aaccaagctc 720
cagcaaagct catatcacaa gcacaagaag aattagatgc ccttaaaaaa accattgagg 780
aaagtganga gactttgaaa aacactaaag aaatccaaga aaagcngaag aaaaatatga 840
agtattggaa aataaatgaa aatgcngat 869

<210> 346
<211> 813
<212> DNA
<213> Homo sapiens

<400> 346
atttagaatt taagcctaga tacttcagca gtttttctat aactgaacaa agaaacaaag 60
tagctcttga tggtccagta aaatgagtct aaccagggac tccttacagg ttttatatat 120
agtaaactac attttcgtgg aatatgagaa ttacgttaaa agagtaccaa ctaagaataa 180
ttttattgtt catggaagat agggtaaatc tcaatactgc cttatttata catgtactaa 240
tcaaaagagc cattaaactg tttttccaca ctattatact aagcacattt cacagcttta 300
catgtcatct gggcccagtg tggtgactca tacctgtaat cccagcactt tgggaggcca 360
aggcaggagg atcactgagc aacattagga gacctcatct ctacaaaaaa cttaaaaatt 420
ggtcgggtgt ggtgatgggt gcctgtagtc ccagctactt gggaggctga ggcaagagga 480
ttgcttgagc acgggaggtt gaagctgcat tattgagcca tgatcgcacc actgcactgc 540
agcctgggag actgagtgag accctgtctc aaaaaaaaaa aaaaacagtt gtttcaagtc 600
agtaaattct attttggata agtagtaaag aatgggtttt gggggggtgta ttttttaaa 660
tcttgtaggg gacaagtaat ctattccagc aggtagatct aatctttctt ttcattctaa 720
gnttatactc taaagnttta ttttgncaga ctttttacag ggtaccttta gtggttgcca 780
atctggcatg tctgacaact gggttataaa ctg 813

<210> 347
<211> 817
<212> DNA
<213> Homo sapiens

<400> 347
acgtggacgc gtctgggctg ctggaggcag cccgagccgc cgccgtcggt gtcgccgcca 60
ccaccaccat cggagtcacg agtcccgcgt ctgtccgaag tcgccgctct cgggctgctc 120
acgtctcttc ggagggcgcg cacatggcga ctcaggcgca ctccctcagc tgctcgtgag 180
gaaaccctct atcctcacaa tacacccact gctacatgtt ctcatagacg cctctccccg 240
tccttatcgt agtactcact gcaccctgtc gttgcttaat tttcctctct cttcacctat 300
ggtggtaggg gccatctttt aagatctggt gtgtccatga tcttaaagtt tttaagtttc 360
tattaaaaat caattatatt atttgtgaga gaagtttttt ttttttcttt ttgaaatacg 420
taaaataaag ctggctggct tcttgaattt tagtagtgca ttgtggaaat aacacaggct 480
taggaattag ctatgtttga atcccagctg tgttagtagc attgtgctgg ccctctgtcc 540
ttctgaccct tagtttgctc atctgaaaat gggaattacc ttgtgcccac cctgggattg 600
agaagattta ttaaacttgt gtttgtgctt aggattcttt ttagttgttt gatccttggt 660
aaagattcaa agcagatttc tgcataacag gttaatgtca gaatgagttc accgtgttnc 720
aacgtggagt gccaggatcc atctagtcgg cacagaggan aaagcctggc tgactggcag 780
gtcctgaanc cctgtgtaca ccaaaccaaa ctgagtc 817

<210> 348
<211> 784
<212> DNA
<213> Homo sapiens

<400> 348
cagagttgcc cagggaaagc agctatgaca tctacagagt gcccagcagt cagagcatgg 60
aggatcgtgg gtacagcccc gacacgcgtg tggtccgctt cctcaagggc aagagcatcg 120
ggctgcggct ggcaggggcc aatgacgtgg gcatcttcgt gtccggggtg caggcgggca 180
gcccggccga cgggcagggc atccaggagg gagatcagat tctgcaggtg aatgacgtgc 240
cattccagaa cctgacacgg gaggaggcag tgcagttcct gctggggctg ccaccaggcg 300
aggagatgga gctggtgacg cagcggaagc aggacatttt ctggaaaatg gtgcagtccc 360
gcgtgggtga ctccttctac atccgcactc actttgagct ggagcccagt ccgccgtctg 420
gcctgggctt cacccgtggc gacgtcttcc acgtgctgga cacgctgcac cccggccccg 480
ggcagagcca cgcacgagga ggccactggc tggcggtgcg catgggtcgt gacctgcggg 540
agcaagagcg gggcatcatt cccaaccaga gcagggcgga gcagctggcc agcctggaag 600
ctgccagagg gccgtgggag tcgggcccgg ctccttcgcg ggcttcaatg ctcgggccga 660
gttctggcgg ctgcggggtc ttgcgtcgag gagccaagaa gaaccacttc aaccggancc 720
gtgaggacct tttaantttt gaacccgaca ggggcccgtt acccgncctt acgaaaccaa 780
atgg 784

<210> 349
<211> 712
<212> DNA
<213> Homo sapiens

<400> 349
tatttataat atgtggagga gagagagctc accatgctca ggtaaaggga tgaagcctct 60
ggtatgtcag aaccatgctg tcttccatga gacttccttt gtgaagagca tccatttaaa 120
agacttttat gaatacatgg tttcaatcaa gtccccagag aacacatttg tcttctgagc 180
tgctggcagt tttgagaatc tgatgacctc cgaggggacc ctgcactcag ccatcaaagt 240
gttcctgccc ctctggacac tcataattca atggtagatg caggtggagt tgagaacatc 300

0050505-0702000

acccagcttc cccaggagct tcctcagatg atggctgcag cagccgatgg tttggggagt 360
atagcgatag acacgaccca gctcaacatg tccgtgacag atcccacagc ctgggctaca 420
gccatgaata acctgggcat ggttcccgta gggttgcctg gacagcagct cgtgtctgac 480
tcaatctgtg tcccaggctt tgatccaagc ctcaacatga tgactggaat caccccccatt 540
aacccaatga taccaggcct tggactggta cctcccccac caccaacaga agtggctgtt 600
gtcaaagaaa taatccactg caaaagctgt actcttttc ctcaaaatcc aaatcttcac 660
ctnctttcac aagagaacga cctnctgggt gtaagaccgt gttgtcggan ga 712

<210> 350
<211> 844
<212> DNA
<213> Homo sapiens

<400> 350
tgttataatg caaagcctat caaacttaaa attagcttaa tcctgaaaga tgtatattgc 60
ataatcaacc tgtcactttt ttcaaacacg atttgggagg gtattgaggt cccatgtaaa 120
ttttaaaata aaagacaaac aggaactaat cttttagtaa aaattatttt gttttcatat 180
aggaaaacaa tgccttctgt catttacgga aaacacatgg gcaatatggt tggttgttca 240
ttgtgcccct ctatcctata ggaagaatgt gatcttttaa ttgtgcttgg tgctttgttt 300
ctggagatat atatatatat attatatata tgtatatata ccatatgtat atatacatat 360
gtatgtgtgt atgtgtgtat atatatctct ctaggttgta tgtaattcaa tatgttggaa 420
tttaaagatg cattattatt tggatttgat gtgaaattag attgtgaata atggagattg 480
ctctccattt tttgctgttc tagcatagcc aaaaatataa agatatagat gtacatatac 540
atatgtattt gattaaacac tttaaatttt aaatggccgc atcaaatttt aaatggtaga 600
tgatatcaac aattgcagtg cactcaaaat gttataaaat ctttgtagca caaatcctga 660
agtatatgca aactaaatag catatttata taaaatacct agataacatg tctaggttga 720
gatatttaat ccctcataga gctatatttg actaataaaa aacgacagct aaaaataatt 780
tcccttccta taagtncaaa tatgatttta aagcatcatt gnaacttgnc atgaactatt 840
aata 844

<210> 351
<211> 672
<212> DNA
<213> Homo sapiens

<400> 351
cttcctgatg gctcctggat gtcaggaagc accacgccat ttccagcttc tcaggctcat 60
ggcttaaaag gaccccagcc aactgttctt cccaagcaag cagacgggat ttatggtggc 120
ggtttcttca aagtgcttct tctctaccca aatccagaag cgaaacaaaa cagaacactc 180
ctttaccttt tcgaagccag gaaaaggaac tcctcttatt ttttaaaagg cccaagagct 240
gcaagcaaat gtcaacttca tcctgtggtt tgatttacat gtttctttgg gagaaagaga 300
caaaatacag cattgaactt aaaaaaaaaa acttacaatg aactgttata actcagaaca 360
tgatgcacaa acccagattt aacaaacgga gcaaaaaaaa aaaaagttct tctgagaggc 420
tcctcgtgtg aggctgtgcc tgtctggcga atcatcttgg aaatggatga ggttaaacca 480
agggtcattg agtcccagca ctgggattgt tnntncctgc tctgaaaaaa tggaaaagct 540
acgtccataa gaggcatgga tgtctctaga acctgggcca aatatacaac cgctttttc 600
gagtgcgatt ttccctaatt gnaatattgt gcatgatcat gaatggaaaa ttttgggaaa 660
tgganaaaag tn 672

0550250.0004.0

<210> 352
<211> 865
<212> DNA
<213> Homo sapiens

<400> 352
gtcgtggctc gttccattct cggcggtggt acctgctccc ggtggccctg aggacgtgtg 60
ggccaggggc ggccccgaaa ttaggaagcg gaggggggagc agtctgcagg tctgcggggc 120
taagtgtcgc ggcggcgcac ctcgcgtcaa gaatccggag gaggagactg caaggatagg 180
cccaggagta atggagtcca aagaggaact agcggcaaac aatctcaacg gggaaaatgc 240
ccaacaagaa aacgaaggag gggagcaggc ccccacgcag aatgaagaag aatcccgcca 300
tttgggaggg ggtgaaggcc agaagcctgg aggaaatatc aggcgggggc gagttaggcg 360
acttgtccct aattttcgat gggccatacc taataggcat attgagcaca atgaagcgag 420
agatgatgta gaaaggtttg tagggcagat gatggaaatc aagagaaaga ctagggaaca 480
gcagatgagg cactatatgc gcttccaaac tcctgaacct gacaaccatt atgacttttg 540
cctcatacct tgaatcctaa aagttttcgc tgaggttaat gtgaacactg ctttacaagc 600
ttgtattttt gtgatttact ttttctgtaa gccttttggt gtttacactt accagtttct 660
aatggaaatt agaattctaa ttgaatattg ttttgtctca gcctaaaagt tacngtcagc 720
attgcaattc acctatttta ggaaaaatac tcttttcata atatgaaatg cataagcatt 780
caaaaagcat ctgtattcca tcatttccnt tttcattcca gccttntttt tgaagtttac 840
tttcctctnc ggttcctgat taaaa 865

<210> 353
<211> 822
<212> DNA
<213> Homo sapiens

<400> 353
aatctatgcc agctctctgg catctggggt tcctgactga taccagcagt tgaaggaaga 60
gagtgcatgg cacctggtgt gtaacgacac aatcagcaca actggagaga ggcattaaag 120
aaccagggaa ggtagtttga tttttcattg aattctacaa gctaatattg ttccacgtat 180
gtagtcttag accaatagct gtaactatca gctgcaatac catggtgacc agctgttaca 240
aaagattttt tcctgtttta tctgaaacat actggattta tatatgtata agcgcctcaa 300
tggggaatta gagccagatg ttatgatttg tttgctcttt ttcttttata gttatagcaa 360
aaatatggat aatttctagt gaatgcataa attaggttgc gtttcttatt ttgctttaaa 420
tctctggtag tttttccacc cctgtgacac aatcctaata gacagtgtcc tgtaaatgga 480
cacaacacaa taaagtcaag ttattattgc tgttactctg gatgatatgg aaaacactgc 540
catattttaa atcaactact ccacgtgttt ttccatccaa tcacactgct gtgattcagg 600
gatctttctt ctaaaacgga cacatttgaa cctcangttc atcacaaacc tggtacctgt 660
tgcttnccag aggatgggag aagtgtagtt aatcacacct cttagtttaa tctgaaatct 720
tgacccagtt atttaacaaa taaatacctc attgattata tttaaaagta atcccttcct 780
gnnaaccaaa tggggacaat gcattccaaa aaantttta aa 822

<210> 354
<211> 769
<212> DNA
<213> Homo sapiens

0030050.0002

0502004800.0 2005.07.29

<400> 354
aaaaccgcgg ttgccggagc ccgaactgag gcggcggcgg gagcccggtt ggcgtctggt 60
cttcgcgtcg gccccgcgga gccagacgct gcccccggcg cggggagaag atggtgccta 120
gcggcctcgg gcccgccacg cgccgccacg agtgagccca gcgcgaccgc gggcgtccgc 180
cgagcagctg gcccggctgg gcccggggcg cgcagctgcc cgccggggcg gggtggagct 240
gatcagaata atgttcagca tcaacccccc ggagaacctg aaggtgtaca tcagcagtcg 300
gcctcccctg gtggtcttca tgatcagcgt aagcgccatg gccatagctt tcctgaccct 360
gggctacttc ttcaaaatca aggagattaa atccccagaa atggcagagg attggaatac 420
ttttctgcta cggttcaatg atttggactt gtgtgtatca gagaatgaaa ccctcaagca 480
tctcacaaac gacaccacaa ctccggaaag tacaatgacc agcgggcagg cccgagcttc 540
cacccagtcc ccccaggccc tggaggactc gggcccggtg aatatctcag tctcaatcac 600
cctaaccctg gacccactga aacccttcgg agggtattcc cgcaacgtca cccatcttgt 660
acttaaccat cttaagggca tcaagattgg acttttcaag gcaaggggaa agccccaccg 720
aagggaggat ttaaaccatt taaccnttta acccccttggc cntancaag 769

<210> 355
<211> 714
<212> DNA
<213> Homo sapiens

<400> 355
tcccttctcg tcgtcgccat tttgagctgg tgactgtggc cggctgggag taggcggcag 60
tgagtttccc tgggagggca gcgcgcttgg cgcttctccc ctccccccga tctgcctcca 120
gtctcggact tggttgttgc gcgctccggc tccggctgag ctgggagagt tggaggaggt 180
ggcggcgggc agaggtgatg tctgggagcc cttccttgac agcccgggcc gagaagagtc 240
cctgcgggaa gcatcaccca ggctggcaga tcatggtagc agcagcgggg gtggctggga 300
agtgaaacgg agccagcggc tgaggagggg ccccagcagc ccccgaaggc cctatcagga 360
catggagtat gaaagacgtg gtggttgtgg tgacaggact ggccgctatg gagccactga 420
ccgctcgcag gatgatggtg gggagaaccg cagccgagac cacgactacc gggacatgga 480
ctaccgttca tatcctcgcg agtatggcag ccaggagggc aagcatgact atgacgactc 540
atctgaggag cagagtgcgg aggattccta cgaggcctcc ccgggctccg agactcaacg 600
tangcggcgg cggcggcaca ggcttccccg agacggcgac tatcgggacc aggactatcg 660
gaccgagcaa ggggaggagg angaggagga ggaggatnaa ggaggagang agaa 714

<210> 356
<211> 722
<212> DNA
<213> Homo sapiens

<400> 356
gcaaaaagcg aggcgacggc ttaaagatgg agaacgaccc ccaggaggcg gagtctgaaa 60
tggccctgga tgctgagttc ctggacgtgt acaagaactg caacggggtg gtcatgatgt 120
tcgacattac caagcagtgg accttcaatt acattctccg ggagcttcca aaagtgccca 180
cccacgtgcc agtgtgcgtg ctgggaaact accgggacat gggcgagcac cgagtcatcc 240
tgccggacga cgtgcgtgac ttcatcgaca acctggacag acctccaggt tcctcctact 300
tccgctatgc tgagtcttcc atgaagaaca gcttcggcct aaagtacctt cataagttct 360
tcaatatccc atttttgcag cttcagaggg agacgctgtt gcggcagctg gagacgaacc 420

agctggacat ggacgccacg ctggaggagc tgtcggtgca gcaggagacg gaggaccaga 480
actacggcat cttcctggag atgatggagg ctcgcagccg tggccatgcg tccccactgg 540
cggccaacgg gcagagccca tccccgggct cccagtcacc agtggtgcct gcaggcgctg 600
tgtccacggg gagcttcagc cccggcacac cccagccccgc ccacagctgn ccctnaatgc 660
cggcccacca tnctctggcc ccctgtacca cccttagagc cctgccccaa ctgcgtgccc 720
ct 722

<210> 357
<211> 671
<212> DNA
<213> Homo sapiens

<400> 357
ggccttcatg tgtttgtggt ggcaaagagg ctggtaggga tcttctgctg acttttttcc 60
ctgcaatagc aattccctcc cgtctccagg cagatctgat ctaggtgggg aagatgggac 120
cacgagtttg agtgcctcta tgctgccttc ctagatttcc aatcaccaca ggtgcatctt 180
cattctatca gtgcacccca ctactcttcc ttcacactcc agtcaaatct tagctgtttg 240
tttgttgcct tgatcctttt tttgtgtgtg ggttagacaa gcaccaggta tccctactca 300
gccatcttgc tgatgttact cctttattgc ttttcttttc ttttcttttc ttttttttt 360
tttgagatgg agtcgcgccc tgttgcccag gctggagtgc aatggtgtga tctcagatca 420
ctgcaacctc cacctccttg gttcaagcga ccaagtagcc tcagcctccc aagtagctgg 480
gactacaggc acccaccacc acacccaact aatttttgta tttttggtag agacgggagc 540
tcaccatgtt ggccaggctg gttttgaact cctgacctca agtgatccgc ctgcctnagc 600
ctnccaaagt gctgggatta taggctggag ccactgtgcc caactncttt attgctttta 660
atctctgcat a 671

<210> 358
<211> 796
<212> DNA
<213> Homo sapiens

<400> 358
gtttccatcc ctcctctgga ggcttttgaa gtcaccggga gacagatgtg ctctgtggca 60
ggcaggggag tgggggtgct caggcacttg ggaggtctgg gagctcctca gtgtgaccgc 120
tgggacccac caggactttt tcctttgtca gaagcctttg gttgctttgc tgctctgcat 180
gtgtcactgt ggaggggcaa tagagcaagg ccttacatgg catggtcatt tctcgggccc 240
aggaggctta gaggcctgcc cctggcgctc aagtattgaa ccagaaccat ggggtggcac 300
tgaagcctcc tcaccacatc atgataaata acggggacat tcacagagca ggcactgttt 360
cctcagtcca tggctgagta catcaccggt gttttctctc ttattcctcc catcaagcct 420
aaaaggaatc tctattggag atactgccat tagtgttcct tttataggtg aggaactgag 480
gcatagaggg ttccccagtt gaaccaactg ataaatagta gaacttggat tttaattcag 540
tcttgatgcc agggataagg ctcttacttt ctaccttagg ctatttctag gaaacgcang 600
agagtgttga aggggcagag aaagggatcc agttcctttc tgtcccgcat cctagtccct 660
gagaagcaaa gaagaatgtg tggcttcttt tgctttgctt ttggtgcatt ccacacatct 720
tcaggggacc tgggctcttg atcttggcct cttncccttt aactggtaaa tgggaacagg 780
tnaaggggta cnagta 796

<210> 359

0005205350

0305305.00200

<211> 797
<212> DNA
<213> Homo sapiens

<400> 359
acagtgaatc agtgaccccc aacccacggt cccctctaga agactattcc ctccatatca 60
ttgaccttca caccggccgc ttatgtgata cacgcacgtt caagtgtgac aaggtggtct 120
tgtcacacaa ccaagggctg tacttgtaca aaaacatcct ggccatcttg tctgtgcaac 180
aacagaccat ccatgtcttc caggtgactc ctgaaggcac tttcattgat gtgcggacca 240
ttggccgctt ttgctatgag gatgacctgc tcactgtgtc agctgttttc cctgaggtac 300
agcgggacag tcagacaggc atggccaatc cctttaggga tcctttcatc aattccctca 360
aacaccggtt gctggtatat ttgtggcgcc gggcagaaca ggatggtagt gcaatggcca 420
agaggcgctt cttccagtat tttgaccaac tgcggcagct gcgaatgtgg aaaatgcagc 480
ttctggatga aaaccacctg tttatcaagt acactagtga ggatgtagta acactgcgag 540
tcacagatcc atcacaggca tctttctttg tggtgtacaa tatggtgacg acagaggtga 600
ttgctgtgtt tgagaataca tcagatgagc ttttggagct ctttgagaac ttctgtgacc 660
tttttcgtaa tgctaccctg cacaagtgaa agttcaattt ccctgctcag cttctagcaa 720
caattttgca aggcagatcc agcgccngnt caaagaccta ttataaatgc caagttggag 780
ggcacacaga gcantac 797

<210> 360
<211> 850
<212> DNA
<213> Homo sapiens

<400> 360
aatacaagtg gatttgttaa atggctttc cctagatgaa gtaggtcaaa ctcgggcctg 60
catctcccta aggaggcaat aatgcctggt agcattacca gagggtaaga cggagaagta 120
ctttggagaa attagaaact tccctagtac ttgttatgaa agctcaaact ctttaaaata 180
atggaaatgt cataaatcag gcagattcac ttttgcctga ggatggcttg aaggaggctg 240
ctgtgagctc tttagtgatt tgtctgacac aggctacagg caaatttaaa ggtgaccaac 300
ttagcaagaa acaaggcaat tgaaagatcg gtttcctacc ttgaccagct aatgcctgca 360
agagcagacc gaatggctga attccaaccc gattccagga atactgtttg ctgacctgct 420
gtcttaagtc agtgctgtga ttcctgcaaa agacggcaga gtcagggtgg ggaaatgagc 480
aggtgctgct gttggcggtg ggtctaaaca ccccaccaca catttgtttg catcacttgt 540
ccaggactat gattctggca ctattttcct ggatgttata caatgtcaaa ggggaaggtg 600
gatggttccc accaagacag aagcaccttc ttatttcaga tgctatcttc ttggtctgct 660
gtgctgtgta acaaaaatgt atcaacccca agcagagtta aaggccagag ctgggatgct 720
gtggtangct gaaaaacacc ctggaaaaga tatncatggc ctaatcctgg accattgaat 780
ggttccttat ntggaaaaaa tgtggggagc ctttgctaat gggattaaat taaggatcct 840
gaatcntgac 850

<210> 361
<211> 770
<212> DNA
<213> Homo sapiens

<400> 361

tcataatgaa cagtgagaac tctcctactg ggcttctgga atgttgggac cactctggtc 60
caatgctact gtcgtttcct gtctggaaat gagagtagct tcttgaatat tcttcctatt 120
cctactttgg cttcttttaa tctattcaca ccattccatc agaaccacct gagggttttg 180
tccaaaacac agctccgatc ctgtcacgac ctcttgcttt aaagcccatt agtagctttc 240
tgntgctctt gtgatagaaa caaaactccc tgatacagcc tacatggtcc tgcattgtct 300
ggctcccact tccctttttc atttcttacc acactccttg gcctctgcac tagaggctca 360
ctggctgatt gcaggcttga gaactgacca tgtttgtttc tgccagaggc ctttgcactg 420
ctgttttctt ttcctggaat gtgcttcctt ccctatttag ttaactccta gtcatccttt 480
aatttattat ttgagacggt cttgatctgt cacccaggct ggagagcagt ggcacgatct 540
tgcctcactg cagcctcggc ttcctgggct caactgatca tcctcccacc tcagcctncc 600
aaagtgctga gattacaggc atgagccacc gtgcccggcc agctcaatga attttgtaaa 660
gcaatcatgg tcatgtagct accactcaat taaaaaagta ctggccaggt gtggtgattc 720
acatttgnaa tccaagcact ttgggaactt aggcnngagg acacttgagg 770

<210> 362
<211> 654
<212> DNA
<213> Homo sapiens

<400> 362
gcaacctcca cctcccgggc tcaagcaatt ctcatgcccc agcctcctga gtagctggga 60
ttacaggcgc ccaccaccac gcctggctaa ttttttttgt tttgtattgt ttttttttt 120
ttttagtaga gatgagattt caccatgttg gccaggctgg tcttcaactt ctgatcttag 180
ctgatccacc tgcctcagcc tcccaaagtg ctgggattat acgcctgagc caccgcaccc 240
agcctcaaat cataaacttt tttttgtttt ttgagacgaa gtctcactct gttgcccagg 300
ctggagtgaa gtgacacaat cttggctcac tgcaagctcc gcctcccagg ttcaagcgat 360
tctcctgcct cagcctcccc agtagctggg attacaggtg tgcgccactg cgcctggcta 420
atttttttgta tttccagtag agatggggtt tcaccatgtt ggccaggctg gtcttgaatt 480
cctgacctca ggtcatccac ccacctcggc ctcccaaagt gctgggatta cagacatgag 540
ccactgtgct cagcctcaaa tcataaactt tttaaaggnt tatccctgac cctctaaatt 600
aggttatgtg ccttgntata tgctctttta gcacttatcc taattgngat tggg 654

<210> 363
<211> 743
<212> DNA
<213> Homo sapiens

<400> 363
ggaacggggc agtcccctga ggagcggggc tggttgaaac gctaggggcg ggatctggcg 60
gagtggaaga accgcggcag gggccaagcc tcctcaacta tgacctcaac cggccaggat 120
tccaccacaa ccaggcagcg aagaagtagg cagaaccccc agtcgccccc tcaggactcc 180
agtgtcactt cgaagcgaaa tattaaaaag ggagccgttc cccgctctat ccccaatcta 240
gcggaggtaa agaagaaagg caaaatgaag aagctcggcc aagcaatgga agaagaccta 300
atcgtgggac tgcaagggat ggatctgaac cttgaggctg aagcactggc tggcactggc 360
ttggtgttgg atgagcagtt aaatgaattc cattgcctct gggatgacag cttcccggaa 420
ggccctgagc ggctccatgc catcaaggag caactgatcc aggagggcct cctagatcgc 480
tgcgtgtcct ttcaggcccg gtttgctgaa aaggaagagc tgatgttggt tcacagccta 540
gaatatattg atctgatgga aacaacccag tacatgaatg agggagaact ccgtgtccta 600

0956204.0007000

gcagacacct acgactcagt ttatctgcat ccgaactcat actcctgtgc ctgcctggcc 660
tcagctctgn cctcagctgg tggatgccgn cctgggggct gagatccgga atggcattgg 720
ncatcattgg gccttctgga cat 743

<210> 364
<211> 717
<212> DNA
<213> Homo sapiens

<400> 364
aattaaatgg ccacaagtgc ctggtggtcc ctttgttggt ccacacagat ctgcctgcct 60
tgggagaggt atctggggct gactggtggg tgttccattg cagaaagctt ctgagacaca 120
cagaagtcgc cacagttggg agacgtgata cccgcagtgc tgcagtcctg cttgccttgt 180
tgttgttctc tcaacttcta cattagagac ttagttatga tgagtgtggc cgcccttagg 240
aaggcatgtt atatactcac ttaaatgcct cagccccctt ttttaaaata ctttgttcag 300
tggttaatgg catagactag agctagactg caagagtttg agccttaact ctatcccatg 360
ttagctgtga ccttgggcag gtcgcctaat ctctctgtgc cttagtgtcc tcaccttcaa 420
attaagataa tacaggcttg ttatgaggat taaatgagtt aatatttata atgcacttaa 480
cacttaaaat gttcttgttc tttgtaattg tttttcaaga tgaagtgtgt aactaataaa 540
gtgaggggg attaacagcg aggactggct tgccaccaac agagcaaatc tttagattca 600
tattcaactc aagcctccca gtttcaaccc tgtatacaac tgtccagagt ctgtacatgg 660
angcacgcan ccacgtggcc gaaaggaacc cgctgggcan gacaagcacg tgggccg 717

<210> 365
<211> 787
<212> DNA
<213> Homo sapiens

<400> 365
cattccctag gaagtgcttt gaagaaaaac ttgaggtata tgaaatggtt aaaaatcaga 60
aactaaacct tttaacatgg acatcaaagc tttgccataa gcaattcagc atattcctag 120
aaatgtttct aatccataac ctgagagaat gttgatctcc atagtgtgaa aatgacttgg 180
gccagtttaa cttgctcttt tttttatttt ttcactaatt ccctttttgtt tttctctgat 240
aattcttctc tttcctgagc ctctttagag cagcacttac aggattgcct ctgtaaagcc 300
ttattcctgt cccagaaaag gtaacccaaa aagtctctag tatccactaa aaggtaaccc 360
aaaaatctct agtatccact ggctttctcc agtgtggaag ctttcccctc cacctcccat 420
agatcactgg aaaggacccg aggcctcggt tctaatccct ggcttatcac taactgctgt 480
gtggctttgg cttgtccctt agtctctgtg agactgctgc accctcatct gtcaaagatg 540
gaactgaact tagttgagct ctgaggtccc tgtggacttg gcccctccac accctcatta 600
tggcaactgg acataaactt aacagaggac ttcccagcaa aatgtcctct tcttcctaca 660
aacaggctgn ttctatatgt gcatgtttca tgctaagcac ttctttcttg ggtggagatg 720
gcaaangcct ctttctgctg agacaaagtg atttgganag cacctggccc ctgaanggg 780
agtggta 787

<210> 366
<211> 832
<212> DNA
<213> Homo sapiens

0540703.0040000

<400> 366
atgttacatg ttcggaaaaa ctttcagttg ctcaagggca ataagaaaat ttgaggccgg 60
gtgtggtggc tcacgcctgt aatcccagca ctttgggagg ctcaggtggg cgaattgctt 120
gagcccagga gttcgagacc agccggggca acatggcaaa accctgtctc tactaaaaat 180
acaaaaatta gctgggtgtg gtggtgcatg cctgtagtcc cagctactcg ggaggctgag 240
gtgggaggat cccgtgagcc tgggaggtgg agtttgcagt gagctaagat cgtgccactg 300
cactccggcc tgggtgatgg agcaagacct cgtctcagaa aattggaaac tattgactaa 360
gagaagtttc taggtttgca ctgaattgtc ttttgtacat acagtgaatt gttttgctgt 420
tctccccact ccatattaat gcaggagcca ggttggtctg ttaggatgaa caaaggttga 480
ggggagggca ggattcgtgc atctgggggc caaacacatg ttccgtcttg attgccttaa 540
gagttactag cgaggtcagt gttaggcttg caatagggat tttaaaatac actaactagt 600
tccttagcta ccttcacata cattctatag gccttcttaa attagcacta acctccactt 660
ccttctctgc cccattgcct tccaaatatg ctatggagct atttttggta ccacgttata 720
acgtgaatat ttatacagta gcctcttcan gctttgtaat tttcattcca aaaatgcccc 780
ggtgtgatgc tttacactct acaaagtatg ggttaaangc ncaaggtcat gg 832

<210> 367
<211> 652
<212> DNA
<213> Homo sapiens

<400> 367
atccccagca agcaccaggg cccgtgtgac caggccccgt ccccatgcct cggggtgcag 60
tgtgcatttg gggcgacgtg tgctgtgaag aacgggcagg cagcgtgtga atgcctgcag 120
gcgtgctcga gcctctacga tcctgtgtgc ggcagcgacg gcgtcacata cggcagcgcg 180
tgcgagctgg aggccacggc ctgtaccctc gggcgggaga tccaggtggc gcgcaaagga 240
ccctgtgacc gctgcgggca gtgccgcttt ggagccctgt gcgaggccga gaccgggcgc 300
tgcgtgtgcc cctctgaatg cgtggctttg gcccagcccg tgtgtggctc cgacgggcac 360
acgtacccca gcgagtgcat gctgcacgtg cacgcctgca cacaccagat cagcctgcac 420
gtggcctcag ctggaccctg tgagacctgt ggagatgctg tgtgtgcttt tggggctgtg 480
tgctccgcag ggcagtgtgt gtgtccccgg tgtgagcacc ccccgcccgg ccccgtgtgt 540
ggcagcgacg gtgtcaccta cggcagtgcc tgcgagctac gggaagccgc tgcttcagca 600
gacacagatc gaggaggccc ggcagggccg tgcgagcang ccgantgcgg nt 652

<210> 368
<211> 859
<212> DNA
<213> Homo sapiens

<400> 368
aggtatatca tcctaagatc ttcgtcagct ctgacaaaca tcctaggaac ccactctaac 60
tcctcatttt ttcatgcctc ctccagtgct cttcactcat gctgtttccc cttcttctct 120
tggcttcaga ctctggacat taatgtgaag gccccagccc tgatgacaaa ggcagtggtg 180
ccagaaatgg agaaacgagg gtacagagag tgagagagag cctgggtgag aggggacacc 240
acacgggctg agggcactgg tccacaatgg gaagatggtc agctctcttc tttttccaga 300
ggcggctcag tggtgatcgt gtcttccata gcagccttca gtccatctcc tgtaagaacc 360
cttttgtcta cctcttccat cccaccctcc actccacatc tttccacccc tcctattacc 420

0956450.0726

caaggaagtt tgtgtcccct tgtagaatca caccaccaag tccctgccca caaaatagat 480
gccttgcctc cacaaaccac aacctagggg aggtttagcc acaagacagt tccctaactc 540
tgcccctccc ttacaggaga tccctattga gcactgccct ctatgtctag ttattagaac 600
caagaatgac ctggaaacta tgagtctaac acattctctt ctttctccag ggcttcagtc 660
cttacaatgt cagtaaaaca gccttgctgg gcctgaccaa gaccctggcc atagagctgg 720
ccccaaggaa cattagggtg aactgcctac acctggactt atcaagacta gcttancngg 780
atggtgaaga aagggagctt tgcatttgac tgggacccct tgnaaggcat tcatcttttt 840
ggacaaggga agcccacta 859

<210> 369
<211> 709
<212> DNA
<213> Homo sapiens

<400> 369
acttccgctg tcccgcgaag ggcgggggga gcgaactgtt gtggtgcgga gcgttcggcg 60
ggcggcggcc gggcggccca ggggctgccg cgggactcgg ggcgcagccg agtggctgca 120
ggggtggagt gggccggacg agccgcgggg cccgggtgcc gcgggttcga ggccgggccc 180
cgcgcgagga ggccgcgcca ccccgggggа gctgcccggc agcgagtttg ccccgctgcc 240
gaaagaaggc gggagccggc aggggccttc gaaacccccc ggcaacccag gcccggagtc 300
cttggggagc ggctgtttcc tgggacgccc tcccggacac ccccgctgca gggttacggt 360
tctgggcccc cggcagaagg ctcctccggg tgacccccgg cggggccctg cgagccgcgg 420
gagccgaccc cggggcctcg agccgggagg aagggggctt ccggaggcgg agggccgggg 480
gccgagggag ccgggcctct cggacgcggg gcagggcagc gcccgggctg gagacggact 540
ctgggaccct cggctgcggg ggtctcagcg acctgcccgc ggcaagcgcg gccgcggagt 600
ggctaccggg gacccttccc caganggacc ggcccggggc cggggagatg aacggnttca 660
agcaccggaa ggangacaag cccgcgaaag ggcccccccgg cggccccaa 709

<210> 370
<211> 792
<212> DNA
<213> Homo sapiens

<400> 370
aatggagtgg ttatctttgg aaaataaact gtaacacttg gagcaacagt cctgagtgga 60
gaaggtgagc cccgggacct gccaggagac tgtgtcttga ctatccccat cagagatgca 120
ttttctgcta tgtcacatcc catccgttag aatcttccgg atactatatc tcatagttga 180
tggtctcttg aattcagcaa tttcatatct aaagagattc ttgaagacac catgttgtac 240
accttaaata tatatacaat ttttatttgt taattaaaaa ataaataagt gaggccagag 300
tgctgggatt gcaggcgtga gccaccatgc ctggccgatt ttttatttta acgttttgtt 360
ttatcttact gtttttcctt aggtgagaaa aatgtaccct tccatgcctg tgctttctag 420
attttgggac tgatacagat ccacagaggc cacacctaaa attaaattat cgttagtgct 480
aaaacttaat tgactgtgta tataactgtg caattgctgt tactgatata actgtttggg 540
gttcattcaa cagattaaag aagcaaggtc ttgcatttaa cacacaaact aatgagatac 600
tgctttatac aagaatttta aaaacactgt catatggttt aagtgtaagt taatgtcatg 660
cttatgtcat ataacatagc atgttagagt tctctagagg gacagaacta acaggatata 720
tgtacataag aaagggagtt gattggcccg gtgtggcggc ttatgcctgt aatnccanca 780
ctttgggang cc 792

0950204 0950204 0950204

0502045.00700

<210> 371
<211> 827
<212> DNA
<213> Homo sapiens

<400> 371
tagcactgat tttttaaaac tatggtgact gtattcatat tagacaaagt agaaattaga 60
acaaagaata ttaccaggga taaatagagt tgtttcataa tgataaagtg gtgaactcat 120
caagaataaa tgatcttaaa tgtttatgca cctagtaaaa taatttcagt atacatggga 180
agaaatagac aaattcacaa ttgtggtcag atttcagcac ccttccttca atagataata 240
gatcaagtag ttggaaaacc aagaaggcta tagaagactt gaacagtgct atcaaccaca 300
ttgacttaat tggcgtttat agaacgctac tcaacagcaa actgcacact ttttccaagc 360
atagccagaa catttttcaa gatagaccat attctgggtg ggaaaataag tcaattaatt 420
ctgaaggatt taaatcatac aaagagtgtt cactgaccat aatggaatta aattagaaag 480
gaatctggaa aaatatcttg taactgaaca tcacacttcc aaataaccca ggggcacatc 540
ctgagacatt aaaaacatct taacaaattt aaaagaatag aaaccataca aaatactttc 600
tgagactaca gaattaaact aaaagttaat actgaaaaag tgctggaaat tttccaaata 660
tttggaaatt aaacagtatg cttctaaata acccatggat caaaggaaaa atctcaagaa 720
aaaatggtta aatatttttt aattttaatg gaaaattccg gnttatggaa accntggtgg 780
gatcaagctg gaaacagggc ttcaaaaatt gggagcattt ngatgga 827

<210> 372
<211> 894
<212> DNA
<213> Homo sapiens

<400> 372
tttcaaagac ataaactcct gctgcccaca ggaagcaaca atgcaagaac aagatatgcc 60
attcttgcga ggagggccag gcatgtacaa ggtagtgaag acgggaccct caggtcacaa 120
catcagaagc tgccctaacc ttagaggtat cccaattgga atgttagttc tgggaaacaa 180
agtcaaagca gtgggagagg taaccaattc tgaagggaca tgggtgcaac tggatcagaa 240
cagcatggta gagttctgtg agagtgatga aggagaggca tggtccttag ctagagacag 300
gggcggaaac cagtacctcc gacatgaaga tgaacaagct cttctggatc agaattctca 360
aactcctcct ccaagccctt tctcagtgca agcttttaat aaaggggcaa gttgcagtgc 420
ccaaggattt gattatggac tcggaaatag caaagttttg actgttttac ccactgcagg 480
tgaccaactg agtgccatat tgaattccat tcagtcacga cccaatctcc cagctccttc 540
catctttgat caagctgcaa aacctccctc ttccctagta cacagcccat ttgtgttcgg 600
acagcccctt tccttccagc agcctcagct tcagagtgat cgaggaaaca tctcaacatc 660
ttctaaacca gcctctacat caggaaaatc agagctgtcc tctaaacaca gcagatcgct 720
ttaaacctga tggacgtatg aacccggact actgnttgat cagaagaagc ttaggggcac 780
cagaaagttt atctgctagt gaatccctta tcttaaaatc tgatgctgca aaagttgang 840
gcagattncc acagtaggtc antattcccc aacattacac cttgcagaca tttg 894

<210> 373
<211> 795
<212> DNA
<213> Homo sapiens

<400> 373
aagaagatga agaaggaaac caggtgaact cagcaaggca gactggctgc ttacttcagc 60
actattggaa ttatttcccg ctgttgccaa tggaaatcaa agaaaatgga tgtgacgtct 120
gtgcaggtgg acggcagtcc gaggggctta tttcacttgc ttctcagtgc aacttgatag 180
gagaatccag catcttaaag ttgcatatgt gtagcactaa tgtttctttt taaatagttg 240
ggggaaaatg acctagaaaa ccaaattgca gtttggtagc caaaattaac tcttggttta 300
tttgtccttt gtgtgtgaaa agtcctacta ttccgtgcgt cagacttcct cacagaactg 360
ttgactggtt ttggttctta gtactattga gatctttcgc gtcgatccca acggccttag 420
cggcggcaga ctggaataac accttacacc tttctggcct gcatttctgt agacttcact 480
ctcaagggag gagttttctt ttcttacgtt ttgacttttg cacaccatat gcactaggga 540
ttctggaaac ttctagcatg actgcaaagt ggccaagaga ataaagtcct tgatgataaa 600
tcacagtata tcccttgagc ctcaccttat tgccagtgct agatttttc tttttaatct 660
ctccgttttt gctaacgaaa acttgaaaag cttatttgga agcttaaatg ntttatcttt 720
tctccatgga ctaaacctct tcaggactct ntcgcacctg gatgtccagc tctngaacac 780
cagtcagatg ggcat 795

<210> 374
<211> 725
<212> DNA
<213> Homo sapiens

<400> 374
ataaagaagg aaaatttgtg attcactacc ccgaggaaga ccaaagtgtt aactggttat 60
tttcttcctt tgaatgtata ctttcatacc ttcctttaat gagattgaac tcttggccag 120
gcatggtggt cagtactttg ggaggagtaa tcccagcact ttgggagggt aaggcaggag 180
gattgcttga gcccaggagt tcaagaccac cttcagcaac aaagtaagac tccatctcta 240
caaagaaaag aaaaaattag gtgggtgtgg tggtacactt gtggttccag atggtgggag 300
gctgagacgg gaggatcact tgattccagg agtttaaggc tgcagtggtt tgtgttcgtg 360
gcactgcact ccagcctggg tggcagagca agaccctgtc tcaagaaaaa agaaattgaa 420
ctctccccaa aaatgatgtg agaatttaac tgtggaggag accagatact cttgggtgat 480
gtgacctgtg atacttctcc tagtagacac tgaatgatga gaagctgggg atcataggaa 540
tagctgtatt tttcaaatgt ttgttggtaa cgagtgagga acctgatgca tccagctcca 600
gagtaaggnt tatttgccat ggtaacactg gataagtaca ttggtgcctg natttccaag 660
taatttatca tttctgnatt ttagtaaaca tacatatata cagaaaagtg cacaaataan 720
tggac 725

<210> 375
<211> 747
<212> DNA
<213> Homo sapiens

<400> 375
aaaaaaaaaa aaagtttcca tttctttcaa atagagttgc tgcctgctat atgcaagaag 60
attggttcca gtacaccctg agtataccta aatccacaga tgccagctct tttataaaat 120
ggaatattcg catgtaccta cccacattct cctgtatact ctataaatgt ctagattaat 180
taaaatatct catgcattgt aaaagctgtg tacatagttg tattgtttag ggaatcataa 240
gaaaaaaaat ctatatgtgt tcagtacaga cccaaccatt gcaggcctat ctacatcgta 300

US005955600A

tatatcacct ataatgttac agtttcttgt ttcaatactc agattacttt tgtctaatga 360
cctgaaagaa tgtgttaaca ccaaccgcaa ttctggttct tctctcttga taacccaagt 420
attacgatgg ttatgacaat gatgattgct gtatggtgcc taatgtgatg tgtagaggtg 480
actagatgtg tggcatcata gataaacagt gagacctcag gctaacttga atcttgacag 540
gacatcaaga ccttcatcta tgttggaaga cccaggttct gattgaagat gttgactctt 600
tgcaggaggc taatactaat gtcagcatct gttcagcttg agggctgaag atgtttgtgt 660
tgaanggtat gtcttcatat ttgcagatat ttagttagaa acattggttt angaagctag 720
ntctttttct ttgaatccct aaaaaaa 747

<210> 376
<211> 820
<212> DNA
<213> Homo sapiens

<400> 376
cgctttctgt cagcctctct ccctctccct ctcccctctc cttcctctcg cttcctctct 60
cgcacctgag cgtacgcacc tgcccgggcc cggctcctc ctcctctccc ctccctcttt 120
ccccgcccgg ccgcgggagc ctcgtggctg cgtcaccgcc gccccccag acaagatgga 180
caccgcggag gaagacatat gtagagtgtg tcggtcagaa ggaacacctg agaaaccgct 240
ttatcatcct tgtgtatgta ctggcagtat taagtttatc catcaagaat gcttagttca 300
atggctgaaa cacagtcgaa aagaatactg tgaattatgc aagcacagat ttgcttttac 360
accaatttat tctccagata tgccttcacg gcttccaatt caagacatat ttgctggact 420
ggttacaagt attggcactg caatacgata ttggtttcat tatacacttg tggcctttgc 480
atggttggga gttgttcctc ttacagcatg ccgcatctac aagtgcttgt ttactggctc 540
cgtgagctca ctactgacgc tgccattaga tatgctgtca acggaaaatt tgttggcaga 600
ttgtttgcag ggttgttttg tggtgacgtg cacactgtgt gcattcatca gcctggtgtg 660
gttgagagag cagatagtcc atgggggagc accaatttgg ttggagcatg ctgcccaccg 720
tcaatgctgc gggcatcacc aaaatgaggc ttcagcagga aggaaatggt gcaanaaaat 780
gttgctgctg atcaagcctg ntaacccacc agctganaac 820

<210> 377
<211> 861
<212> DNA
<213> Homo sapiens

<400> 377
ctagcttaac ttcatttaaa gaataaatta atcgttttta aacttatgcc agcagttgtt 60
aattcccaga tggcaggtga actctctaaa cattttttta aaacttttca tcaaatagta 120
attccatttt aacccaaaaa tagctttttg ttttctttct taaaacatga ccatgatgca 180
tcgtcaatca aaataaactg aagtatttat taattacagc tgtattgatt tctactctaa 240
actgacttcc tccgaaatct agtatgtttc atgtttcaag aattaatttc ttgatggtac 300
tctgctgcac tgtaatttag tcatggtgga ttgagtcacc agatattaag acagtcatga 360
ttgcaaatga cagatggcat ccagtggctc accattgttt gtacctcttg gtacccattt 420
ctctgaagct acaagtacag ccatgaggca gtggtaactg tcttagttgg agtctcagag 480
ctcatgcttc atttattccc aaggcaaggc actaaaaagc catagttgga gctggagcac 540
ttgccaactt gtatttctgc catttagaag gtgctcagtc cctacatcta aaatttgaag 600
ggaaaggaaa tcttccatat gaatgccact tttcgttatt ttccagacca tcacatctta 660
cttttccttt cattcaacaa tgataactta ttcgccaaca cttttcaaga atgtgtttac 720

0902045B1.0N2000

atgaaagcag agcaagcatg ttaagagacc cagactgcaa ataactttgg acgggttcag 780
tgtaattcaa agtgagtcat cctgcctcan ttaccgaatg acagctctga tgacagaact 840
tggaaaagct acccngancg g 861

<210> 378
<211> 887
<212> DNA
<213> Homo sapiens

<400> 378
aaaatggacg taagatttta tccacctcca gcccagcccg ccgctgcgcc cgacgctccc 60
tgtctgggac cttctccctg cctggacccc tactattgca acaagtttga cggtgagaac 120
atgtatatga gcatgacaga gccgagccag gactatgtgc cagccagcca gtcctaccct 180
ggtccaagcc tggaaagtga agacttcaac attccaccaa ttactcctcc ttccctccca 240
gaccactcgc tggtgcacct aactgccatg catcctagtc tccccaggaa catagccccc 300
aagccgaata accaaatgcc agtgactgtc tctatagcaa acatggctgt gtcccctcct 360
cctcccctcc agatcagccc gcctcttcac cagcatctca acatgcagca gcaccagccg 420
ctcaccatgc agcagcccct tgggaaccag ctccccatgc aggtccagtc tgccttacac 480
tcacccacca tgcagcaagg atttactctt caacccgact atcagactat tatcaatcct 540
acatctacag ctgcacaagt tgtcacccag gcaatggagt atgtgcgttc ggggtgcaga 600
aatcctcccc cacaaccggt ggactggaat aacgactact gcagtagtgg gggcatgcag 660
agggacaaag cactgtacct tacttgagaa tctgaacacc tcttctttcc actgaggaat 720
tcaaggaagt ggtttcacca tggattgctt tgtacagtca aggcagttct ccattttatt 780
agaaaaatca agntgctaag cactttagga ccatttgagc tttgggggtc acccacttct 840
gggaagaaat agtcatgctt ctttaataat tttttnaanc ctttaag 887

<210> 379
<211> 862
<212> DNA
<213> Homo sapiens

<400> 379
atgtaaattt tcccattgtt cttaagcaag tcattaaaat taaatataac tatgaatgga 60
gagtgtttta ttctttcaat tacatagggt ttgtgaagag tcattctttg tctacttata 120
tttaatcaac atgcaatatt ttatgtgcct tattaccatg tgttaagaag gtaatattca 180
cgttacctag ctatttttta cattagccaa aaaaatatgg ttatgtgcaa atattgtgaa 240
gaacatgcat gcaagtagtt tgcttattaa ccaggtttgg tgtcagccac acacttataa 300
agctaataat tgctagctat taatattata actttagttc aaatattact gatgtctgtt 360
cttctaagac tgaatgttaa gattagaatt tagaatttag tacaagtatg tataaatcat 420
ttcaacagaa aaaaatgaat gcaaatcagg aaccagctgg aggcagattt gcatgattat 480
tttaatgctg tgacaggacg tgaacactca gaaattcgaa ttaggatgct tatttctcat 540
atctacaatg agcactgagt ctctcttatg atgtggccag ctatcaccct gtgttatcag 600
caaaccctac taatagaaat ttgagagtct aatatcaaac ttactcttcc tatttgnttt 660
ctctgagccc tgggttagaa gactgatatg aaataagcat ttttactata ctgagctatc 720
cgtatcattt cattattggt gttgcttaga aattctncac aggntttcaa aagataaatc 780
atgccatttg attatcagca ccatttggcc aatcagcacc caaatcaatg gactcttgcc 840
tggcagccct nttaaaaaaa tn 862

0005705-0005750

<210> 380
<211> 581
<212> DNA
<213> Homo sapiens

<400> 380
ggatccacgg ncgcacagct aaacagcaac cccctacccg cttcgtctcc ctccgccgct 60
atcggggcct aagcgggagc ggctggcacg gcgtcactgg gtgggctggg gcggaagtgg 120
aggcggaggg agacggtggc agtcgtccgc ggggccctgg gctctcgcgg cgaggccctg 180
gtgggcgcga ggcatngggg agggggagga ggaggagccc gcggcccggg cggcggcggc 240
tctcgggttc tccgtagggc cccgcctcgg agcgggcggc ggcggaggag gagactgagg 300
agcaggatgg cggnctcggn cctgtacgcc tgcaccaagt gtacccagcg ttatcctttc 360
gaggagctct cccagggcca gcagctctgc aaggtccgtg ggctccggga ggcgggcggg 420
atgggtgtcc tcggccgtag ccggaggggg ccgggtagcc gctgcactgc agcccctctt 480
cgccggcgcc tcaggggttt gggagtctgg agccctcgnc ttcccactcg gggacccctt 540
tttctggggg ctngaacatt anctgggaac ggaccctgaa a 581

<210> 381
<211> 673
<212> DNA
<213> Homo sapiens

<400> 381
tcttcttagt cactacttcc cacagagtta accattgcca agattagctt taatctttaa 60
aaataacctg agattagctt tgcctgttct gaaaatttac atgcatttaa ttagacgata 120
tgcattattt ggagtttggg agtcttcagt tattgtgtat agcagggcg ggtttgttct 180
cattgctgta tattttactg tacaaccgtg ccactcagtt attcatttta ctgatgacag 240
agacttaatt ggttccagtt tgggactctt aggaatagtg ctgctgtgaa catttggcga 300
tgtgtccctt gatgtacata tttgtgtatt tctggtgggt atatactgag gaatggtatg 360
tgtatggtca tagggcatat gtaccatcag ctttagtacc agtagatact gccaaacgat 420
tgtccatatt gagcatcttc ttaatgcttt ttttgtgggg gtgaaggggg cagagtttca 480
ctcttattgc acaggctgga gtgcaatggc acgatttctg ctcactgcaa cctccgcctc 540
ctgggttcaa gcaattctcc tgcctcagcc tcctgagtag ctgggattac aggcatgtgc 600
caccacacct ggctaatttt atatttttag tagagacagg gtttctccat gntgatcang 660
ctggncttga act 673

<210> 382
<211> 858
<212> DNA
<213> Homo sapiens

<400> 382
attactttcc ttcccattgt caataatgac ttctttatgt cttaggctgt attataaatt 60
caaacacagg aatgttattc ttgccttttt ccatcagaat tacctaaagt tttattagac 120
tttcccccta cttgcaaatc tgcctggagg ttctggtctt taggaagtag cacttagcaa 180
gttctggata agcactccag aatttgggat gagttatcct tgttgtttgt ccagctctat 240
cttggacccc agtgctgcta attagattca tgccttgttc tttagggcat aagttcctct 300
cttggctatt tttcctagta tgctgagaac taggattccc tttcagtgac agagtcctgc 360

cctggaaccc caatcaagag cctaaagttt aactactctc tgagatatta gcctgatgcc 420
agcagcctgc ctggatctct aaatattacc cattctggga gttgttagtg gtctctgctt 480
tcctgcagtg tcactcctgc ttcctcattg ggcctgctag ccacagctac ttggatgtac 540
ccgaacctgt tgccttgccc tacctctgtg ggctggttca gttctgcatt cccattccag 600
tgtccactgc cttctcgcta tccctcccat ctgtgcgcca ccaccagctt atccccagcc 660
ctgctaacat gacaaactat tgtgcatttg agtgcccact atacaatgtg tgaatataac 720
cgtgcttgta agcattgact ttaatgtctg ggatgatccg ctagagtcca tggnaccctn 780
ctgnggtttt tcatcccttt cttaagtaat cttgggaaat cccttatgaa atctttttct 840
aacatttctt tgctgaac 858

<210> 383
<211> 767
<212> DNA
<213> Homo sapiens

<400> 383
gattcctgcg gacccagctg tggcgacgcc aggagacccc aagctgcatc gccgagtgga 60
agcaactaga actccagggc tgtgaaagcc acaggtgggg gctgagcgag gcgtggcctc 120
aggagcggag gacccccca ctctccctcg agcgccgcag tccaccgtag cgggtggagc 180
ccgccttggt gcgcagttgg aaaacctcgg agccccgctg gatctcctgg ctgccacccg 240
cacccccgc cagcctacgg tgcgcccgcg ggcccagctt ctctctgcgc tgctccccgt 300
taaattccct ggggagacgg aagaaaaggc aaaggaagtc ggttctccag gggccagaag 360
tgttgagcct aattagtctt cagacttctc aatgaggaat cgcttatcag tttcttatct 420
gggagagttg aggatggagg gacagaaggc acccaggatt tgcacggggg ggattcaggg 480
agagagggtg atgagggacg gggtgggcct tccagtcttg gcccagtccc catcttgcac 540
acattgttgg cttcctctta gagccgttcg ccccccctggg gaggggagac ccatagtgac 600
ctctcctgac acccgccgac cctgaccagt gttgccgggt tcttcaaagg ccacgctctg 660
acttgctggt ctgtgtcacc tgcacccccc agccccaccg tanaagatgc cttctttggt 720
gacggcgctg ggtcangcca ggtcctttgg ccccgggatg gccccna 767

<210> 384
<211> 779
<212> DNA
<213> Homo sapiens

<400> 384
ataaggtata aggaaggggt ccagtttcaa ttatctgcat atggctagcc agctctccca 60
gcatcattta ctaaatagaa aatcctttcc ccattgcttg tttttgtcag ggttgttgaa 120
gatcagatgg ttttaggtgt gtggtcttat ttctgagttc tctattctgt tccattggtc 180
tatgtgcatg tttttgtacc agtaccatgc tgctttggtt actgtagcct tgtaatatag 240
tttgaagtca ggtagggtga tgcctccagc tttgttcttt tttgctgagg attgccttgg 300
atattcaggc tctttttggt tccatatgaa ttttaaaata gttttttttcc taattctatg 360
aagaatgtca atagtagttt aatgggaata gcactgaatc tataaattac tttgggcagt 420
atggccattt tcacaatatt gattcttcct atccatgagc atggaatgtt tttccatttg 480
tttgtgtctt ctctgatttc cttgagcagt ggtttgtggt tctcctcaaa aaggtccttt 540
gcttcccttg ttagttttat tcctaggtat tttattctct ttgtagcaat tatgaatgtg 600
agtttattca tgatttggct ctatgcttgc atgctggtgg tgtataggaa tgctagtgat 660
ttttgcacat tgattttata tncccagctt tgctgaagtt gcttatcagc ttaanaactt 720

0502703.0702

ttgcactgag acaatggagt tttctaggnc aggatcatgg catctgcaac caagataat 779

<210> 385
<211> 715
<212> DNA
<213> Homo sapiens

<400> 385
aagtccccta tacccaaata tggtttaggc ttgattgaaa acttagcttg ggcatttttc 60
tttaaacata acgttttgtt tagcaaaagg aaacttgttc ttttttggtt catggttttc 120
ttactgaaga ttctactact tatttgaggc taaactgtag ctagtatctt tgagctttc 180
ttgaaggagt ttgaagttca ctattagtga tttgggcttt tggaccatgt ctataagtga 240
catgggaccg gctgtcactg acaggaccct tccagggagg ctgtgtaaca cccacgggcc 300
cctgacagta actctgtgca gtgagtgggt gggggcctct cacagtggct gggaaccagc 360
cagagcaggg atgagggagc agactgtctg ggccccaggg cagactgaaa aggatggaga 420
gaaaccccag gatggggtcc tcctccttat gtgtttttaa gttgatgttt ggcttggctg 480
ggtttccgta ataaaaatcc ttggagtgca gggctagtcc tgctggcccc agcagaaagt 540
cgaggacttc ctagatgtct gtggtgcaac agggcaggat ggggccgtgt tagcgctccc 600
aggagacatt aggaggcaca ggcatgggtg ggtgcatcct tttcctcaac tggatctgaa 660
gactncaccc aacccttnaa gaagatggaa atgcagttgc ccagaaaccg nactt 715

<210> 386
<211> 747
<212> DNA
<213> Homo sapiens

<400> 386
ccaggcatta aatatatgat ataatatgca tgtgtgttat ttttgtaagt ggattcttag 60
aaaatataat gttctgtttc tggtttttca cttaacagta ttgtaggtac cttctctgcc 120
ttaatgcgta caaatctgct ctacccccctc cctgcataag cattctgata catgactctt 180
gtaattttaa tgtagctttc tgttggtaga tctatatatt ttccttttt ttttttttg 240
ttaggaaaat atattgtgat agcgtggggg taagttgcat gttacatact atgtttttga 300
acacttacaa agtttctaaa agtaaattcc tagaaatgtt atagctcttt ctggggagca 360
agcagggatt cagaataatc cccatatttc attttgttcg tttgttttaa tttgttatca 420
tacagtgtta tcggcaattg aaatacaaat attgtgtgaa ctttgaagaa aatattttta 480
tttgttcatt ccccttagca gagttgctga gtctcattcc taatttgagg cctagacttt 540
tgggaaaaca cagaggacgt ccacctttta gagaacagtg ataacttacc aatgggggtt 600
tgccggttgg gagttattct ggtatgcata atgcatacag gccacttgaa ggtagaaggc 660
aactattctt ttttctttgc ttctggtggn ttttggttgg tngntggttg gctggttggt 720
tgaagatttg ggggaagtta tccagga 747

<210> 387
<211> 812
<212> DNA
<213> Homo sapiens

<400> 387
acttaaagta catatatcta ttgataaggc agcaatacaa gaattgaata gatgtgtggc 60

0950450.0020000

agagagaaga gaagaacagc tctttagatc tggtgaagat gatgaggtca agaggagtac 120
tccagagaag aatggaaaag aaatgttgga gcagacatta cagaaggtca ctgagttgga 180
aaatcagctg aaatcttttg agaaaaggtc gagaaaatta aaagaaggga ataaaaaatt 240
aatgaaagaa aatgattttc tgaaatccct cttaaaacag caacaagaag atacagagac 300
cagagaaaaa gagctagaac agataataaa ggggagtaaa gatgtagaaa aagaaaatac 360
tgaacttcaa gtaaaaatca gtgagctgga gacagaagtc acttccctga ggagacaagt 420
ggcagaagct aatgcattga gaaatgaaaa tgaagagctg atcaacccaa tggagaaatc 480
acaccagtca gcagacagag ctaaatccga gatggccacc atgaaagtga gatctggacg 540
atatgattgt aagacaacta tgaccaaggt taaatttaaa gctgcgaaga aaaattgctc 600
tgtgggtcgt caccacactg ttctcaatca ttccatcaag gttatgagca atgtgtttga 660
gaacctcagc aaggacggct gggangatgt gagtgaaagc agtgattctt gaagcacaga 720
cctcttcaaa ctttgggaac cattatttgt aggaaaccat tcccagaaaa ataaggtcct 780
taccggaagg aatgggaaaa nganccenga aa 812

<210> 388
<211> 890
<212> DNA
<213> Homo sapiens

<400> 388
aggttcgaat ctccgccgct tcgcggttgc ttctcaacgt ccgggccgca tctcggcggc 60
ggcgagggct gagcgcggga gctgcctccg agccggagcc ccagccctag gccctgcgcg 120
agctgccccg ccctaccccc tccagcgtcc tgtcgcctcc tcgcccgact tcggcctgtc 180
cctctctcgc gcgctcagtc ctcgctcttc gccccccgca gctatcggca ctcggtctcc 240
cgcgcctggc gggctccgcc cgagcctctg ggcccatggc caagcggcgt gcggccgagc 300
cggtgacgtt ccacgtgcct tggaagcggc tcctgctttg cgacttcgct gagcagccgc 360
cgccaccgcc tctctggatc cggccgcccg gggtcgcgca tgctgggcag ctcctcggcg 420
tcccagagca gcaccgaaag cgcaaaatcg acgcagggac catggcagag ccctcggctt 480
cgcccagcaa gcgccgtgac agcggggaca acagcgcccc gagcggccag gagcgtgagg 540
accacggtct ggagacaggc gatccgccgc tgccgccgcc gnccgtactg ccggggccgg 600
gggaggagct cccgggcgcc cggctcccgg ggggcggtgg cgacgacggg gcggggcgcg 660
cangaccccc gcggggagaa ctgggggggtc gcatcgtgcc aagcacaatg aagaattttg 720
ggcagtatta ataccttnca atacttggaa ggaaatcctt ttggccttcc taattggatc 780
ttgggcaaga catttggaag aatttnaagg tggaaagacc acccccttgac aggaaagcca 840
accactttta aggggcaang ggaaatgnaa agggggcctt gaagggttga 890

<210> 389
<211> 624
<212> DNA
<213> Homo sapiens

<400> 389
agtacttcct gttctcggct aaccctggcg ctgggccggg ggctggagag tgaccgtggt 60
ctgagtgacc tgggacggct gcgtgggccg gggtgggcct caaagccggg caccagacgg 120
gaggggcggc gctcgggccg cgcgctgccc gcgccgggtc ctggcgggcg gcgaggctgg 180
ggctgactcc tgcctcagga tgccgggggga ggaagaggag cgggccttcc tggtggcccg 240
cgaggagctg gcgagcgccc tgaggaggga ttccgggcag gcgttttccc tggagcagct 300
ccggccgcta ctagccagct ctctgccgct agccgcccgc tacctgcagc tggacgccgc 360

0050-0050-0050

acgccttgtc cgctgcaacg ctcatgggga gccccgaaac tacctcaaca ccctgcccac 420
cccttcctgg gatgggccag acaagcagag cctggtcagg cggcttttgg cagtctacgc 480
actccccagc tggggccggg cagagctggc actgtcactg ctgcaggaga cacccaggaa 540
ctatgagttg ggggatgtgg tanaagctgt gaggcacagn caggaccggg ccttctgcgc 600
cgcttgcttg cccangagtg tgcc 624

<210> 390
<211> 590
<212> DNA
<213> Homo sapiens

<400> 390
cttcccgtcc cagcacgcca cgctgtcagc cttcgccgcg gtctatgtgt cgatgtactt 60
caactcggtc atctnggaca ccaccaagct gctgaagccc atcctggtct tcgcctttgc 120
catcgccgcg ggcgtatgcg ggctcacgca gatcacgcag taccgnagcc accctgtgga 180
cgtgtatgcc ggcttcctca tcggggcggg catcgctgcc tacctggcct gccacgcggt 240
gggcaacttc caggccccac ctgcagagaa gcccgcggcc ccggcccccg ccaaggacgc 300
gctgcgggcc ctgacgcagc ggggccacga ctcggtttat cagcagaata agtcggtgag 360
caccgacgag ctggggcccc cagggcggct ggagggcgcg ccccggcccg tggcccgcaa 420
gaagaccccg cgcgccgcca catgaccatc cacgtgccgc tggacgcctc gcgctccaag 480
cagctcatca gcgagtggaa gcagaagagc ctggagggcc gaggnctggg gctgnccgac 540
gacgccagcc ccgggcacct gcgcgcgccc gncgaaccca tggcggagga 590

<210> 391
<211> 788
<212> DNA
<213> Homo sapiens

<400> 391
aagcgtcatt cagtcattcg atgctgcaat acttcaagag ggcggctgtg ggccatgcac 60
caaccccacc cacgttcacc cgggcccttc cagctccaat ccaggggtc tggaggatgc 120
ctgcaatgtc ccctttttaca ctaaagaaaa caagcgccag tcaggtggaa gtggcctcta 180
actagtcact ccgctgggca catggtctct gtagtcagag actccccttt gaccttgccc 240
ttcactttag aaatgcatat cacaggctac ttcatccaga ccagaaagga ctccagtgtt 300
ttcagttggg agaaaaagcc ctcatcagaa atgggatcat tttcctggcc ccatcagccc 360
ttcgaaattt ggcccagctc cctaaaggtg tgtttcagga aagggtgcag gcacgcctgt 420
aacctggccc acacctacaa gcttggggct ccaggctctg aatatctggg gacgtgcagt 480
gtcgggtgac ttcttcgtca ccacgctgtg ttccttctcc gagtgcccac ctactctgtc 540
cagcttaaag gatgaattgc acagatgcaa acatttccca cagaggagag tgaggggcat 600
gccaggatca ctgnaagggt ccctgcagcc aggtttctag ggatcaaggt ctctacagga 660
ctcttccagc aaaagcaggt cccctcgtgg aatgggtctc tgagtgccct ggtgaatata 720
ttctccatgc ctgctttgaa aaaatccctt tggctntctt tggntcatcg ngatgaaacc 780
tcttttaa 788

<210> 392
<211> 859
<212> DNA
<213> Homo sapiens

09/07/2004 09:50:50

<400> 392
aatcatgtta gattttctga gagtgaaaac acctgccatc tacaaattac aaggctggat 60
aacagctcac tccatttgaa attcagtgga aacccaagag ctaggttctt actgaatttg 120
catctcaatt tgggaaactg aacttagctt tcaaagatca taggaagtct ggttggagaa 180
actagggatt attctggcaa tgggtgcagg aaggtggtca gaataaccca gtcgccattg 240
gttttgagaa acggaactat cttatgcaga gcccggaggg caagtctcag acccatgggt 300
tgaagccatg gagaaggaaa tttggatcca atgtaatgaa gcgctttcta agtcagaatt 360
tccctgcaat ggtgtggcct gattcaataa aaattaagaa taataaatat aatggaaaaa 420
aatctccact gattgagtgt ttacttggtg ccaagcacta tgctaagttg ttcattattt 480
tatttaattg ttacagcaat tttgagtatg catctttcac tattttataa gtggaaaaga 540
gaagtgcccc caaaaagtta gagctcaaac agcagcttat tctaccagcc cctgctcttg 600
cggaggcctc tggaaaagac ctgaatgaca cctattggag aatcacatct acaaggggct 660
tcaaacagac caaatagatc atcacctctg tggtcccttg gtaactatat gttctgagac 720
aaaggaaagc tccctaaggg ttagttaacc tttgctgagg aaatttacat tcatacntag 780
agtgaattac tcaggtgtgc cttaggtgtg caaaaaggga aggagancct gaattcacca 840
aggttaaatc ttgctaaan 859

<210> 393
<211> 614
<212> DNA
<213> Homo sapiens

<400> 393
ccctttcacc tccaattccc gtgatcccaa aagaagagga agactccagg aggggtatag 60
attgtgccgt catagcttta caggtggttt taaagttagc aggggtttgt catggtgatt 120
cactactcag tttaccagct caaggattat acagctcttt tccgggaact cacccaggag 180
caagcgagac actaccattg aatcagggaa tgagaattaa gaatggacag gaccaagaca 240
gaactcaaga aagccactgg ggaaaactcg agaagaaagg gtgtatacta gtaggttaga 300
tctgtgaacc tgaggacaag aagaccttgg gaaatggagg cctcagggga tgtgcattca 360
catactatta cgcttctcaa agagagacca acatcatgct tttaacacat ttgatgaggt 420
tttttatttg tgtttttgtt tgtttttttg agatggagtc tcactctgtg gcccaggctg 480
gagtgcagtg gcgcaatctt ggctcactgc aacctccacc tcccaggttc aggtgattct 540
cctgtctcgg ncttccaagt agctgggact acaggcatga gccatcacac ccagctggnt 600
ttttgngttt ttgg 614

<210> 394
<211> 752
<212> DNA
<213> Homo sapiens

<400> 394
tcacggtttg gcctcggaga ggtccgaggc aagtacattt cttaaaaggt aataaaatgc 60
attattggaa agttggacag tcaggccacg actcctagcc cacggcgtgc cccacctccc 120
agcagcccct tcagcccctt gcccctgttg ccccaaacct cagggttccc tcttgcatat 180
tcatggggga accacagtgc tgatgtgcac ttccccactg tcagctcggc tgcacctcgt 240
gtggcgccag gtcccaaggg cctctgcaga ggccaggctg tgagcccctt gcctgcctgc 300
tcccctgatg aggcaacagc ttctctgaaa tgagctgccg gccaggagca ggcaggcacc 360

0956203.0972800

agcctgtctt tccttttctg gtaattcctc agcactgagg ctccgttcct gggcacccca 420
ggattgaagg gaacctcaga atcatgtcac tgccattcta gagtttcaat ccaaggggtc 480
ccctttagct catctccaag atgggtaaac gtagccacca ttcagaaagc ccagaaattc 540
ttgttcccac atcttagacc cctgagcaac acaaggagaa aatgcagctg cttacctatt 600
aatatctact gagggacaat cagcaaagcc tcaaaggagt cgtctcaggt agggtacttg 660
gcctgtggca ggagagacag aggcacaaac ccacccaccc ataacttccg gtggctgatc 720
ggggcccang gagggaaaca ngtgaaacan ca 752

<210> 395
<211> 685
<212> DNA
<213> Homo sapiens

<400> 395
cttgatgcca tgttaagaat gatgtgaatt cttcccagtt ctgccctggt gctagacatt 60
gccccatact ttcaattaga cactagctgt atctaaatag tcccactcag taaacttaca 120
tcttgaaaaa caagaccagt aagaggccag tgaaagtact aaagaaagaa accaatgttg 180
tgtgagtttc aaagcagctg caatgctgtg taaaagtaga gtgttcattc tccatttcca 240
agagtgtttc agaataggat gtcttaagac ttcagtcatg tcagagattt tttttttag 300
gtgattattg agtttctcct tctcctttaa gtcatcacct tcctttatg aaatgatagt 360
aaggaactcg tctattctga aaggcatttg agaaatagct gaattcctgg ctgctttttt 420
gctgggggta gatggtggaa tacttctggt ctagatataa cttaccacta agaaaccccc 480
agtatgtcac cactgcctaa atctaactag accagggtcc aaatgccatc caggccaggc 540
aggaaatata cctcatgtga aagacagtaa ggagttgtgg gcagtgtaac aaacaggaga 600
gctatgcccc aactaaaagg agcagctgct actgcttant ttcagccagt tgcaacagta 660
tgtgggaatg tangctgcat ggntg 685

<210> 396
<211> 812
<212> DNA
<213> Homo sapiens

<400> 396
aaaattctgg ccatttgccc tccttccccc cttcgtccgc tctcattggc tctgctgcag 60
ccctgaccaa cgctccaata ggccgggatc cagccatact tcaatggatc ccaggggtat 120
cttgaaggca tttcccaagc ggcagaaaat tcatgctgat gcatcatcaa aagtacttgc 180
aaagattcct aggagggaag agggagaaga agcagaagag tggctgagct cccttcgggc 240
ccatgttgtg cgcactggca ttggacgagc ccgggcagaa ctctttgaga agcagattgt 300
tcagcatggc ggccagctat gccctgccca gggcccaggt gtcactcaca ttgtggtgga 360
tgaaggcatg gactatgagc gagccctccg ccttctcaga ctaccccagc tgcccccggg 420
tgctcagctg gtgaagtcag cctggctgag cttgtgcctt caggagagga ggctggtgga 480
tgtagctgga ttcagcatct tcatccccag taggtacttg gaccatccac agcccagcaa 540
ggcagagcag gatgcttcta ttcctcctgg cacccatgag gccctgcttc agacagccct 600
ttctcctcct cctcctccca ccaggcctgt gtctcctccc caaaaggcaa aagaggcacc 660
aaacacccaa gcccagccca tctccgatga tgaaccagtg atggggaaga aacccaggtt 720
agtgcanctg atctggaagc cctcatcant ggccactacc caccttcctt gagggaaatt 780
gggagcctac ccancctgc tgcctggata aa 812

0562345 .0420000

<210> 397
<211> 815
<212> DNA
<213> Homo sapiens

<400> 397
ggaggcaaac aacccatctc tcttggagaa tccacacttc gtttcttcta ggtccagcct 60
aaatgttacc tcctccaggg agcctttcca gatactgctt ctcctctctc ccccaactcc 120
ctcccacaaa tgaagttttc tcttctgaat tccttgctgg tactgtcact tatattcttt 180
tgggtagatc tctgggcatg catatgtcac ctcctgtgac tgtgggtttc ttgacaacct 240
aatcaatgca ttgaacaaag gagatgttta gacaacccat ataaaatgaa taagagaaat 300
agggtgaata ccgtctaccc caattgcaat cagattagtt tcctttattt tgaaaacgat 360
tagaactagt agaggagtta gatgtggccc actagggaac aaattttcat ctccaagccg 420
tcctctggct cgatcgggtc tgcactgggt ctgcatcaac ttgcgctggc tcagagggag 480
gctcagcccc agcctggcct tcctggtgcc cactcccaac atcctgagca gggccgactc 540
taggcacccc acgattagct gagtgatcta gggcaaggac ctaggcgtct ctaagtctta 600
gtttccccat ctgaacaatg tggataatga cacgtacctg gggtgggcag gctagagtaa 660
atgggaaaat caaagcgcca gccagagcgg gtcgcactgt tagttcctgt attttctcct 720
cctgcctctg gtttcttccg tccgntctag ctgcctgaag acccagcccg acagcgatgc 780
ctgtcaancc cgcgtcgccc accanggcag ctgct 815

<210> 398
<211> 840
<212> DNA
<213> Homo sapiens

<400> 398
ttgttgttgt tgttttgaga cagggtctca ctttgtcacc caggctggag tatagtggca 60
caaacatggc tcactgcagc ctcgacctcc tgggctcaag cagtcctcct gcttcagccc 120
cacaagtagc tgggactaca ggcacacacc accacgccca cctctacaaa aaattgtaaa 180
aatgagccag gcatgtggtg gtgtatgcct acgatcctag ctactcagga ggctgaagtg 240
ggagaatttt ttgagcccag gaggtggagg ctgcagtggg ccataatggc aacactgcgc 300
tccagcctgg cagacagagg gaagatatgt ttgacatagt ttagatattt gtccccaccc 360
aaatccatgt tgaaatgtaa tccccaatgt tggaggtggg gcctagtggg aggtgtttgt 420
catgggggcg gatccctcat ggcttggtgc tgtccttgtg atagtgagtt cacttcatgt 480
gagatctggt taaagtgtgt ggcaccttcg cctaccccca cttgttccca ccaagtgaga 540
ttcctgctcc tgcttaccct tctgccatgt ttcttgaggc ctccagaagc caagcagatg 600
ccagctccat gctccctgta cagcctacag aagcatgagc cagttaaacc tctcttcttt 660
ataaattacc caagtcctga gtatttcttt atagcaatgc gagaacggnc tacacaaggn 720
tctagtaggg agaaactagc angtaaatgg atcccagaca gcactcttac atttttaatt 780
acaggtccct ttgagtagac caaactttaa gaatagggga aatcattacc tatnaattgn 840

<210> 399
<211> 830
<212> DNA
<213> Homo sapiens

<400> 399

0950350 : 0420000

gacagagatt gaactcagct atgcaaagca actcaggaat ctttcaaaga agtaccaacc 60
taaaaagaac tcgaaggagg aagaagaata caagtatacg tcatgtaaag ctttcatttc 120
caacctgaac gaaatgaatg attacgcagg gcagcatgaa gttatctccg agaacatggc 180
atcacagatc attgtggact tggcacgcta tgttcaggaa ctgaaacagg agaggaaatc 240
aaactttcac gatggccgta aagcacagca gcacatcgag acttgctgga agcagcttga 300
atctagtaaa aggcgatttg aacgcgattg caaagaggcg gacagggcgc agcagtactt 360
tgagaaaatg gacgctgaca tcaatgtcac aaaagcggat gttgaaaagg cccgacaaca 420
agctcaaata cgtcaccaaa tggcagagga cagcaaagca gattactcat ccattctcca 480
gaaattcaac catgagcagc atgaatatta ccatactcac atccccaaca tcttccagaa 540
aatacaagag atggaggaaa ggaggattgt gagaatggga gagtccatga agacatatgc 600
agaggttgat cggcaggtga tcccaatcat tgggaagtgc ctggatggaa tagtaaaagc 660
agccgaatca attgatcaga aaaatgattc acagctggta atagaagctt ataaatcagg 720
gttttgagcc ttctggagac attgaatttg aggattacac tcagccaatg aagccactgn 780
gtcanataca gcctttcaaa ttcngaggag aagcaaccag acttaaattg 830

<210> 400
<211> 850
<212> DNA
<213> Homo sapiens

<400> 400
taaagaactg cataggtgat ttcctaaaaa ctttggaaga cccagatttg aatgtgagaa 60
gagtagcctt ggtcacattt aattcagcag cacataacaa gccatcatta ataagggatc 120
tattggatac tgttcttcca catctttaca atgaaacaaa agttagaaag gagcttataa 180
gagaggtaga aatgggtcca tttaaacata cggttgatga tggtctggat attagaaagg 240
cagcatttga gtgtatgtac acacttctag acagttgtct tgatagactt gatatctttg 300
aatttctaaa tcatgttgaa gatggtttga aggaccatta tgatattaag atgctgacat 360
ttttaatgtt ggtgagactg tctacccttt gtccaagtgc agtactgcag aggttggacc 420
gacttgttga gccattacgt acaacatgta caactaaggt aaaggcaaac tcagtaaagc 480
aggagtttga aaaacaagat gaattaaagc gatctgccat gagagcagta gcagcactgc 540
taaccattcc agaagcagag aagagtccac tgatgagtga attccagtca cagatcagtt 600
ctaaccctga gctggcggct atctttgaaa gtatccagaa agattcatca tctactaact 660
tggaatcaat ggacactagt tagatgtttg gtcaccatgg ggaccattac atatgaccat 720
acaatgcact gaattgacag gttaatcata agacatggaa agagaagtgt ctaaaagctt 780
caaaatggtc actttttttc cttctggaga ctgttggttg gctttcttca ttgtggtttg 840
nacattaatt 850

<210> 401
<211> 730
<212> DNA
<213> Homo sapiens

<400> 401
tactggccat tgctgcctgg ctacccgggg aggaggaggc gcaggagtga gctgcccgag 60
accgcagggc aagtaagcgg ctgacggcgg aaagaccctg gggaaggggc tttgcggccg 120
gctagaaaca ttttccccaa gcggctccgc aaaatgacca gcctgttccg ccggagcagc 180
agcggcagcg gcgggggtgg caccgccggg gcacgcgggg gcgggggagg cacggccgcc 240
ccccaggagc tcaacaacag ccggcctgcc cgccaggtgc gccgcctgga gctcaaccag 300

0062/0450 0062/0450

gccatggacg acttcaagac catgttcccc aacatggatt acgacatcat cgaatgcgtg 360
ctgcgcgcca acagcggcgc tgtggacgcc accatcgacc agctgctgca gatgaacctg 420
gagggcggtg gcagcagcgg cggcgtctat gaggacagct ccgactcgga ggacagcatc 480
cccccggaga tcttggaaag gactttggaa cctgatagct cggatgaaga gcccccacct 540
gtgtactccc cgccagccta ccacatgcac gtgttcgacc ggccctaccc tctggctccc 600
ccgactccgc ctccccgtat cgacgcgctg ggctctggag cccctacaag ccagagacgc 660
tatcggaact ggaacccacc actggntggg caaccttncg gatgactttc ttccgcatnc 720
tggcccagca 730

<210> 402
<211> 795
<212> DNA
<213> Homo sapiens

<400> 402
ggacaatgtt gaatgaatgt ctggctcagt gatggagagc caggttcatc tttgaaatct 60
agggctcttc actcatgaag cagactccta gtcctggagt gactgtgtac gagagcgtgg 120
ttgtggtgct gtatgtgaac gcatgcaagc ttgattcacc ttcaggggggc tgataaccta 180
gtaaatcatc aaaatgagat cataagtgtt aatgtacact ggacatgaaa acaaagactg 240
gtttagcagc agacattggt ttactctgca gcctgtgttt tctgtttccc cctttcccac 300
ctccttcccc ccacccaatc ctttttttt ttctttttg cttttctttt ctttttttt 360
agtttttatt tactttacct agtatgcctt tttttagttg cttctcaagt cagaaaactt 420
ttcaggaagg tttccctgtg catttgcacc agatgaatgt ttgatgctat gaaaagcttt 480
ccatatcatc aaaactaatt tgtgtagatt tttgcatgaa aaaaatcata aatttccctc 540
aaaatagact gtgttgcagt acacaagttg ccataatagt ataaaacagt aaaatgtgct 600
taaaaggcca ccctttttcat tttcagagat aacataaaga tctttgcatg aggtaaatct 660
acagcatagt tcatttttag attttgttga gtcctgtaaa gaagaagaag aaaaaagttt 720
cagttgnggt anaataccgt gctgngttta aatggtactt ggtttcaaac tttggtttct 780
atgaaaatga tatgg 795

<210> 403
<211> 853
<212> DNA
<213> Homo sapiens

<400> 403
acttttgct tcaaaggaca ctagcaataa agcgaaaagg caattaaaag agctggaaaa 60
atatttgtaa accatatatc aggtaacagt ctagtattca gaatagataa ggaactctta 120
aaactgacca ataaaaagat aaaccattta aaaaatgaac aaaaaattta atagacattt 180
gccttagtct gttggaactg ctattacaaa ctaccataga ctaggtagct tgtagtaaca 240
gatttatttc tcacagttct ggagactggg aattcctata tcaaagtgcc agcagatttg 300
gtgtctggtg agggccttct tccaggttca cagatagtgt cttactaagt tctcacatga 360
tagaagaagt aggggtgcta tccagagtct cttttataac agcactaatt ccattcataa 420
ggactctgcc ctcatggcct tatcacctac caaagtgccc acttcctaat gccagcacat 480
tggagattag tatttcaaca tatgaatttt gggggataca tattcaatcc atagcctgcc 540
acccttgcc tcccaaaatt tatgtttttc tcacaagcaa aagacattgc atcccaacag 600
tcctcaaaat cttgattcat tccagcatca acctaaaatt taaaacccac agtctcacct 660
aaatatcatc taaatcagat atgggtgaga ctcaagatat gattcatctt gaggcaaatt 720

0305045.00500

gtccctagct gtgacactgt gaaaccaaat aagccatatg cttncaaaat acagtggtgg 780
gacagggata gaatagcata tccattncaa aagggagaaa tacaaagaag aaaaggtanc 840
aaatccctgt agt 853

<210> 404
<211> 864
<212> DNA
<213> Homo sapiens

<400> 404
tttgcgctcg gggaattaaa agaggggaaa aaaagcccga agaaaactca cgccccaaac 60
aaaacgcaag gagaggaggg cgcgcggcct gcagccctcg cccgcgtccc cggccgcggc 120
gtgatgcgcg cggaccagcc cgcgacgccc gggctgccgc tgtccccgca cctggacgct 180
ggcgcggtgg ccgcgcccca gcctcgatcg ctcgccgcgg cgactcggcc ccaggcttcc 240
ggcgccggtg ggggccctcg ctctccatgg ggctgaggga ctggctgaga accgtgtgct 300
gctgctgccg gtgcgagtgc ttggaggagc gcgccctgcc tgagaaggag cccctcgtca 360
gtgataacaa tccatattcc tcatttggag caactctggt gagggatgat gagaagaatt 420
tatggagtat gccccatgat gtgtcccaca cagaggcaga cgacgacaga accctgtaca 480
atttgatagt cattcgtaat cagcaggcca aagactcaga ggagtggcag aagctcaact 540
atgatatcca taccctgcgg caggttcgaa gggaagtaag aaacagatgg aagtgcatct 600
tagaagattt aggttttcaa aaggaagctg actctttgnt gtcaagtgac taaactcagc 660
accatcagtg attcttaaaa cacaaggaaa gctcgagaga tgtttgntaa aactggcttg 720
aagaaaccag tattttccca acaaagttgg gaagcttctc agagagatat ctctttgttg 780
nggaccgtct tattgcactt gatgctcaga agagtcttta agcttgttgt cgaacttccc 840
caanaagctg gggttcatgc tgna 864

<210> 405
<211> 830
<212> DNA
<213> Homo sapiens

<400> 405
atgtatgatc tgttggtgta cacaccatgg gtaaggtatt gcttgcacat aatttgctct 60
gcatattatg gaccattgtg gtttcttcca gtcacttaga tggaaaggag gttaaaccta 120
ggtacttttt agcaaggata taaagtcaaa ttcagcatat gtttttattt ttaggcttga 180
cttttacaag acattaatct ccatttgtac atatgttatt ttatttgtaa aaccaaatat 240
gactcaacac ctttttgatg agtagtgact taactaagat ttacaagtaa tatttagaca 300
gattcagtca gacaccactt agccattttt acattccctc tggttagatt tggtacagta 360
taattaagac tttaatctga aatttaaagt agttttaatt ctgaagaagt tacatcctct 420
gtattattta catgcaacaa aataaaagtg gattaatata gtaatgccat ggtaacaata 480
gagctatgtc ttatgcatga aggcaacttt ggatgtttta acacatttga ctgactttgg 540
tttagtgaat gctgacaatg ctgctctact taggtttcct atgaaatttt taagaatggc 600
tatgagactg tatagaagct tctagagaac tgaaagtcat aatgcagagt tgccttttct 660
agtgcagcta agtggcggcc tcaactgaag atatgagttt ctttgggttc ttggagttat 720
caaatggatc ttgcattatg ttactttgca aatactgaag taatgatctt acctaatacc 780
acacctgtna cattgctcac attatanagt atttcntcac taattaaata 830

<210> 406

0050250.0050250.0050250

<211> 848
<212> DNA
<213> Homo sapiens

<400> 406
gtagttggga acagcggaac gctggtcccg gggactgagt aaggtgtctg gatcggaggg 60
aggttcgggt gggcatcggg cggctggaag agctcgactc gtcccgctgg gaaagcgcga 120
gtctgagtgg aaccctggac gacttgcaga gcggctggcg cagtcatggc ggactactgg 180
aagtcacagc caaagaaatt ctgtgattac tgcaagtgct ggatagcaga caataggcct 240
agtgttgaat ttcatgaaag aggaaagaat cataaggaaa atgtggcaaa aaggatcagt 300
gagattaaac agaaaagcct ggataaggca aaggaagaag aaaaggcatc aaaggagttt 360
gctgcaatgg aggcagctgc cctgaaagca taccaagagg atttgaaaag acttggctta 420
gagtcagaaa ttttggagcc aagcataaca ccagtaacca gcactatccc acctacctcg 480
acatcaaatc aacagaaaga aaagaaagaa aagaagaaaa gaaaaaaaga tccttcaaag 540
ggcagatggg tagaaggcat aacctctgag ggttaccatt actattatga tcttatctca 600
ggagcatctc agtgggagaa acctgaagga tttcaaggag acttaaaaaa gacagcagtg 660
aagaccgttt gggtagaagg tttaagtgaa gatggtttta cctattacta taatacagaa 720
acaggagaat ccagatggga gaacctgatg atttcattcc acacactatg atctgncttc 780
tataaggtca atgaaaatcc ttgcacccta atgaatccaa tcatcagatt ccatagngat 840
ctgatggg 848

<210> 407
<211> 846
<212> DNA
<213> Homo sapiens

<400> 407
ctgccgcggc tttgcgggga cgggggagtg gtagtggggg ctgcagctgc cggacccagg 60
cgcgatggct acgggcgcgg atgtacggga cattctagaa ctcgggggtc cagaagggga 120
tgcagcctct gggaccatca gcaagaagga cattatcaac ccggacaaga aaaaatccaa 180
gaagtcctct gagacactga ctttcaagag gcccgagggc atgcaccggg aagtctatgc 240
cttgctctac tctgacaaga aggatgcacc cccactgcta cccagtgaca ctggccaggg 300
ataccgtaca gtgaaggcca agttgggctc caagaaggtg cggccttgga agtggatgcc 360
attcaccaac ccggcccgca aggacggagc aatgttcttc cactggcgac gtgcagcgga 420
ggagggcaag gactacccct ttgccaggtt caataagact gtgcaggtgc ctgtgtactc 480
ggagcaggag taccagcttt atctccacga tgatgcttgg actaaggcag aaactgacca 540
cctctttgac ctcagccgcc gctttgacct gcgttttgtt gttatccatg accggtatga 600
ccaccagcag ttcaagaagc gttctgtgga agacctgaag gagcggtact accacatctg 660
tgctaagctt gccaacgtgc ggctgtgcca ggcacagacc ttaagatacc agtatttgat 720
gctgggcacg aacgacggcg gaaggaacag cttgacgtct ntacaaccgg accccaaanc 780
aagtggcaaa aggaggagta cctgctacag gacttcncaa gaatgaggcc cgaaaaagga 840
acggga 846

<210> 408
<211> 838
<212> DNA
<213> Homo sapiens

0962945.0720

0502450-020900

<400> 408
gtgccgtccg cccgtccgtc tgcccgcagg cattgcccaa gccagccgag ccgccagagc 60
cgcgggccgc gggggtgtcg cgggcccaac cccaggatgc tcccctgcgc ctcctgccta 120
cccgggtctc tactgctctg ggcgctgcta ctgttgctct tgggatcagc ttctcctcag 180
gattctgaag agcccgacag ctacacggaa tgcacagatg gctatgagtg ggacccagac 240
agccagcact gccgggatgt caacgagtgt ctgaccatcc ctgaggcctg caaggggaa 300
atgaagtgca tcaaccacta cgggggctac ttgtgcctgc cccgctccgc tgccgtcatc 360
aacgacctac acggcgaggg actcccgcca ccagtgcctc ccgctcaaca ccccaacccc 420
tgcccaccag gctatgagcc cgacgatcag gacagctgtg tggatgtgga cgagtgtgcc 480
caggccctgc acgactgtcg ccccagccag gactgccata acttgcctgg ctcctatcag 540
tgcacctgcc ctgatggtta ccgcaagatc gggcccgagt gtgtggacat agacgagtgc 600
cgctaccgct actgccagca ccgctgcgtg aacctgcctg gctccttccg ctgcagtgcg 660
agccgggctt cagctggggc ctaacaaccg ntcctgtgtt gatgtgaacg aatgtgacat 720
gggggcccca tgcgagcagc gctgcttcaa cttctatggg acccttctgt gtcgnttgcc 780
acaaggctat gactgcatcg ggatggcttt tctgcatgat attgatgatg taactact 838

<210> 409
<211> 844
<212> DNA
<213> Homo sapiens

<400> 409
aagagttaaa tgaaatactg gtttttaaa tggttagaac agagactgat gcacataagt 60
attcattatt ataattcagt ttttgcattc tttaaagtga agctgtgttg ttgcagtatt 120
ttaaggatat attgttcccc aaatttttgg gtaaaattga ctgttaagga agatgagtca 180
tgtttaaact gtaattgtga gtagaccacc ctttatcctt gaagggcttt ctcaaccagg 240
tgaatggcat ggctgtggtg ggaaatacag ggccctgtga gacaggaaat ctaggggtt 300
gtctagctcc attaccatcc tcttctttta tggattcagt gtcttgttct tttgttccat 360
gtgagaatca tccctgccct gcctacgtta taaagctgga gaaaaatgaa ataagtaaaa 420
acacatggaa aacgtactaa aatattaatg caaggatgca aggtataatc tttgctggaa 480
cattagttcc tcatttatta gtaacattac aggcatttga aattatgtac tttatatggg 540
acctatattt taaatatatg ctaatcatcc tagaagccct acaaggtagg tgttactttt 600
ttccatttta ccattaagga aattatccag gtttacacaa cttgaaccca ggtctctgtc 660
agtaaaaaac tgtctactct tccaaaccat tttatctatc catatttatt tcctccatca 720
aacattagtt gaatgcaatg tggtgtatca cccaangtcg gctggcatct ttgaaaacca 780
taactatgtg ttactcagca tcttagcacc tagccaaaga agtggagaat nttacagtct 840
ttca 844

<210> 410
<211> 827
<212> DNA
<213> Homo sapiens

<400> 410
ttctcctttc gcctatatgt aagtatgtgt tctgcaggct gatatcatag gccaggttac 60
cataggccaa gttaccagga ttaattacag gtcagatcac aatgtaataa gcactaggaa 120
agcaaatttt tggcctactc agttcaagaa gtgttcactg tcagaattta aaataagtaa 180
atgacctcag agacaatcca gtccaagtcc cttattttat acttgagggg actgaggcct 240

gaagagattg acttgtctaa gctcctagca gttagaagaa ccagaaatag attgcagatt 300
gccagatatc caaagaatct ggtatctttt cttctactat aatggactag atgtagtttt 360
taaatgaatc agcaactggc cctatacctg gcaacaaagt gagcactcaa attgtcaaag 420
gcacaaaaag gccagatgta acatggcgcc cacctcttcc aaggtcagtg gggggtttt 480
cagttgccac ttgaggggaa caggtgtaga agagtagtga gcaacttaca gctctccaac 540
cacgctgttg caggaagctc cgagatgaaa ctaccttctc cttctgtctg gagagtgact 600
ggcctggagg ggtgaaggtg gaccttgctg gcaggggact cgcactagtc tggaggagac 660
agattcagca gctgaaccga gtcagcctgg aaatggccag tgcanttgtg aatgcctatc 720
ccttcccaca gctcctggta cangcttatc agcagtgttt ttcggataaa gaacgccaga 780
atttgctcgc agacatacag gtgcccccnt gggggaangt gtgacat 827

<210> 411
<211> 834
<212> DNA
<213> Homo sapiens

<400> 411
ttgaacctat gatgaatgaa agaaatgaag tttcctatat aggtggttat gtcataagtg 60
ttatatcata agtggtgtta tagtatcatt attacctact atcaggaata atttcttttc 120
actctctcat tattcttgtc actgttgaat gtctcaagag ttgtgtgtgt attcagtttc 180
tatttccctc tctgtctcat ttactgactc cagtctgact aatgctctaa tatgctcttg 240
agaagtcacc atgaactcca tgttgctgag cccagtggac actttctgtc ctcctactta 300
acctctctgc acagatagat tccgtacaga gagaaagttg atcacttcct ctcttctcag 360
cttctctgac accaattctg tatttttctt ctaccccttt ggctaatctt gatttttaag 420
acactttgtg ggctaacaaa acattctgtg gaatgagttc aacatatatt acaatttccc 480
ctttttaaaa atcatgttat tctgtttcat ttacagctct tcacattctg tattgatttt 540
taaaaatatt ttaaaattgt ttctctttcc tccactttga aagctttatg aaagaataat 600
ttctgtctat tgcctaatac tgtgtatcat cactgtgctt gacacgtagt tggtaatctc 660
taagtatttg agaagcagtg agttaattaa tatttgcttt tttgactttt ttagggtatt 720
taagtatttt tgacatctct ttttgggaat ggggtaaaag aattgtagag gactattaaa 780
tgaccagngt aaccattgtt gtaaatggtg ggtaatatga cttgggaata atgc 834

<210> 412
<211> 833
<212> DNA
<213> Homo sapiens

<400> 412
cacattccag aaaaaaatac cgctttcaca aaactcgctc cgcatgaccc acagaacacc 60
caaggtcaaa aagagtccaa agttcagaaa gaaaagttat ctgagtagac tgatgctcgc 120
aaacaggcct ccgttctctg cagcgaagag cctcataaat tccccttcac aaggggcttt 180
ttcatcctta ggagacctga gtcctcaaga aaacccttt ctggaagtat ctgctccttc 240
agaacatttt atagaaacca ctaatataaa agacacaact gcaagaaatg ccttggaaga 300
aaatgttttt atggaaaaca ctaacatgcc agaagtcacc atctctgaaa acacaaacta 360
caatcatcct cctgaggcag attccgctgg gactgcattc aacttagggc caactgttaa 420
acaaactgag acaaaatggg aatacaacaa cgtgggcact gacctgtccc ccgagcccaa 480
aagcttcaat tacccattgc tcagtttgaa attcagctaa cccagcagct acagtccctt 540
atccccaaca acaatgtgag aaggctcatt tctcatgtta tccggacctt gaagatggac 600

0956294.0020

tgctctgggg cccatgtgca agtgacctgt gccaagctca tcttcaggac aggccacctg 660
atgaagcttc tcagtgggca gcangaagta aaggcatctg agatagaatg ggatccgacc 720
aatggaagac tgagaactac attaatgaga gcacggaagc ccagagtgac ngaaagagaa 780
gtcgcttgag ctcccaaaga agtttcagga tacggtattc tgacaactna ttt 833

<210> 413
<211> 678
<212> DNA
<213> Homo sapiens

<400> 413
aaagcgccat tacgcagaga gaaagttacg aggttcgtgg ccgcggtttc cccaggcagc 60
tggcgctgga ggcttcggcg tcacgtgctg gtctggattt ttctcgatgc actggggaaa 120
gcggtggact cttatcgtgg gagggctctt gatctgtgat ttatagatag gcacagctac 180
tcccgttcgg gaacccaacg gcagacaggt cctagtgccc atcagatacc cgcggccggg 240
actcggagct gtggggtgtg gggaggcgga ggcaccaact aagagcgacc tagcatcgca 300
aagccgccct cggggcgctc atggcgggac gcctcctggg aaaggcttta gccgcggtgt 360
ctctctctct ggccttggcc tctgtgacta tcaggtcctc gcgctgccgc ggcatccagg 420
cgttcagaaa ctcgttttca tcttcttggt ttcatcttaa taccaacgtc atgtntggtt 480
ctaatggttc caaagaaaat tctcacaata aggctcggac gtntccttac ccaggttcaa 540
aagttgaacg aagccaggtt cctaatgaga aagtgggctg gcttgttgag tggcaagact 600
ataagcctgn ggaatacact gcagcctctg tcttggctgg acccangtgg gcagatcctc 660
ngatcaggga aagtaatt 678

<210> 414
<211> 789
<212> DNA
<213> Homo sapiens

<400> 414
cttcatgtga attttccaat tttggtgttt ttcatagaaa acttcaatgc cagaccagct 60
tccctggtta cttagcatat atttgtgacc atttcatatg cactcataaa tatccaagga 120
tttcaggccc agccaagaaa aacataagaa gggaggtaaa aaggatgttg gacattgact 180
tagtgtactt tttaaaccca acaaaagcga tgtggtgatt atctcccttt tcgaaggatt 240
catgccactg taatgagaga ggcagtgtag gcaaatggtc tgagccttgg atggagattg 300
aagtcctgac ttcagctggg aaatcttggt taagagtctt tctgtacctt agtttcccta 360
agtgagaata agagagttgg acaagacgaa tgtatctcca ggttccaatt tttctgagaa 420
tggttgatag agaagctgct ctctccttaa aatgcatgga ctcaatggct tgaagatatt 480
ccccatgggg aaccattgcc acggaggcct tgcatgcaag aagtttgggt ggggacagtg 540
aggaactgaa acacaagcac cttccaccaa ttattgctgt gaagaacctg agcctgaaga 600
agctccatct aatttttttc ccagagttcc agattttagg gtgcaatcat ccagcctata 660
catgtggctc atagttcaaa aaattaaaag caaaaccaga actctncagt aggaatggag 720
aaaacctatc tgtaggctga actggcttct ttggcttaag angcactggt cangggaaaa 780
aagctgctt 789

<210> 415
<211> 284
<212> DNA

09508.0004-00000

<213> Homo sapiens

<400> 415
ctctctgcgg ggcgccgttc ccgcgccacc gagggcagct aactcctagc agaggaccgg 60
ggtcgcggcc gccgggggcg cagcgcggtt agggcggccc cgccacggcc caggcactcc 120
cgctgggccc tgccgggcct caccccttccc cgcgcagcga ctcgggaagt aggacatcct 180
gtggagagcc caggacccgg gagacgccct gggaggaggt ggcagggatg ggggcgatgg 240
ggggtcagag cggtctaggg gtgaccaggg tggggtgcgg annn 284

<210> 416
<211> 771
<212> DNA
<213> Homo sapiens

<400> 416
attgcctccc cgacccacac tggctggact actgcccagg acagaagagg ggggttggct 60
gtgagtgggg aggaggtgga agcggtagat tcccagcaca accttcttcc tcccaccccc 120
aaaacctcca tctgaagaag gcctgaggaa gctgtcaggc tgcctgcctg attcatccct 180
tccctctggg cgtagccact gagtctgctg ggctgatgct tctgaataca aactatggca 240
cctggaaggc actgcagaga aagggggggac ctcagggctc ccattccatc actcttgagt 300
ctaggtcata ccctccacaa tccccaagag gcccgtactg tctcttctga tgggactcct 360
gggttctgtg ttgcccaccc tgcaaatctg catgccagca agtatgggtg acccggctgg 420
ctgctgggtc accttcattt gggtgctagc cttgctgcct tcctttggtg ctgttgagat 480
tgtccttgcc gtgttcactc ccagcgcagg catgccctgg ccccaggctg tggctccgat 540
tcactcttac tgccatgctt tggtctcatt ttttgcttcc acagtaagtc tgcacaaaat 600
actgtcctca cagctgagct tacctggtga tctattcttt tttctcggtc actacttgtc 660
cagcttttttt ttttanactt ttggagacag tgattgacaa cagaacctaa caccagggct 720
gcgctagtcc cctacccctt canacctgtg tcangcatat gactgatgga t 771

<210> 417
<211> 866
<212> DNA
<213> Homo sapiens

<400> 417
cacagctgga atgtggttgg cttgttgact tctgttccca gcatagtgaa cagtgggcac 60
tataagccag taggcactca attgatgatt cttcaatgaa ataattgatg ccacttttag 120
gtcagtcttt cttgtacgtt acaccttctg ttgttcaaca gagccccaca atatcccaga 180
acttggaggt cttatctcgg ggtttctcag atgttggagt acccaggtat cacctgctga 240
gccagtttcc ctggcctcac ctgcaggggc tctgagtcag taaatctggg gcaggcccag 300
tactttgcat gtgagcacag acccaggtgt ttctgaacct ggtggtccag ggactgctgc 360
aggaaggagc caataggact gcatgcctta caggcagtgg gtctcatcca tccctatcta 420
tggcactgac tacaggccat gtccaggcca catgggcaca tgctattata attattttgt 480
gcgatggatg agttacagaa ctggagccct aagacctgag ttctagtttc agctctgcca 540
gttgctggct gattgaaact gaacaagcca cctgccttcc ctgagactgt ctcttctcct 600
gtgaaattag ggcattagaa tacatgaaga cccctttatg tccttaataa cctgtaagtt 660
taagaaccta gggaatctnc atgctggtgg ctgcgggtat atccccttat cctcaactcg 720
ngaagaaaga gtcaaaatgg caacanggtt gtgtcaactg ctcttcttag caagcttatc 780

attaagggga aatggccttt ggcaattttc ccagccctta acaacattnc cacaacgggc 840
naccattnac cttaaaccat ttgggg 866

<210> 418
<211> 797
<212> DNA
<213> Homo sapiens

<400> 418
aatccattgc agctcgtctt atcaatgcta ccttttttatt tttttctttt ttgagttagg 60
gtctcactct gttacttagg ctggaataca gtggcatgat cacggctcac tgcagcctta 120
acctcctggg gtcaagccat cctcccacct cagcctccca agtagctggg actacaggca 180
catgccacca cgcctggcta atttttgtat tttttgtagg gacggagttt cgccatgtta 240
gccaggctgc ttttgaactc ctgagctcaa gcaatctgcc tgcctctgcc tcccaaagtg 300
ttgggattac agaggtgggc cactgtgcct ggccttctaa tcaatgatac ctaattctgt 360
cttcggtcag tggaactcaa ctcaatttgt ctcctgagtc cttttgaaac tattctaatc 420
ttgtcagttt cctcgctttc tggtatggta agatttccag gatcatgttg tacattttca 480
gtccagatct gaaatcagtc atttctccaa ggagccctgg ttttgttgga aatggtattt 540
agcaaccagt ctgggcaata agcaaattca ttgccacttg tttggtcata ggccttttcg 600
gtggacagag ctaggaaaat attacctgat tctccctcta gccacacaaa tcatgttacc 660
ttctggtcat ctgaaggtcc tctcttctnc aagcggaaac cctctcaacc ctgcctcagt 720
cagtgccaca gttttgaatc tcctaactat atgnnggctt tctgcactct taatttggga 780
agtgccactc tttnttt 797

<210> 419
<211> 800
<212> DNA
<213> Homo sapiens

<400> 419
tttcatcact taaaagaacc atgtctatta aagaatctag ctcactggag tgcattgcca 60
ttccaaaaaa gaagatgaat ttaaaagata aaagccatga aggtgttgct tgtgtccaga 120
aagaaaaatc agtagttaaa acctggttct gtgaatgcaa tcagcgattc ccaagtgaag 180
atgcagtaga aaagcatgtt ttctcagcaa acacaatggg ttataaatgt gtggtctgtg 240
gaaaggtatg tgatgattca ggggtcattc gtttacacat gagccggatt cacggagggg 300
cacatttaaa taactttctt ttctggtgtc ggacatgcaa aaaggagtta acaaggaaag 360
atactatcat ggcacatgtg actgaatttc ataatggaca cagatatttt tatgagatgg 420
atgaggtaga aggtgaaact ttgccatcat cctctacaac attggataat ttgactgcta 480
acaagccttc atcagctatt actgttattg atcattcccc ggcaaatagt tctccgaggg 540
gtaaatggca atgccggatt tgtgaagata tgtttgattc ccaggaatat gtaaaacagc 600
actgcatgtc tttggcaagc cacaagtttc atagatacag ctgtgctcac tgcagaaagc 660
cttttcataa gatagaaaca ttgtccgaca ttgccaagat gagcatgaca atgagataaa 720
gattaaatct tctgtgggct ttgngatcnt atctttaatg nggaagaaca tttctgagtc 780
attatgagga gcaccacagc 800

<210> 420
<211> 823
<212> DNA

0960204690 - 09 02 2010

<213> Homo sapiens

<400> 420
gttcacttaa aattcataga gagacatgta gaaatacata ctagataatg aaaggatcca 60
aacagtgaag aagcagtccc tttatatttt tgaatttttt ttcaagagta aagtgtgtta 120
tgatagtcat cttgatttgt ttgaaatgat gtttacaaat gctattaaaa ttataaatcc 180
tacattttac ttgtgaattt tttggtctac ctttctagtt gtaaaatata aaaatcctaa 240
aagatcatat tgattaactt cttggtggaa tcacttatct tgttttgatg ataggagcag 300
tatagcatca agttctagag gaattgggag ccattgcaaa tctgagggtc aggaggaatc 360
tttcgtccca cagagctcag tgcaaccacc agaaggagac agtgaaacaa aagctcctga 420
agaatcatca gaggatgtga caaaatatca ggaaggagta tctgcagaaa acccagttga 480
gaaccatatc aatataacac aatcagataa gttcacagcc aagccattgg attccaactc 540
aggagaaaga aatgacctca atcttgatcg ctcttgtggg gttccagaag aatctgcttc 600
atctgaaaaa gccaaggaac cagaaacttc agatcagact agcactgaga gtgctaccaa 660
tgaaaataac accaatcctg agcctcagtt ccaaacagaa gccactgggc cttcagctca 720
tgaagaaaca tncaccangg actctgctct tcaggacaca gatgacaggg gatgatgacc 780
ccagtccctg atcccaggtg ccanggtatc gaaccggacc tgg 823

<210> 421
<211> 832
<212> DNA
<213> Homo sapiens

<400> 421
tttttcggac ggctgcagca tcgcggtggg gatcgaaagc gggggcttct gggacgcagc 60
tctggagacg cggcctcgga ccagccattt cggtgtagaa gtggcagcac ggcagactgg 120
tcaaacaaat ggattttaca gaggcttacg cggacacgtg ctctacagtt ggacttgctg 180
ccagggaagg caatgttaaa gtcttaagga aactgctcaa aaagggccga agtgtcgatg 240
ttgctgataa caggggatgg atgccaattc atgaagcagc ttatcacaac tctgtagaat 300
gtttgcaaat gttaattaat gcagattcat ctgaaaacta cattaagatg aagacctttg 360
aaggtttctg tgctttgcat ctcgctgcaa gtcaaggaca ttggaaaatc gtacagattc 420
ttttagaagc tggggcagat cctaatgcaa ctactttaga agaaacgaca ccattgtttt 480
tagctgttga aaatggacag atagatgtgt taaggctgtt gcttcaacac ggagcaaatg 540
ttaatggatc ccattctatg tgtggatgga actccttgca ccaggcttct tttcaggaaa 600
atgctgagat cataaaattg cttcttagaa aaggagcaaa caaggaatgc caggatgact 660
ttggaatcac acctttattt gtggctgctc agtatggcaa gctagaaagc ttgagcatac 720
ttatttcatc gggtgcaaat gtcaattgnc aagccttggc caaagctaca cccttggtca 780
atggttgntc aaganggaca ccccaaaatg gtgtggagct tttgcttttc ca 832

<210> 422
<211> 853
<212> DNA
<213> Homo sapiens

<400> 422
cattttaaaa agaaacttct ccaaaactac attagatatt tatatctcac atgtctttag 60
attccatttt cctaagctgg gtttgggtgg atcactctgg taatatgaga tgggccatgt 120
tctgcatctt gaagttagag tttggccaat ttaggctaca tctggagggg gtgatctcat 180

09/529,506 - 03/29/2000

tctcattctg cttctgggaa tggtgtacta gtgtggggat gtgcttgtgg taaatggaga 240
agagcaagaa actccaatgt ggaagccatc tcaaagacgt atacaaaatt tactaatttc 300
cagttcatca aagcaaatta catgagtgag ctcagattcc aaggtcaagg tagtcaccct 360
gcctatggca ggaggacact gcaagataat atatcaaagg atgagggagt caagagtatt 420
tacaaaacag ctgaatagtt taattaaata attaatattt aaacattaaa tagacttgag 480
agtaacttta ccaaaggcct aagcatgaga aatatgtttg atagatatta ttctggtctg 540
aaaaccctga gtgggaaaac agaactaatt ccacctggat gaccttctgg aaactcattt 600
tttcattttt ttaaattaaa agaaaataat tccttccaac cccaatgggt ttaagtgtgt 660
gtttttgtgt ttatgagctt ggtaacaata aagtcatata aaagtattgg ntagcagcaa 720
cctgatttta aggcgtatgg ccttcttgng gttccaagaa aaccttggat gattttgata 780
aaaggtttgg gttctggata tttaaatcta cattaaaaaa taaatccata tttatccnat 840
cctagnatga nca 853

<210> 423
<211> 872
<212> DNA
<213> Homo sapiens

<400> 423
gatactcata tagtagagat ctagaccttg ctaagaaaaa acatgcttcc ctgaggcaga 60
cggagtctga tccagatgct gatagaacca ctttaaatca tgcagatcat tcatcaaaaa 120
tagtccagca tcgattgtta tctagacaag aagaacttaa ggaaagagca agagttctgc 180
ttgagcaagc aagaagagat gcagccttaa aggcggggaa taagcacaat accaacacag 240
ccaccccatt ctgcaacagg cagctaagtg atcagcaaga tctccggact gaacgattac 300
aaaaaacaac agaacgtttt agaaatcctg ttgtgttcag caaagattct acagtcagaa 360
aaactcaact tcagtctttc agccaatata ttgagaatag accagagatg aaaaggcaga 420
gatcaataca ggaagataca aagaaaggaa atgaggagaa ggcagcgata actgaaactc 480
agaggaagcc atcagaagat gaagtgctta ataaagggtt caaagacacc agtcagtatg 540
tagtaggaga attggcagca ctagagaatg agcaaaagca aattgacacc cgtgccgcgc 600
tggtggagaa gcgccttcgc tatctcatgg acacaggaag gaacacagaa gaagaagaag 660
ctatgatgca ggaatggttt atgttagtta ataagaaaaa tgccttaata aggagaatga 720
atcagctctc tcttctggaa aaagaacatg atttagaacg acngtatgag ctgctgaccc 780
gggaattgag gcatgctagc cattgaagac tggcagaaga ccgaggccan aagcgacgcg 840
acagttntgc tgatgactgg tggncctggt ga 872

<210> 424
<211> 859
<212> DNA
<213> Homo sapiens

<400> 424
aaaacgtttg tatctcaagc aagtgctaca atgcaacagt atgcacagag agataagaaa 60
catgaatatt ggtttgctgt gccacaagaa aggacagatc acttgtatgc cttcttcatt 120
cagtggagtc cagaaatata tgcagaagat actggcgaat ataccagaga acctggattt 180
atagtagtaa aaaagattga ggagtctgaa acaattgagg attctagtaa tcaagcagca 240
gccagagaat gggagattac tacaagggaa gacataaatt caaagcaggt tgctacagtg 300
aaagcagacc tggagtctga atcttttcga ccaaacctaa gtgatcccag tgaactttta 360
ctgccagatc aaattgaaaa gcttaccaag catcttccac caagaacaat tggctatcca 420

0562549.0700

tggactcttg tttatggtac tggaaaacat ggcacaagct tgaaaactct ttatcgaaca 480
atgacaggtt tagacacccc agtgctgatg gtgattaaag acagtgatgg acaggttttt 540
ggtgcgttag catctgagcc actgaaagtg agtgatggct tttatggtac tggagagacc 600
tttgttttta cattctgtcc ggagtttgag gtctttaagt ggacaggaga tgatatgttt 660
tttatcaaag gagacatgga ttcactagct ttcgtggtgg aggaggagaa tttgcgcttt 720
ggcttgatgg agatctctcc atggaagaag ccattcttgn aaaacgtttg gaatcgacac 780
tttctaagaa ggaagattct tatccagata tgaaatctgg cttttgaata ataaaagctc 840
ttgcttanag gagaaggcc 859

<210> 425
<211> 760
<212> DNA
<213> Homo sapiens

<400> 425
gaaacagaaa cagaatgcat ggctgctcaa aaagagtatc tttttgtgct ttcttgaggg 60
agagggttgt ggaggggaaa ccctccaact cgggctggct aacagggatg cttccttatg 120
aaacgtgctc acctaagaat accagtgaga ccatcggcac tttctgtaat tggcagcaat 180
agagctatta gaagaaacat gaaagagata gatggatctg aaatcaacat ttgtaacaaa 240
aggcctcacc atgttcccca gcacaaatgt gctactgatt agcagctaaa atgtgagcat 300
ccctactcaa attcaccctg ttctccccat cctgaaggtt ctgatattaa tgcataacat 360
tgtagcttat aatgctttta cttaacatta tcttattcat gcatcatcag agaatgatct 420
accaaaatgt atggagagaa agctaaaaat gtaaagtggc tgttctcaat cttagctaca 480
tattagaaca acttggggag tttttaaatt ctgtgataac cacactgccc tcagaccaat 540
ccgaattctg gggcttaaat ccaggtggag tgctagccac atgtagagca gctttctgct 600
ttcatatata tctgggctta ggcctcggtg agggttggga agggcctatg acctctgaag 660
agccttcaca ttacagccca ggaacagctg gcccacagca ggagagatgc agagcctgan 720
gtgganggcc aagcctgggg aatanggggt gctttgaaaa 760

<210> 426
<211> 877
<212> DNA
<213> Homo sapiens

<400> 426
actcttgctg tactacaaag agatagaatc aaactgcttt ttttcgacat actggttttt 60
ctttctgttt ttcttctcct tcttctattt cttgtggata ttatggctaa taacacaaca 120
agtttaggga gtccatggcc agaaaacttt tgggaggacc ttatcatgtc cttcactgta 180
tccatggcaa tcgggctggt acttggagga tttatttggg ctgtgttcat ttgtctgtct 240
caccttccgg cgacaagctt ccctggaaca agcaaattcc tttccaagaa aatcaagttt 300
cagagcttct actttccatc cctttctgca atgtccacca cttcctgtgg aaactgagag 360
tcagctggtg actctccctt cttccaatat ctctcccacc atcagcactt cccacagtct 420
gagccgtcct gactactggt ccagtaacag tcttcgagtg ggcctttcaa caccgccccc 480
acctgcctat gagcccatca tcaaggcatt cccagattcc tgagtagggt ggcttttggt 540
ttttgtttct ttcttgtctt gtcttttatt gaaaggaaat caaaaatagg ctaaacagaa 600
ttttgagggc atggcccaaa taactcatga gttccaagtt gaaacatggt tgtgcaagtt 660
ggacattaca atgtttttag tagagatgaa gtgtcactat gttaccaagg ctggtctcaa 720
actcctaaac tcagatgatc ctnctgcctc ggccttccaa agtgttggaa attagcctgg 780

US 2005/0260630 A1

ccaatcttgg attttaatgg gaaatgtggg ccccaaaatg accgaacata ggacattcta 840
aagttccttg gattggatca ttataagaaa gngnggg 877

<210> 427
<211> 866
<212> DNA
<213> Homo sapiens

<400> 427
atttatggtg gtagctttcc aaaattatat agatacctct tacacaatct caagctctta 60
cagcaagctt gtccagcctg tggctcgaca caagtttata aactttctta aaacattgtg 120
agtttttta ttttttattt tttttaagct catcaactat cattagtgta ttttatgtgt 180
ggcccaagac agttcttcca gtgtggccca gggaagccaa aagattggac acccccttata 240
acatcttaga agttttaaat aattatcttc atatccacat agctttacaa aagctcacga 300
cagggagagc attttcttgg ttctgtagta atttcagggg gtttactgat tggaaccctt 360
ccttttcctc ctctctccag tccagctggc attcagtcct ttaaacaatg tggctatgca 420
gtacttttga ttactaatga cttctattac cttcttcccc attgtgtaca gatgggagaa 480
tcctcagcac aagtgtctac tactattgga tggacagcgg cagatgttca cagcgcgtca 540
tgattaatta gtttaaattg caaggttcta tctgtgaggt agctcaggta gatttaaggg 600
cggtagacat gaactgaagt cacgtttgcg cagcggctct aggtatacac ttcacattgn 660
ttctttgcag gtcgcacagc attttaatct gcgcccgcaa tgcacaatgc gcgcatgctt 720
gnctgccagt ggaagcttca tgaacaaaag atagnaatta tgccaataaa tggtgaaaga 780
cttttggata tttatccaat tatttataaa tataanggct tggaaagaat ggccatgntg 840
aaatttgaac aaattggaag tttttt 866

<210> 428
<211> 765
<212> DNA
<213> Homo sapiens

<400> 428
taatgcaact aaaatgttct cgggtttagt accaagcgta ctagtatgag aggcatgaga 60
tgttccggca gtatttacac ctaattttat gagatttcca aaacttgatg atttcaggtc 120
cttcgcaaca tggtacactg tgcagacctg agcaacccca ccaagtcctt ggaattgtat 180
cggcaatgga cagaccgcat catggaggaa tttttccagc agggagacaa agagcgggag 240
aggggaatgg aaattagccc aatgtgtgat aaacacacag cttctgtgga aaaatcccag 300
gtatctaata tgagattttc aaagtttttg tgagctctgc tgattataga gctggagggt 360
tctatttaat tccgtttttc caatagaata tgtatatatg aaacaataag gagacaacta 420
cgcattttgt tccattatag tcaggactca tgcgacttct ccattacact cagtttcaca 480
gggtggggaa aagtagtcat cagaaaccca tcaaaatttg gactatgtgt ccctaaatca 540
tttagatagt tgtctctgat gttagcaaat ccagctgaat aatatgaaca tcagtgtctc 600
ctccatccca accctctgga tttctcctag ctctgtcttc attcaagaac tctactcctc 660
atccttgctt ccagccctct gnttttatct tctgncctta atcaagccca tggtgaccat 720
caccagangc agtctctttt actgcatagt caaagccctg tcttg 765

<210> 429
<211> 848
<212> DNA

09/05/2005 10:08:00

<213> Homo sapiens

<400> 429
aaagcaaaaa aattagtaga aatggaaaga gaacatgaaa aatcacttag tgaaattaga 60
cagttaaaga gagaacttga gaatgttaag gccaagcttg ctcagcacgt caaaccagag 120
gaacatgaac aggttaagag cagattagaa cagaaatcag gagaacttgg gaagaagatc 180
actgagttaa cattgaaaaa tcagacacta caaaaggaaa ttgaaaaagt ttatttggat 240
aataagctcc tcaaggagca agcacataac ttaacaattg aaatgaaaaa tcattatgtt 300
cctttaaaag taagtgaaga catgaaaaag tcacatgatg caattattga tgatcttaat 360
agaaagcttt tagatgtaac acaaaaatat acagaaaaga agttggaaat ggagaaattg 420
ctactggaaa atgacagctt aagtaaggat gtaagccgcc tagaaactgt gtttgtacct 480
cctgagaaac atgaaaaaga gataatagct ctgaaatcca atattgttga acttaagaaa 540
cagctgtctg aacttaagaa aaaatgtggt gaagaccagg agaaaataca cgctctcaca 600
tctgaaaaca ctaacttgaa gaagatgatg agtaatcagt atgtgccagt taaaacccat 660
gaagaggtta aaatgacact gaatgacacg ttagccaaaa ctacagagaa ttattagatg 720
tgaagaaaaa atttgaggat ntaaatcagg aatttgtaaa aattaaagat tagaatgaaa 780
ttttaaaaag aacctggaaa acactcagaa accaattaaa actgagtnca ttancctggc 840
anacccca 848

<210> 430
<211> 832
<212> DNA
<213> Homo sapiens

<400> 430
ctagaagagt tccggtccga ttctgcgaaa gaggaagtga gagaaagcgc gtactacctt 60
cggtctaggc agcggaggca gccgcgaccc caggaaaccg aggaaatgaa gacgcgaagg 120
actacccgcc ttcagcagca gcactcagag cagcctccgc tacagccgtc tcctgttatg 180
accaggagag ggctgcggga ctctcattcc tctgaagagg ttgaagcatc ttcccaaact 240
gatttaagcc aaacgatctc aaagaaaact gtcaggagca tacaagaggc tccagtgagt 300
gaagatcttg taatcaggtt acgtcgaccc cctctaagat acccaagata tgaagccacc 360
agtgtccaac agaaggtcaa tttctctgaa gaaggagaaa ctgaagaaga tgatcaagac 420
agctctcaca gcagtgtcac tactgttaag gccagatcca gggattctga tgaatctgga 480
gataaaacca ccagatcatc tagtcaatat atagaatcat tttggcagtc atcacaaagt 540
caaaacttca cagctcatga taagcaacct tcagtgctaa gctcaggata tcaaaaaact 600
ccccaggaat gggccccaca aactgcaaga ataaggacca ggatgcaaaa tgacagcatt 660
ctgaaatcag agcttggaaa ccagtcacca tcaaccttca gcccgacaag tgactggaca 720
accccaaaat gcatcttttg tcaagaggaa cccggtggtg gctacttnct ctggatagct 780
gctcttggct tttgggaagt ttttgggttc tttaagnact tcctggaggt ng 832

<210> 431
<211> 603
<212> DNA
<213> Homo sapiens

<400> 431
ggagaatgct gatagaatgg tatttttgga tcaagatagg agggtgtgat atgggaactt 60
ctagtccccc cctttctcag gagagagctg tcttttgaag aaatccatcg cacgaaaagc 120

0000-0000-0000-0000

aggcgagaga ggggaaacct gacattgttt gagcccctgc agtcagctgc catcaaagcc 180
tttgacttcg catgacttga accactgaat catttttttt cttttttttt ttttttgaca 240
gagtctcgct ctgtcaccca ggctggagtg cagtggcacg atcttggctc actgcaacct 300
gcgcctcttg ggttcaggcg gttctcgtgc ttcagcctcc cgagtagctg ggactacagg 360
cacccgccac cacatctggc taatttttgt atttttagta gagacaggat tttgccttgc 420
tggccaggct ggtcttgaac tcctggcctt aagtgatcca cctacctnag cctcccaaag 480
tgctggaatt acaggtgtga gccaccacac ccggcctgaa ttgtctttta tctcaaggtc 540
cttcattgct actcaaagtg tgctccacaa cccancacag ncacatcatc gganagcttg 600
cta 603

<210> 432
<211> 880
<212> DNA
<213> Homo sapiens

<400> 432
gttacccagt gcccaagggc agtcttgata ttatcattct catatttgtt ctttcagcaa 60
ttgttccaga caagatgcag aaggctatca acaggctgag caggcttctg aaacctggcg 120
ggatgatgct tctgcgagat tacggccgct atgacatggc tcagcttcgg tttaaaaaag 180
gtcagtgtct atctggaaat ttctacgtga gaggtgatgg aaccagagtt tacttcttca 240
cacaagagga actggacacg cttttcacca ctgctggact ggaaaaagtt cagaacctgg 300
tggatcgccg actgcaggtg aaccgaggaa agcaactgac aatgtaccgg gtttggattc 360
agtgcaaata ctgcaagccc cttctgtcca gcaccagctg agaggcacct gctgccaaca 420
cgatgcaagc ccattgtgtt tccgggcttt ttttaaaaaa aaaattgtag cactgggcgt 480
ggtgcatgcc tgtaatccca gccactcagg aggctgaggc ggggaggatc cattgagccc 540
agcagtccaa cctgggcaaa atagtgagag accctgtatc tgaaagtaat aataaaaata 600
aaaaatataa atgaggtctc gttgatgttg gacaattcaa gaattcagac ttgaacctta 660
aacctaggaa aagttacttt gtatcaggat tctaacaatt atgcttcata tttgtgaagt 720
cctttaaaac ataattttct caagttcttt ctttgagatc tcaatctgnc ttaacatttt 780
gnaactaata actgaaattt tattcaaagg aattgnaaac cttaaacccc ccaatttatt 840
tccatgtgaa aaagtgttac atatgacaag tgtttttttgn 880

<210> 433
<211> 840
<212> DNA
<213> Homo sapiens

<400> 433
gttcagctaa gtactaggga ggcttcatta gtcatgagga tgtttttata tataaatgta 60
gcaaacatat attacagttt tcactgtgta atagattatc cataataatt cataaatatt 120
cctgctgaag ttagtttgta acttcaagtc aaagatgaaa aatatcaatg gtgaagattg 180
attgttcata tagagaggac gtttttttttc cagactgtaa aactgaatct tgttgaattt 240
aaagagaaat tctggcagag gcagatgaat cacctgaggt caggagtttg agaccagcct 300
gatgaatatg gtgaaaccca gtctctacta aaactacaaa aatagccagg catggtggtg 360
ggtgcctgta atcccactcg ggaggctgag tcaggagaat tgcttgaacc cggaggtgaa 420
gattggagta agccaagatt gtgccgttgc actacagcct gggcgacaga gcgagactcc 480
atataaaaaa aaaaaaaaaa aaaaagctgg gcgtggtggc tcacacctgt aatcccagca 540
ctttgggagg ccaaggtggg cgaatcactt gaggtcggga gtttgagacc aggtgaccaa 600

0050250 "0 2005

catggagaaa ctccatctct actaaaaaat acaaaattag cccggtgtgg tggcgcatgc 660
ctgtaatccc agctactcgg gagactgagg caggagaatc gcttgaacac gacaggtgga 720
ggttgcagtg tggcgagatt gcaccattga ctccantctg ggcgacagga nggaaactca 780
tctgaaaaaa angagaaatt cttttatttc tacttctctt caaattggct tatgcatttt 840

<210> 434
<211> 912
<212> DNA
<213> Homo sapiens

<400> 434
ttctaatgct tttaaggttc cttttcagcc cttcctcctc gtaatccaca aatactgaga 60
ccaaggcatt ttttgggtca gtcctaattt caagcattct atcctgccct ccccaaatga 120
actcacactt attagaccat atgttcctat attagttcag gaaggggaa aaaatgttca 180
tcacacttgt atataagaga tcatagaaaa acagtttact aacctgtgaa aataccattc 240
attctctgtt tacctctggt ccacagctaa gcaatcagta ggatataaat gtaccctatg 300
ttcactattc agtattcata agtatactac ttatgaattg gaaatctgac acaacattta 360
catgacctaa ttttgaaaat ttaaaatagt gtaaggcccc taggcttaat tttacagggg 420
aaagattaaa aggacacaag caaacatata ttctctctct gtgctgtggg acactggtaa 480
ttttttgact taaaatattt gatacttaaa atgccaaact tctacatttc tgcagtaaca 540
aggcagttat catattgaat accatttctt tctctccagt aagtaaatat tagcacatga 600
actgaaaata ttaagtgatt ataaaaaagt ccaaataaat tcattaaaat ttagcttggc 660
aaaatgttag tttcatgttc ttggtagaag tccttttata tttatattca aatgaaatga 720
accaatttac aagccaaagg aaatggcatc aaatattttg acacccctgg cttcccaagg 780
gggtattgga ttcaatgcct ttttggctca naaatctang gtttcttcca cttcanggaa 840
aaaggaggga gaaatgtacc cccatacctt tggggaaaaa ccaagttttc cgatgggccc 900
cagctttttg aa 912

<210> 435
<211> 791
<212> DNA
<213> Homo sapiens

<400> 435
attttgttcc tcagtaagag aaataaagaa attcgcagcc ctttgtttta agaagggagt 60
gttttacatg ctttttttgc ttttttttt ttttctccta ccctagcgat gacctcttcc 120
aggtagcggt cccttgtgcg cggttggtag tacccagggc ttanagcgag cgcgcacccg 180
gggctgcggt ggaggctcct ctgtgagctc tacctgcctc ccatcccgag gcctaggaga 240
aggcgggtac ctggccgcca gctgacgccc tggtggtcac tgtggccctt tagaaacaca 300
cagctccatt tcataagcaa aacctcctcc cccagccccg gctcaagcac cattcacact 360
gccatccaag ccgcgggcgg ccgtggaaag ggcactggac cacccgtctc gcgggcgccg 420
tgaggtacag cgatggctcc cagtgccggg cagttcaggt gacaggagct ttccaaagac 480
acctagggtc caaaaagcag ggttcccatc tcacaatttg gatttgctca tagaggagca 540
gataggacag gctgctcaca tttctccttt gaaggcactt ccacagtgga ctgtcgctgg 600
cgggcccctg ggcggtgacc atcggtgccc cgggagacag cgaggaattg acccttttggt 660
cactgngtaa gcccccacta ggctgctgct ctttccaaag ggaangggct gggggaacca 720
ggaaggaagc ccacccccac acctgcatct gnctgggttc aaccaggtaa agggacttac 780
tgggatcgng g 791

0050250-0450

0950204 2000204

<210> 436
<211> 751
<212> DNA
<213> Homo sapiens

<400> 436
aggtgggggc cggggcggga tggctgcagc ggcggccggg gccgggagcg ggccctgggc 60
ggcccaggag aagnagntcc cgccggcgct gctgagtttc ttcatctaca acccgcgctt 120
cgggccgcgc gaaggacagg aggaaaataa gattttattt tatcatccaa atgaggtaga 180
aaagaatgag aagattagaa atgtcggatt gtgtgaagct attgtacagt ttacaaggac 240
atttagccca tcaaaacctg caaaatcttt acatacacag aagaacagac agttcttcaa 300
tgaaccagaa gaaaatttct ggatggtcat ggtatttaca cacacagtgt atctttctga 360
aattgtatgg tgaagttatg ggtgatcttt actgttcana atttaggaaa gttctctggc 420
tgttgcatcc aagtaaaatt aaaataaaat tggttgcaat tttaaaatca agttcttcct 480
atttgcttta ttcattcttg gggctgtttt aagaagttgt gtttctggtg ctgtagcatg 540
ttcaaagttt ttaaattaag gcaagataaa catggnctaa tgaattcatt gtataatttc 600
aagtttatca aactttgtag gttgttcgga atcctataat tgaaaaacag agttcanatg 660
gaaaaccagt tattgaatat caagaggagg agttgtttgg taatggtgtc attggttgtt 720
taatnattta ttttttaaa tgnattgctg a 751

<210> 437
<211> 780
<212> DNA
<213> Homo sapiens

<400> 437
cttccttcta gcagaaatgg cggctgcggc ggctcgagtg gtgttgtcat ccgcggcgcg 60
gcggcggctc tggggtttca gcgagagtct tctaatccga ggcgctgcgg gacggtcatt 120
atattttgga gagaacagat taagaagtac acaggctgct acccaagttg ttctgaatgt 180
tcctgaaaca agagtaacat gtttagaaag tggactcaga gtagcttcgg aagactctgg 240
gctctcaaca tgcacagttg gactctggat tgatgctgga agtagatacg aaaatgagaa 300
gaacaatgga acagcacact ttctggagca tatggctttc aagggcacca agaagagatc 360
ccagttagat ctggaacttg agattgaaaa tatgggtgct catctcaatg cctatacctc 420
cagagagcag actgtatact atgccaaagc attctctaaa gacttgccaa gagctgtaga 480
aattcttgct gatataatac aaaacagcac attgggagaa gcagagattg aacgtgagcg 540
tggagtaatc cttagagaga tgcaggaagt tgaaaccaat ttacaagaag ttgtttttga 600
ttatcttcat gccacagctt atcaaaatac tgcacttgga cggacaattt tgggaccaac 660
tgaaaatatc aaatctataa gtcgtaagga cttantggat tatataacca cacattataa 720
ggggccaaga atagtgcttg cttgctgctg gangtgttnc catgatgaat tgcttgctta 780

<210> 438
<211> 872
<212> DNA
<213> Homo sapiens

<400> 438
gataaatcta tgctagaggg tataaaagaa acacaaaaat agaggtatgc catgtataag 60

acccaacata ataaatagtt ctaccaaatt aatttataaa ttcaaagcaa tttcatataa 120
ccacagtaaa gcttttaaa tggatgtaat aacctgatta taacattaat ctgaaagtca 180
tcaggcataa agcaattttg attacatctc aaaacaatcc atggagttag ggtaaatgtg 240
ctgttcacac aggaataatc acaggtatag aaccgagaac ctaggaacag agcaatgtat 300
atatatatgt atttaaaaaa tggcatcaca agtcagtaga gaagggtttg aactattcag 360
taaatgatgt tgaggttatt tactactttt tcttatttca tatcatggat gaaaaaaatc 420
aagatgaatt aaacatggaa attaaaaata actagaagaa aatactggaa aaaaattgta 480
ataaatgtgt aagaaaggca ttcccaacca agacacaaaa cccagtagcc atgaaaaaaa 540
agatagattt gactacattt ttaaaaagta aaacctttca ctttttacaa aactttgata 600
aaattagatt tcataaataa aggagtggga aaatacatgt aatagaacag aagatttaag 660
ataatataaa gagcacctac aaacacaaaa attggacaaa ggctataaaa atattttata 720
aataagaaat acagactata aacataaact ttcaacctcg tagcaatcag gaaaattaaa 780
ggtaaaatga gatactattt ttcaatactt ggaaatggca gattttaaag attggtgata 840
gtgccggaga tatgtgagga aagagtntct cc 872

<210> 439
<211> 863
<212> DNA
<213> Homo sapiens

<400> 439
cataattttc tatctatggt acccttggct tctgcctggc ttctgaggct tagggaaggg 60
aggaagggac ctacaaagag ccagggtaca cctgcctctt gtgctgaggg cacgtgccag 120
cttctctgcc agtaagcctt ttgctagcta acatttccca ccctcccaag gcccctaacc 180
tgccctcccc tctccactat gttagtatat ctacctctgt ttctgactct gaggaagggt 240
caggccacac ggagggaaca gtagtgggta ccagcctccc ctctgctgtc cagtccacca 300
catcaatctc ttcctcttca gagctggcag gaagtgagcc tagtagttca gagtgaccag 360
atacctcctt gcctgccttg ggagaagggt ataataactc atctgtagtc aaggagactt 420
ccagcccagt ctccacccag tttgagcagg gaggtgagag gtccccataa gacctctggg 480
gagtatcaag ggagctgaca tggagaagtt tgtcttcctg accatccagt ggctgggagc 540
tggtaatttc aaggtctggt gtccaacggc ctcctactga aagcacttca ctcacctcag 600
agggcatgac aaggggggcta aggagctcag ttggccctct gttctcacca gcaggttcct 660
tttccaattc tgtgagctcc ctgggccaga gttccatgtc tggtagacac cattcttccc 720
ttcaatccag tctttcctgg ttctgcagat ggtaggtagg cgttctgcaa cccttaaccc 780
cctggaactn ttcaaaagac ccttataggg ngggttcaat ggtctgaacc cccagaaccn 840
tgaaagtcca ggatcttctt tca 863

<210> 440
<211> 640
<212> DNA
<213> Homo sapiens

<400> 440
atccatggca cggagcggcg gcggcggcgg cagcaggagc ccggcgcgat ccgctaggtc 60
ccagcccagc gcccagcgag caggcgacgc ggaggggccg ggcctccagt gtcccgaggg 120
ccgggcgctg agactccggc cgcgcagctg ggagctgccc gcgctgcgct gacagccgcg 180
ccgacgtcct ccccgccggg gcgctcgcag gacatgcccc cggggcgcgg cggcggggac 240
cccggggctc gcctccgccc agggcccccc tccacgccct cgggagcccc gggcccccgc 300

US 2005/0059005 A1 Mar. 17, 2005

tgagcactcc tcccgcacgc ctgggtccct ccggccggng cgcagcccgg ccccagcgct 360
gtgggtcccc gcggggcgat gggttgatgg gcgccggggg acgcaggatg cgggggggcgc 420
ccgngcgcct gctgctgccg ctgctgccgt ggctcctgct gctcctggcg cccgaggctc 480
ggggcgcgcc cggctgcccg ctatccatcc gcagctgcaa gtgctcgggg gagcggccca 540
aggggctgag cggcggcgtc cctggcccgg nttggcggaa ggtggtgtgc agcggnnggg 600
acctcccgga gcctcccgaa cccggncttc tgcctaacgg 640

<210> 441
<211> 823
<212> DNA
<213> Homo sapiens

<400> 441
cctcagtgta ggagtgatct gaagcaggac aagctcagcc tgcagctgcc gtgggctttg 60
tgtggactgg acgcagagct tgggagacgg gggagggcta ttactccaat tcactgtcaa 120
tggaattaca gctatagcgg cagtgtatat aggattgctt tttctcgtct tcctgggttc 180
tgaagtaacg gaagctacct tgtataaaga cctcaacact gctgaccatg atcagcgcag 240
cctggagcat cttcctcatc gggactaaaa ttgggctgtt ccttcaagta gcacctctat 300
cagttatggc taaatcctgt ccatctgtgt gtcgctgcga tgcgggtttc atttactgta 360
atgatcgttt tctgacatcc attccaacag gaataccaga ggatgctaca actctctacc 420
ttcagaacaa ccaaataaat aatgctggga ttccttcaga tttgaaaaac ttgctgaaag 480
tagaaagaat atacctatac cacaacagtt tagatgaatt tcctaccaac ctcccaaagt 540
atgtaaaaga gttacatttg caagaaaata acataaggac tatcacttat gattcacttt 600
caaaaattcc ctatctggaa gaattacatt tagatgacaa ctctgtctct gcagttagca 660
tagaagaggg agcattccga gacagcaact atcttcgact gcttttcctg tcccgtaatc 720
accttagcac aattccctgg ggtttgncca ggactattga agactacgct tggatgataa 780
tcgcatatnc cctatttcat caccatctnt tcaaggctca cta 823

<210> 442
<211> 852
<212> DNA
<213> Homo sapiens

<400> 442
cattccaaat ggtcaacatt ggctcaacac tgagtgagaa gaaaaggcag aagaaaacca 60
aagggcagaa ctgatagctt caggtcagtc tgagtgcaga atgaaagact cagctgtttt 120
tattatttcc agcttgttga ccttgctata cattcacaga agtttgaact tttctagata 180
atcagcaaaa caaagcaaga tgagaagaga gtttgaaggg tttgtttagg ctcctctttg 240
tagacttaga gcagcagttt caaaattcag ttccagcagc atcaggtcac ctgggaacgt 300
gttagaaatg cagattcttg tgccccattc aggcctactg aaccagaaac tggagagtgg 360
ggcccaggaa tctgtgggct aatttttttt taatgttgta gttatatata taaaacatag 420
cattttctat tttaactgta gaattcagtg acattcacag tgttttacaa ccataaccac 480
tatctgtttc caaaactttt tcatcacccc aaacagaacc tttgtaatta ttaagcaata 540
attcctcact ccctccaatc cccagcccca gataacctct aatctccttc tgtctctatg 600
aatttgtcta ttctagatgt tatgtacaag tggaattatg tggccttttt agtctggttt 660
attttgccta gcagaatgtt ttcaagggtc ctacatgttt tagtatatag caatacttcg 720
atacttttta tggctgaata atattccatt gnatggctat accatggttt ggttatccat 780
tcatctggtg atggatgctt ggggtggttt cacccttgg ctattgggga ataatgctga 840

0094-0549-0350

aatgaacact gc 852

<210> 443
<211> 834
<212> DNA
<213> Homo sapiens

<400> 443
agggcaatac agtttttgta aaattttaca aaaattggac tccccccatt gaaacactgt 60
actttgaaag aaacttcaaa ttcagcatat tttttaaaaa tctggatgat gactcgtttt 120
ctttctttca aacctttaa ttncgacaac atttagctta aggcaaattt tatctttgtt 180
atagctattt cagaacagct tttaaaatgc aatttaaaaa atggcattta gcaagcaatt 240
gccttttcaa ccttaaccat agagcctctt ccatggattc cattatattt tattaacata 300
agttaaaata ggagtgttct gggtttcaca aggattaaag ttcctatcta atgtgcatgt 360
aactaaacgc acgtttacgt acataatagc tattggtcac agtttgtatg atggtctttc 420
agccagaaaa cagggctgca gttcttacag tagtccttga ataatgacgt tacattcaac 480
gtcttttcat tattgggtta tgagaaaaaa atttgattcc aggtgggtgc ccctgtctgt 540
gtggaatttg cacattctcc tcaagtctgt ttgggtttc tctggatact acagttttct 600
cccacatccc aaacacacgc atcgcatgtt aggtttatcg gcttgtttaa atggtcctac 660
ttttgagcaa gtgcgctgtg tgtgtgtgtg tgtgtgtgtg tgngtgtgtg tgtgtgtgtg 720
tgttagtgca ccctgcgaag gggatggcat cctggccagg gttgggncct cctttggccc 780
tgagcttttg ggatgggctc tggcaaccct taagnctgac tgggaatang cagt 834

<210> 444
<211> 634
<212> DNA
<213> Homo sapiens

<400> 444
gttaggattc ctggttttaa actagagaaa agaacatgta tcaagaaaat cataaggaag 60
agaaaacaca tttacagtac tgtactgtat ttattggtac catacattta tgttgctgtt 120
tacaagatga agcatctgtc tgaaatggcc agcagctaca gctgtaccta tctactgtac 180
atatcaagca agtcacttta ttcttataat gtctatgact tctctctttg aaagcgcttc 240
catcatcact gttggcactt catatgggtc tcatggtgtt aaggtttacg gcattgcact 300
agacacaatg aaaactacac aagagggccg ggcacggtgg ctcacgcctg taatcccagc 360
actttgggag gccgaggcgg gcggatcatg aggtcaggag attgagacca tcctggctaa 420
cacagtgaaa ccctgtctct attaaaaata aaaaaattag ccaggcatgg tggcacgtgc 480
ctgtaatccc agctaatcgg gaggctgagg caggagaatc gcttttccc agaaggcgta 540
ggttgcagtg agccgagatc gtgccactgc actccagcct ggatgataga gggagactct 600
gtcgcaaaaa aaaaagaana gaanaagaan agaa 634

<210> 445
<211> 852
<212> DNA
<213> Homo sapiens

<400> 445
gatccttttg gttctgttcc tttcatttct cattcaggca agttacacat gtaacatcat 60

0050209-0050800

cactgtcaca aataaaacac acaagaacaa cagcaaaatc ttataaagtg gaagtaagac 120
tctgatgtta gttagctaca gaaagtagaa aatattttaa cctttagcca tcctactctt 180
cttaatgatg ttctttgcat tgagttatta ttcagttgta tctttgccaa catagaaaaa 240
tgctgattta cacaatagaa acataactgc ttcttttcat ctttattatt ggatactgtt 300
gaaaaaaata tttaaagata tttttatact tggcttttgc ttaaaaattt gatattttcc 360
tagtttgtac atgctctctt gtagatgcat tttaaaagta ttaatagttt tgtatttgtc 420
acaatcactt tgttttactc ttgtcttctt atatccctct tttgatttca attcagaatt 480
caaatattga tgtttttcac tgttaaaaat tttcagtaat aatttcaaat tacccagtta 540
acacttggaa gatactagga tggaatagga tcgtgcattg gcataaatga attttcatgt 600
atgtatggtt atagtggaaa aaaagagttt taatcttggc aaagggaaat atgttagaag 660
aagttatgct ttattagaag gtaaaagttc gatatattca tggtaactgt cggccatgtt 720
cttcagttct ggtccttttg gttctcactc aggcaagtta catatgtaac accatttgaa 780
aactacngaa ttaccaccaa aggaaaaact tacaaatgta aagnccaaag aagaattgag 840
ggttaaggat tc 852

<210> 446
<211> 853
<212> DNA
<213> Homo sapiens

<400> 446
gaagcacatc tggacagctg tgcggcctcc ttgcgggccg acgtcagccg agcacgtccc 60
ccacgtcctc tccttctcgc cacttattat ttattcgttt tcccaaagaa gcgactaggg 120
acccaagttt aaaaattcct ccccccactc aatgcgagac gtggccagat cccatccaac 180
acacggttta attttcatgg ggctctggga tcaaaagaac agaaacagca acaacaaaag 240
cccagccgct gtctgatttt aagctggcaa agtgggaaaa ataaagtgtt gagtaaacag 300
accaagttgg atcatgggga atttcagagg tcatgccctc cctggaacct tctttttat 360
tattggtctt tggtggtgta caaagagtat tctgaagtat atctgcaaaa agcaaaagcg 420
aacctgctat cttggttcca aaacattatt ctatcgattg gaaattttgg agggaattac 480
aatagttggc atggctttaa ctggcatggc tggggagcag tttattcctg gagggcccca 540
tctgatgtta tatgactata aacaaggtca ctggaatcaa ctcctgggct ggcatcattt 600
caccatgtat ttcttctttg ggctgttggg tgtggcagat atcttatgtt tcaccatcag 660
ttcacttnct gngtccttaa ccaagttaat ggtgtcaaat gccttatttg tggaggcctt 720
tatcttctac aaccacactc atggccggga aatgcttgga catctttgng caccaactgc 780
ttgggtttgg gccgctttct gacaggnctt ggtggctttc taaagttcct tggtcggaca 840
atggactttt gga 853

<210> 447
<211> 851
<212> DNA
<213> Homo sapiens

<400> 447
ggtaatcctt gaaatattta aattataggt cacatttgaa attctgctta gccgtttgta 60
tgtaacttgg taagaactaa atgaattacc gcattttact caggttgttt tcttgaggta 120
ataacattat agattttgta aaaagagaaa aaagtattag aattatctta acattaggct 180
tccctaagta ctctttctga gttaaccaat tgctttttaa attatagctt tatcagctac 240
ccctctaaaa atcatgcttc agtagatttt tttatagggt gtacagttct atactttgaa 300

0005-5555-0000

aagctcctgg aataattatg atattgcaaa cagattttat cataacactt ttcattagtt 360
ttgccatatg cacgtccttt gttttatcct atgacatgtt tcagaattct tttattgagt 420
tctttgtgaa attttcctta aaactttcct atgcagatga tcacaaatca tatttgagtt 480
taaatacaag tttgtttgtt tgtttgttta gagacggggt cttgctgtgc tgcccaggct 540
agtcttgaac tccggggctc aagcaatcct cccacctcag ccttccaaag tgttgagatt 600
acaggcatga gccaccacac cctagcctaa ctacaagtat ttttgacagg tgattttgaa 660
attttggggg agctaatgca agtaaactac tttacttggt gacatttgac actctaaatt 720
ttaactggca aatactttag atatggacca agaagatgca ttaatttgct ttgaagaaca 780
cattcgggct ttanaaaagg aggaagaaga agaaaacccg aagagttgct gagagaaagg 840
agacnaccgc n 851

<210> 448
<211> 687
<212> DNA
<213> Homo sapiens

<400> 448
acttgctttt tctcccgctt tgtaattgta ggagaaaacc aaagaactag cagagaagca 60
ggcgcaactg agcccatctc gctggccagc tgcgccatgg ctgatctggt tccagacttg 120
cagcccattc ttttctggat gtctaactcc atcgagctcc tgtactttat ccagcagaaa 180
tgcccactct acatgcagag catggaggag cagctggaca tcacaggctc gaaggaatcg 240
ctgttctcct gcacgctgac ggccagcgag gaggccatgg cggtgctgga ggaggtggtg 300
ctgtacgcct tccagcagtg cgtctactat gtctccaagt ccctgtacat ctgcctcccg 360
gcactcctgg agtgcccgcc attccagacg gagcgccgtg agagctggtc ctcggccccc 420
gaactgcccg aggagctgcg ccgcgtggtg tctgtgtacc aggcagccct ggacctcctg 480
cggcagctgc aggtgcaccc cgaggtggcc tcgcagatgc tcgcctacct cttcttcttc 540
tccgggacac tgcttctcaa ccagctcctc gacaggggcc cctccctgag ctgcttcact 600
ggcccagagg tgtccaggcc tgcgccgcct gcagcagctn ctggagtgga tgcngagcgc 660
cngcttcggg gcggctggag agcactt 687

<210> 449
<211> 874
<212> DNA
<213> Homo sapiens

<400> 449
ccaatatgag gaggaagact ccgtaaatcc aacaaacagg agaattagca ccaaaagaac 60
ttaagatctt aacagaatgg tttcaaagaa aatgtagtat atgaagtcaa aagctcaatg 120
gacttgctaa atagcaaatt agttaaaatt caatgaataa gttaaaaaca gcttaagaaa 180
agaattagcg tttgaggctg ccatgagcct caaacatcca gccttttatc tctctgtagc 240
ataaagagat aaaaaaagta gaaaaaatta taggaaggtt aaatattgga ggactgaatg 300
agaaagtccc acatacatct cataaggaat ctagaacaag agagaaaata agaaaactaa 360
tttcaaaatg aaaatagatg agaattttcc agaaattcaa tttcattcct caaattaaag 420
aagcacaaca catccccagc aagttaaata aaaataaatc cacagacatc tccagtgaaa 480
ctcaatacca aattcaaaga tacaatctta aaagaaccaa agattaccta gtatgaatgc 540
agactggcat catgtttttt gcaacatcag gggccagatg acaatggaat aaagtaatat 600
ctttgaagta atgagaaaaa atatcaatct agaattctat acccacctta gctatttta 660
agagtaaggg taaaataaaa tttcactctt gcagaaagga cacccaactc tagagttaga 720

0502350.0002

aaaccggtaa cccaaaaatt aaggtgggac tcaaaggact aaaaatatgg ttggtaaaat 780
cttaaatcag caatggactg cntaaaacca ccnttaatag gttaacctta aggaagttgg 840
ttaaggataa anggtaaaaa tactaggcca ataa 874

<210> 450
<211> 746
<212> DNA
<213> Homo sapiens

<400> 450
acagctaggg ctgctcagta actgccccaa ccactaccac gtccccaagt gcaacgggac 60
ccacggaact acaggtgtgg ggcagggtga gcgtggaaga agggacgcgg atgggggtgc 120
gctttgcaga cgatctggag actgctgtgt gttgagggaa gatacgaagt cgcgggagca 180
gttggggact caatgtgtgg gcaacaaggg tcctgctgag ctcaggagct gcacggaatg 240
gtggcagtca ccttgccagt gcagcaggca tggatcagac tgcaagctag gggcacgagg 300
catcagttgg gaagagggga cgcacagcta ggcttgaggc ctcttcatcg ggatgtcccc 360
aggcccccca gcccaggccc agcataaagg ccgtgttggg gggccccccc gacccaaggg 420
gggcttcatg cgccacgtgc aggcggagcc gtctccatcc tcagagccgg aggctggccc 480
ttcacagcct ccagtcaggc agggggccct ccagggtggc ctgctcatgg gctacagccc 540
atcaggggggg gcgacatccc ccggggtcta ccaggtatcc atcttttccc ctncggctgg 600
tacctctgag cctcataggg ccctgaaacg acaagcccca tccacttgag ggttccccgg 660
gagcttaaaa aaagcccttg ggcttggggg gccanaanaa gggacttacc ccccttggaa 720
gaaacccntt ttacttgggg gggctt 746

<210> 451
<211> 787
<212> DNA
<213> Homo sapiens

<400> 451
aggagcttgc agtagcgggc ggcagagctg gagtgaaggg agctagtgtt taggtagcag 60
tcaccattat gctcaaagcg gtgatcctga ttggaggccc tcaaaaggga actcgcttca 120
gacctttgtc ttttgaggtg cccaaaccat tgtttcctgt ggcaggggtc cctatgatcc 180
aacaccatat tgaagcctgt gcccaggtcc ctggaatgca ggagattctg ctcattggct 240
tctaccaacc tgatgagccc ctcacccagt tcctagaagc cgcccagcag gagtttaacc 300
ttccagtcag gtacctgcag gaatttgccc ccctaggcac agggggtggt ctttaccatt 360
ttcgagacca gatcctggct gggagccccg aggcattctt cgtgctcaat gctgatgtct 420
actccgactt ccccttgagt gctatgttgg aagcccaccg acgccagcgt caccctttct 480
tactccttgg cactacggct aacaggacgc aatccctcaa ctacggctgc atcgttgaga 540
atccacagac acacgaggta ttgcactatg tggagaaacc cagcacattt atcagtgaca 600
tcatcaactg cggcatctac ctcttttctc ctgaagcctt gaagcctctt cgggatgtct 660
tccagcgtaa tcagcaggat gggcaattgg aggactcacc agcttgtggc caggggcang 720
taccatccgc tagacaggat gtgtttcagc ctgcaggcan ggncagatta cgtgcatcta 780
ctgatgg 787

<210> 452
<211> 784
<212> DNA

0352350.0002

<213> Homo sapiens

<400> 452
atttatttcc tgcttacaag gcagtcttca gcatgtgtat gtccatgtgg tcattcaggg 60
atccaggctc cttgtgtttt ctggctccac ctcaccctag ttcctaatca tcatccatat 120
ccacctgatg gaatagaaaa tagcgtgagg tgtgttccca ggaggctttg catgggttag 180
acctggaagg caaacacatc acgtctgctt atgttccatc tggaaaaaca tttgagttgc 240
cacagcaaat tgctagtgag aatgagagat ggagttccct gtgtctccaa gaagggtatg 300
actttggcag agcagctctt ctgttccctg acttctcttt ctcctgccag aacccagcac 360
cgagagggac catcagagga tgttccatga gaacttggtg agggttgtgg agaggttggc 420
tggtgcttct ccgtcttcat acagatgtcc agacagggga ccagaagtct caggtctgag 480
ctctacctgg aagcccctca cgtctgtagc catcaaacct ccagataaga cgagccctga 540
agcattttgg ttgcatcaga aaacagatgg aaggccagtc ttcacagatg catatacttc 600
atcctggctt ccacccacag aggttgcatc tgtgcagaaa ttcatcccag agcaccaggc 660
aggtgggtgt caactcctgc tgagatttcg ctgtatcang aaactcatgc atctggtgca 720
gatgtcccgg agtggctctg acagtccang gcttgggcag tggganacct gatgacagcc 780
ttga 784

<210> 453
<211> 851
<212> DNA
<213> Homo sapiens

<400> 453
acaccaagct gaagcggctg gagatcacgc cggtggtgtg caatgtggaa caagttcgca 60
tcctgagggg actgggcgcc atccagccag gagtgaaccg ctgcaaactc atctccagga 120
aggacttcga gaccctctac aatgactgca ccaacgcaag ttctagacct ggaaggcctc 180
ctaagaggac tcaaagtgtc acctccccag agaactctca catcatgccg cattctgtcc 240
ctggtctcat gtctcctggg ataattccac caacaggtct gacagcagcc gctgcagcag 300
ctgctgctgc taccaatgca gctattgctg aagcaatgaa ggtgaaaaaa atcaaattag 360
aagccatgag caactatcat gccagtaata accaacatgg agcagactct gaaaacgggg 420
acatgaattc aagtgtcgga ctggaacttc cttttatgat gatgccccac cctctaattc 480
ctgtcagcct acctccagca tctgtcacca tggcaatgag ccagatgaac cacctcagca 540
ccattgcaaa tatggcagca gcagcacaag ttcagagtcc cccatccaga gttgagacat 600
cagttattaa ggagcgtgtt cctgatagcc cctcacctgc cccctctctg gaggagggga 660
gaaggcctgg cagtcaccca tcatcacatc gcagcagcag cgtgtccagc tcccctgctc 720
ggactgagag ctcttctgac agaatcccgg tccatcagna atgggttgtc catgaaccag 780
atgcttgatg ggcttatcac caaatggact ttctgggccc aaagaaggag atttggccgt 840
catgacatgg n 851

<210> 454
<211> 526
<212> DNA
<213> Homo sapiens

<400> 454
tttttgtttt gttttaactt ccccttgttt caagacaatg ctaaggaact ttaaaattgt 60
agcagttcat atttgctggg ctcttactgt gtagtggcag ggttgtaatt gcgttaccta 120

0050209450

tattaactca gtcaatcctt acaacagccc tatatgactg gcataattat acccttgttt 180
tgtgcatgag gaaatacagg gaattgacat actggatggc agggctggga ctcaaggaca 240
gtctgactct ggagcacagc tcttttgttt ttcttttttt ctttttcttt tgtgtttgtg 300
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtaggagag agagacagag 360
tctcgctgtt gcctaggctg gaggtgcagt agctcaatct tggctcactg caacctccac 420
ctcccaggtt caagggattc tcctgcctca ccctccccag tagttgggat tacaggcgtg 480
tgccaccacc cccagctgac tttttgtgtg tgtatgtgta tgtnnn 526

<210> 455
<211> 845
<212> DNA
<213> Homo sapiens

<400> 455
cctcctgaaa atgaaaagaa ggtagaggaa gatattatca cagagcttgc tcttggagaa 60
gatgctatat ctagcagtat ggaaattgac caaggtgaaa agaatgaaga tgaaacttct 120
gcagatcttg tagaaacgat taatgaaaat gttattgaag ataacaaaag tgagaatatc 180
ttagaaaata cagactctat ggagacagat gaaatcattc ctattttgga aaagcttgca 240
ccttctgagg atgaacttac ttgcttttct aaaacatctc tccttccaat cgatgagaca 300
aatccagatt tggaagagaa aatggaaagt tcttttggtt caccatctaa acaagaaagt 360
agtgagagtt tgccaaaaga agcctttctg gtcctctctg atgaagagga tatttcgggt 420
gaaaaagatg agtctgaagt tatatcgcaa aatgaaacgt gctctccagg ttagcatata 480
acttaaatgt taaagatttt ttattgactt tgatgaactg tttaataaaa cattatcata 540
atgttttaaa tttattttag ctgcagagaa agttgagaat agtgatgact ctatagaaag 600
atgtcttaac ttcatagaat tcagaattag tgtgtgtact ctgtgagtag cattgtctaa 660
atactaagaa gggagataaa atnagtagaa aatatgccct tatagtctgg aaatagagat 720
gaagtanagc accatacact gagatacagc ttaagttagt acataattga ctagagttgt 780
acagttcttt cttgctatca cttancgaac aaatnactta gaactaaaag cctaatagtt 840
taatn 845

<210> 456
<211> 794
<212> DNA
<213> Homo sapiens

<400> 456
aaggcgcgga agcggcggta gctgcagctg gcgaagttgg gcgactggcg gatgcaggcc 60
ttgcggcacg tcgtgtgcgc cctgtccggc ggcgtggaca gcgccgtggc cgcgctgctg 120
ctgaggcgga gaggttacca ggtgacaggg gtgtttatga agaactggga ctcactggat 180
gaacatgggg tctgtactgc cgacaaagac tgtgaagatg cttacagagt ttgccagatc 240
ttagacatcc ctttccatca agtgtcctac gtaaaggagt attggaatga tgtgttcagt 300
gactttttga atgagtatga aaaaggaagg actcccaatc ctgacatagt ttgcaacaag 360
cacatcaaat ttagttgctt ttttcattat gctgtggata atcttggggc agatgccatt 420
gccacaggtc actatgcaag aacttccctg gaagatgaag aagtccttga gcagaagcac 480
gttaagaagc ccgaagggct tttcagaaat cggtttgaag ttagaaatgc caggtttccc 540
aggatgccct gaggagaacc atcttccctc tggggggatt aacgaaagag tttgtaaaga 600
aaatcgctgc tgagaataga cttcatcatg tgcttcagaa gaaagagagc atgggcatgt 660
gtttcatcgg gaagaggaat tttgaacatt tccttcttca gtatctgcag cctngacctg 720

09529650.072800

gcactttatt tncatagaag acaataaggg tctgggaaca cataaaggtt gggtcctgna 780
taccttgggc caga 794

<210> 457
<211> 846
<212> DNA
<213> Homo sapiens

<400> 457
aatccattaa tctgatgcta tgatgacctt ggaaataatg tacttttaaa aaatatccta 60
aagtcctatg acttaaagtt cacattatct tccttcataa atgaaaaatt ttcatttaaa 120
acatggaatc agtttatcaa agtacagttt acaggtttta agtctgttcc atttctggtt 180
agacaaactc aaatacaatg atcaaactaa aagatttctt aaaagtatga tgactattaa 240
ttgtctgcta atgaagtctg aaggtctgat aagattatcc atgaagcaaa agggaggaac 300
aaaaaaactg ttacatttct ttcttctaat ttttgagcct aaaaaccatt ttttataaac 360
gtggtttcat tgttctgaca tcttaggtgt ggcagttctc tgcctcaaga aaatttgtaa 420
aatttatatt ttagatttta gcataatttc tgaaacaaac aataacaact acttaccagt 480
ttttactgta gatactggac tttgcctctt agggtgaata cttgtttgac ttcaagcggg 540
gagagtatac tttttaacca atgacttgct gattttgcag ttaagaaaga aaaacagaat 600
ccactgaaaa taaaatttct atttgaaagt ttcataagtg taattgacta acggtgagtc 660
ctcccccagc tgttactggt atttcaatgt ttaagaaatt attttattta cactaaatag 720
tctcaacaat tccctatctt atactggcag gcaggaaact gnagangttg tatcaactgc 780
agtttgcact gaaagaaaac aatcttaaat cacttttaat cttgcagagc atttttggaa 840
ggtcaa 846

<210> 458
<211> 425
<212> DNA
<213> Homo sapiens

<400> 458
acccacgctg cgggcaagcc atggcgggaa gcgagccgcg cagcggaaca aactcgccgc 60
cgccgccctt cagcgactgg ggccgcctgg aggcggtcat cctcagcggc tggaagacct 120
tctggcagtc agtgagcaag gagagggtgg cgcgtacgac ctcacgggag gaggtggatg 180
aggcggccag caccctgacg cggntgccgg tgagcgtcgg ccgcaggccg nggaggacag 240
tggggccggc ccgggccgga gggacctccc ctggagcccc ccggggcctg gggaactctc 300
gcgccccggc ctgggtctgg ctccgtccat gcagccattc ctggcagagt agtcaccgag 360
aagctacagt tgatcagaag cgtcttggct tggaccctgg tgcttcgnan ggggcccgaa 420
catnt 425

<210> 459
<211> 868
<212> DNA
<213> Homo sapiens

<400> 459
ttcagaatca taaaaacatt tttaaaagga attgagaaaa aaaaaacctc aaagaagata 60
ccatatgagt atggtagtaa tacccaaaga taaccaaagc aatggaacaa aataaatttt 120

0507260 2004-09-30

ataatgagaa attttaatcc ttgttatatt taacccattt gttcattcaa tgctgttata 180
cattcccttt gttgtgggtt gaatctagga aaagggtctt gtccaatata attaaggatc 240
tcaagatgaa gcatcctgta tcgtcacggg tacgtcctaa atccaatgac aagtgttctt 300
ataaaagaca agagaaggca caaagacaaa gaaaaagcca cgtgaaacac aatagaaggc 360
ataaataaaa agccacgtga aagcaaaggc agaaactaga gcaatgcagc tacaaagaat 420
gctgacagct accaaaagct gaaaaagaca agaaaccatt ctcctctctt gtcttcagag 480
ggattgtggc cctgccaaca ccttgatttt gtacttctgt cctccagaac catgacagaa 540
tgaatttctg ttattttaag ccaagtaggt ggtacagcag ccacgggaaa ctaatatatg 600
tggtttgctt tatatttatg ttggacagca ttctcttaga tcctacaacc aattcacaga 660
aaacacaggg ctgaggaacc agttaaactt caccagggaa tacagttcac aaaatttagc 720
ccatgggaaa ttccacagag taaactatct aatctncaca aataaattga aatggaagcc 780
ttctatggat gaaaagagac ttagacntat caaccagtca caaccagntt tggaaccctg 840
attaaaacca aaatggtaaa aaaaaaac 868

<210> 460
<211> 819
<212> DNA
<213> Homo sapiens

<400> 460
gtggttaaac gtacaatttg gggggcctca tcccccaaat ttatttgaat ggagcagagg 60
ggggttgtca tctttacatt ttcaaatgag cagtcctggg gctgagactg attaatgtaa 120
ccactacatt gagaattact ggtctaacat aaaagtgttc aagatgttga aacaagtgac 180
accttgtgcc gttgatttcc ttccctttc cagagctgtg ttggtggtgt atctcaaact 240
aaaggaggta acagaatgga ctcttaggac gaacctgatt tagttagagt ttccactccc 300
atcttgaact agtggtataa tgtaggaaag cagttctcaa agtgtggaca gatgacccat 360
ggggatctcc tcttaccctt tcagggtagc ctcaaggtca taactatttt caaaataata 420
gtaagatgct atttattgtt ttcactgata cactgatggt tcaaaagcaa ggctgggtaa 480
aactactggc ggtaccttag cacaaagcaa gtcaggggca ccaaactact tgagaatgcc 540
cttgaagcag taaaatttat tattctattt ttatttttt gaggcggagt tttgctctgt 600
cgcccagggt ggagtgcagt ggcactatct cggctcactg caatctcttc ctccctggtt 660
gtatttttag tagagacagt gtttcgccat gttggccang ctggtctcga actccggacc 720
tcangcgatc cacctgcctc ggcgtcccaa agtgctggga ttacaggcat gagccaccgt 780
gcccggncta ttattattaa gcttanctt tgactactg 819

<210> 461
<211> 415
<212> DNA
<213> Homo sapiens

<400> 461
tgtttaatct gatgaatgtg gctttttttc ccttcacttt aatgttcaag aagttgtggc 60
tatttcatag atttcttctg atttattctg tgggtccctg ttatctgttc tttatgtaat 120
ctttcagtag attttcatcc ttttatatcc acattcttat gtggacttgc tgaagaaaca 180
gaatatcagt tcaaaacaaa acctaggcca ggcatggtgg ttcgcgccta taatctcagc 240
actttgggaa gccaaggcgg tcaggagttt gagaccagcc tgaccaacat gatgaaaccc 300
tgtctctact aaaaatacaa aaattagcct ggcgtggtgg cacgcatctg taatcccaac 360
tactcaggac gctgaggcag gagagtcgct tgaacccang aggcgganat tgcan 415

0952456.0952800

0950450-050000

<210> 462
<211> 856
<212> DNA
<213> Homo sapiens

<400> 462
atgtagcccg gtccgtgccg caaagcgaac ggcggccgcg gcgcgggccc cgcgggggtt 60
agagtcacca cgcccagccc acagatgtca cttctgcctt tccattatta ctcagttttc 120
tgaatgccag ttgcttctag catagtgcct gctctagaga ggcactcagg aaccaaggcc 180
tatctttctg tgttgttcca ctctacacct aagttgctgt gatggagcca tgtggtcggg 240
gtcagggttc ccactgcact ttctgcagtg ctcccagaac tcagtatgta ctgggaaggg 300
cctgctgtcg tgacagcctc tctttggggc cagcttctgc ttttgccccc atctttgcag 360
tacagggggt aaattaaaca agaggatgcc tgaatgaacg atatcctggg ttcttgagag 420
acaagtggga gctgataatt ctgaaaattc attagtcaaa gcatggagat aaaggtggca 480
gcaggaaggg gagaggcaag gagtagaccc gtgacagttt tagaatctta tttgtgccaa 540
aatactttac tgcattggct tggacctcta atacaatgtt gaattgttaa ccatgatagc 600
actgtatcct ggtctaattc ctgaattgaa tggctagtct taccattaag aatgctattt 660
gcggccaggc acggtggctc acacctgtaa ccccaccact ttgggaggcc aaggcangtg 720
gatcacttga ggtcaggagt ttgagaccag cctggccaac atggtgaaac cccgtctcta 780
ctaaaaatag aaaaattaac ccgtgtgtgt ggccggcgcc tgtaatccaa ctgctctgga 840
ntctgangca aaanaa 856

<210> 463
<211> 827
<212> DNA
<213> Homo sapiens

<400> 463
gcgagcaaca ggccgtgccg ggtttgcatt tccttactgc tttgtcttga agacagaacg 60
atgccaaaga aagcaaagcc tacagggagt gggaaggaag aggggccggc tccctgtaag 120
cagatgaagt tagaagcagc tgggggggcct tcagctttaa actttgacag tcccagtagt 180
ctctttgaaa gtttaatctc gcccatcaag acagagactt ttttcaagga attctgggag 240
cagaagcccc ttctcattca gagagatgac cctgcactgg ccacatacta tgggtccctg 300
ttcaagctaa cagatctgaa gagtctgtgc agccgggggga tgtactatgg aagagatgtg 360
aatgtctgcc ggtgtgtcaa tgggaagaag aaggttttaa ataaagatgg caaagcacac 420
tttcttcagc tgagaaaaga ttttgatcag aaaagggcaa cgattcagtt tcaccaacct 480
cagagattta aggatgagct ttggaggatc caggagaagc tggaatgtta ctttagctcc 540
ttggttggct cgaatgtgta cataactccc gcaggatctc agggcctgcc gccccattat 600
gatgatgtcg aggttttcat cctgcanctg gagggagaga aacactggcg cctctaccac 660
cccactgtgc ccctggcacg agagtacagc gtggaggccg aggaaaggat cggcaggccc 720
ggtgcatgag tttatgctga aacccggtga tttgttgnac tttnccagag gaaccattca 780
tcaagcggac acttctgcgg gctggcccac tcgactnacg tgaccat 827

<210> 464
<211> 863
<212> DNA
<213> Homo sapiens

0050204850

<400> 464
aactcattga tgaagacctg tgcttgggca aagctaagaa acaagaacaa actgttgagg 60
agaagaagaa gatgcctatg gaaaatgaga accaccaggt attcagtaat ccaccaaaga 120
tccttactgt tcaagaaatg gctggattga ataacaagac aattggatat gagggaattc 180
atagccctag tgtgcttcct tctggtggag aagaaagcag atcaccatct cttcaactta 240
agcctctgga ttccagtgtt ttacagtttt ccagtaagta caaatggatc ctaggtgaag 300
aaccggtgga gaaacgaaga aggctccaga atgagatgac aacaccttct ctagattatt 360
ccatgcctgc tccttacagg agggtagaag cacctgttgc ctacccagaa ggggagaaca 420
gccatgataa atcgagttct gagagaagta caccaccata ccttttccca gaatacccag 480
aagcaagcaa gaatacaggt cagaataggg aggtttcaat tctgtatcca ggggccaaag 540
accaacgcca ggggtccctg cttcctgaag aattagaaga tcagatgcca agattggtgg 600
cagaagaatc taacagaggt agcacaacca taaacaaaga agaagtcaac aagggacctt 660
ttgtagctgt tgtgggtgtt gccaaaggtg ttagagattc aggagctccc attcagctga 720
tccctttaa cagagangac ttgctgagag acgaaaagca gttgaatcct ggaacccaat 780
gccttattct gnggcctctg ctgcaatccc tgctgagcca ttggggagaa agcaagagct 840
ttgaggagac caaagtcata atc 863

<210> 465
<211> 858
<212> DNA
<213> Homo sapiens

<400> 465
tacacatgag cctcctccgg cagaaaatag cccagctgga ggaggagaag caggcacgca 60
cggccttggt ggttgagagg gacaacgcgc atcttaccat caggaacttg cagaagaagg 120
tggagaggct gcagaaagag ctgaacacgt gtcgagactt gcacaccgag ctcaaagcca 180
aactggccga caccaatgaa ctgaagatta aaactttgga acagactaaa gccattgaag 240
atctaaacaa atccagagac caactggaga agatgaagga gaaagctgag aaaaagctca 300
tgtctatcaa gtcagaactg gataccacag aacatgaggc taaggagaat aaagaaaggg 360
ccagaaacat gatagaagtg gtaaccagtg aaatgaagac actaaaaaaa tctctggaag 420
aagcagaaaa gagagaaaag cagctggcag acttcaggga ggtggtgtcg cagatgctag 480
gcttgaacgt gaccagcctt gctcttcctg attatgaaat catcaagtgt cttgaaagat 540
tgatccattc acatcagcat cactttgtta cctgtgcctg cctcaaagat gtgactactg 600
ggcaagagag gcacccacaa ggccatttac agcttcttca ttgaacactg tatctcttga 660
gagaggtggc cataagacat ggcacacaat tcccaatttc acaaattcct cctgtctttg 720
agatttgatc agttggtgaa tattttatgc tttgatgata tagtgagaat gcatcacttg 780
caaaaacgat ctcaaaagtg tcagccttag ataacgttca catttaaaac gcctattatt 840
catttactag cntttang 858

<210> 466
<211> 590
<212> DNA
<213> Homo sapiens

<400> 466
aatcgagtcg gccttgttgg cctactgggc ggcgcttcct agttcggctg gttcttctgt 60
cgccggcttc agcagcccgc gcccgggcag gtaaggcatt ccccgcctta atgcctcggt 120

caaacgtcgt ccgaggtccg cttccaggcc ttggcacctc tgccccaggg ttgctggggt 180
cggctgctgg aacggaaatc tctttatcat ccgtgagaaa agttnnagag gaagtgggtt 240
cctttgacag agcttactcc agaagaaaga cttgggtagg tccccggtaa tcaagaagtt 300
cntcggccct gaggaagagc ctgaggcttg gagggacgtc acccagctgt tctggggcgc 360
agtcggacct caagtttctc acctctcagg ccctggattc cgtgaacccg actgcgaaat 420
gaagtctctt ttccccagaa ccagcangtc atgccagcac ctgacagatg cctgtggcgc 480
cagcagctcg ctgagcctgc acacgattgt nattcgcttg tttctccggc ctncaagctt 540
ccagggaatt agaaagtgga ggcngcttat gggatcagat gagtacattc 590

<210> 467
<211> 800
<212> DNA
<213> Homo sapiens

<400> 467
cctttgcgcg ccgggttaat gggcggtaat ttggtaccct tgggtgcact ttgttttgcc 60
cctgttcatt tgaatgcaaa tgggtgaccc gggcccgact aggtgcttat taaattgcag 120
ttttcccccc tgccttttcc ggaatgcaga cttagaggag agaggctgcg ccctggccca 180
gcctggctcg gctcagctcc gcgcgccatg gcaagctcgg cttccctgga gaccatggtg 240
cccccggcct gcccgcgcgc cggagcgttg ccggccactt ccaagacact ggccttttcc 300
atcgagcgca tcatggccaa gacgtcggag ccccgtgcgc cctttgagcc ccggcctgga 360
gcgctagagg cggacggcag ccagggcaag aaactgctca acctctgctc gccgctgccc 420
tgtatgatcc ccctccagcc cctaggctac gaggtgccgt caaagacact gctcagttac 480
tcggagctct ggaaaagcag cctccgggcg ggcggcggcg gaggcggcgg cggcggtggc 540
ggcggcggcg gcggnggggc cccagtgtgc ggcgccagcg gcttgtgcaa aaccaactgt 600
ggcgtgtgct gcaaggccga gctgggcctg gcgccgtccg cgcttgncgc gggcagggtc 660
atcaagccgc aagtcatcaa ccaaggctgt gggctgccgg ccagcggctc gctctactac 720
tttaaactac ctggacttcg aaccgngtac cccgccgtnt gagcttcttc agcggggcac 780
ctttttnccg tcttggcctt 800

<210> 468
<211> 696
<212> DNA
<213> Homo sapiens

<400> 468
ggaacagcaa gtggcacata gtaggcacac cttttattcc tctctcatcc tgttctctac 60
tcattaagct gtccactctc ttttttgacc ttagcacatt cctaatgctc taaccttctc 120
agcctctttt tttaaagtgt cagagcccta taaaatattg ttaataaata attttaacat 180
aaaaagaggt acagatttac agatgtacat gcagtataaa atgataacct caagcatacc 240
tttctccaaa gaaaaatgtt acaaaactaa acacagttgg ctgagcttga gttgcattac 300
tgcatactta ggacgtgcca gcacataaca aacgtttaag gaaagtgatt acaagaagaa 360
aagttaatat tttagacaag ttgattcagt ttttcttggg ttgtatgatg ttagaagttg 420
actactgtct caaattggag cctgtaggcc actggngttt tataaggcac ttgattggag 480
aactaatgct ttaaccacac cagaataatt gcattctgca nattaaatgc antgccatat 540
gctgccaatc ccccctgcgt gtcccccggc attatcttct ttctcgacca ccactgatga 600
gcatctaatt gccccttcaa ggccttattc agatggccct tattggagct gnttctgaat 660
ctttttagac tcatttgggc cccttnactt aagaan 696

0005204569.0 07/28/2008

0963469.0002

<210> 469
<211> 869
<212> DNA
<213> Homo sapiens

<400> 469
tacattaaaa tgcacttaat atcactttgt aaagcccaga tgagtgcaaa tgtgcctgta 60
acttcctcct ttaatctgtc caggtagtat ttagtcttta gtcttacatt ttctttctcc 120
ctttatttca tgaaattcct tgagaaaact tcaacagtaa agaaagaaat ttcgttcatc 180
tcacaactct tccaaacgag gaaacttagt gaaatatttc agagcttcta gatgtgaggt 240
acaaaacttg ggatcaaatg gaatcttgat tcactaacca atttaagatc tgacttctaa 300
ttttaggaac tttgggttat gaacgcttcc attttatacc tgtgtctagt tagtttctgc 360
ctatctatcc aagaagcttt tatcaagggt ccaccatgtg ccagccactg aagtagttat 420
aaatacaagg atgtgtaagg tatggatgat ggtatacgaa ctgtcatctt actggatttg 480
tccgctctgt taaagatacg gttccgaaaa ctttttaaag ccctagagag ggctttaagg 540
caatgtagca tcatatatag aggcatcaac ctgttcatat ctttctattt aacagaactg 600
tgcacctggg cacaagggtg tgcacaacag gatgtgtaca gcagcactgt taaagtgtag 660
cacatccata ctacaggatc ttatgcaact gttggaaaga atgaagcgat gctgcactgt 720
ggtcatgcag tgatctctaa gacatattaa ctagaaagcc aaagggttaa caatgtatag 780
caactgggcg caatgactng cgccctgtaa tcccagcact ttgggaaggc tgantanggg 840
cggatcacct gaggtcagga gttttgaaa 869

<210> 470
<211> 822
<212> DNA
<213> Homo sapiens

<400> 470
gttatgaaga tagtctgtct tgataaaatc ccaggcttaa tttagataat gtcagtctgc 60
cacacggagt tggtagccat aaaatgctac ttctgagttc tacacttagc tgtagaatgc 120
aaattgagtg acacctttaa ggctacagta cttgattttt taacatcttt tctgttgggg 180
ctttgactag ttctgcagaa agggattggg acaaaaccag gagtttgtta tttttagttt 240
ttctttgcca tttagcagca gaaattcgat ccccactgat aaacagaacc tgctggacca 300
cctttgctca gataatttct ataacacaga ggttaactca ctattggttg aaataaatgc 360
ttaaactttg aagcactttt taaaaaatca taagtacacc agtgctgcac ctccaatgat 420
aatcatttag gaaacacaga aaacaaaaat taaatgaatg gtccacatgt gaataaataa 480
ccttaatcca ctcggatatg cagcagctct tcccactgca aatgggtttt gtggtggtaa 540
cttgaattgg aggagagaga cagctggcct ggtgctgctg ctgctgccaa aagccatctt 600
gttaacatgg tttatttcca ttctgtcttc ctgctaccca caagagccct gtcctcctgt 660
ctccctcctc tttcatcagt tttcagtggc atactgncct cagtcacatt tctcctgctt 720
tgccagtaaa cagcatgtag ctgattcttc tagtcctcgn ctgcattcct acaattnctg 780
ctcattccga attgggtctg gtatctncta agttggtgca ct 822

<210> 471
<211> 798
<212> DNA
<213> Homo sapiens

<400> 471
agcagaggga acagggaaga aacctaaagg ctgcaggctg ccaggtgtgc ttggagagcc 60
cccttcttcc gccgggcctc gcaagcagcg taggactgtg gagaagggcg gtgggcaagg 120
agggaactcg agagcagcct ccatgggcac acaggagggc tggtgcctgc tgctctgcct 180
ggctctatct ggagcagcag aaaccaagcc ccacccagca gaggggcagt ggcgggcagt 240
ggacgtggtc ctagactgct tcctggcgaa ggacggtgcg caccgtggag ctctcgccag 300
cagtgaggac agggcaaggg cctcccttgt gctgaagcag gtgccagtgc tggacgatgg 360
ctccctggag gacttcaccg atttccaagg gggcacactg gcccaagatg acccacctat 420
tatctttgag gcctcagtgg acctggtcca gattccccag gccgaggcct tgctccatgc 480
tgactgcagt gggaaggagg tgacctgtga gatctcccgc tactttctcc agatgacaga 540
gaccactgtt aagacagcag cttggttcat ggccaacgtg caggtctctg gacggggacc 600
tagcatctcc ttggtgatga agactcccag ggtcgccaag aatgangcgc tctggcaccc 660
gacgctgaac ttgccacttg agcccccaag ggactgtgcc gaactgcaat ggagtttcag 720
gtggatgaca cagacccaat cccttgagct tnctggctgg gggtccttaa gccttcnttg 780
gacttggggc ttnttcca 798

<210> 472
<211> 862
<212> DNA
<213> Homo sapiens

<400> 472
agtgctagct cgccgcggcc gcctccgggg accacctggc ttcatgtgtg gatttccacg 60
gctcttgccc agaggcgggt acactgtgtt ccaatgtgcc acggaactca cgcagtggca 120
ctttgtggct tcatgaagga agaggcaggc cacgcaacac ttcctcccca agccaaggag 180
aagtatcact tttagaggca gaggagcgga aggcagtggg tgtgaccaaa agtgccattt 240
gttaaagctt atcttccttg ccagatttta aaaactatta tggaaaatct caagcattca 300
caaaagtaga gagaaagaaa ggactctcag actgttggag cagaactact gagaaaaacc 360
aggcattgta tcttcagttg tcatcaagtt cgcaatcaga ttggaaaagc tcaacttgaa 420
gctttcttgc ctgcagtgaa gcagagagat agatattatt cacgtaataa aaaacatggg 480
cttcaacctg actttccacc tttcctacaa attccgatta ctgttgctgt tgactttgtg 540
cctgacagtg gctgggtggg ccaccagtaa ctacttcgtg ggtgccattc aagagattcc 600
taaagcaaag gagttcatgg ctaatttcca taagaccctc attttgggga agggaaaaac 660
tctgactaat gaagcatcca cgaagaaggt agaacttgac aactgccctt ctgngtctcc 720
ttacctcaga ggccagagca agctcatttt caaaccagat ctcactttgg aagaagtcag 780
gcagaaaatn ccaaagtgtc cagaagccgg tatcggcctc aggaatgtaa gcttacagan 840
ggtcgncatc tcgttcccac cg 862

<210> 473
<211> 811
<212> DNA
<213> Homo sapiens

<400> 473
cgacgctcca cagctcgccg cggccggggg gcggtgcgcg gaccgtgcgc gccgcgggcg 60
ccagatgtgc agtccccgcc gccgccagtg accgagccgc agtccgagcg gtatcgggcc 120
gcctccctga tgctgcgggg gcgaccttga gcgtacagcg gcttccctcg gtggggaccc 180

0560250-0220800

cgacatccca gcgctgtgcc cggtcttgcc ctctgtagcc cggttcgccc cgcgcttgga 240
catggaaggg gccgccgcgc ctgtggcggg ggaccgcccc gacttggggc tgggggcgcc 300
gggctctccc cgagaggcgg tggcgggggc gactgcagcc ctggagccca ggaagccgca 360
cggggtgaag cggcatcacc acaagcacaa cttgaagcac cgctacgagc tgcaggagac 420
cctgggcaaa ggcacctacg gcaaagtcaa gcgggccacc gagaggtttt ctggccgagt 480
ggttgctata aaatccgttc gtaaggacaa aattaaggat gaacaagaca tggttacatc 540
agacgagaga ttgagatcat gtcatctctc aaccatcctc atatcatcag tatttatgaa 600
gtgtttgaga acaaagataa gattgtgatc atcatggaat atgccagcaa aggggagctg 660
tacgattaca tcagtgagcc ggcgacgcct cagtgagagg gagaccggca cttcttncgg 720
cagatcgtct ctgcttgtgc actattgtca caaggaacgg tgttgggtcc acccgggact 780
ttggaagctt gaaaaaagaa ccagtnatna a 811

<210> 474
<211> 866
<212> DNA
<213> Homo sapiens

<400> 474
caaatgcgta cctttctgtt tttaatttgt gtgtctccaa aaaaaagaac ctttcatact 60
tggcagcttc actactaagc tttaagccct gtatgtaatt tgttacccag ttcctctgct 120
catccatcca ttcattcaaa aaatatttat tgaggatttg caaggggttg ggaacagagt 180
ggtgaacctt gaaggtgatg ccactgctct tggggagctc agcggtgact ctccccatat 240
atgtaaataa acatataaac agaaatgtgg ataaaccaac ttctgagcaa attaacatgt 300
atgtgattta aaagtaagat gatttgcaag agaggagcag gtgatgaagt gtaatcaaga 360
tcggcctagg atgatcaggg aagcgctttt taggtgggtg acatgtgagc agaaagacct 420
gcctgaagag aagggataaa ccagcaaagg cctgggggaa gcattttaga cagagagaca 480
catggtgcag agaccatgag ctgagaagga gcctggcatg tccaggggct gacagaacac 540
tggtaatgtc acagggtgtg gaagaactgg cataggtgag gtcagagcat atagaaagag 600
cangttgtaa gggattttgc atctcacaac gtggtccact agactattct cccttccacc 660
acccacccct atgcacacat ncaagcagtg tgataagttc tgtccattct acatacttga 720
tatctctcag atctcctctt tcccactact ttaacaggca ccatcatctt ttggcttatg 780
ctcaatggtt gcctactgac ttncttggct tctaggactt ncttcctaac catctttcat 840
aatgccaaac ttggatagnt ctaatt 866

<210> 475
<211> 864
<212> DNA
<213> Homo sapiens

<400> 475
atgcatggta aatttgaatt tccccattgt tctctagagc taggtcaaaa aaacaactgt 60
ttcttttctt attccactat taataaattg aaagcttgct gtacaaaggc aacagcaact 120
taaaaaagaa aatctggaca atagatgtgg actccaaggg gccactgcca tcccttcctg 180
tgtgctcttt ttgacaagta aatcactcca gttagctgat gtcctgaaat gacatttgta 240
cctgaggcaa ttcttattag agcttactca ggacttttca aacatcagga cacacatagc 300
aatttggatg ttgtaaaact acgtgttaca tttggagagg tcttgttgag aaggcaaaat 360
tttctaaata ttttgatatc aatttgggta aagaaaggaa tacttttgtt agaatgagaa 420
ttaaagagaa aacaaaagaa tcttggcaaa attttccctc tgaaattaca aactttagga 480

0980250 - 0980250

actttccag atgtatcgaa tttaatttga cattgatgtc actcttcata ccaagtgaat 540
ctattctcat gaactttgaa cccatgttaa ttttggaccc tataactaat ttcctttctg 600
tatcccatgg tggtcaaagc agtaaaggag tttagagata cttagcaaat gccattcata 660
tagtattgtt agccaaacta ttattccttc cttagaagtt gatgtatcag aaaatttata 720
agttatttgt atttatatat aagtacatca gaacttgccc acatgataac tcatggttgc 780
tttaataagg gaaaatatgt tatttgangg taattatatg atagtgagga acattttaca 840
attatttaca gngnttgaca ttaa 864

<210> 476
<211> 861
<212> DNA
<213> Homo sapiens

<400> 476
gataactgta ttatattttt catctagcta taaaacttta atcttactct taatatcctg 60
gatttaattc aaactcctgt tgggttcttc acaaatgaga acttgttcaa aggatttatt 120
gaactggtat tgatttcact gaaaattttc cacaccacca ccattgtttt tttgaattct 180
tggtgttgtg cttcccacct tctgtccttt tcgtttgttt agagaagatg aatttttaaa 240
aagcagataa attgctaatg agcaataatg accttatctt taccaaaaca ctgaaaatta 300
agagaggttc agtgttgaag aagcacaata tgctgcggtg tctttttcta gaagtgaatg 360
gaaatcttgc tcagttggca tttcaagcag gaaatgaaat gcttgcttta atggcaaagc 420
agcgttaaca tttttcctgt cgtgtagcag agagtacaag aatcatttca gcaaagcagt 480
gactcaccat gagacgttat ctccatggag ctgcgttttg acttttccca ctctcttact 540
catagaagga ggacaaagga acgaaatgaa atcatgctca caatgaactg ttcattacat 600
caactgatct ctctctctct ctcttcctct ctttctcttt ctcccatacc ccaaggcaaa 660
atttttttaa agaaatgact ttaaaaacta tcatttctgt attttaatta catctcttag 720
aaataaaatt atgtttgcac catagctttc taagaaaaaa aaatgtgttt ttaactgagt 780
cttagttgct tagtgctttt attggggtat ttttagactg tattttaacc acacttccaa 840
ggatcatgtt cattgcctta c 861

<210> 477
<211> 866
<212> DNA
<213> Homo sapiens

<400> 477
tatgaaacag acgtggcaga gtaaacctcg aaaccgacct tcttttcggc agacactcat 60
gcatttagac attgcctctg cagatgtact tgccacccca caagaaactt acttcaagtc 120
tcaggctgaa tggagagaag aagtgaaaaa acattttgag aagatcaaaa gtgaaggaac 180
ttgtatacac cggttagatg aagaactgat tcgaaggcgc agagaagagc tcaggcatgc 240
gctggatatt cgtgaacact atgagcggaa gcttgagcgg gcgaataatt tatacatgga 300
attgagtgcc atcatgctgc agctagaaat gcgggagaag gagctcatta agcgtgagca 360
agcagtggaa aagaagtatc ctgggaccta caaacgacac cctgttcgtc ctatcatcca 420
tcccaatgcc atggagaaac tcatgaaaag gaaaggagtg cctcacaaat ctgggatgca 480
gaccaaacgg ccagacttgt tgagatcaga agggatcccc accacagaag tggctcccac 540
tgcatcccct ttgtccggaa gtcccaaaat gtccacttct agcagcaaga gccgatatcg 600
aagcaaacca cgccaccgcc gagggaatag cagaggcagc catagtgact ttgccgcaat 660
cttgaaaaac cagccagccc aggaaaattc accccatccc acttacctgc accaagctca 720

0002475205 - 0002475205

atcccaatac ccttctcttc atcaccataa ttctctgcag cagcaatacc agcagccccc 780
ttctggcctt gtcccagagt caccatncca gactcaatat gcacggacag gacatagcaa 840
cctgcgccaa caacctgagg tatttn 866

<210> 478
<211> 857
<212> DNA
<213> Homo sapiens

<400> 478
accatcatgt taccatattc ttgccaaaaa aaaaaaaaaa aaaaaaaaaa caccagagtc 60
gttacatgaa gtatctttga tcactgaatt tccagcactt ctttgttgtg tctagatgct 120
aagccctttt ctaatttgaa aaaaaaaaaa aaacaaaaaa ctggagacct gattctgttn 180
atctcttgta gtttctctta tctctgtttc taaccactct atgtagtgcc tctttttttc 240
tgtctacaca cacacggagc atccaccata ccaataatca cagtatgtgg taatgaaaag 300
tggaagggaa aaatggccct tgcttctcac agacaaactc actatctcaa tggatcattt 360
ttgttttttt gttttgtttt gtttttgana cagtctcact ctgttgcgca ggctggagtg 420
cagtagtgca atcttagctc actacaacct ctgcccccgg gttcaagcaa ttctcctgcc 480
tcagcctcct gagtagctgg gattacggca cctgccacca tgccctgcta atttttgttt 540
ttttagtaga gatagggttt caccatgttg gccaggctgg tctcgaactc ctgacctcaa 600
gtgatctgcc cgcctcggcc tcccaaagtg ctgaaattac aggcatgagc cacagcgccc 660
cgcctcaatg gatcctgatg agctacgcaa accattattt ttatgtcttt acgaatgcca 720
ccagaaagtt cattttgntc tttctgaaaa caaccatgat tataagatgc ttctgaaaca 780
cggaagtgag agaacatgtt gtacagagaa catgcatcct ttgccctgcc ccatgnacct 840
atgctaagca tttataa 857

<210> 479
<211> 862
<212> DNA
<213> Homo sapiens

<400> 479
aacaaacatg cagacagtct tacagctgca gttgcctgag ccttaagggc cttgctactc 60
aaagtgtggt cctcggaccg ccagcatcag catcacctgg gagcttgtta gagaaaacaa 120
atctcagacc tcaccgaccc cacggaatca ctatctgcat tttaacgaca tctccaggtg 180
attcatctgc acacaagttc aaccacaggc tgaccattta gagaagctgg acttgagtgg 240
gattttgcag tttttccttt tgatggcctc ctccccttg cttcccctcc taccttctg 300
actccttgta gcttatttta gaacatgtcg ggatcctgct tctcttgtca acaaaaggct 360
gttgttaaaa tctttcagcc ggcagcagca atgtttaatt catggactag aaaattaatt 420
ttattttcat gaatagagct gaggaaaaat agcaaggaga ctctgtgcat ggcccttggg 480
aatccagctt gtctatttaa cagatgaact ggcaacagtg gggaggcctg aggggagggc 540
tgccttctac aaacttgtgt agcaaattgt attaggatgc ttttggctgc aggtatcaca 600
aaattcagct tcaaatggct taaaagaaaa ggaaaatttc taatttcact gataaaaaat 660
cttgagatag ggtactttta ngatgaccca gaaatgccat caaatagcag gtttggtttc 720
tgccatggtg gcttggtgca ttcagntttc ctcatgggta caaggtggcc cgccagagtt 780
ccgggcagca catgggagtc aatggcctat ggnangagaa agaggttgcc cttcctgaag 840
ttcatttatc agaaaccaaa at 862

0050250.00000

<210> 480
<211> 865
<212> DNA
<213> Homo sapiens

<400> 480
caattaaata cagtggacac aagccagtgt tatttattaa atcctggtgc tcaataaggg 60
tgcctgctga gggttgggag cctggggcca ctacatcctg ccttttctct aaggagatta 120
gctagtatta aagaagtgtt aagactagcc cagactgagt ctttctcctc aaagcatgaa 180
gcacctgaga gcatcctgct ttcagcagga gggagccact cagaaactgt tccctagaac 240
cctgttgttc aaagtgtggt aggaggacca gcagcctggc tggtcaaagt agagttctca 300
cctaggagat gtgggaacta cagaaacttg gccccctaga tcttcagaat cagaatctgc 360
actttaacaa agttcctagg tacctcggtg cccattaaag ccagaggacc cctgacctac 420
aggccacaga cccagataaa gcagcccaag ctatcgtttc ctcttgctct cttgagtcac 480
accagcgagg cttttgtggt gcctttcatt cactgcagtg tcgagatgtg ccgccaagtc 540
acgaatattg tccacactgt ccctgcagtg taacattatc agggcctagg aacgactgag 600
cccctcgtag gcatgtgaca ctgtgttcct aagactgctt ctctcttttc atgaataaaa 660
gcagacacaa cgcangtgtt tagaaaacta gnctgggatt aatattttaa gctagacctt 720
ggatgcctca gactttatat tcgtggttta ttttcaattc tggtcattgt attggctctt 780
acattaaata tactggtttg gccctagaaa tggcaaaatc acgaagtcac cactctggct 840
ggccttaagg agctcacaag ccatt 865

<210> 481
<211> 745
<212> DNA
<213> Homo sapiens

<400> 481
tattgatctg tgtaggaatg tactgaattt cacgaaacac agcttattta tttaggtagt 60
agtcccccaa acttgaatct agtgaaaggt ggcagacatt ttagctcaga gttttctgac 120
atttgatttt gtaaatgaat cggtgggtaa cagatctgtg tcatcctatg tgatgtgatg 180
tgatgtcatc ctatgtgatg tgtactctgg ggtactcaca tcctatgtga tgtgtctcaa 240
gtgactgtca cacagtggac actttaccag tgctagcttg aatgaggtct acctccatgg 300
cccagccctg ctgccccta gtgatttcat tgaatgggat gaaaaggtaa aaagtgctta 360
agacctgtag aagggactac atcaggtagg gtatgggaat atttaggact actttggtaa 420
ttattgaaaa gtctagagta ttaagccact ggtggttttg tgaggcacga gtgagttgaa 480
cagtttggtg ggctttggtg tatctttgct ccagaattat atcaccagtt agctgttagg 540
tgctgccatt tggtaacgtg ccaacttttc aaaaatggtt tgccccaaac tagatttttc 600
tatcttctcc aaagccagag ccaccttcct gtcctagtgc atttttagca gtgccccgtc 660
atcttactgg cattcacctg ggcttnctgn gctcaatcag gggtcaagtc tggcctgatc 720
tcagttncac agttcctcta ctctg 745

<210> 482
<211> 755
<212> DNA
<213> Homo sapiens

<400> 482

0962345.02200

tttgtttaat acatgttaaa caatagtcca tcagtggttt gtctctttta agatcactaa 60
cttggggcat accgtaccgg ttggacaaga tctcaaatgg tgacttaact tttaatgagt 120
gcttataaaa acatgtgtgt tgcctcatga cactatgcaa ttgctgcttt agtggtgctt 180
tttgcattcc agttgaattg tacataggtt ggcccatatt gctcaccatt tagttagatc 240
ttcattgttt agatctcagt atgttgaaaa tctgggaaca gcatcataga aaactatatc 300
ctcctctctt agaacattgc ttagcaaaaa ttatgttttg ttctctaaat gaacttttcc 360
aacttcgaaa ttttgtgact tttaaataat gtataatact ctaatgttat tctaggaaca 420
agccagcatg tttggcctta tttacaaagc agttaatata ccagtgttag aataagtcaa 480
aacactgtac caatgaaaat gtgtgctctt ccaagtagta tatgtgtttt attttaatat 540
ttagaagatc taaaaagcta taggaacaca tgttccactt gtaacttaat agcatgcctt 600
aaacttaaag atatctggcc gggcgcggtg gctcacgcct gtaatcccag cactttggga 660
ggccgaggcg gtggatcatg aggtcaggag atcgagacca tnctggctaa caaggtgaaa 720
ccccgctcta ctaaaaatnc naaaaattag cccgg 755

<210> 483
<211> 876
<212> DNA
<213> Homo sapiens

<400> 483
gtggctgtac tggcggcggc agggctggcg gcttaggccg cagaggtctg tgggcctgag 60
cccacgctgg actctgtccg ttctgcgatg actgctgctc tggccgtcgt cacgacgtcg 120
ggtttggaag atggggtgcc taggtcccgt ggcgaaggga ccggggaagt ggtcttggag 180
cgggggcccg gcgcggccta ccacatgttc gtggtgatgg aggacttggt ggagaagctg 240
aagctgctcc gctacgagga ggagttcctc cggaagagca acctgaaggc cccgtccaga 300
cactattttg cactgcctac caaccctggc gaacagttct acatgttttg tactcttgct 360
gcttggttga ttaataaagc gggacgtccc tttgagcagc ctcaagaata tgatgaccct 420
aatgcaacaa tatctaacat actatccgag cttcggtcat ttggaagaac tgcagatttt 480
cctccttcaa aattaaagtc aggttatgga gaacatgtat gctatgttct tgattgcttc 540
gctgaagaag cattgaaata tattggtttc acctggaaaa ggccaatata cccagtagaa 600
gaattagaag aagaaagcgt tgcagaagat gatgcagaat taacattaaa taaagnggat 660
gaagaatttg tggaagaaga gacagatnat gaagaaaact ttattgatct caacgtttta 720
aaggcccaga catatcactt ggatatgaac ganactgcca aacaagaaga tattttggaa 780
tccncaacag atgcttcaaa atgganccct aaaaatggaa cgtggtacta ccggaactga 840
aagtcccgat taggacttga caataaggga ttgggn 876

<210> 484
<211> 797
<212> DNA
<213> Homo sapiens

<400> 484
aaggttatgt gtgatcgggt gtgggagaga cactctttgg ggctctgtat gggacattga 60
gagaccgtat gtgggagtga gagaccgtgt gtgacggtgc gtgtgagggg gcagtgtgtg 120
tggctgtgtg caacatggtg agcatacggt gctgtgtgtg tcacagaagt agattctgtg 180
tgagagagag tgagactgat gactgatgta cactgagagg tggtgtgggc aggtgtcatg 240
agaggcacat agggggcctg ggtgggacag acacagtgag tgtcagacag tctgtgttgg 300
ccactctgtg tatggcttgt gaaaaagtgc gtgatccggg cacattgctg taatcccagc 360

0005345803-20220000

actttgggtg gctgaggcgg gaggatccct tgaggccagg agtttgagat cagcctgggc 420
aacataggga gacccctccc cccacccccg ccgtctctac caaaataaaa ataaaagaaa 480
ttaaccaggt gcggttatgt acctctgtgg tcccagctac tgggaggctg aggttggagg 540
atcgcttgag cctgggaagt ggaggctgca gtgagctaag atcgtgccac tgcactccag 600
cctgggtgac agagagagag accttgtctc aaaaaacaaa acaaaactgc gtgactatgt 660
gtgacactga gctggtgaga gatggcagcg ttgtgacagt gcatgccaaa agtttgcggc 720
ttgtgcaggg cactcggaac cnaaagcctn agggaggcct tgtgtgtana aggcaagaaa 780
tgatggaaaa ggtggga 797

<210> 485
<211> 832
<212> DNA
<213> Homo sapiens

<400> 485
agttaaaaca atttttaag agaaaggaga taaccagagc atagccagca gaaggactcg 60
catgaggttt ggtgggactg cctagggaga aggaggcagc tggctgcgtg acagagccca 120
gtgatagggg agggcctgtg acccctaag gagctgagac gctgtcacag agcaatggga 180
gcgctgagtg atggagctgg atttgtgctt ttagaaaagc tttgttggct gctgttggga 240
gaatggattg gaaggggtg agactgcagt cagagactcc cataaggaag ctgttactgt 300
aatcacaaca acagatgcct acactccttc ccaagacttc cctctctgat cttagaagca 360
ttgtcaaatc tgggttccca gcctgccatg gcaagctgct tgctacttgg gagtgaaaag 420
cccttgtgga gctttttctt attcggtgac tgctcataaa gtgccttcac ctcgcttgcc 480
ttattagcca gtcctgcctc caaattacca ccacttgctc ctttcaggag tctcttcccc 540
ctaaagtccc tattactcct tctctctgct ttcagatcag aaacagaaaa agtcaccttc 600
cctaagagtc tgctccagtc cagtagaaat gctttaaaat ttttctggcc tcanctgccc 660
ttcttgagca cagaaatttc tagaatattg aatgaatcac tggttcttta taatcatttt 720
gtccagtttc aatcactgca ttttaggaaa gatttgaaaa actgaaggac aaagtggggc 780
ctttaaagga cttangattc tttcaganga aagtatctaa ngaacaagtt aa 832

<210> 486
<211> 762
<212> DNA
<213> Homo sapiens

<400> 486
taaaactccc gtctctgcca aaaatacaaa aattagccgg gtgtggtaac atgctcctgt 60
agtcccagct actagggagg ctgagatggg agaatcgctt gaacccggga ggcggaggtt 120
gcagtgcgcc gagaccacat cattgaactc cagcctgggt gacagagtga gactctgtct 180
caaaaaaaaa aaaaaagttg tggtcataaa acttggttca gatgccgtca gcggcatgcc 240
ttgcctaggg tcttgccctc cttgtggcct ctgcacaccc tgcctagtct ttccttccct 300
cctgaccttt ctgaatctga ttcatccttt tgccccaagc agaatcccac cttctccagg 360
aaggtgttag cctttgtagg acccactctg ggacactggt acctgctgcc tgtagccgtg 420
gcctttcccc ttccagaggg cagggcggtc tcagcaccct cttggtccac agctgatctt 480
ttttagctgc tgaagggtct ggggctgtgc cctggggaag ccatgacgct cccctgcgta 540
gggtcactgg gtggctcctg cagccagact tggacaccct ccctttgcag atttctgtct 600
cctccccagg aaccagctgc cttccttctg gggcgaattc attcttatcc cacagcccca 660
gcataatggg atctggctca nggaggcctt tcctgatctg ccctaggttt gccttccctg 720

0502450.0702000

tgagcaagcc cttactgncc tctgncttcc cgttgagctg ca 762

<210> 487
<211> 852
<212> DNA
<213> Homo sapiens

<400> 487
tgtacaagag atcattgtca tcctgggtgt tctttgtatt cttcatacta gaaatccata 60
acacgccaaa tgcccttaga accatggaca gcacccaggt tttacaaatg tcttctccag 120
gcttcagaag gaaggtggtg gacattcttt ccatcatgac acaaaccaac aattacatac 180
caggctttgt tggtgagaaa gcaaggtggc ccacctggag atttatgccg aaacaaccac 240
tttacaacac aacccacgga gtccttgacg ttggcttggt ttgtcaatcc caccacctca 300
taccatttag aaacttatca gctatttcta gataactggg tgttttagtt tcctgtagat 360
aaaactgaag gctaaattga atatatgact aagttattta ctatgaggaa tcttagtcca 420
ggaaaacctc tcaaaataca caaatgtctg agagatgtaa tatatttaat taatccctta 480
ctccttttat ttttatttt tatttttca gagacaaggt cttgctttga cacccaggct 540
ggagtgcagt agtgcaatca gaggtcatta cagcctccaa ctcctgggct taagtgatcc 600
tcctgcctca tcctcccaag cagctggagc tacaagtgtg caccatcatg cctggccct 660
ttattcctaa acgtttcttc atgaaggaag atncaaattt acatgagccc atgctcttca 720
catgggtaag gggaaaacag agagactcca gggcacccac atattgggct ttatcattgg 780
nctaggaaca gtcttggaat aggcagcttg ggttctactn ccagaaatac tttgccatnc 840
attaatttat tc 852

<210> 488
<211> 806
<212> DNA
<213> Homo sapiens

<400> 488
gaaccaggag tttggcgtga ccatggtgag agaagacggt ccaagaaggg acgttatcag 60
gccacttttt gggtggagaa ggaggtagtc agaccgtggc caaatttcct tcacattatc 120
ctagcatatt ttcattctgg tcttagctct taaacttctc caagcggtga ctgttatgct 180
ttacagagtg gggaagaggg tctgggttat ttgaggcaag aagggaaggc aatagacaag 240
agaaaagaag agactttaaa agatgccgtg tgtttccaac ttttttaatt ctaaaatttc 300
tgtttcaagg ggaagcaaaa gaaaacaagg aagtatgcga ccatgaagcg aatgcttagt 360
ctcagagatc agaggctgtg agtgtctgga atcaactgcc cagggatatt ctaataagag 420
tctagagagg ataagtagta aaaatgtttg ttgttattat tttgtttttt gcttattatc 480
gtgtcttaga tttatatagc atgagatagc cagtgtttaa cagtaattta gctgctgagc 540
gatcacactg ggaaaggcgt tgggaattaa acatttctta agtgttcact ttttctaccg 600
ttatatgctt tgtctgccat atcgcattta aacctcatgt cagttcggtg aagtccgtat 660
agttctcttt atgtttttac cattacacta ctacattccc ctggggtggg gccaagggga 720
gtgtttcttg ttgaaagatg gcaaggttag agaccttgnt tggctggcgt ttccagtgcc 780
ctggnactca aatatttttg gcanaa 806

<210> 489
<211> 889
<212> DNA

0956204.0007800

<213> Homo sapiens

<400> 489
tataaaacca taataaatta cttagactac aatgagcaaa acacatttgt gggtttggtc 60
agcagatact gctctgattt gccattaaaa tcttaaaaat tcttaaaaag ctctcttgaa 120
ttcgacctct actaccttcc aaggaccttg gaaagactta agtatgtgtt agaactctct 180
tgaaggcttg gtcttccttt agtgacatta acactcaggt ttgttattcc agtgggcagc 240
cccagttcat gcaaactgac ctgttgtgtc tggtgtcctt agactttgat atgcaggcca 300
aagtccaagg gatatgcaaa cataacacac acctgtactt ccataaaaac cagcagaatt 360
gtagatcagc tcattttact gaaattttaa accctgtaaa aaaaaaaata ctatgtttga 420
agaaagaaat cctggtgcat ataaaaacta caatgagtaa cagtaataca ggtaagaatc 480
aagcaggcct tgagcaaaac agtccattat tactgcgtaa actatgttgc tatgatactt 540
attttgagcc tttatgcacc agcacataca tagtaagaca cacaagatag ttcaacaaaa 600
tctaagtaat atacaaacac tgtaagagct tttccaacca aagaaacttt aatgtagatc 660
tgaaatgagc catcatgata cagaaaaaga tgattaccat ttcgtgtcct ttccaagtag 720
aactatctga taaacttttc tggttgtatc agaagagatt tcaactcaac atgaaaattc 780
tactacttgg gaattatttg aaaaaatcaa gtatttgaag gaaaaaatta tttttcatct 840
aaaggacgct tacattttcc ttttgctaga aacgaatgcc atggatgan 889

<210> 490
<211> 723
<212> DNA
<213> Homo sapiens

<400> 490
acatggaatg atcagaatcg tggaggcaaa gctctgtcca aaaatgttca ttttgttttg 60
ttttgttttg ttttcttgtt tttaacattt ccttcatcct ggtgaaatat cctggaaatt 120
catagatctg ggtttggtga tttcaaaact caccatgccc agtggccatt tcagttactg 180
ccgtgacatc cctgaggcta ccatactctc aaaaccaaat caatgccagt gatctaacag 240
gattctttct tatttatgag ttttgtttag atggatattt ttgcagagca taaaaaatta 300
aatgacattt agttatccat tgaatgtatc accctgactt aaaaaaaaat ccttaaatca 360
aaacttttca aaaaatctgg gctatggagt cactccctct gtggagcgag agcccagtct 420
tttctggtac taaggccaca gaggcaattt ccagtagcat ttttatatct tctctaagtt 480
tcttttcctt ttctgtctgt atctgttttt ctctgactgc ctatatctta ctttgtatac 540
ccatacataa attattttcc catcttctct cttccccttt ttttctgatt tgttttctct 600
cttgcaagaa actctgaaat aaccttcaga acacaaaaaa ctggaggttc tatacctaca 660
gagtcattat cattattgng attaccattg ttactgntgn tggtgttttt cctcttttta 720
ttg 723

<210> 491
<211> 808
<212> DNA
<213> Homo sapiens

<400> 491
cttagtggtg tcggggtcta gtggacagag aagactcttg gccaggcaga tggcttctcg 60
gtggcagaac atggggacct ccgtgcgccg gagatctctc cagcaccagg agcagctgga 120
ggacagcaag gagctgcagc ctgtggtcag ccatcaggag acctctgtag gggccctggg 180

0556250 .DOC 2006

gtccctgtgc agacagttcc aaaggaggct gcccctgaga accgtcaacc tcaacctccg 240
cgcagggccc tcctggaaac gcctggaaac cccagagcca ggtcagcagg gcctccaggc 300
tgcagctcgc tcagctaaga gtgctttggg tgccgtgtcc cagagaatcc aggagtcctg 360
ccaaagtggc accaagtggc tggtggagac ccaggtgaag gccaggaggc ggaagagagg 420
agcacagaag ggcagtggat ccccaactca cagcctgagc cagaagagca cccggctgtc 480
tggagccgcc cctgcccact cagccgcaga cccctgggag aaggagcatc accgcctctc 540
tgtccggatg ggctcacatg cccacccatt acggcgatca aggcgggagg ctgccttccg 600
gagcccctac tcctcaacag agcccctctg ctctcccagc gagtctgaca gtgacctaga 660
gcctgtgggg gcgggaattc agcatctcca gaactgtccc aagagctaga tgaagccatt 720
atggcggaag anagtggtga catcgtctct ctcattcatg acttgaggaa gtgccttgca 780
ngaaaacaag ccctgtctgg accgncaa 808

<210> 492
<211> 874
<212> DNA
<213> Homo sapiens

<400> 492
agaagatcta ggaaagaaga ttgctttggc cttgaacaaa gtggatggag ccaatgtggc 60
tcttaaagac tctgaccaag tagcacagag tgatggggag gagagccctg ctgctgaaga 120
gcagctcttg ggagagcaca ttaaagagga aaaagaagaa tctgaatttc taccctcatc 180
tggaggaaca tttaatatct ctgtcagtgg ggacattgat ggtttaatta ctcaggcttt 240
gctgacgggc aattttgaga gtgctgttga cctttgttta catgataacc gcatggccga 300
tgccattata ttggccatag caggtggaca agtactcttg gctcgaaccc agaaaaaaat 360
acttcgcaaa atcccaaagc aaaattacca ggctcatcac tgcagtggtg atgaagaact 420
ggaaagagat tgttgagtct tgtgatctta aaaattggag agaggcttta gctgcagtat 480
tgacttatgc aaagccggat gaattttcag ccctttgtga tcttttggga accaggcttg 540
aaaatgaagg agatagcctc ctgcagactc aagcatgtct ctgctatatt tgtgcaggga 600
atgtagagaa attagttgca tgttggacta aagctcaaga tggaagccac cctttgtcac 660
ttcaggatct gattgagaaa gttgtcatcc tgcgaaaagc tgtgcaactc actcaagcca 720
tggacactag tactggagga gttctcttgc tgcgaanatg aatcagtatg cccatttgnt 780
ggcagctcaa ggcagtattg ctgcagcctt ggcttttctt cctgacacac caccagccaa 840
tatcatgccn ctttgtgaca gactttgtan accc 874

<210> 493
<211> 834
<212> DNA
<213> Homo sapiens

<400> 493
agacgatccg ctagccacat taggcgctcg gtctctgcgt ccgcccctcc cgtgcctcag 60
agacttgcgc tccccaggcc cgagcccctg tcggcccatc ctcgagcccg tgtggctcgc 120
gaacctctaa ctccagccgc tgcagccccc tcccaggccc ggcgtccccg agccccgcgg 180
gcgccgcgcc tgcccttctt tggctacgct gcagccgcgg tgtcggcgag tcctcccggg 240
ttgccccccgc gggcgtcaga gggagggcgg gcgcccgcgt ggtgacggcg acgcctgcag 300
cccaaggagc gctccactcg ctgccgccgg aggggccggt gacctcttgg ctaccccgcg 360
tcggaggctt agatggctca ggcgaagatc aacgctaaag ccaacgaggg gcgcttctgc 420
cgctcctcct ccatggctga ccgctccagc cgcctgctgg agagcctgga ccagctggag 480

0050504800

ctcagggttg aagctttgag agaagcagca actgctgttg agcaagagaa agaaatcctt 540
ctggaaatga tccacagtat ccaaaatagc caggacatga ggcagatcag tgacggagaa 600
agagaagaat taaatctgac tgcaaaccgt ttgatgggaa gaactctcac cgttgaagtg 660
tcaagtagaa acaattagaa accccagcag caagaatccc taaagcatgc cacaaggatt 720
attgatgang tggtcaataa gtttctggat gatttgggaa atgccaagag tcatttaatg 780
ncgcttctga agtgcatggt catctgaggt gccacatggg ccagnttggn tcaa 834

<210> 494
<211> 823
<212> DNA
<213> Homo sapiens

<400> 494
attgtgggaa gggcggccgg tgcagccgca gctgccatct taggggcgcc tggcgctacg 60
ggtttctcgt tggaggcggc cttcgtggca gctgtagacg ccgggaaaag gcataaagtc 120
cgttggccga caccttttctt tcctccggcc tcggtagaac cgccagcccg cgtccgaagg 180
cggaggcgag gggaactggc cgcgtgaggg gcctgaggcg agcggttaga gcgtctcccg 240
gaaggatggg ccggtctcgg agccggagct cgtcccgctc caagcacacc aagagcagca 300
agcacaacaa gaagcgcagc cggtcccggt cgcgatcccg ggacaaggag cgcgtgcgga 360
agcgttccaa atctcgggaa agtaaacgga accggcggcg ggagtcgcgg tcccgttcgc 420
gctccaccaa cacggccgtg tcccggcgcg agcgggaccg ggagcgcgcc tcgtccccgc 480
ccgaccgcat cgacatcttc gggcgcacgg tgagcaagcg cagcagcctg gacgagaagc 540
agaagcgaga ggaggaggag aagaaagcgg agttcgagcg gcagcgaaaa attcgacagc 600
aagaaataga agaaaaactc atcgaggaag aaacagcacg aagagtagaa gaattggtag 660
caaaaagggt ggaggaagaa ctggagaaaa ggaaggatga aattgaacga gaagttctcc 720
gaagggtgga ggaagccaaa cgcatcatgg aaaagcagtt gctcgaagaa ctcgaaccga 780
caganacaag ctgaacttgn cggacaaaaa agcttganaa gga 823

<210> 495
<211> 752
<212> DNA
<213> Homo sapiens

<400> 495
gcgcacgtcc cggagcccat gccgaccgca ggcgccgtat ccgcgctcgt ctagcagccc 60
cggttacgcg gttgcacgtc ggccccagcc ctgaggagcc ggaccgatgt ggaaactgct 120
gcccgccgcg ggcccggcag gaggagaacc atacagactt ttgactggcg ttgagtacgt 180
tgttggaagg aaaaactgtg ccattctaat tgaaaatgat cagtcgatca gccgaaatca 240
tgctgtgtta actgctaact tttctgtaac caacctgagt caaacagatg aaatccctgt 300
attgacatta aaagataatt ctaagtatgg tacctttgtt aatgaggaaa aaatgcagaa 360
tggcttttcc cgaactttga agtcggggga tggtattact tttggagtgt ttggaagtaa 420
attcagaata gagtatgagc ctttggttgc atgctcttct tgtttagatg tctctgggaa 480
aactgcttta aatcaagcta tattgcaact tggaggattt actgtaaaca attggacaga 540
agaatgcact caccttgtca tggtatcagt gaaagttacc attaaaacaa tatgtgcact 600
catttgtgga cgtccaattg taaagccaga atattttact gaattcctga aagcagttca 660
gtccaagaag cagcctncac aaattgaaag tttttaccca cctnttgatg aaccatctat 720
tggaaagtaa aaatgttgat ctgtcangac gg 752

0950204-050800

<210> 496
<211> 465
<212> DNA
<213> Homo sapiens

<400> 496
cttagtggtg tcggggtcta gtggacagag aagactcttg gccaggcaga tggcttctcg 60
gtggcagaac atggggacct ccgtgcgccg gagatctctc cagcaccagg agcagctgga 120
ggacagcaag gagctgcagc ctgtggtcag ccatcaggag acctctgtag gggccctggg 180
gtccctgtgc agacagttcc aaaggaggct gcccctgaga accgtcaacc tcaacctccg 240
cgcagggccc tcctggaaac gcctggaaac cccagagcca ggtcagcagg gcctccaggc 300
tgcagctcgc tcagctaaga gtgctttggg tgccgtgtcc cagagaatcc aggagtcctg 360
ccaaagtggc accaagtggc tggtggagac ccaggtgaag gccannaggc ggaagagagg 420
agcacagaan ggcagtggat ccccaactca cagcctgagc cagaa 465

<210> 497
<211> 830
<212> DNA
<213> Homo sapiens

<400> 497
ttcagaaggc cagccggcag gaggagccgg acagcctctc ctattactgc gctgctgaga 60
ccaacggggt gggtgcagcc tcgggcaccc cgccctccaa ggctaccctg gaggggaagg 120
tggcttcccc caagcactgt gttctggctc ggcccaaagg gactcccct ctgcccctg 180
tccgaaagtc cagcctggac cagaagaacc gggccagccc tcagcacagt gccagcggca 240
gcggcaccag cagccccctg aaccaaccag ccgccttccc ggcgggcctc ccagacgagc 300
ctagcggcaa gacgaaggac gccagcagca gcagcaagct cttcagtgcc aagctggagc 360
agctggccag cagaagcaac tcgctgggca gggcgacggt cagccactac gaatgcctct 420
ccccggagcg ggccgagagc ctgtcctccg tgagctcccg gctgcacgcg ggcaaggacg 480
gcaccatgcc ccgcgcgggg aggagcctgg gccgcagcgc cgggacctcg ccccccagct 540
ccggggcctc gcccaaggcc ggccagtcca agatctccgc cgtgagcaga ctcctcctgg 600
ccagccccag agcgcacggn ccgtccgcct ccaccaccaa aaccctcagc ttctccacca 660
agtccctgcc gcaggcggtg ggccagggct tcagctcgcc ccccggtggg aagcacacgc 720
cctggtccac gcagtncctt cagcaggaac aggaagcttc ggcctgggct tcaaagcttt 780
cccttgcggg gccgtcaagc ngggcgcatc ttcggaactt gcttcanggt 830

<210> 498
<211> 847
<212> DNA
<213> Homo sapiens

<400> 498
tttccatggg cagggtcgac agactccctt ttcagtgatt tctggctctg agaaacctct 60
ttactcacta gaaaagaact ttatttaaat ggccaatttt gttcctcaga aaaagaaatt 120
aaaaaaaaag aaaaatagga tactgaagac agaaccatgt gacttggtga caaacaaaag 180
gaggggtgca ctagaatttc aataggctcc ctaattccat agaaaaagca aagcaaccca 240
atgcctcctg agcctgcagt gcatgaagag agtgcttgag ctgacccagc caccaggcct 300
tctggggcta gacataactt cccactggaa cagcagcagc ctctttcccc tctttgtgtt 360

0960304503.0470000

ttcatgaaga aaacggctgt tctcttaggt agccaggaaa tagattacat ggggcaaact 420
ttcaaaagca atctctaccc tggtgctcag gctacataca gaggcagaaa aggggcacgg 480
aagagccctt gctcttgaga gagagtattt tcatattccc aagggctttc cgtgtagagt 540
tgctatttct gatatcactt aaacctttac aagaaaaaag gctgtggtga ctcagtgttc 600
ctataaattc agaatgtgga aactactaat ccaaagcatc acttctagca ctgagtatca 660
agacgatcag cctgaccaaa atattgcaaa gagttttcta agtctctgaa gatttttttc 720
tncttgaaca ctgagtctat agcagtcagc aatgtcctta cccgatccct ggggaatggg 780
tatggaacag taagggcttg gttccatccn ttttagagtg aagagatnga aaattagggc 840
tacctan 847

<210> 499
<211> 819
<212> DNA
<213> Homo sapiens

<400> 499
gtcataaaca agccatgcaa ggtttcaagc tctacatgcc acggggtcgg tactggcggc 60
ttcgtctctg tcctgaacct cccagtgctc ctagtgagta tgctggttta gtggtccgca 120
ccgtactgga gcctgtgttg caaggattgc aagggttgcc acctcaagcc caggcccctg 180
cccttggtca ggctctgacg gccatcgtgg gtgcctggct tgaccacatt cttacccatg 240
ggatttggtt cagcctgcag ggagcgctgc agctcaaaca agactttgga gtggtcaggg 300
agttgctgga agaggagcag tggagcctgt cccctgatct ccgccagacc ctgctcatgc 360
tcagcatctt ccagcagctg gatggggccc tgctgtgtct gttgcagcag cccctgccca 420
agtctcaagt ccacaggagg ccccccctgtt gctgtgagtt actccccttc gctcactgct 480
ttgtgtgtcc caaaccctat tctcaccatt aatctggctt cagtatatcc ccagcagcca 540
cctaccttcc actcctgcct taccaggtgc ttgtcaggag gtccagacca cgaaattgcc 600
cagcagctgc ctcaatagcc tggagagctt ggagcccccg ctccagcctg gaacatctnc 660
agcccagaca ggtcanctgc aaagcacact aggaggaagg ggacctagcc cggagggcta 720
cctggtggga aaatcagcag gcctggcttg gcctnaggca acaccaagcg aaccccgttg 780
gnaccctggc cgttttttc cttgccttgg ggaanccag 819

<210> 500
<211> 711
<212> DNA
<213> Homo sapiens

<400> 500
atgcagcaga tccgcccgcc cttcatccgc gggcctccgc accatgcctc caaccccaac 60
agcccctgt ccaaccccat gcttcccggc atcgggcccc cgcccggtgg ccccagaaac 120
ctgggcccca cttccagccc catgcaccgg cccatgctat cgccccacat ccacccccg 180
agcaccccca ccatgcccgg gaaccccca ggcctgctgc ccccgccgcc tccgggcgcc 240
ccactgccga gtcttccctt cccgccagtg agcatgatgc caaatggccc gatgccggtg 300
ccccagatga tgaatttcgg gctgccgtcg cttgccccgc tggtgccgcc cccgaccctg 360
ctcgtgccgt accccgtgat cgtgccccta ccggtgccca tccccatccc catccctatc 420
cctcacgtca gcgactccaa gccccccaag aagctgctgt cgcctgagga accggcggtg 480
agcgagctag agtcggtcaa ggagaataac tgtgcttcaa ctgccacctg gacggggagg 540
cggcaaaaag ctgatgggcg aggaggccct ggcgggggcc gacaagtcag acccgaacct 600
taataacccc gcggacgagg accatgccta tgctctgcgg atgctgccaa gaccggctgn 660

0952945-050209

gtgatccagc ctgtgcaaaa cccgcggaga angctgcatg gnaccgtgca t 711

<210> 501
<211> 840
<212> DNA
<213> Homo sapiens

<400> 501
ttgccagcta tccacctcag agtggatatg ctaacaggga tgtactaaaa attgcaaaca 60
ttgaaggctt ctctaatccc agatacacaa caaaatacca tccaagacca taccacacag 120
agacttccaa ggccatcctt ggaaaaatgg agaagtagaa ggcccccatt attttatttt 180
atttttattt ttttgagatg gagtctcgct ctttcaccca ggctggagtg cagtggcgcg 240
aacttggctc actgcaagct ctgcctcctg ggttcaagcc attctcctgc ctcagcctcc 300
tgagtagctg ggactacagg tgcccatcac caggcccggc taatttttt gtatttttag 360
taaagacagg gtttcaccat gttagccagg atggtctcga tctcccgacc tcataatccg 420
cccgcctcag cctcccaaag tgctgcgatt acaggcgtga gccaccgcgc cttaaggccc 480
ccattcttaa ctgttaactc ctgaattggg gatttctgtc aatctagcag aaactccaaa 540
aggattctct gtactagaac cttgattgtc tgatcacccc tgtttcttat ttttcttatt 600
tttaggcatt aattccaaaa acatccatca gacagacatt taggaagtgt tctttctata 660
caacagagac ttggacaggt gaatcagacc acagtccttg gttcattaag ttttcaattt 720
tggaagggga aggaaaggag aatgagacag ccaaaaactt ggctaactgg tactgaagtg 780
atgggtgang acaggagaca gagccnttaa ttctgctgga ctagcagatg gggnctttca 840

<210> 502
<211> 745
<212> DNA
<213> Homo sapiens

<400> 502
ggctcctccc ccaccggcct tcacctttg ttccctatcc tgggccagtt ctctcgcagg 60
tcccagatgt ccagttccag atgcctggac ccagagtgtg ggggaaatat ctctggagaa 120
gccctcactc caaaggctgt ccaggcgcaa tgtggtggct gcttctctgg ggagtcctcc 180
aggcttgccc aacccggggc tccgtcctct tggcccaaga gctaccccag cagctgacat 240
cccccgggta cccagagccg tatggcaaag gccaagagag cagcacggac atcaaggctc 300
cagagggctt tgctgtgagg ctcgtcttcc aggacttcga cctggggccg tcccaggact 360
gtgcagggga ctctgtcaca atctcattcg tcggttcgga tccaagccag ttctgtggtc 420
agcaaggctc ccctctgggc aggccccctg gtcagaggga gtttgtatcc tcagggagga 480
gtttgcggct gaccttccgc acacagcctt cctcggagaa caagactgcc cacctncaca 540
agggcttcct ggcctctacc aaaccgtggc tgtgaactat agtcagccca tcagcgangc 600
cagcangggc tctgaggcca tcaacgcacc tggagacaac cctgccaagg tcagaccact 660
ggcaggagcc ctattatcag gccgnggcag caggggcact cacctgtgca ancccaggga 720
cctggaaaga cngacaggat gggga 745

<210> 503
<211> 812
<212> DNA
<213> Homo sapiens

0050204-0050800

<400> 503
agcaaagagc cgaggccggg cgcgcgaccc tcgtccttct gcccctggcc gcacactttg 60
cgcacatctc tttttctgca tggtggatat tatttttcat tatccttttc tgggtgctat 120
gggtgatcat tccaagaaga agcccgggac ggccatgtgc gtgggctgcg ggagtcagat 180
ccacgaccag tttatcctgc gggtgtcgcc cgacctcgag tggcacgcgg cctgcctcaa 240
gtgtgccgag tgcagccagt acctggacga gacgtgcacg tgcttcgtga gagacgggaa 300
gacctactgc aagcgggact acgtcaggct gttcggcatc aagtgcgcca agtgccaggt 360
gggcttcagc agcagcgacc tggtgatgag ggcgcgggac agcgtgtacc acatcgagtg 420
cttccgctgc tccgtgtgca gccgccagct gctgcctggg gacgagttct cgctgcggga 480
gcacgagctg ctctgccgcg ccgaccacgg cctcctgctc gagcgcgccg cggccggcag 540
cccgcgcagc cccggnccgc ttcccggcgc ccgcggnctg catctgcccg acgctgggtc 600
gggccggcag cccgcgttgc gccccgcacg tgcacaagca gacggagaag acgacccgcg 660
tgcggactgt gctgaacgag aagcagctgc acactctgcg gactgctacg ccggcaaccc 720
gcggccgacg ctntcatgaa ggagcacttg tggagatgac cggnctgagc ccccggggca 780
ttccgcgttt ggttccanaa caagcgcttg aa 812

<210> 504
<211> 792
<212> DNA
<213> Homo sapiens

<400> 504
tctaaaattc ctataatttt ttgctgcata ttatcctcat ccccaaaata acatccattt 60
taaagtgtat agttgagggg aaggatgctg tttttggtat aagttgtcaa atatggaaca 120
tttgacctgg agagggctaa aatcaatatt taatcctcag agcttcacct gtcaaaacta 180
tttaagtctg cagaaaatca agattgaaat gaaaactacc aaccagctga acatccaaaa 240
cgtcaaattc cttaacatga tgtaaaaaat gtaagctaaa aggaattagt ccattttgat 300
agcagcaata gagagccctg tgtattcgta ttcgactttc atggaaaggt tcttctgtgg 360
caagaccacc tgtggaacta gtacctaaac acacagattt gttttatttt agagcttcac 420
aatttgagat ctcaaaatac aaaacctaat aaggctgaaa cacagggtct atgaaggcta 480
agaacccaca ttaattcaaa aagttgacac agctaaacat cttacaagca tgaggtgaga 540
actgcagaaa ccaaagctgt gctaacatct cacctctact gctttgatgt gatctagatg 600
cacagttagc ttcagtgtgg cccgttatct aatagaacca tctttcaagg cttttcatta 660
gaaatgacaa aaagccagtt gctctggctg tgtggcttca gaggcacatt tncagntaat 720
cagtacaacc aaagtcaacc taatagttga ctggnattta atttatttta atttactttt 780
attatagaac ta 792

<210> 505
<211> 726
<212> DNA
<213> Homo sapiens

<400> 505
cttcgctcta gctgggaggc tgacggcccg cgggcgtaag cggactgcag ccgcgagctc 60
ctggaggcgg cgggatggag gcggcggccg agcctggaaa cctggccggc gtcaggcaca 120
tcatcctggt cctctcagga aagggggcgg ttgggaaaag caccatctcc acggagctgg 180
ccctggcact gcgccatgca ggcaagaagg tgggaatcct ggatgtggac ctgtgtggcc 240
ccagtatacc ccgcatgctc ggggcgcagg gcagggctgt gcaccagtgc gaccgcggct 300

0956303.0302000

gggcacccgt cttcctggac cgggagcaga gcatctcgct catgtctgtg ggcttcctgc 360
tggagaagcc ggacgaggcc gtggtgtgga gaggccccaa gaaaaacgcg ctgataaagc 420
agtttgtgtc cgacgtggcc tgggggggagc tggactacct ggtggtggac acgcccccgg 480
ggacctccga tgagcacatg gccaccatag aagccctgcg tccctaccag cccctggggg 540
ccctcgtggt caccacgccc caggcggtgt ccgtgggggga cgtgaggcgc gagctgacct 600
tctgtaggaa gacggcttgc gggtgatggg aatcgtggag aatatgagcg gttcactgcc 660
acactgacga tgaccacgtt ttcaggcgcg aaagactgcc antngcggtg ctntagtcgc 720
ctgact 726

<210> 506
<211> 762
<212> DNA
<213> Homo sapiens

<400> 506
ataaaaagaa tggctttgca ctgagcagct cagtctactg gtctcatcag tgaaaggctt 60
gtgaaaattt ctggaaagag cattggctgg cttgttcatc tctctgtttg gtcagttgct 120
gtgtttctgc cggatcagat gagcagattg gttagtgaag gtcagtgtga gaagaagatt 180
gtttctgagc ttgagaagct tctggaggat tgaagagtat ttgaagtctg tgtcaaacat 240
ccacatcata agtggaattt tggagatatt caaagaatgc tgtcagaagg gtatctcagt 300
ggacttgagt actggaatga catccactgg agttgtgcct cttataatga gcaggtggct 360
ggggaaaagg aagaggagac aaattctgtt gctacccttt cctattcctc tgtggatgaa 420
acacaagtca gaagtctcta cgtgagctgc aaatcatctg gcaagtttat ctcttcagtg 480
cattcaagag agagccaaca tagcagaagt cagagagtca cagtgctgca gacaaacccc 540
aatcctgtgt ttgaaagccc aaacttggct gcagttgaaa tatgtanaga tgccagcaga 600
gagacctact tggttccatc ttcttgcaaa agtatttgca agaactataa tgacttacag 660
attgcagggg gccaggtgat ggncattaat tcagtgacac cagattttcc tctgagagca 720
gttttgaata tggccctttg cttgaaanca ttctganaat cc 762

<210> 507
<211> 786
<212> DNA
<213> Homo sapiens

<400> 507
acaacgctgc cgccgcgctc cgtgggcaac tcctactact gctgggctgg gctgggctgg 60
gctgggctgc gccggagctc gcctgcacag atcagctccg gagaggggag aaccacgctc 120
ctcggaccaa gcctcgggag ctaagccaga tctgccagtg agcctcaggc tttaggaact 180
gaagagtgtt tctgaaagat ctatccagca ctccgatggc cagcaacaac accgccagca 240
tagcacaagc caggaagctg gtagagcagc ttaagatgga agccaatatc gacaggataa 300
aggtgtccaa ggcagctgca gatttgatgg cctactgtga agcacatgcc aaggaagacc 360
ccctcctgac ccctgttccg gcttcagaaa acccgtttag ggagaagaag tttttctgtg 420
ccatccttta agtctttgag aggggcctga agagcctccg ggctcctggg acattgatgt 480
agagttttta gtgaagtggg caccttttcta gtccacggca tttgaagaga gcgaggagaa 540
ccattctgga aactctaggc tatgcatgtt taaagatctg gtcccccttta tgagaatgca 600
agccgatcca catcctgact taagagatct gattctgacg aactgctgga ggangggaat 660
atataaaaat aaaattggtg tcacttcttt tctgctatcc ccaagccccc ccccccaaaa 720
tcctcatggt tctgcttnat attttggaaa ataaccatta aaacagacag ntgtactgag 780

EP 1 695 978 A2 2006.08.30

gtaana 786

<210> 508
<211> 860
<212> DNA
<213> Homo sapiens

<400> 508
acaccatgcc gactgtcagc gtgaagcgtg atctgctctt ccaagccctg ggccgcacct 60
acactgacga agaatttgat gaactatgtt ttgaatttgg tctggagctt gatgaaattg 120
ctccgtagaa tttgngacag ccctggctga cctccgagca gaggctagct gtcccatctg 180
tctggactac ttgaaagacc cagtgaccat cagctgtggg cataacttct gtctctcctg 240
catcattatg tcctggaagg atctagatga tagtttcccc tgccccttt gccacttgtg 300
ctgtccagaa aggaaattta taagcaatcc ccagctgggt agtttgactg aaattgctaa 360
gcaactccag ctaagaagca agaggaagag gcaggaagag aagcatgtgt gtaagaagca 420
taatcaggtt ttgactttct tctctcagaa agacctagag cttttatgtc caaggtgcag 480
tttgtccact gatcaccagc atcgctgngt ttggcccata aagaaggctg cctcctatca 540
cgaaaaaact ggagcaatac aatgcaccgt ggaaggagag agtggaacta attggaaaaa 600
gtcataacta tacaaaccag aaaatcactg gaactgaaga aaaaggtaaa acatacggca 660
gaagaagtca agtctgaatt ttgagcaact tagggtattt ctgcaaaatg agcangagac 720
tggtttgggc aattacaaga tgacgagatg gatattttag cacaactaaa tgaaagccta 780
ccaaantttn agatatcctc tcattaaata tctactaaga gatagagagn tatatgtgaa 840
gcagactgga atactggctg 860

<210> 509
<211> 678
<212> DNA
<213> Homo sapiens

<400> 509
tcgggctccg cgggcgggcg ggcggacatg gcggccaaca tgtaccgggt cggagattat 60
gtctactttg agaattcctc cagcaaccca tacctaataa gaaggataga agaactcaac 120
aagactgcaa gtggcaacgt ggaagcaaaa gtagtatgct tttatagacg acgtgatatt 180
tccaacacac ttataatgct cgcagataag catgctaaag aaattgagga agaatctgaa 240
acaacagttg aggctgactt gaccgataag cagaaacatc agttgaaaca tagggaactc 300
tttttgtcac gccagtatga atctctgccc gcaacacata tcaggggaaa gtgcagtgtt 360
gcccttctga atgagacaga atcagtattg tcatatcttg ataaggagga taccttcttc 420
tactcattgg tctatgaccc ctcattgaaa acactattag ctgacaaagg tgaaatcaga 480
gtgggaccta gatatcaagc agacattcca gaaatgctgt tagaaggaga atcagatgag 540
agggaacaat caaaattgga agttaaagtt tgggatccaa atagcccact tacggatcga 600
cagattgacc agtttttagt tgtagcacgt gctgntggga cattcgcaga ncctggatt 660
gcagcagtct gtgangca 678

<210> 510
<211> 769
<212> DNA
<213> Homo sapiens

0305205.0002

0305205-050200

<400> 510
ttttttttttt ttaacttgaa ttgatagttg gtttataatc ctggagttgt atatgttagg 60
gtttgctatt gagaagtata ggagtgtatt aactctgata aatgaagtgg gctaattagt 120
atttcagttt aattttctgc aattgcattt aagtttgtga tcagttcttt tctcctcact 180
gtataacttt ttcctgaaga tttgtataat tattagtggt aaaaactcca tcttagttgc 240
ttatgatttt aatgtcaatt tgaggaagat atcaccatat agaaaatact tagaagtagc 300
ttattttaaa aatattcatt tgcttttctt ccaaacacgt ggtcacttag caagcagtga 360
ttcaattatt catagtcctc agtatttatg taatgccaaa gaagtggaag aaggggaagt 420
gaagtgagaa aggaaattag gcagacaagt gaatcagagg gcaagagaaa tgagtaatgc 480
aaaaggggaa ggaaatgatg gtcagagcac acatgccttg cagcatgagc aaagaaaatg 540
tgctaaacaa aactacagtc agaatcatag aaaggataag gttttagaga ggttttgttg 600
ttttttaaac attcatgtga gctaaatata atgcaggtat tgaaatgatt actgcagata 660
tgccagatga ccttgatatc tattttcatg ttaatcttct ggtatttggt ggtgntgaat 720
tggtaccccc acgttttacc tgngtaagtg aattgaaata ttcaaggnc 769

<210> 511
<211> 802
<212> DNA
<213> Homo sapiens

<400> 511
taacaaatca tttcgtatta ggttccatta aaatgtcatt cctttgaaaa ggcaagggat 60
ttccactttc agaatttgaa aatgaaagta gcatgtttat ctaaaggcag aaaatagttc 120
ggacttggta ttatgaaaat aagtaatggt ttctggagag gatttgttta gatttgcaca 180
gatggcgatg gcacctttta cttaaattaa cattaatcaa cagtgctaag gaaaatttac 240
acaaaattac aagataaaac atggaaatgt gtgcctttca gtatacaaac tcttgcttgg 300
tggccatttg ggtaatcaga ccatttgaat gcctgagagc atgtttaatt tctgtggagt 360
gccacatatg gctaaaacaa ctctttaatg tgcaattaat ttctagagta aaatgtctgt 420
tatgtgaggg ggatctttat gttgggcttt tctatttttt aaatgttcac atttctttct 480
gttaattaaa tgccatcata atgtcacatt tacactgttg cctcttttaa aagcaaagcc 540
actttcttgt tctaagatta catcaagact tgagcagtgt gtagtaatta aaatgtgtgc 600
ttaatgagca taatagattc tggttttagg aaataacata tagcttttat atgaatattt 660
tcttttgcta taatgaaagt cacagatttt ttttttcctg cttttatgga ggaatgaaaa 720
gagttggctc cctctaagag tatactattt ttgatctcat agcataatgn cnccttctta 780
tcnaagggaa atccccctgg at 802

<210> 512
<211> 782
<212> DNA
<213> Homo sapiens

<400> 512
tatgcacagg cacacaagaa ttgtgggcag atgagtgaga ttgaggccaa ggtccgctac 60
gtgaagctag cccgttctct caagacttac ggtgtctcct tcttcccggt gaaggtaggt 120
tatggaccct tttcactgcc ctccttgttt cccactcttg ccctttctg tctctgaaag 180
tctctggcct tgccctcagt cacatctccc accattccct aagattccca ttctcttcct 240
tgctctgacc tcatgaaaac ctgcctgtca tcagccctac accaccactt ccctccctac 300
cctgcatttt cccttgtccg ttagccctcc cggccacctc aacatccccc atggctgcaa 360

gctgatctga tcattcacct ctcatttgac ctttgacctg taacaccaac accaacctct 420
gcctcatagg aaaaaatgaa agggaagaac aagctagtgc ccaggcttct gggcatcacc 480
aaggagtgtg tgatgcgagt ggatgagaag accaaggaag tgatccagga gtggaacctc 540
accaacatca aacgctgggc tgcgtctccc aaaagcttca ccctggtaag tctggggact 600
ataacaagaa agtgctttgg gagtttcatt aaaggggcag ctgcagaggt ctcttccctc 660
tcttggggta agtatactga gtattactnc agaaaaaaag gaggntagag tagatggaga 720
atcttcctct ggggaaantg tgaaggcttt aaaatggaaa accggatgaa tggacttaat 780
tc 782

<210> 513
<211> 893
<212> DNA
<213> Homo sapiens

<400> 513
gtgcatttgt gttgtggggg catggggtgc atttgtgtgt atatatgtgt ggatgtaggg 60
tgcgtttgtc tgtgtgtatt tgtgtgggca tggagtgcat ttgcgttgcg ggggtgtgga 120
gtgtgtttgt gtgtgtgcac acgcacatgg ttctcatggt cctcccgttt tcaactgaac 180
ctgtaattag ctcctcagag accaggtttc aagacaacag atgaattgtg aaagagagca 240
gctaaggggt aatcaggaag cagccgctgc ccctgacaca atggctcagc cttacgcttc 300
ggcccagttt gctcccccgc agaacggtat ccccgcggaa tacacggccc ctcatcccca 360
ccccgcgcca gagtacacag gccagaccac ggttcccgag cacacattaa acctgtaccc 420
tcccgcccag acgcactccg agcagagccc ggcggacacg agcgctcaga ccgtctctgg 480
caccgccaca caggcagatg acgcagcacc gacggatggc cagccccaga cacaaccttc 540
tgaaaacacg gaaaacaagt ctcagcccaa gcggctgcat gtctccaata tccccttcag 600
gttccgggat ccggacctca gacaaatgtt tggtcaattt ggtaaaatct tagatgttga 660
aattattttt aatgagcgan gctcaaaggg atttggtttc gtaactttcg aaaatagtgc 720
cgatgccgga cagggccaag ggagaaatta cacgggaccg tggtaaaang gcccgtaaaa 780
tcgaggtaaa taatggcccc acacgtgtaa tgaccaatta aaaagaaccg tcaacccttt 840
atacaaaagg gctggnaaat tgaatnccan ttgtgggtgc aagtctaaca gtc 893

<210> 514
<211> 784
<212> DNA
<213> Homo sapiens

<400> 514
aatgtgtatg tggcaaaaac atttttaaag tttagaccca aaggccgtag ttataaaaga 60
ttcattttga gtcagtcaat aggaatttat gtttgtggaa ttgtttttga aaactaatca 120
tttaaaatct atcatagtct atggattcac ctcatttaat aaataatcag aataatagct 180
aacagttgtt atattaggca gttttctaaa tgtcttacat gtcttattta atctccacat 240
aattctctga cttaggtagt attctcattt tatagataag gaatctgaat taaatttaaa 300
aattatttct atattaacaa aagtattaag ctaaaaacta cagagctggt tctagtatat 360
ttcaatgtaa atgttaacat aatatgtcta cttattttta tctagatttt cttgccatat 420
aaggatcata attgaaaagt agcaagttac agtagatgga caagcaatta agggagaaat 480
aatctaatat attaagttta ttactaaatt ttttgttatt ggtttttaat ctttgctttt 540
tttctgttag cctaaatgga aaatattatt gtgtatggag gggatggagg gtatacaaat 600
aatatatagt ttacatgcag ggaaatgagt aattgnaatg catatatgat gtagaattct 660

0950403-0950800

ttactctttt ttttccctat aaaatttaa aaatttggtt cctgaatttt ttttctcagn 720
ctttanatga ccttttaaaa ggttccttct ggagacctca agtncacttc atgcctacat 780
ttca 784

<210> 515
<211> 794
<212> DNA
<213> Homo sapiens

<400> 515
tatgtactta gaatttgagt tctgataatt catttttta tgggaggtgg ggaggtttat 60
tttttaaatt gcagtccaaa ggagtaaatt tgatgttaca ttggacagtt tattcagata 120
ccacaaactt tacagattta attagataga taatggatga tgttaaaaac taagcagcat 180
cttaagttta aatttttatt tttatttctt tttctgtcat cattatttat gaaaactggt 240
tgaaaatgaa gttaaaagat tttctgtaca tcataagatt ggacagaaat attatttacc 300
ttaaaacttt ttctgagtaa aaatttaaac ataaactaga actcagcctg aatttttttt 360
taaaccatct ttggaagcac atataaaagt agagtaaata catcgaatgt agcttaccta 420
ctgcatttga agaaaatctt ttgtgtatgt ctgtaagcta tttgtgtgtt ttgaaacagt 480
ttaccagaat agactgaaac tggtagaaac aggcataagt aactctgcag tggtagttgt 540
attgaaaact ggaatggtag tctctttcaa aatcttgaag agatggaaac taatgaatct 600
ttttttttt ttggtaaaat agtatttttt tttgntcact taaatgaaat tatttgnact 660
ttaagttttg tccaggaaat tacttcagtt ggagctaatt tattggcacc ctttactaac 720
aaatttctgg tctggattaa gattagtatt ggaaaaaaaa ggagatgttg gaaattaaga 780
aagcnccnna aatt 794

<210> 516
<211> 692
<212> DNA
<213> Homo sapiens

<400> 516
gtagctggaa ggggaggtgg ggcaagggag gggaccccca gcctgtcacc tgggttgcct 60
gcatggtact gagtgagctg gtggcttctg tgtgggcctc tggctgtggg gatggtcaga 120
caggaataga cacaatgctg cccaccctct gcatgcatgt gtgtgctggc atgcacacac 180
acgtgtgcac acacatctac atgcacatac ccacacgtgc atacatacat gtatagacat 240
acacctttgt gcatacacac aggtatagac atacaccttt gtgcatacac atacattata 300
cacacatgta catagacaca catacacatg tgcacacacc tataggcaga gcccactcct 360
tttcccctga tgaggttgtg gtggtattaa taatcataat ggnagatgat atttactgaa 420
tgcttactgt gcatgatatg ttccactgac agttttacat ccattatctt aatcttcaca 480
gccccttgtg ggataggaag ttggccacat tgcccacatc cagtagccag tgaatagttg 540
tgcttggagt ttgccctgta ggctgactta tgagccatag cccaagtcac atcccgagaa 600
cacacaatac ggggagcccc tccttagggg aaaatttctt tccaaaatat cacctcatac 660
cttgctcagg gaatactctn tnnggtataa gt 692

<210> 517
<211> 785
<212> DNA
<213> Homo sapiens

0357050 0357050

<400> 517
ctcacgcagc caacatggct ccagtggagc acgttgtggc ggatgctggg gctttcctgc 60
ggcatgcggc tctgcaggac atcgggaaga acatttacac catccgggag gtggtcactg 120
agattcggga caaggccaca cgcaggcggc tcgctgtcct gccctacgag ctgcggttca 180
aggagccctt accggaatac gtgcggctgg tgactgagtt ttcaaagaaa acaggagact 240
accccagcct ctctgccacg gacatccaag tgttgcactc acataccagt tggaagcaga 300
gtttgttggg gtgtctcacc taaaacaaga accacagaag gttaaggtga gctcatcgat 360
tcagcaccca gaaacacctc tgcacatttc tggtttccat ctgccctaca agcctaaacc 420
cccacaagaa acagaaaaag gacactcagc ttgtgagcct gagaacctgg aatttagttc 480
cttcatgttc tggagaaacc ctttgcccaa catcgatcat gaactgcagg agctgctgat 540
tgacagaggt gaggacgttc caagtgagga ggaggaggag gaagaaaacg ggtttgaaga 600
cagaaaagat gacagcgatg acgacggggg tggctggata acccccagta acatcaagca 660
gatccagcag gagctggagc agtgtgacgt ccccgangac gtgcgggttg gctgcctgac 720
cacagacttc gccatgcana atgttctgct gcaaatgggg ctgcacgtgc tggccggtgg 780
aacng 785

<210> 518
<211> 901
<212> DNA
<213> Homo sapiens

<400> 518
antcgcgatc cactacccaa tccatgggca ccaccgccag ctacccagag ttctgcaact 60
accagcacga ccacaagcac tggtagtggg tctggcaata gttccagcaa tgctactggg 120
aacaccgttg ctgccgctaa ttatgtcgcc agcatcttta gtaccccagg catgcagagc 180
ctgctgcaac agataactga aaacccccag ctgattcaga atatgctgtc ggcgccctac 240
atgagaagca tgatgcagtc gctgagccag aatccagatt tggctgcaca gatgatgctg 300
aatagcccgc tgtttactgc aaatccacag ctgcaggagc agatgcggcc acagctccca 360
gccttcctgc agcagatgca gaatccagac acactatcag ccatgtcaaa cccaagagca 420
atgcaggctt taatgcagat ccagcagggg ctacagacat tagccactga agcacctagt 480
gaaaccacga gtcatacatc agaatcagga cccaaccagc agttcattca gcaaatggtg 540
caggccctgg ctggagcaaa tgctccacag ctgccgaatc cagaagtcag atttcagcaa 600
caactggaac agctcaacgc aatggggttc ttaaaccgtg aagcaaactt gcaggcccta 660
atagcaacag gaggcgacat caatgcagcc attgaaaggc ttcttggctc ccagccatcg 720
taatcacatt tctgtacctg gaaaaaaaat gcatcttatt ttttgataat gggttcttaa 780
atcttttaaa cccncccccnc caaaatcggt tcttttactt ttcatttttg gattcttttt 840
aaaactgggc taagttggta aagtcttaat tatggaangc atttttaaag aaagggaggc 900
c 901

<210> 519
<211> 771
<212> DNA
<213> Homo sapiens

<400> 519
atatgggctc tccggactgg aaagaatctt aggggtcctc taatctaacc ctcacatgat 60
gcttcaactc ctccagatca tctctaacat agccagagtg tcacgctatg tttaagcatc 120

0050150.00000

ttcagggatg ggaaaatccc ccacacccag ccttcatcat ccatatccca gaccacttcc 180
atgtgacgtc ccactggccc ccaaagacgc tccacccagc agcctctcag ccagagccat 240
ctgttcctgg ccttaccaac tcctgggctt cctccagcct tgctgacccc atggctctgg 300
cctcactttt gtttcagtca aggagaaatt gactgctgac cctgacagtg aggtggccac 360
tacaagtctc cgggtgtcac tcatgtgccc ggtgggtaaa aggggagaag ggaacagggt 420
gggaagggag ttgggtttag cctgtggact ttgatgaggg ttcctaggga tactggcgtg 480
aagttttctg ggatgaaatc agagtagggc ctctgacaag agaacttgct tctcctcagc 540
tagggaagat gcgcctgact gtcccttgtc gtgccctcac ctgcgcccac ctgcagagct 600
tcgatgctgc cctttatcta cagatgaatg agaagaacct acatggacat gtcctgtgtg 660
tgacaagaag gctccctatg aatctcttat cattgatggg tanggccatt tgctttcctc 720
ttacctggga catccactag aacctctttt cttgggtaat nctttttnctt t 771

<210> 520
<211> 684
<212> DNA
<213> Homo sapiens

<400> 520
caaataccct ctgccatctt ctgtgcctag aacatttatt ccaatgaaag tgttgatgtc 60
aacttcacag aagaggaaag tgagattcag aaggcactta aactgcatca tagaagacct 120
ttgttttcat taggctttgc tttcaatccg tttcatcata caaaagttgg aaagcaaaac 180
cagactaatt ccaaactctc ttcactgcat catgctgttt tctaataagc aaatgacttt 240
ttaaattggg attaattatg gagccaccat ttctggcttg tgctctcatt acctcaagtt 300
ctcgatttta acatataaaa ttcaaattca gtatattcta attagttata aaaccaaact 360
gctcagttta caaaactccc aaagaatatg ttgaagtttt tttccatgca aatgtatctt 420
attgaaatgt caaatcattg aggctgattt atagagatgt agatcatccc acttttggat 480
agatgtgcct tgaatatcta ctgtctaaca aacaataaac acttatcaat aaaggtgagt 540
tactggtatt gatgaaaaca gtcagagaat atactttatt taaaaaacat ttacaaagaa 600
ctcttaaaac tcaacaataa gaacttaaca gatatgcccc aaagaagttn tcngatgacn 660
agtaagattt gaaaaaaaat gctg 684

<210> 521
<211> 833
<212> DNA
<213> Homo sapiens

<400> 521
aaaaatcatt cattcatcta acaaacttat tgagcaccta tcatgtatca ggtaatattc 60
tagataatga gcatataaga tgtaagcaaa acaaagtcct agtgctaaaa aacaaaagca 120
cattctggta atagatatgt gacaatagac aaaaagatat aatatgttag gtggtaacta 180
tcataaagta aaataccatt taaaaactca ggtgcaaaca tagaaaaatg gaaagagtgc 240
tgctccaacc ttaagaaaac tactgaataa tctataaaat cataactttt cttgagtccc 300
atagagagct aacatcccag gacaatcatg cggcctgaaa tctaaggaaa tactggcacc 360
tccaaggaga gatgggacac agacactggc ctgcctgtgg cagaatgtgg cagatgcaag 420
tgccacacaa gcacttaaga agaaatcagg taaaaatttt agtgaattta taaagaccaa 480
gcgtggccta gagtaaaccc ctttaagctg cagacatcca gggagttcac actcactagt 540
gtgagaaaga ctggaggcag gagagagatt gatgacagcc ttcctcagtg gtgtgagcct 600
ggaagaggag atagctccca ccacaaaaag gcaggggcc ttaccaaccc ttctccatag 660

0952945-0072000

ttaacgaaag ccttcagttg ctgaggaaga tcagcaaacc ctgtcagctt ggggcactgc 720
atcttgggta gggaaaaaat taaaacccac ttacttcctg gngggttgga gcaaggaaac 780
ccaacctggg gccttagcac catttagaag ggcttcctac tggntgggna aaa 833

<210> 522
<211> 696
<212> DNA
<213> Homo sapiens

<400> 522
gaaatagaac aatatgtttt caagaaaaca ggtatttcat attaaaacca tgtgaatgtg 60
taagtcttag ggacagattt ggtttatctc aagataataa aatcttaagg aatatttttt 120
gagaagagat gtcagaacac ttttccctat attaattcaa tcctgttttt agaattaaac 180
atatagaaga attaaacatt tagaatgaaa catatagaag actgaataga ttaagtgttt 240
ttctctgaag acatatagtt aatactggac aagacttaaa aattatattt tgggacacat 300
tcttacaggt aaattgcttc tcggatttaa ataagatatt ttctaaaata tattactttc 360
agatcaccag agatttgttt tttgtttgtg tatattttat aaagtaaatt gcactccagt 420
actctaaact gtgtactaag caaagaaggg ttgtgccttc tgacatatta cactgagtac 480
tcaggataga aaaagtaata atcttatact ggctgggtgc gatggcccat gcctgtaatc 540
caagcacttt gggaggccaa ggcaggtgaa tcacttgagc tcaggagttc gagaccaacc 600
tgggcaacat agcaagaccc cgtgtctaca aaaaatacaa aaattagcct gcattgcggn 660
acacacctgt aatcccagcc attcaggagg ntaang 696

<210> 523
<211> 828
<212> DNA
<213> Homo sapiens

<400> 523
tggacaagaa ggaaaatccc ctgggtttgt tcatgaagag cacccatacc taaacctgac 60
aaaggcagaa aataaaaaag acaactgtag gccagcagtt ctcaaacttt ttggtctcaa 120
gactccttta cactttgaaa aatcagtgag aaccctaaac agcttattta tgtgagttat 180
atgcataaat atttaccatg ttggaaacta aagcagaaac tttttaagaa tggagaaata 240
tgtaatttta ctaagaagta aataaacttg tctttctttt ccccattcct gaatttacca 300
tattgatgtt tagttttatt tttttgtttg taggtgtcaa aatagcattt taaaggcact 360
gctgaattat tccatcatac tacagtatga atttgtgctt gtcataattt gtgacttata 420
tgctattgaa attttagcca aactaaatct gtacacaaag ggtgtgtgta taagaatgtt 480
catgggctgg gcacagtggc tcacacctgt aatcccagca ctttcataga cctaggtggg 540
aggatcgctg gagctcagga ggtatattca tttcttattg atgagggctt agatgctttg 600
cctgttgctt ttgctctgtg atagtttgca catcatgtca gctgctccac ccttangctc 660
aaaagggatt tccctggcac cacccttata gttcccactt tagctggacc acagggaaaa 720
tatttaacag nctcataatg gtacttcagc ttcataaata ttggaacacc actatggttg 780
gtgatagtaa aataccttta gntcttcagt tctactggat acgngtag 828

<210> 524
<211> 805
<212> DNA
<213> Homo sapiens

US005955300A

0050750-0050800

<400> 524
ctcactaaat gcaggagaac gaggatgttt ttgtcttgat ttctcccaca atggaagaat 60
attagcagca gcttgtgcca gccgggatgg atatccaatt attttatatg aaattccttc 120
tggacgtttc atgagagaat tgtgtggcca cctcaatatc atttatgatc tttcctggtc 180
aaaagatgat cactacatcc ttacttcatc atctgatggc actgccagga tatggaaaaa 240
tgaaataaac aatacaaata ctttcagagt tttacctcat ccttcttttg tttacacggc 300
taaattccat ccagctgtaa gagagctagt agttacagga tgctatgatt ccatgatacg 360
gatatggaaa gttgagatga gagaagattc tgccatattg gtccgacagt ttgatgttca 420
caaaagtttt atcaactcac tttgttttga tactgaaggt catcatatgt attcaggaga 480
ttgtacaggg gtgattgttg tttggaatac ctatgtcaag attaatgatt tggaacattc 540
agtgcaccac tggactataa ataaggaaat taaagaaact gagtttaagg gaattccaat 600
aagttatttg gagattcatc ccaatggaaa acgtttggta atccatacca aagacagtac 660
tttgagaatt atggatctcc ggatattagt agcaaggaag tttgtaggag cagcaaatta 720
tcgggagaag attcatagta ctttgactnc atgtgggact tttctggttg ctggaatgag 780
gatgggatan nggatgtttg gaccc 805

<210> 525
<211> 788
<212> DNA
<213> Homo sapiens

<400> 525
gcaataaacg aataccgaat taggtgtgga aagaaaccca gccagaaagc aacagtgtta 60
ccagaagaca taatcccctc agagagtagc tctttgtctg acaccaccac ctatgatgat 120
cccagtgatg ccttcacttt tcctgggcag cgatcaagtt cagtacctca ttctccaaga 180
attcttcccc ccaagtctct tggtattgag cgaatccatt tcagaaagtc gtccatcaat 240
gaacagtttg tggataccag gcagtccaga gaaatgctgt ccacacacag cagcccttac 300
aaaactctgg agaggcggcc ccagggagga cgaagcatgc ccaccacgcc agttcttacc 360
cgaaacgcct acagcagcag ccacttggaa cccgaatctt catctcagca ctgccgccag 420
cggagtggaa gcctggagtc ccagtcccac ctgctctccg agatggacag cgataagcca 480
tttttctccc tctccaaatc ccaaagaagc agcagcacag aaatcctcga tgacgggtct 540
tcttatacaa gccaatcaag cacagagtat tactgtgtga caccagttac cggcccctat 600
tacaccaccc agaccctgga cactcgcacc aggggtcgga ggaggtcaaa gaaacagaat 660
ggttctactt caaattcagg aagcatgccc aacctacaca aaaggatagt ttgaggaatg 720
gnggttactc aaagagtcag gagccaccgt cttncagtac tacattggcg ggtaccacct 780
atgcanag 788

<210> 526
<211> 807
<212> DNA
<213> Homo sapiens

<400> 526
acataagcaa gggaacacca aagtcctttg atagtgcttc agcactcctt cacaaaatca 60
aattgaggta gtagtgaggc cactgtgggg atgtagtagc caatgatgta tcatttatct 120
tgggacacac ctgaaagttt taatggcaaa agctgaagtt ttggaaatct gtcttccttt 180
tgagctaagg ctttaattct gcctcctctt tgatcttccc ttccaaaaag ctgcctttga 240

gaaatggtac aatttctctc tcatgtttaa gaggtttgtg acattagcta cctggggaca 300
ttattgtcca tcagagaact tatataaaga aaacaaaaaa agatattata tgcacagaca 360
ctgtctaatg gattcttcct gtttcccact cctcttatct tccttgactc agcacaaaag 420
tgctcaacag gccataaact caaaagaccc tcctccctgt tagagctaaa aatcctgcgt 480
gataaccttt cagatgctca gttaagggca aatttgtaac tgagttttaa aacttggtgt 540
gttaccctaa gacttatcaa gaaaagaaga aagagactcg aggggttttg aacaaggagt 600
taggaatagg tgaaactttt tatcatgttt gntcctactg tgtggggttt tgggggagtc 660
aggaatggta tccacaagac tttggcattt atgatgatat tcctgccttg gtccggaatt 720
cctctattta tccctttgca tgangacagt gncaccactg nctattgcta ggccctaaat 780
tatctcaaga aagggcttaa gggtggg 807

<210> 527
<211> 828
<212> DNA
<213> Homo sapiens

<400> 527
ctggtcttcc tgctagagcc aggcctgagg ctccctggga gcccagtgca atcatcagcc 60
ccctgccctc ctccccatac ccactagctc tggggagtaa gccattatct caaaggtcag 120
gccgtgcacc agccagacct catgaactca ggaaggtgct tgtccaggag ttcctggctg 180
ctgtgccctt cacaggcaaa gactgcattc cttcctcagc tgccagtgag gtgctgccag 240
gcattccctg tagaactttc aggccagttt atgaactggt tggcacccgt gtcctcctcc 300
tggcccaggc aggagaacca tgagcaggca gaaggagact ttgcaaagtg ccttccccag 360
catgtgtgcc ctctgccctt cagagcctgc agataggagg ggtggcgagg acactgttct 420
caatgagcag aacctccaag acacccaaag ctgcctgttt gccacctggc cctatgcctg 480
ccccgttttc tccctcaagg ccttcacccg tgctagggca gtcacctgga atgtcctttc 540
cattaccccc gctgtaatgc ccagcacaga acttgatggc aggcctttgc atggtagcct 600
gaagcgatct cacccttcta actgggtttg gccacaggca cactggctca tgcttacctg 660
tgctgcctgt ggttatagtt atgcgaattg tgggtttaca tccctaaaac agaagggcac 720
ggtgtccaag ggatagcacc cagcccaact tcagaaagac ttcaggcnag atgtctaacc 780
cttgncttgg tctggttctt tcanggaatt ccaatgccca ctttcgga 828

<210> 528
<211> 309
<212> DNA
<213> Homo sapiens

<400> 528
tctaaatgtc acctggccac tgtccctcac ctagtgctca accttggaaa ccctttcct 60
ctgtgtctct ttttaaagaa atttaataaa ttcttattgt ctgtttggaa tattcaacaa 120
tttaggctgg gtgcggtggc ccatgcctgt aatcccagta ctttgggagg ccaaaagagg 180
gtgggtcacc tgaggtcagg agttagagag cagcctgacc aacatagtga aaccatgtct 240
ctactaaaaa tacaagaatt agccaggcat ggtggtgcat gcctgtaatc ccagctactc 300
nggaggntn 309

<210> 529
<211> 860
<212> DNA

0352045.0002

<213> Homo sapiens

<400> 529
tataaaccca tatattcacc agttacccca gtaactcctg gtacaccagg aaataccatg 60
cactttgaga atatttcttc cccagaaagt tctccagaaa taaagagacg cacttatagt 120
caagagggat atgacagatc ttcaaccatg ttaacattgg ggccttttag aaattctaat 180
ttaactgaac tgggtctgca agaaataaag actattggtt atacgagccc taggagtagg 240
actgaagtca acaggcagtg tcctggagaa aaggaacctg tgtcagacct tcagctagga 300
ctcgatgcag ttgagccaac tgccctacat aaaaccctgg aaacgcctgc acatgacagg 360
gctgagccca acagccaact ggactcgact cactctggac ggggcacaat gtattcttcc 420
tgggtaaaga gccctgacag aacaggagtt aacttctcag tgaactccaa cttgagggac 480
ctgacaccct cgcatcagtt ggaggttgga ggaggcttcc gaataagtga gtcaaagtgc 540
ctgatgcagg atgatactag aggcatgttt atggaaacaa ctgtgttttg tacttccgaa 600
gatgggcttg tatctggttt cggacggact gttaatgaca atttgatcga cgggaattgc 660
acaccccaga atccaccaca aaagaaaaag ggttctctat tagaataccg taagagacaa 720
cgtgaagcta gggaaaagtg gctctaagac agagaacttt ccactcanta gtgnatcacc 780
ccatgcaagt ggaagctttg agcaacaatg gtgatggctg tgccagcagt aatgacaatg 840
gggaacaggt ggaccacctt 860

<210> 530
<211> 765
<212> DNA
<213> Homo sapiens

<400> 530
gggccgggca gggccggggc gtgggccggc aggaagatgg cgaacgtggg gctgcagttc 60
caggcgagcg cgggggactc ggacccacag agccggcccc tgctgctgct cgggcagctg 120
caccacctgc accgcgtgcc ctggagccac gtccgcggga agctgcagcc ccgggtcacc 180
gaggagctct ggcaggctgc cctgagcacg ctcaacccca accccacgga cagctgtccc 240
ctctacctaa ctacgccacc gtggctgccc tgccctgcag ggtgagccgg cacaacagcc 300
cctcggccgc ccacttcatc acgcggctgg tgcggacctg cctgccgccc ggagcgcatc 360
gctgcattgt gatggtctgc gagcagccag aggtctttgc ttccgcctgt gccctggccc 420
gggccttccc gctgttcacc caccgctcag gtgcctctcg gcgcttggag aagaagacgg 480
tcaccgtgga gtttttcctg gtgggacaag acaacgggcc ggtggaggtg tccacattgc 540
agtgcttagc gaatgccaca gacggcgtgc ggctagcagc ccgcatcgtg gacacaccct 600
gcaatgagat gaacaccgac accttctcga ggagattaac aaagctggaa aggagctggg 660
gatcatccca accatcatcc gggatganga actgaagacg agaggatttg gaggaatcta 720
tggggttggc aanccgncct tgcatcccca gccctggccg tcctt 765

<210> 531
<211> 800
<212> DNA
<213> Homo sapiens

<400> 531
ctcccaagat ggcggagaca gagtgaagaa actgtgttcc ccccttgggt tgctatcgat 60
caagggtaaa attccattct gatatcaaaa tgcagtattc gcaccattgt gagcaccttt 120
tagagagact gaacaaacag cgggaagcag gttttctctg tgactgtacc atagtgattg 180

0054350.0002

gggaattcca gtttaaagct cataggaatg tgctggcctc ctttagtgag tattttggtg 240
cgatctacag aagcacttct gagaacaatg tctttcttga tcagagtcag gtgaaggctg 300
atggatttca gaaactgttg gagtttatat acacaggaac tttaaatctt gacagttgga 360
atgttaaaga aattcatcag gctgctgact atctcaaagt ggaagaggtg gtcactaaat 420
gcaaaataaa gatggaagat tttgctttta ttgctaatcc ttcttctaca gagatatcta 480
gtattactgg aaacattgaa ttgaatcaac agacttgtct tcttactctg cgagattata 540
ataatcgaga gaaatcagaa gtatctacag atttgattca ggcaaatcct aaacaaggcg 600
cgttagcgaa aaagtcatct caaacgaaaa agaagaagaa ggctttcaac ttcccgaaaa 660
cagggcagaa taaaacagtg caatatccca gtgacatctt anagaatgca tctggtgaat 720
tattcctaga tgcaaataaa ctggccacac ctgtagtaga acaagttgcn caaataaatg 780
ataattcana actcgagttg 800

<210> 532
<211> 606
<212> DNA
<213> Homo sapiens

<400> 532
tcaaagtggc ttctcgtgag ctaaagaatg gtttcgctgt ggtgtggccc ccaggacacc 60
atgcagatca ttcaacagcc atgggcttct gcttcttcaa ctcagtggcc atcgcctgcc 120
ggcagctgca acagcagagc aaggccagca agatcctcat tgtagactgg gacgtgcacc 180
atggcaacgg cacccagcaa accttctacc aagaccccag tgtgctctac atctccctgc 240
atcgccatga cgacggcaac ttcttcccgg ggagtggggc tgtggatgan gtaggggctg 300
gcagcggtga gggcttcaat gtcaatgtgg cctgggctgg aggtctggac ccccccatgg 360
gggatcctga gtacctggct gctttcagga tagtcgtgat gcccatcgcc cgagagttct 420
ctccagacct agtcctggtg tctgctggat ttgatgctgc tgagggtcac ccggccccac 480
tgggtggcta ccatgtttct gccaaatgtt ttggatacat gacgcatcaa ctgatgaacc 540
tggcaggagg cgcantggtg ctggccttgg anggtggcca tgacctnaca gccatctgtg 600
acgcct 606

<210> 533
<211> 703
<212> DNA
<213> Homo sapiens

<400> 533
ttcttggaaa ggcattaact ttgtgatggt caacagcgtg gcgctgaacg gggatggctg 60
tggcatctgc tctgaaacag aagcagagct cattgaagnt tctcacagac tgaactgctc 120
ccgagaggca cgtggctcca gccggtgtgg acctgggcct ctgctgccca cgtctgcccc 180
tgtcctcctg cagcattatc ctctgtatcg gagaagtgat gctaactgtt ctggggaaga 240
cgctgctcct ccagaggaaa gggacatccc atttaaggag aactatgacg tgctttcacg 300
ggaggcatca caaaagctgc tgtggtggct ccagccgtgc ctggttctca gtggccacac 360
gcacagcgcc tgcgaggtgc accacggggg ccgagtnccc gagctcagcg tcccatcttt 420
cagttggagg aacagaaaca accccngttt catcatggga acagatgctt anttgagcat 480
caaggggcag gaagacacct ttccctcctt gttcctcgct gaccgatgac cctggaactc 540
cacggtgcct ctctgaatct ctgttatgga tcccccacta tatttgatgg gaacccagtg 600
agccaggggc cagtnttgac agggnagcat nacgcccaca gactacaccc tctccaagtg 660
ctaccttcca cgtgaggatg tggatttgat catctactgt gga 703

0050203450

<210> 534
<211> 756
<212> DNA
<213> Homo sapiens

<400> 534
agcagttgct ccggcggcgc tcggggaggg agccagcagc ctagggccta ggcccgggcc 60
accatggcgc tgcctccagg cccagccgcc ctccggcaca cactgctgct cctgccagcc 120
cttctgagct caggttgggg ggagttggag ccacaaatag atggtcagac ctgggctgag 180
cgggcacttc gggagaatga acgccacgcc ttcacctgcc gggtggcagg ggggcctggc 240
acccccagat tggcctggta tctggatgga cagctgcagg aggccagcac ctcaagactg 300
ctgagcgtgg gaggggaggc cttctctgga ggcaccagca ccttcactgt cactgcccat 360
cgggcccagc atgagctcaa ctgctctctg caggacccca gaagtggccg atcagccaac 420
gcctctgtca tccttaatgt gcaattcaag ccagagattg cccaagtcgg cgccaagtac 480
caggaagctc agggcccagg cctcctggtt gtcctgtttg ccctggtgcg tgccaacccg 540
ccggccaatg tcacctggat cgaccaggat gggccagtga ctgtcaacac ctctgacttc 600
ctggtgctgg atgcgcagaa ctacccctgg ctcaccaacc acacggtgca acttgcagct 660
ncgcagcctg gcacacaacc ttttcgtggt ggncaccaat gaccctgggt gttaaccaat 720
gcgttcgntt tcaaacccca agggcttttt gggtta 756

<210> 535
<211> 871
<212> DNA
<213> Homo sapiens

<400> 535
acctggaaat agttagactc ttccacttcc cttcaggacc tgtgaactca gatatgtaag 60
tcagcttctc aggtggtcgg acgtgagagc gaccacagtg aaggagccag cactcagggc 120
tctctgcctt ctatgtggga atgaggtctt cccaacagac tctccctctt ccaaaagatt 180
gtgtatcagt tgctccttct gggatttaga gatggacaga aaagggtgtg cgatctatgc 240
tgtgagaact cccagccagc ttagaagtgt cgagccattt gcacagaaag ccactccttg 300
agcgaggaga ccaaatccct cctgaaatcc tccatcgcgt ccttctgggg agaaaaaccc 360
ttgatgtgct gaggaccatc atggggacca ggatagaagg cttcttccca ctcaaagctt 420
ttctccctgg agggtgggca ctgctgggcc atgccacttc aaagcagtgt tcctcagcag 480
gaaagcggag gtcaccactt accggcctnc tccaccttct cggcttctct tttctccatg 540
aacccaggtc gtccagcagg tacttccaag ntcccaggtc tgtctgccta agagcctttt 600
gaggagaccg tcctggagcc ccatcagtgc ccagatcctg gggtaccgac cattgctgtc 660
tagcagtggg ggatcctgtn gtgggaatgg ggtgggcttc tcatccatgg tgcttctggg 720
aagagagggt tgcctttctg ggctagggaa gtggctggag cttctgcctg accttcccta 780
gaaacccagt atatccattg gccacagcaa tactgtntaa caaatccgcc acaacttngg 840
tggcctgcac antcagcact tgatctaggg g 871

<210> 536
<211> 864
<212> DNA
<213> Homo sapiens

0952304650.0720000

<400> 536
caacagcatt ggaaaggaaa ggagacagaa tgagctttgg ttatttctat tgcacagaaa 60
aggattttta aaattagatt agtataatat ctggccatag agtgataaga acaatatgac 120
ttagattttc tgtatttcat ctgccagatt atttgaatca cacaggatga tgtgttaaca 180
gtattagggt ggaagaggaa tcaagagtaa agaggtaggg gtttactcat ttttcttccc 240
tgagccaggt gtgacaagcc aactctgtca ccattcgtga ggggagagtt gcagtcctct 300
tcaagctgtt atcataagta cagtagtcag ctacttggat atcaagacta agtgctgata 360
tgaagacttg cctttgtgtt ttgttatgaa acacgcaagc ataaagcagg actcaagcac 420
aaggctgact gttctacttt gaataacagc ttccttgcag tctcctccac atgggtggta 480
ctgtgtttag aagggattac caaaggctgg agcgatttaa gctatgcact agccttgccc 540
tcttaggttg cattctcttt aggccactgg ttctcaaaca ttagggtgca ctgtaaccat 600
tacagagctt gtgaaaagtg cagaaacctg agcctcacct tatgagattc tgattcagcc 660
agggggagga caggaatctg tatttttcat agcaacctca agtaatcttt attctgaggg 720
tctcgggatt gcaggttgaa aaacacacct taatcagcag taaatcttct ctactcggnc 780
aggcgcatgg ctcatgcctg taatcccaca ctttgggang cccaagtggg tggatcacaa 840
ggcaggagtt cgagaccagc ctgn 864

<210> 537
<211> 773
<212> DNA
<213> Homo sapiens

<400> 537
tccgtaatgg ctatactagt ttacattctc atcaatggta tgcaggggtt tccttttctc 60
catattcttg ccaacatttg ntatctatct tttttaatat agtagccatt ctaacaggtg 120
tgacatggta tttcattgtg attttaattt gcatttccct gatgataagt gatattgagc 180
attttctcat atactgagcc atttttatgt gttcttttga gaaatatcta ttcaggtcct 240
ttgcccattt ttaaatcaga ttatttgttt tcttgctgtt ggattgttta agttccttat 300
atattttcag tattaacctt ttatgagatg tatggcttgc agatatgttc tcccactctg 360
tagattgtct cttcactctg ttgattgttt ccttagccat gcagaagcct ttttgtttga 420
tgtaatctta ctttttttgc ttttgttgcc tatgctttgg ggcacataac ctgatttttt 480
caactgtcac actgattgta cctaacattg aaatgttaga aatgtatttc agattatatt 540
ctatatatat caagcatacc acttgtgaaa tctgttctga ttttttttcct gaatctacct 600
ggagtgtctt aatgaatgac tctacttaga cttcccccag agaaatgatt acataataat 660
actttgtata ggacatctta taaaaagctt aaagtatttt gnatatagac tcattaatca 720
ttgaagtata cttanggaaa atctangtgg gctggcatag cactttatac tgg 773

<210> 538
<211> 856
<212> DNA
<213> Homo sapiens

<400> 538
ttctgagaag cttatgtagc tgataaagca gtgaaaaaaa ctcagccttt agatctacat 60
ttgtgtgagt ccagttgcgt gaaatactgt gatcaaaaca aaaattgcat atttattgca 120
ttcaaaggga cattttgtag tctaacctga ttttcgaaat tgattattga taatttaaga 180
tatttttcat agttatatga gttaccttta gtaatgatag acaataaata aagaactaag 240
aagttgtcat gaaagtcata gccagagcag gtagataaga gaaagaaata aagggcatcc 300

0050-0050-0050-0050

aaactagaat ggagaagtca aattgttctc tatgcagatg acatgatgtt atatatataa 360
aaacaaaact aaagactcta ccaaaaaact catagaactg ataaattttg aaaagttaga 420
agatacaaaa ttagtataca aaaatcagta gcatttctat gcatgaacag tgaactagct 480
gaaaaagaaa tcaaggtaac cccatttata atagctgtga aaaaaatcta ggaataaatt 540
aaccaagaag gtaaaatatt tctatacaag gaaaactaca aaacactgat gaaagaaatt 600
gaaggagata caaacaaatt gaaagacact ccgtactcat ggattagagg aattaatata 660
ttttaaatga ccatgctacc caaagtgatc tccagattca atacaacttc tatcaaaata 720
actgacattc ttcacagaaa ttgccaccaa aaaaaattct taaaatttat atggaaccac 780
agaccccaaa tgccaagcaa tactgagcaa aaagaccaag ctggagtatc acctccagac 840
tcaaaatata atcaaa 856

<210> 539
<211> 791
<212> DNA
<213> Homo sapiens

<400> 539
atgtacgcct ttgtgcggtt cctggaggac aacgtctgct acgcgctgcc cgtgtcgtgc 60
gtgcgcgact tcagcccccg ctcgcggctg gattttgaca accagaaggt gtacgccgtg 120
taccggggcc cggaggaatt gggcgccggg cccgagagcc ccccgcgcgc cccccgcgac 180
tggggcgcgc tgttgctcca caaggcccag atcctggcgc tggcagaaga caaatctgac 240
cttgaaaaca gtgtgatgca gaagaaaata aaaatcccca agctttctct taatcatgta 300
gaagaagatg gagaggttaa agattatggg gaagaagatt tacagcttag acacatcaag 360
gattgtctgg ggaaatattg atctgcagtc caagaaaatc ccagctgccc ttgcctgaac 420
tgattctcgt tgtcctacac agagacctga ggggcggaag ccgagcgaag tggcgcacaa 480
gagcatcgag gcagtggtgg ctcggctaga gaagcagaac ggcctgagcc tgggccatag 540
cacgtgtccg gaagaggtct tcgtggaggc ctcgccaggc acagaggaca tggacagtct 600
agaagatgct gtggtgcccc gggctctgta tgaggagctg ctgcgcaact accagcagca 660
acaggaagag atgcgccacc ttcagcagga gctggagcgg actcggangc agctggtaca 720
acaggccaag aagctcaagg agtaccgggc acttgngtct gaaatgaagg agcttcgtga 780
ncttaaccgg a 791

<210> 540
<211> 865
<212> DNA
<213> Homo sapiens

<400> 540
caccaccagg ccttccttgc aagagttcct gaaggaagca ctaaatatgg aaagaaaaaa 60
ccattaccag ccactacaaa aacacactga agtacataga ccaatgacac tataaagcaa 120
ccacataaac aagtctgcaa aataaccagc tagcatcatg atggcaggat caaattcaca 180
cataacaata ctaatatcaa atgtaaatag gctaaatgcc ccaattgaaa gacagagaag 240
tgcaagctgg ataaagagcc aagaccgatt gatacgccat gtttaagaga cccatcacat 300
gtgcaaagac acacataggc tcaaaataaa gggatggagg aaaatctacc aagaaaatgg 360
aaatcagaaa aaagcaggag tcacaatcct agtttttgac aaaacagact ttaaaccaac 420
aaagataaaa aaaaaagaca aagcaaggca ttacataaca gcaaagggtt caacaagaag 480
atctaactat tctaaacata tatacgcacc caatagcaga ggacccagat tcataaagta 540
agttcttaga gacctacaaa gagacttaga ctcccacaca gtaatagtgg gagactttaa 600

0950204-0950204

cactccattg acaatattag atcattgaga taaaaaatta acaaagatgt tgaggacctt 660
aactcagctc tggattaagc agacctgata gatatctgca gaactcttca ctccaaaaca 720
acagaatata cattttctc atcatcacat ggctcttaaa aatgatcaca taatcggagt 780
naacacttct tagcaaatgc aaaagactga atcatacagt ctntagacca ttgcacatca 840
attgactcag attagaaatc cccaa 865

<210> 541
<211> 562
<212> DNA
<213> Homo sapiens

<400> 541
gctgagaggc gggcgggccg ggggcgccgg gcgcggggcc gccatgtgga gcggccgcag 60
ctccttcacc agcttggtgg ngggcgtgtt cgtggtctac gtggtgcaca cctgctgggt 120
catgtacggn atcntctaca cccgcccgtg ctccggcgac gccaactgca tccagcccta 180
cctggcgcgg cggcccaagc tgcagctgaa cgtgtacacc acgacgaggt cccacctggg 240
tgctgagaac aacatcgacc tggtcttgaa tgtggaagac tttgatgtgg agtccaaatt 300
tgaaaggaca gttaatgttt ctgtaccaaa naaaacgaga aacaatggga cnctgtatgc 360
ctacatcttc ctccatcacg ctggggtcct gccgtggcac gacgggaagc aggtgcacct 420
ggtcagtcct ctgaccacct acatggtccc caagccanaa gaaatcaacc tgctcaccgg 480
ggagtctgat acacagcaga tcgaggcgga gaagaagccg acgagtgccc tggatgagcc 540
antgtcccac tggcgacngn tg 562

<210> 542
<211> 865
<212> DNA
<213> Homo sapiens

<400> 542
atttcaagca ctgactgcta agattggcat gtctccagcc acgtacattt gcaaaaagtc 60
agatttgcaa tgtaatatgt catggagctc atgcttgttg aagagaatct ttgataggct 120
ggacacattc attttagtag gaggcagagg tggcctaaca gcaaactcta ggttcaggat 180
ctaattttca tagccttcaa ggatgaatgc aatataaact gtgtagtaga ttgtgatgct 240
cattccaact agggaggcaa gcatttgtac ctgctatcta caaggcacca aataatgcat 300
gtgtcaccat tgctataaat tgtcctcttc caggacctaa ctatttgggt aaagaaccta 360
cagttcccat caccacctat gtatgtatgt acaaacataa attagtccaa attctaattt 420
tctcttattt ttctttgtgg aaaaacagat aagaaagctc agtaaaggaa gatataagca 480
attaatgtta cagttcttca atataataat ttgaattaaa tgtactaaga agcaaaaact 540
attagtgttg agactatcat gatgaagctt ttggtttttt taatatattt tcatttttat 600
gcataaaatc ttaatacata gaattccatg atgtcatcag gcattaacaa tcacttacct 660
tagaaaccaa ctctttttat ctaggcttaa cagggtttgn attaatgtat tggcctagca 720
ctgggccctg ctagatgctc aataaatatt gcctaatcac tattagacat tttaaaatat 780
cttttggctg ggaacagtgg ctcacacctg taattccagc tctttgaaag gncaaacagg 840
aagatccttg agcccangag tttga 865

<210> 543
<211> 756
<212> DNA

0005705 "0005705"

0050250-050250

<213> Homo sapiens

<400> 543
aactcgcacc cgggtcctgg ctgcaccgca tcccctcctg cacccccctgg atggcccttc 60
agccaacggg ggcctgggcg atggtcgacc acggagctgc gcaaggaaaa gtcccgggat 120
gcggcccgca gccggcgcag ccaggagacc gaggtgctgt accagctggc tcacacgctg 180
cccttcgccc gcggcgtcag cgcccacctg gacaaggcct ctatcatgcg cctcaccatc 240
agctacctgc gcatgcaccg cctctgcgcc gcaggggagt ggaaccaggt gggagcaggg 300
ggagaaccac tggatgcctg ctacctgaag gccctggagg gcttcgtcat ggtgctcacc 360
gccgagggag acatggctta cctgtcggag aatgtcagca aacacctggg cctcagtcag 420
ctggagctca ttggacacag catctttgat ttcatccacc cctgtgacca agaggagctt 480
caggacgccc tgacccccca gcagaccctg tccaggagga aggtagaggc ccccacggag 540
cggtgcttct ccttgcgcat gaagagtacg ctcaccagcc gcgggcgcac cctcaacctc 600
aaggcggcac ctggaaggtg ctgaactgct ctggacatat ganggcctac aagccacctt 660
gcgcagactt ctccagctgg gagcccttga ctcaaaaccc ccgnttgcan tgcctggtgc 720
tcatcttgcg aagccattcc ccacccangc aagcct 756

<210> 544
<211> 797
<212> DNA
<213> Homo sapiens

<400> 544
aaatctgtgc aggatactga ttgcctgctt ctgaactgtg ggtatggttg gctgtggata 60
atgtagaaca tgtaagaaat gatggtctgc tgcatgtacc aggccacatc taagagtctt 120
attgttgagc acagccacgt ttacactgaa tataaacttt attcaccatt ccaggccttg 180
accttatatt caggaatggc agcctggcat ggtgaataga acttattagg gtgcatcgta 240
gatttgctca gtaggggctc aggaattgac acaaatgctg acggagttgg aacaagtaaa 300
ttatatgtct ggaagataaa tatttaaata attagattaa gggtggaaat gataaaagtg 360
tactttgtta taaagattgg agatcccagt aagagtaata tgctctatga aaaattgtaa 420
gttcttatat tacattatta gtttatgagt acttgttact gttttcacat ttttgcttat 480
actcatacgg tactcctact ttgctatact cacactggtt tatctcccaa gcctcaggta 540
gatcatgctt ccctgactcc cccagacagg tttttcctgt accctcaaaa catttatcag 600
tgttctcatt ttatatttat gtgtaatttt acattatgtt caccttttctc ataaattttg 660
ccagatcagg aaccgtgtct ttggccactg gtaccatccc cagaaacgtt gactaagtgg 720
tttatgaagt ngnaagatgc ttttgngaac catttggttg ggttaaataa gggacccagt 780
tttgggtaag ccccaat 797

<210> 545
<211> 808
<212> DNA
<213> Homo sapiens

<400> 545
cagcaaagaa aataaaaaga aagacaaaga tatgcttgaa gataagttta aaagcaataa 60
tttagagaga gagcaggagc agcttgaccg catcgtgaag gaatctggag gaaagctgac 120
caggcggctt gtgaacagtc agtgcgaatt tgaaagaaga aaaccagatg gaacaacgac 180
gttgggactt ctccatcctg tggatcccat tgtaggagag ccaggctact gccctgtgag 240

actgggaatg acaactggaa gacttcagtc tggagtgaat actttgcagg ggttcaaaga 300
ggataaaagg aacaaagtca ctccagtgtt atatttgaat tatgggccct acagttctta 360
tgcaccgcat tatgactcca catttgcaaa tatcagcaag gatgattctg atttaatcta 420
ttcaacctat ggggaagact ctgatcttcc aagtgatttc agcatccatg agtttttggc 480
cacgtgccaa gattatccgt atgtcatggc agatagttta ctggatgttt taacaaaagg 540
agggcattcc aggaccctac aagagatgga gatgtcattg cctggagatg aaggccatac 600
taggacactt gacacagcaa aagaaatgga gattacagaa gtagagcccc agggcgtttg 660
gactccagta ctcaagacag gctcatagcg ctgaaagcag taacaaattt tggcgttcca 720
gtttgaagnt tttgactttt gaanaagctg aaatattnca gaagaacttg atgagaccac 780
cagattgctc aagggaactt ccaggaag 808

<210> 546
<211> 824
<212> DNA
<213> Homo sapiens

<400> 546
tccaacacat ctgttacatt agtcagcttt tagtgccata ttatgggaat ctcagaaacc 60
ttttgactgg gttcaggtta tctgtgaatt ttcatattat tttatggcca ccagctgcat 120
tttatgacta tatattaaat gttttatttt ttcaaataat ttttccaaat ggtctcagtt 180
tcccatccaa gggaaatcaa gcatatgcct aaagatctac tgttcagtaa gttgtagcta 240
atgcaaaacc ccaaataaac aaaaaagaaa caaaaataaa accctccttt caaaaacaat 300
cctgtgcaaa ataccagtgt gccccaaaat ctacatacct gacctttcgt tatatctgtt 360
cttggttgga tatgccttca ggttttaatt ggaacctttt tcataattgt tgccatttaa 420
cacatttagt ctgtcaaatc ataggatgtc tttatagcca tataataaac cctagagaac 480
aacttctccg actgtagcca tctgcaatga tcccaagagt agcttacaaa atactgacag 540
tctttatggt aatatgatac atatggcagc ccacaattat gtgtagctgc attcaattag 600
tgttgtacaa ttacacagtt ttattgctta gttaaaacag tgaaagcact acatactggg 660
taatttgcct aatccctgtc cctttaatag cccctcagtg tttaaaatgt gggggaacat 720
ctatagtact taaanggacc agggatgaac attaaatcat acctcatggt ggggaatact 780
ncttggactg gccaattaat gnacttccac tttaacgtgt gggg 824

<210> 547
<211> 835
<212> DNA
<213> Homo sapiens

<400> 547
ttgagaaatg tccagatgat ttggaaatta ggttatgttt ttgatacagg gcaggttcct 60
ggcttcactc aggaaggaat tcaagagcga gccagttgta gaggaaaaca gctttattga 120
ggtggtgaca atagttacat ctctgtgact gctcccgcag agcgggacta ctccatatag 180
gcagtgtgct gagagcagca gctcaggaac agtctgcagt catatttata cctgctctta 240
atgacatgct aattaaaaga tgggtgattc acaatttgcc agaaaatgta ctggtgttgc 300
ttccaggtgt tgccatggca atggtaaact gtcttggtgc aagtgggtgt gtcttatgga 360
gaggtgcttt ccatgcctct tccctgtttc ggtcagtctt cagtctggtc cagagtccag 420
tcctgtctgc ctcctacctg attttcacct ttgagaaatc tgttgttttc aatggtgaga 480
gcaggaaaca caacgttaag ggctgagtaa acagcaggta ttgtcaggga cggacgcagt 540
aaaaagaaat ggactaaagg gataagaagg tcattagaag gtggttttac aatggggaga 600

0956453.0002

gattgaaaac agaagaaacc agcggagagg tcacataaca acattggaag caaggagagt 660
ggaatttaga attcaggacg tggagagtgt tatcagcaat atggcagaat aggagttcct 720
tgggttcaca cacccacccc ccaaaatgta actagcaatg atccgcangc aaaaaatact 780
atcctgaata tcccaaactc tggantgagg ctganaactt tcttggactg gccat 835

<210> 548
<211> 803
<212> DNA
<213> Homo sapiens

<400> 548
acatcttgcc cactccgcgc gcggggctag cgcgggtttc agcgacggga gccctcaagg 60
gacatggcaa ctacagcggc gccggcgggc ggcgcccgaa atggagctgg cccggaatgg 120
ggagggttcg aagaaaacat ccagggcgga ggctcagctg tgattgacat ggagaacatg 180
gatgatacct caggctctag cttcgaggat atgggtgagc tgcatcagcg cctgcgcgag 240
gaagaagtag acgctgatgc agctgatgca gctgctgctg aagaggagga tggagagttc 300
ctgggcatga agggctttaa gggacagctg agccggcagg tggcagatca gatgtggcag 360
gctgggaaaa gacaagcctc cagggccttc agcttgtacg ccaacatcga catcctcaga 420
ccctactttg atgtggagcc tgctcaggtg cgaagcaggc tcctggagtc catgatccct 480
atcaagatgg tcaacttccc ccagaaaatt gcaggtgaac tctatggacc tctcatgctg 540
gtcttcactc tggttgctat cctactccat gggatgaaga cgtctgacac tattatccgg 600
gagggcaccc tgatgggcac agccattggc acctgcttcg gctactggct gggagtctca 660
tccttcattt actttcttgc tacctgtgca acgcccagat caccatgctt gcanatgttg 720
gcactgctgg gctatggnct ctttgggcat ttgcattggc ctggtcatca cctataatat 780
ccacttcacg ccctttttnta cct 803

<210> 549
<211> 790
<212> DNA
<213> Homo sapiens

<400> 549
agcactgtcc ctcggagtcc gagacttcca cctgggtcgt gtccaaggcc ccggcgactc 60
cccggactcg gggtgccggg ccaacctccc cgccgaggcc cacccgccgt cgctatggcg 120
tgcagtttgc agaagctgtt tgctgtggaa gaggagtttg aagatgagga tttcttgtct 180
gctgtggagg atgcagagaa ccggtttact ggctcactgc ctgtgaatgc tgggcgcctg 240
agacctgtct cttctaggcc acaggagact gtgcaggcac agtcctccag gctgctgctg 300
ttacacccca ctgctccctc agaggctttg ggcctgccag acttggacct ctgcctccct 360
gcctccagca cgcccagtgc tgacagccgt ccatcatgca taggagcagc tcccctaagg 420
cctgtctcta cttccaactg ccttaacagt tcccactcag caactccact gggaagtctg 480
tccgcaacgc tccactgttc aagcacttca gcctctccaa gctgctagag ggaccattca 540
gagcagccct caaaatcgtt tcccttgtca gccattccag tctccaagtt cctggttaag 600
tggcaaagct catttaccca gacctngaac tcccaactca agctgttcta ctccctcaag 660
gactagctct ggattatttc ctcggatacc cttacaacag cagcaagttg gtggctttga 720
ngggcctgaa caagacgaat ttgataaagt cctggcaagc atggaanttg gangaacctg 780
gcattgggaa 790

<210> 550

US 2003/0224000 A1

0002045850

<211> 753
<212> DNA
<213> Homo sapiens

<400> 550
ccagattacc tgatgcagct gatgaacgac aagaagctca tgagcagcct gcccaacttc 60
tgcgggatct tcaaccacct cgagcggctg ctggacgaag aaattagcag agtacggaaa 120
gacatgtaca atgacacatt aaatggcagt acagagaaaa ggagtgcaga attgcctgat 180
gctgtgggac ctattgttca gttacaagag aaactttatg tgcctgtaaa agaataccca 240
gattttaatt ttgttgggag aatccttgga cctagaggac ttacagccaa acaacttgaa 300
gcagaaaccg gatgtaaaat catggtccga ggcaaaggct caatgaggga taaaaaaaag 360
gaggagcaaa atagaggcaa gcccaattgg gagcatctaa atgaagattt acatgtacta 420
atcactgtgg aagatgctca gaacagagca gaaatcaaat tgaagagagc agttgaagaa 480
gtgaagaaat tattggtacc tgcagcagaa ggagaagaca gcctgaagaa gatgcagctg 540
atggagcttg cgattctgaa tggcacctac agagatgcca acattaaatc accagccctt 600
gccttttctc ttgcagcaac agcccaggct gctccaagga tcattactgg gcctgcgccg 660
gttctcccac cagctgccct tgcgtactcc tacgccagct ggccctacca taatgccttt 720
gatcagacca antncngacc ggttgtcatt gcc 753

<210> 551
<211> 778
<212> DNA
<213> Homo sapiens

<400> 551
aaatattatg tctttcaagt ctatttttt ggtaagtcaa tttttgacta ccctttcttt 60
acttattgtg ccctgtgaac tcttccatgt ccatacccat tcattgtcta taatcttggc 120
actttcttat tcattaattc aacaaatatt tattccctat caccttttatt tatgcatttc 180
tatagatgct agagataggg taaataaaag tatggcaaaa ccagcaatta cttttgcacc 240
aacctaatat gatttttaa gaaatttata atttcattag agaaatagat gtataaacaa 300
agaaattata atacaaacat tgtgataagt gcaggaagta gaaaatagtg attattgctt 360
tcttcaaaca taaagtattg ttagtcagga gtccttcagt tgtaagtgcc agaaacccaa 420
tttcaaacag caaaagcaga aaatggaatc tattggctcg catccctaca aattccagga 480
atagaactgt gctaagggac tcaaataatg ttgttgggtc ttcatagctt attctggttt 540
atttcttgct tttggggcct tgctttttc ttctgaagat ggactctgaa gtgaattcta 600
cagcacacta cccagatgcc ttatttagaa tcgaagcatt ggtttccttc aggttttggg 660
agtgttggct gctgatggct catagntgag tctctttctg agacaaaggg angtgtctca 720
ctcaagttta tccctnctcc tgagaatagc ttggatccaa gactgatcaa tgagggat 778

<210> 552
<211> 761
<212> DNA
<213> Homo sapiens

<400> 552
ccagccggcg cttgcgcggt ggcacgggcg agtgggggg cgaggaggtg gaggaggagg 60
aggaggagga ggaggtggcg gcgagaagat ggcgacttcg aacaatccgc ggaaattcag 120
cgagaagatc gcgctgcaca atcagaagca ggcggaggag acggcggcct tcgaggaggt 180

catgaaggac ctgagcctga cgcgggccgc gcggctccag ctccagaaat cccagtacct 240
gcaactgggc cccagccgag gccagtacta tggcgggtcc ctgcccaacg tgaaccagat 300
cgggagtggc accatggacc tgcccttcca gacccctctc caatcctcgg gcctggacac 360
cagccggacc acccggcacc atgggctggt ggacagggtg taccgggagc gtggccggct 420
cggctcccca caccgccggc ccctgtcagt ggacaaacac ggacggcagg ccgacagctg 480
cccctatggc accatgtacc tctcaccacc cgcggacacc agctggagaa ggaccaattc 540
tgactccgcc ctgcaccaga gcacaatgac gcccacgcag ccagaatcct ttagcagtgg 600
gtnccaggac gtgcaccaga aaagagtctt actgttaaca gtccaggaat ggaagagacc 660
acatcagaag cagacaaaaa cctttccaag caaacattgg acaccaagaa gacngggtcc 720
aaggnccaaa atcctngtaa ggtcccccgg aaattaaaca t 761

<210> 553
<211> 734
<212> DNA
<213> Homo sapiens

<400> 553
gcatttcggg tctgcgaggt ggggtaggcg ggcaaggcgg gcgccgaggt ttgcaaaggc 60
tcgcagcggc cagaaacccg gctccgagcg gcggcggccc ggcttccgct gcccgtgagc 120
taaggacggt ccgctccctc tagccagctc cgaatcctga tccaggcggg ggccaggggc 180
ccctcgcctc ccctctgagg accgaagatg agcttcctct tcagcagccg ctcttctaaa 240
acattcaaac caaagaagaa tatccctgaa ggatctcatc agtatgaact cttaaaacat 300
gcagaagcaa ctctaggaag tgggaatctg agacaagctg ttatgttgcc tgagggagag 360
gatctcaatg aatggattgc tgtgaacact gtggatttct ttaaccagat caacatgtta 420
tatggaacta ttacagaatt ctgcactgaa gcaagctgtc cagtcatgtc tgcaggtccg 480
agatatgaat atcactgggc agatggtact aatattaaaa agccaatcaa atgttctgca 540
ccaaaataca ttgactattt gatgacttgg gttcaagatc agcttgatga tgaaactctt 600
tttccttcta agattggtga gttaacattg tcgaagtatt ctttcttttt ttaaaatttt 660
attttattaa tataaataga gttgggggggg gtttgctggg ttggccangt tggnctcaaa 720
ctcctggcct naag 734

<210> 554
<211> 667
<212> DNA
<213> Homo sapiens

<400> 554
agttacacag gatgccgtct tgtgtttcct cttgtttagt tacccactac agtgattttg 60
tgatctgcta atgggttgcc acccacaacc attgctttag cacttttact tcaaatcaat 120
gaaggattga taaaagttct cctggtgtct ccgcagagtg ccttccagga acagatcttt 180
gcatagaata tcagtggttt cctttttttgt ttcaaatagt ggtcagaaaa tacccagtgt 240
tgactcacca aggcaatcag cttccttttt ccctttttttt gttttttttt aacattttat 300
atttttgctt tattttattt tattttattt tttgagacgg agttccactc tgtcgccagg 360
ctggagtgaa gtggtacaat cttggctcac tgcaacctcc acctcccggg ttcaagcaat 420
tctcctggct cagcctcctg agtgctggga ctacaggcgc gtaccttctt tagtagagac 480
tgggtttcac catgttggcc aggatggtct ctatctcctg accttgtgat ctgcctgcct 540
cagcttccca aagtgctgag atgacaggtg tgagccatca gacccagcat ttttttttttt 600
aatttaaatt taaatttttt tcatttttttt gagaggtttt ttttgttttg ntttgttgnt 660

0095950-0042000

gntggtg 667

<210> 555
<211> 823
<212> DNA
<213> Homo sapiens

<400> 555
gaatcttcat gctgggacat ttttaacttg gatatcttgc tattcaagtt gtatcggatt 60
tgtatcaaat ttagcatgct tgcaacctaa gcacactcca ttctatagtc agttccactc 120
ttgactttaa tatttatggt acggttagtc tccacatctt ccaagttcaa gcttcataac 180
caaagatcat cttcaccttc cttctcactc tgcattccat tggtcagctt ctgttaaaat 240
ggccttccta aggcaggcct ctgaacgatc atttattttt aggaaaactt ataaaaagtc 300
actgagattt aaaaacaccc acacatatat ttgcaatcat atttgtgtgc ttggttaaac 360
atgtcaacat ttaacagatt tgagccttct aaatttaatc cagcatgaat gtcgttttta 420
ctaaaatatt tgctatttta ctcacttagc tggttcctta cacaagtcca gttaaatttc 480
acatgtgaaa aaaatgactg aaaacactga atggaatgtg atactccttg tgtagtagaa 540
atgagttgac tttcatattt aagagctgat cctatgaatg agtagacaat aagctgaata 600
gctgttacga tctgagtttt aaaaatggaa aatgtttcat gttttagaga atgtaaactt 660
ccacaagggg cagagattgg taatacgttg tccccccagt ggacttaaaa cagtactggc 720
acatagtaag cactcaataa atagttggtg gaatggantg aatggtaggg aacccatact 780
gggaatcaat attggaagct nccttngaaa ggcacccaca ctg 823

<210> 556
<211> 868
<212> DNA
<213> Homo sapiens

<400> 556
ggccggatgg ctgcgtgggg ctgtgtggct gcgctcggcg cggcgcgtgg gctttgctgg 60
cgggcggctg cgcgcggctg cggggctcca gggccgcccc gcccgcaggt gctatgctgt 120
gggccccgct cagagcccac ccacctttgg gttcctgttg gacatcgatg gagtgcttgt 180
gcggggccac agagtgatcc ctgctgctct gaaagccttc cgaaggctgg tgaactccca 240
ggggcagctg cgggtgcccg tgtttttttgt tacaaatgct ggtaacatct tacaacacag 300
caaagcccag gagctgtcag ccctgctggg gtgcgaggtg gatgcagacc aagttatcct 360
ctctcacagc cccatgaagc tcttctccga gtaccatgag aagcggatgc tggtgtctgg 420
acaggggccc gtgatggaaa atgcccaggg actgggcttc cgaaatgtcg tcaccgtgga 480
tgagctgcgg atggcctttc ctctgcttga catggtggac ctggagcggc ggctaaagac 540
cacgcccctc ccgaggaatg acttcccccg cattgaaggg gtgctcctcc taggggagcc 600
ggtccgctgg gagaccagcc tgcagctgat catggatgtc ctcctcagca atgggagccc 660
tggggctggc ctggcaacac ccccctaccc ccaccttccc gtcctaacca gcaacatgga 720
tctcctgtgg atggctgaag ccaaanatgc ccaggtttgg acatggcacc ttttctgctt 780
gtgnctggga aaccatttac caagaaaagt gacgggcaaa aggagcttga gataccaagg 840
gccttgatgg cnaaacccag cattcttn 868

<210> 557
<211> 862
<212> DNA

0302045.02N2000

<213> Homo sapiens

<400> 557
agaagtaata cccaacaaga aactgacatg gcgatcaaga caacaggatc gagaaaactg 60
tgctatgaaa ggcaagcata aagatgaatg ccacaacttt atcaaagtat ttgttccaag 120
aaacgatgag atggtttttg tttgtggtac caatgcattc aatcccatgt gtagatacta 180
caggttgagt accttagaat atgatgggga agaaattagt ggcctggcaa gatgcccatt 240
tgatgccaga caaaccaatg ttgccctctt tgctgatggg aagctgtatt ctgccacagt 300
ggctgacttc ttggccagcg atgccgttat ttatcgaagc atgggtgatg gatctgccct 360
tcgcacaata aaatatgatt ccaaatggat aaaagagcca cactttcttc atgccataga 420
atatggaaac tatgtctatt tcttctttcg agaaatcgct gtcgaacata ataatttagg 480
caaggctgtg tattcccgcg tggcccgcat atgtaaaaac gacatgggtg gttcccagcg 540
ggtcctggag aaacactgga cttcatttct aaaggctcgg ctgaactgtt ctgtccctgg 600
agattcgttt ttctactttg atgttctgca gtctattaca gacataatac aaatcaatgg 660
catccccact gtggtcgggg tgtttaccac gcagctcaat agcatccctg gttctgctgc 720
tgtgcattta gcatggatga cattgaaaaa gtattcaaag gacggtttaa gggaacagaa 780
aaacttccag attctgtttg ggacagcagt ttcccgaaga caaagtgccc aagccaaggc 840
ctggctgntg tgcaaaacac gg 862

<210> 558
<211> 862
<212> DNA
<213> Homo sapiens

<400> 558
aaaaaatggt tgcctaattt ttcttagcct aagtcttgat taaaaatggg atggaagatg 60
agtaagtgga ttttgaatcc aatattctga acacacatca caagtgcaga gaagagaaag 120
aaatcctccc aaagaagtta aaaggagaaa acacaaaaaa cttacctcat acatttttct 180
agaacttctc ttacaaactt cggtttggga ctttcaggat cttgactaag acaatctgac 240
ctaaggagga aatgtagttt tatcaatgct tacatataat ctgcacttac acccatttgt 300
actataatta tctgttaact tataacaact tacaagtttt gttaagttat aattgcactt 360
gtaactattt gtacttaact acaaatagtt tccaagaaat taaatatttc agacactttt 420
atattacagt tttaaacatt agtagttttt tgactacaga aaaagataaa acaaaccatc 480
acttaccaat cttcccagct ccaacggaac tggaagttac ttagatgatg agaaaaccaa 540
ttaataaacc tacgtagaga agggggaggt aggcagagaa aaaggaagaa taactgggat 600
ttagaacaga aacttatata agccttcaaa cagataaaac ccgactttac agagttaatg 660
aaaagcatat tcccctacat gcagttgtat cttctgccaa ctctctttat ccttttagg 720
tcaatgacag atataattct agtacctggt ttgtgcgggc acctaacatg tttattattt 780
aattctcaca actttcaagg tcatattatt ttctncatat naaaggatga tgaaactgaa 840
gccaggaaaa aaaaaaaatt tt 862

<210> 559
<211> 849
<212> DNA
<213> Homo sapiens

<400> 559
ttctgttatg taaggcaatt tagcatcctg ctccctagga aatttctttt ggagaaaaca 60

0050150-0050200

ggccatgcaa atgaaaaagt ctaattgggt gattggctgc atttggtaac atgtgcttgg 120
agggcaggga gattggctag ttgtaaataa acatgctttc tctgggcggt tgacccttct 180
gcgtggactg actctgaggt ttgtccccga cagggagcag gtggggtgaa tttcttgatt 240
tctccttaga caccagttac tatgaaatca ctgattcttt tcagctggag aaggatatgc 300
taggggttct tggaggacat accagggtgc aggatgttgg gatgaagttt aataagggtg 360
gtcttggcag ggtttcctgg aattttctgt ctgggggtgc atttttcctt ttttctgccc 420
ccatagcagc tttctgctca ttgccaaata gccccccttgt cagtgacggg agaaatttgg 480
tcttacaggc caaccttggt ctctttgcac agcaaacccc cacgcattac acaccactag 540
gtacccatag accctaactg ggtggcgata ctggtccgca gaagttttgc atcttgattg 600
ttaagctttt gagaacccaa ggagggttag aaaggaatga aaataaacct agacagccac 660
cggcagctct caaggctgtg ggccacagag cagcctgaaa aaaatgtttg ctgatcgatt 720
taaaaagcaa tcctaaaaca gaaggaactg ccgggttggc tttctaccaa atattgtttg 780
gaaatgtatg acaaaggtgc atttgatact ttttcctgta aaagtgntaa caggtanact 840
ggtgacttt 849

<210> 560
<211> 702
<212> DNA
<213> Homo sapiens

<400> 560
atttaaaact atttctatgt ttctatctac tacccaagta taaaaaatca aaaggtccac 60
aatacctta gcatatcagc tgcttctttc ctgcgctgtg ccatgtcctc agattctgtc 120
agaagatcat ccaataagga tgatttatac agctggccta ctagctcact ctgaagagtg 180
tctttcacat gattaaccaa aaaatgcatt actgcctttg gcacactgca aaacacaacc 240
aaattatgga attttagcca aaattctact tttaacaatt tgggcttaga tgctaacctc 300
atgaaataaa gttaagtaag aacactacta ctttggatat ttcattaatg gcataatcgc 360
cctttagatt tttgcttaac tgtaattaaa cattaagaaa agcagttctc ggccaggcgc 420
agtggctcat gcctgtaatc ccagcactct gggaggctga cgcgggtgga ctgcttgagg 480
ccaggagttt gacagcagcc tggccaacat ggtgaaacac cgtctgcact aaaaatgaaa 540
aattggctga gtgcagtggc gcgatcttgg ctcaccacaa cctccacctn ccagggtcaa 600
gcgattctcc tgcctcaccc tcccgagtag ctgggattac gggcatgcgc caccacgccc 660
ggccaatttt gnatttttgg gggagacggg gttnntccat gt 702

<210> 561
<211> 856
<212> DNA
<213> Homo sapiens

<400> 561
agaatgtggg gcgcctgtaa agttaaggtt cacgattcct tggccaccat ttccatcact 60
ctgagacggt acctgagatt gggggcgacc atggcaaaaa gcaagttcga gtacgtgagg 120
gacttcgagg ctgacgacac ctgcctggca cactgctggg tggtagtgcg gctggacggc 180
cggaatttcc atcggtttgc tgagaagcac aactttgcaa aacccaatga cagccgtgct 240
ctccagctga tgaccaaatg tgcgcanact gtgatggaag aactagagga tattgtgatc 300
gcgtatggac agagtgatga gtacagcttt gtgttcaagc ggaaaaccaa ttggtttaaa 360
agaagagcca gtaagttcat gactcacgtg gcctcccant ttgcctccag ctatgtgttt 420
tattggcggg attactttga ggaccagccc cttctgtatc ccccaggctt tgacggaaga 480

0950306-020200

gtcnnggtgt atcccagcaa ccagacttta aaggactacc tcagctggcg acaagcagat 540
tgtcacatca ataatcttta taatacagtt ttctgggcac ttatacaaca atctggacta 600
acaccagtac aagcccaagg gagattacag ggaactcttg cagcagacaa gaatgagatt 660
ntgttttctg aattcaacat caactataat aatgagccgc cgatgtatag gaaagggact 720
gtgttgatat ggcanaaggt ggatgaagtg atgacaaaaa gaaattaagc tgccaacaga 780
aatggaagga aaaaagatgg cagtgacccc ggaccaggac aaaccagtgc ccttgnactg 840
ggatatcatc ggggat 856

<210> 562
<211> 841
<212> DNA
<213> Homo sapiens

<400> 562
tattaattac ctctctagac cagtgttagc aataacaaac acttgctaga attttaagac 60
tatataatca atcactttga tgtcagttaa tcctaccaac acaagattaa aggtttaaaa 120
atctcatacg tgtacagcca ttagtgtctc ctttcatact atattatttt gttcattggc 180
agctagattt ttaggtagaa cttgtgttcc tttttgcaat gctcatttat tttacctgga 240
cagaaggtgc tcttctgtct cttctccaaa gttaatttat ctcatactat ttcttgtgtt 300
aatattttcc aagttcagta tgctgttctg gttataagaa gatcagtgtc ctaatcacac 360
acttttacat tatatgaaac atcatacaga gttttgtagt ctgtataaca atacacagag 420
gtagcaaaat ttgtaaaaga gcagactata tagtccatac tgtagtaact actcaacatt 480
gccattatac gtgaaatcgg ctataaccaa ttcataaaca aatgaatttg gccgtgttct 540
agtaaaactt atttacaaaa acatgtgtta ggccagattt ggaccacagg ctgtagattt 600
ctgacctctg gcttacagca gaagtttatt atgatcctgg ggaaggtgga tatacatgga 660
aggcagaagc gagaagatgt attccatccc atgtcatttt tctgaccctc aacgtaggaa 720
gntaaactaa acatgggcag aactgcttta agcctttgaa tcttgntctt aaagccaggt 780
tgagggtatg ggttntaatc tttatatctc ctttcactta agcttgcact agtcattgga 840
a 841

<210> 563
<211> 777
<212> DNA
<213> Homo sapiens

<400> 563
tgtagattcc ttccaaatga taggtataaa aatgcaatga aaatgataat tggagatttt 60
caaaataaat gtaaaattaa taaatagtgg tgaacatttt ctgcctcagc tcattggcat 120
aatacattcc ccaacataca taataattat aaaataatat agtaactgtt aagttatttc 180
aactgtccaa gttttctggt ataggaactt tgtgtaaaat attactcaga tatgggaggc 240
ttaggctggg atttttcagt ttgtcataca gagcattttt aatgatttga atgtagctga 300
atttggctta cagtcacaag aaaacaagat gttctaaaat ataaaattat acccttggaa 360
ccaagaactg tttccctgta ctctggcagt tagctaatgc catcacattt gaaccttgca 420
tttacctttt atagccagtg aatctctgtc tgctgtatct taaagaacag ttctgatttc 480
cctaatggag gaagaattag cttggatact ctcacagtca ctatccctta cagacaactg 540
ctgagttcta gaaggatttc tattctacca acacagtgtc ttagggagac ggactagagg 600
acaggatgat tagtttagaa attatgcttc tggctaggtt ttaagtttct tgatagcagg 660
tattacgccg tgctgcaagg ttatggttct ccagatggac accattacat ttttttttt 720

tcatattttt ctggngtcct ctggagttat gcaatgtata taacctgngt anctggg 777

<210> 564
<211> 753
<212> DNA
<213> Homo sapiens

<400> 564
ctcttggttt ttgttccagc tgagcaattt tcattgccga cagcacaaca tacattagga 60
taaagcaaat aaacaatgca aggcacttgg agccaggaag tcgcatctca gactagaaac 120
acatagtttt ctattgacat ttgggaggtg ggctgctaaa taggcgagcc agccaccaaa 180
tagaaaacca gtggccatga ggttcttgca cttctaggga agccatttat ttaatcgtta 240
gatctttgaa aggtgtctga agttgatttt gatgtaacaa cagccagttt ctttgtaatt 300
aaatattaac tcaaaactat gtcttgggta actgttaacc tttgccattt gttgtttgcc 360
ttagacatgt aattaacatt cattgaattt aatttgttgt tgttcacgtc ttttattaac 420
tcatacacaa ttacttgtct tctgttttta aaaacttttt tgggaagaca gggtcttgct 480
ctgtgcgcag gctggagtgt ggtggcttga tcttgactca ctgcagcctc gacctcctgg 540
gctcaagcca tcctcccacc tgagccttcc aagtagctag gaccacaggc gcgcaccacc 600
atgcctagct aatttttat tttttgtaga gatgggatct cgctatgttg cccaggctgg 660
tctcaaactc ctgggctcaa gtgagccaca gtgctgagcc ttgncttctg gnttgntgaa 720
gcagtaagtc agacaatatt tgccacaata atg 753

<210> 565
<211> 866
<212> DNA
<213> Homo sapiens

<400> 565
taagtcaatc tccagttcct tttgcctcct ggagttcagc aggtgaggct gaaagttcca 60
agcctcaaaa aatgtggttg gggccaggtg cggtggctca ctcctgtaat cctagcagtt 120
tggaaggctg aggcacatgg accacttgag gtcaagagtt tgagaccagc ctgaccaaca 180
tggtgaaacc ccatttctac taaaaataac aacagttagc taggcgttgt ggcacatccc 240
tgtaattccg gctactcggg aggccgaggc gggagaattg cttgaacccg ggaggtggag 300
gttgtagtga gctgagattg tgccattgca ctccagcctg ggctacaaga gccaaactcc 360
gttttaaaaa aaaaatgtgg ttgctttctc tggcagctag ccctcctcct gaagcagtct 420
cggagcttgc agccaccctg ttagctcaac agcatcccac atgcattctt accatgctgc 480
agatctgaaa gaccttagag gcccttgtgt caggaacctg ggactaagac taaatatcaa 540
aacagaaaat gctcctatta cctctgtcac gaagggcttt ataagagctt tggaagcttt 600
atgccaggaa ccaggggcag agaccaaatg tatatttctt ttcttatatc ggagacagag 660
tctcactctg ccactgaggc tggagtgcag tgatgtgatc atagctcact gcagccttga 720
cctcctangc taaagcaatc cttccacctt acctcttcag tagctggaac tacaggcatg 780
catnaccatg tccagctgat ttaattttgt aangcaggat cttccttttt ncccagctga 840
ctctaatttt ggcttaacaa tcttct 866

<210> 566
<211> 813
<212> DNA
<213> Homo sapiens

0052340.0072000

0050350-0700000

<400> 566
tttattaagt tttgcaacac taattccctt atagtagcta gaaattttca acatcaaata 60
ggcatttagt catgttgaat tgaattttaa gttgaattcc tgtggcttgg gctttctttt 120
ttatactagt ttgtataaac tgttcaactc ctatagctct tacgtctcac tctcagtgag 180
ctggtaacag aatcttcaca gacaagtggt tgcacattcc atttatttag caatgccctc 240
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgttgtgtgt gtgtgtatag gttaattttg 300
ttagtgatct ttaaatttca gaaaatagtc ttttagttga acaaacaaat aaatgaaata 360
tgtcagtaga tcagatgaaa ctgtgacccg ttcggcaata gtaagtatac agtgtgtctg 420
ggctaccaga tggttttaga aactgtcaat ttccaaaata cagaaatctg agagagcttc 480
ataaacaatg tattgctttg ctgaagatga cagatcccat tgaggaaatg ccccttttagt 540
tgttttagat cattaatgat actctataaa cataataaga ttaacacgga gaaacaaaat 600
acctgtgttt gcagtattct ttagttatca gattattgtc tcagttctca aaatgccaaa 660
tgtgatanga taagtgcaag atangaagta cattttaac atctattcag ttagcattaa 720
tgctcaagtt aaagctgggc tcctaccagg gacataatgg gctcctggtt aacatattta 780
tgtnggntgg aaaattngga acctgctttg cag 813

<210> 567
<211> 816
<212> DNA
<213> Homo sapiens

<400> 567
tacatggaga aaggctcaat agaaatgcaa acgtgtgtgc tagaataaag aagttattgg 60
tggttttact tttgattatc ccgtaaattt ttttaatttt aaattattct ttttaaaaat 120
gtcttctact aatctttaaa cattattaag tagtgagaaa tattatttct actgatttat 180
aaatatatcc attcttcaca ttcacagtgg gatttgtaaa agcaatcctt ggatttacaa 240
ccttttttt ttttttttta gcaaacaaag ctctcaagtt ggtgatcctc aggtaacatc 300
taacctacag atattgcacc agttatttat tgctacaaaa atgctgccta agaagccacc 360
caaagggcag tgggttacaa caataactat acctttttc ttaggagtct ctgcattagt 420
tggacagctc ttctggaatt atcttctaag tcaactgtgg gttgggtagg tggctctgct 480
gatttttcgc tggacttcca catttgggac cagttggctg tcatcagctc tagaaagggt 540
gtggctgttt tacattggct gttttcctca cattcctcaa gcaggtaagc ttaatcatgt 600
tctcatattg aagcagaaac tgtttactca tttatctatt tacttactgg gtctcctggg 660
cactaggtac tgtaataaag aactggagaa atacagtcag atgggaagta gcccctgctg 720
tcaaggagct tgccatctaa tgggggagac aggcaagtaa accaaagact tcccaggcan 780
tatggaagng ccatgatttg atgtgacagg gcacan 816

<210> 568
<211> 825
<212> DNA
<213> Homo sapiens

<400> 568
caaaagtact gaaaagacaa aaaggataga agatcgaggt agtaaaggcc atccacattt 60
taaagggtta tttgtctttt atataattcg tttgctttca gaaaatgttt tagggtaaat 120
gcataagact atgcaataat ttttaatcat tagtattaat ggtgtattaa aagttgttgt 180
actttgtctg tgaccttaat tttctgcact gagttaccaa atatttccaa ccaggtagtc 240

ttcagatcac ctgatgaaag gagcagggaa caggaagagg gtggtgtaaa cattataaaa 300
atttcacaaa ccatgcctat ttcattttca cttaaaactg caatgttatt ttttgggtaa 360
acacaaaagt ttcactagca ttttagttat acatgcttaa aaaaatgtta gatgtagtgg 420
gatttctctt aagcatcaaa tgatcttggg tactttaaaa tacagacact atgccatttg 480
agctgctttt tccctagtcc tatttatacg ttggcttgtt catctctagt cttctaggag 540
tttaaggaac tggagataag agtaatttgg gattccatgt ggaataatgt gctcttatga 600
gagtacgtgc tgctgtcttt tgcttagtag cattttgatc cactgtcagt agcccatttg 660
tcaatgcctt gctgctgctt tgtagatata cttagtctag tgcttaataa gggagttgnt 720
ttgggttttc ttttaattgg gacaggtaag aagtagttag catacccaaa aatatncatt 780
ggcttacatt ggccaaactt ttgggttata taagtntcac nggtt 825

<210> 569
<211> 800
<212> DNA
<213> Homo sapiens

<400> 569
gcatcaagct cgagaaggag ttcgacctgc ccccggccgc gatgcccaac acggagaacg 60
tgtactcgca gtggctcgcc ggctacgcgg cctccaggca gctcaaagat cccttcctta 120
gcttcggaga ctccagacaa tcgccttttg cctcctcgtc ggagcactcc tcggagaacg 180
ggagcttgcg cttctccaca ccgcccgggg agctggacgg agggatctcg gggcgcagcg 240
gcacgggaag tggagggagc acgccccata ttagtggtcc gggcccgggc aggcccagct 300
caaaagaggg cagacgcagc gacacttgtg agtactgtgg gaaagtcttc aagaactgta 360
gcaatctcac tgtccacagg agaagccaca cgggcgaaag gccttataaa tgcgagctgt 420
gcaactatgc ctgtgcccag agtagcaagc tcaccaggca catgaaaacg catggccagg 480
tggggaagga cgtttacaaa tgtgaaattt gtaagatgcc ttttagcgtg tacagtaccc 540
tggagaaaca catgaaaaaa tggcacagtg atcgagtgtt gaataatgat ataaaaactg 600
aatagaggta tattaatacc cctccctcac tcccacctga caccccctttt ttcaccactc 660
cccttcccat cgccttcagc cccactccct gtaggatttt tttctagtcc catgtgattt 720
aaacaaaaca aacaaacnaa cagaagtaac gaaacttaga attntgagag tgcttgtcac 780
cagnacacct ggtttttttc 800

<210> 570
<211> 892
<212> DNA
<213> Homo sapiens

<400> 570
aataaaaacc ttcaataaat taggtataga aggaacatat ctcaaaataa taaaggccgt 60
atgtgacaaa ctcacatcta aatcatcctg aatgggggaa agctgaaagc tttttctcta 120
agaactggaa gaagacaagg atgcctgctt tgaccactcc tgctcagata gtgctggaag 180
tagttctagc cagagcagtc aggcaagaga atgcaataaa gggcatccaa actggaaaag 240
aggaagttaa attgttcctc ttttcagatg acatgatctt ctatatagaa aaacctaaag 300
acgtcaccaa aaaacacatt tagaactgat gaataaattc attaaagtga caggatacaa 360
aatcaacata caaaaatcag tagtgtttct atacaccagt aacaaactag ctttaaaaaa 420
tcaagaaaaa gccgggtgtg atgcttcatg cctgtaatcc cagcacttta ggaggatgag 480
gtgggtgcat tgcttgagct taggagtttt gagaccagcc tgggcaacat ggtgaaaccc 540
tatctctgca aaaaaaaaaa aaaaaaaaaa aaaaaaatta accaggtgtg gtagcacatg 600

0502045 0702800

cctgtagtcc ccagctagta gggaggctga ngtgaaaaga tcgcttgagc ataggaggct 660
gcagtgagct gtgattacgc tactgcactc cancctgggt gacagagaaa gaccctgtct 720
cagaaaaaaa angaaaaatt gagaaagcaa tccctttttac gatagctacc ccccaaaaaa 780
ctaaaaaacc caggaattaa atctaaccca ggaggtgaaa gaactntgca atggaaactt 840
ttttaaaccg gggntnaaag gaaattgaaa ggggaccaat ttaaaaatgg ga 892

<210> 571
<211> 876
<212> DNA
<213> Homo sapiens

<400> 571
gaatagaatg aaatctcagt aatgaattaa agcaacaaaa agatattgat tggcaaaaag 60
caagatataa gagatgcatt tgcttaacat ctctacataa tatttatggt ctggtcagta 120
ttggtctggt cagtattgcc tggctgacgt gaaatgtaaa ctagtaggca tgttattgat 180
ctgctaaaac taaccctctt tttaagagga gatttaagga agacgtcaat caaaatgtca 240
aatatgtgtg tcagaatata aataattttt cacattgtat tgttgctata taaaaaaaat 300
aatagaattg gttgggtttc tgaggtgaaa tccagagtaa gagtactaga cagttcaaca 360
agccacatct aatggcacag atagaggatg tagctatttt ataccttca taacatttga 420
gagtaagata tccttcagga tgtgaagtga ttattaagta ctcatacctg aaatctgttg 480
tcaagattag aactggggtt catgttaaaa accttccata ttacctgagg gtacctgtgg 540
ggaacagttc cttcccctgt gtggtagtat tttgttggaa gagaatgttt atacgaaaaa 600
tgaaattctt ccaacagcag agaaactcta aaaagtttga tagtacctat caaagtgctg 660
tacttctgtg atagagaaca tctgatgtcc aatttagatc tatttcttta tacttttct 720
aaccaattgc ttaatagtac tttggatgat tatcaccttt gccacttaaa atatataaat 780
atcctttac ttcatgagga aggaggaatt ttttggatac tgagttcagc cctttgggat 840
acttatattt tgggcttaca ttttaacttt aaagaa 876

<210> 572
<211> 879
<212> DNA
<213> Homo sapiens

<400> 572
tgaataaatt ttgcttctaa gagaagttac tattcctaat tatatgggga gtaaagtctc 60
tttgaagagg aatctctact ttacttttta cacttgtgct ttgataattt tttacttgga 120
aacctcatct tttggcgttt tttttttttg agctatttct ctagtgttgc tatttgattt 180
aatttctgac cttcattttt gtttcccaac ctttttttt tgtttgatat gaggggttcc 240
gtgactgagg ttctgagctg ctgttgatgt gctatacctc cttcaattct cagctatcaa 300
aggggaaaac aactgcagag gatgggaaat gctatactgc catgcctgga aacacccaca 360
ggaaaattac cagttttgag cttgctcaac tgcaagaaaa actgaaggag acagaagcag 420
ccatggaaaa attaatcaac agagtgggac ctaatggtga gaggataagg gcttctgatt 480
tcccatgact taggaaacag aattaagact gtttcattca ttgaagatca gaatgccctg 540
cgtacagtct ggaaaagtaa catgtgccgc ctgaagagac aagagtttgt gataagcaga 600
gcacagactg tgacttctga ccaagagaaa cggttgctac atcagctccg agaaatcacc 660
agggtcatga aagaaggaaa attcattgac agattttctc cagagaaaga agctgaggag 720
gccccttaca tggaggactg ggaaggttac cctgaagaga cttacccaat ttatgacctt 780
tcaaactgta tcaagcgtag gccagaaaca atcttggngg attaccctga cccaaaagaa 840

0960450-090000

ctttctgctg aanaaatagc tgaagnaatg ggaatgatg 879

<210> 573
<211> 833
<212> DNA
<213> Homo sapiens

<400> 573
gtgttttcaa ataggagtaa aggcccttgc aatttttaat taacaagcaa ggcccaaggg 60
aacacatgtc ctcaaaagtt tttctgatcc ctcgccttgc acacctggca tgcatcaggc 120
acatctgtcc tacagctggc agagacagat gcctcggttc tttgtcattc agattgcatt 180
tgacctcttc tcatctattt atttctttat acatccagac ttcatcacat gaagcctatt 240
ggggttaagt ttgtaagtgt ttaattgtgc aaattgccac cctgtgtacc tcctccatgt 300
ctgtctgcgt gttttccacc aaagaatgca aagcagactt ccaggtgttt aaattctgtt 360
cactcaacaa tgccagatga atggaagagg gaacacactg agatgactta gactctggtc 420
caccaaccag acccttggaa aggaatacta aaatcattac aaggtatgga ttttaaatgg 480
atgaaacttc aaattatctt atttggatag aagtctatat tctagcctca tttgcatgaa 540
gtcagatagc cagaagaaat tccattgctg gttttcacga aattcacttg tcttttgcta 600
ataaacacat ggccctttcc cagattattc tctagccaag ccccaccttt gttacgttga 660
aatccctcat ttattttctt ctcaaaatgc ccattatcca aatgcagaac ctctgcatct 720
ccaagccagt tatgctgaat ttgtcaaact tagacaccct tgacaactgc ctcctactgt 780
angctcctgg catactgtcg tcttctgtgg gggatnggag angttagtgt gat 833

<210> 574
<211> 894
<212> DNA
<213> Homo sapiens

<400> 574
tattagaacc attctgcctt gctaatgctg cctaccttgg gggccaagaa atgatggagg 60
tggtgaagag agatgacgaa accataaagg agcatttatg taagcttaca ttttattatg 120
gtactataga tccttggtgt ccaaaagagt actatgaaga cattaagaag gattttccag 180
aaggagacat tcgactctgt gagaaaaaca tacctcatgc tttcatcacc cattttaacc 240
aggaaatggc agacatgatt gctgactccc taaaggatga cttgtccaaa atgtaaattg 300
gcctgaggaa caagccccca ctgccagtac atggaggcag tcagtgtact agacttagta 360
ggtaaatgtt taattttgaa gactgatatt agaaatgaag aaagtgagaa cctttgtctt 420
acaaaccaac tctccgctcg ccatgttata ggctgaagta aacacagttg atgaatcatt 480
ccataggttt aaccatacat tttccaagac tcagggaaca cagtgatcta cacagagtct 540
tgtgtttgca caagatgccc agtggcacca tatggtttat tttggtaggc aggatctttg 600
cagatgaaaa aaaaatctac atgtacttga ttttaattga gttacattgt agaataggct 660
cctctggagg aaattatgaa atacctacta gaaaatgtaa aataaatcag tgaatgttaa 720
gagtatagtt agatatgtga agtgtatgag attatgacaa ggatacactc atgttccagg 780
aacaggaagt gaacctgggt ctcctgtaag acagaagatg aagatgagcc cangctactt 840
agcacagatc ttggctgaga acatcatggg acgtctaatg acctgcctaa aaaa 894

<210> 575
<211> 861
<212> DNA

0962946.0972800

<213> Homo sapiens

<400> 575
agcgcgcggg aggcgggatt gtgcttgcac gacttccccc ggcccgcggc ctgtgagccc 60
aggtcctggg gtgaaccgag cgctcgctcg ttcgtcagac cgtagcgctc cagcggctgt 120
ccttactgtg tagtagccaa agctgagggt gatgactgtg aaccagaaca gactgcctcg 180
ctgaaaagtc acttggaact cttctgtggc atctgaagca gatggacgaa gccaagaggg 240
ccgagagtat ctcagcacct agaaatggac aaggctggtt attagaacaa agatttcgca 300
ggtggtgagt ctcaaaggcg aagctgaatg aggcaagaat ctgcatcaaa gagccctgga 360
agcaatcatg gctcaactgt gatgccttta gaacatgaag tcctccaaga agatgccata 420
ggaatggcct ccatcccagg gcctggagag cagccagaga caagaagagt agcccaggag 480
ggcactggca gtcagtgcta cactgtggcc tgtcagtctc agagccagga tttaatcact 540
ggatctccca ttaaccagtc ataatgaagt aagaacaaga agatggggaa gaggaagtgt 600
aaaaccgtgg cttaaattta ccaaggataa gctgagtgta cttcagcagt catttgcaca 660
gaatccttat cctaatttta caaccaggga aaaactggct ggacagtctc ttgtcctgtg 720
tttgtaattg ataactggtt tcaaaataaa agccagacca ccacttagag agagacacag 780
aatgttcact ggccagggaa ctgcattgat tcctnttgnc aaangccacc catttaccaa 840
gaattccagg aaaaaccagg t 861

<210> 576
<211> 889
<212> DNA
<213> Homo sapiens

<400> 576
aaggatgcgg tcccgggttc tgtggggcgc tgcccggtgg ctctggcccc gccgggccgt 60
tggcccagcc cgccggcccc tgagctccgg tagcccgccg ctggaggagc tgttcacccg 120
gggcgggccc ttgcggacct tcctcgagcg ccaggcgggg tctgaagccc atttgaaggt 180
caggaggccc gagttgctgg cggtgatcaa actgctgaac gagaaggagc gggagctgcg 240
ggagactgag cacttgctgc acggtaaggg tcgggcccgg gggagaggcg tcagagcaca 300
ttcttgactc ttcgtttgac ttttccactg cccacactac ccgagtttga aactctttac 360
tcacttgcag ccgtttttat tttggatcag aggtcaggac atcattacgt gctgtgatcc 420
catcctctcc tgtgggctct cttgtgctcc tttgccacgg cgctctgccg ccttttacat 480
gcttattagt tgtggactcg ggcaagagct cattagctca gcaaggataa ataaggcact 540
gtccctgtga tgggctccac agcggtgttt ctcaaagtgt ggtgtggaga cccatttgca 600
gtagtatcag ggcagtgctt gttaatagca gacttaggac tcagaatctc agacctatac 660
ctgggtaaag gtactaaatt gggaaattca gtatggccta agtatagaat angtgggaag 720
atgatgtcat agaaacatga accngaaaaa tagttaagaa ccttgcaaga caaagaattt 780
ggattatttt tatagaccat ggaaagttac aaatgttttt aagcagagaa ttacgtcttt 840
gtaaanaaag ttatggtggc atgccctagg ataaatggat attttcaaa 889

<210> 577
<211> 804
<212> DNA
<213> Homo sapiens

<400> 577
attttttttt tctaatgtag taaggactaa ggaaaacctt tggtgaagac aatcatttct 60

0502303.0005-0N2003

ctctgttgat gtggatactt ttcacaccgt ttatttaaat gctttctcaa taggtccaga 120
gccagtgttc ttgttcaacc tgaaagtaat ggctctgggt tgggccagac agttgcactc 180
tctagtttgc cctctgccac aaatttgatg tgtgaccttt gggcaagtca tttatcttct 240
ctgggcctta gttgcctcat ctgtaaaatg agggagttgg agtagattaa ttattccagc 300
tctggaattc taagtgacct tggctacctt gcagcagttt tggatttctt ccctatcttt 360
gttctgctgt ttgaggggggc tttttactta tttccatgtt attcaaagga gactaggctt 420
gatattttat tactgttctt ttatggacaa aaggttacat agtatgccct taagacttaa 480
ttttaaccaa aggcctagca ccaccttagg ggctgcaata aacacttaac gcgcgtgcgc 540
acgcgcgcgc gcacacacac acacacacac acacacacac acacacacag gtcagagttt 600
aaggctttcg agtcatgaca ttctagcttt tgaattgcgt gcacacacac acgcacgcac 660
acactctggt cagagtttat taaggctttc gagtcatgac attatagctt ttgagttggg 720
tgtgtgtgac accaccctnc taagtggtgt gtgcttggaa ttttttttttt caagngaaaa 780
tggattggaa aacctggtgg tnaa 804

<210> 578
<211> 893
<212> DNA
<213> Homo sapiens

<400> 578
agcagatgac agtaatccag gcagaaggtt agtgtcagag aagtctgtca gtgggtcata 60
gggctccacg tgctagcctg ggtttccgtg ccagaatttt gttcttggga ggcaggtagg 120
gaaaagcaag tcaacatctc cagttccaga tgagctaggg cacttgacca aatacaggta 180
cagaagttag tccttgaggt agagcttacc tgttggagaa catggcagaa atcattgtac 240
caaaattgga gcacaggtca gaggctaaag catggcttac tgctgtggct catggtgaac 300
ttgagcttct catggcccct cctatctcct gaggatggct gagctcacag atggggactg 360
ttatgtaatc agaggtcaag tggtttagct ggggtggcag agagccaggt gaagactgaa 420
agtgttcaaa taaggaagag aacagaattg ctttatgtct gccttcatga agacaaaccc 480
taatagccaa aggactgaaa gtttgcccaa agagacctca atttttgaaa ggaaaatgca 540
tcttctcctt atgttagaat gaccacgtct aaataaaata aactcttttg ccttttgttg 600
ttacttgtct tggtatctac cattgtttga cactaaaaaa aataaagcag tgactaatta 660
ttggctaatt taatctgtca tgatggcatt tgtaattcag gtacatcctt cattaaagca 720
agtataggca ttattatttt taaaactttt tttttctatt ttggatttct tctatttngg 780
ttggataatt aatttggtgg tactggtggt ggtggggttt acagtgagac atactggtta 840
gttaactaag ggtttgagta anattcntaa cctaaagncc tttgggggggg ttg 893

<210> 579
<211> 892
<212> DNA
<213> Homo sapiens

<400> 579
aagctacact gcagtcatat ttggcatatg tgacatatag gcccactgca tttccttcca 60
aaggcaagat gccaagggaa ggtgccagta attttatgac caatatgaca ccattttgtg 120
gtgtttgtaa gttgaaacaa tatatttccc tgcattacac aagtttataa aaaacaaaca 180
aaaaaaagag gccccagctg tggttgatcg atgatgaatt gaatagagcc taaccttcca 240
ggcttctcac ttgcacaggc ccttccaagg tcctgggagg gcccctggaa atttttgtag 300
tcataatttt tttaatgttt ttactagata aggctcaggc cccacaaaat cctgaaatca 360

0052450-0052000

tccctgggtt ccaatagtta caacccagta aatctcttga atgaagcctc tatgttattg 420
acaaatactg actggccaag ttagcagggt gatagggtca gtctattttg aatctgaaat 480
ccatctcaaa gacaggccaa gagcttatta gtggacttaa ctggattctg ctggcccaag 540
cgcagtaaag tcaaacaacc atatcgaggt tttgcactgg ggaaaggagg acatttattt 600
gcagggcatc caagcaagaa ggaccaggcg gctaactatc aaagtccctc actgaatggg 660
ggcaataatc atatctctta cagatgaaat catgaatgaa atggtttatg gaaaagcagc 720
aatggttgat aatcctaaat gttaagtatg ttnatatttt ttncctgact ttaaagtgct 780
tctccttcat tcctatacac aggtccanac tgatggctta ttttttaaaa tcttttagca 840
cttcatgggt ctaacattan tttagaaact ggatgacttt gcatggtnaa ag 892

<210> 580
<211> 887
<212> DNA
<213> Homo sapiens

<400> 580
gaacaggttg gttgaacttg ggcagaatca cagatacaac tccacactaa agaatgaaaa 60
taagcaatga actagacaga aggaagaaat catgaagact taggaagcag aattacaatc 120
tgtcatatta acaaatggag tttgccttct aagatcagat gttgctcaga aactttcatt 180
gtttacctaa taatttaata tcactagttt cctagtgggt caagcagatg caaaatccag 240
cttattttct tctatgtgct ctcaagctta ttgcttattt taaagtaaaa tcctgaaaaa 300
ggaaaatatt aggttggtgc gaacgtaatt gcggtttttg cattgttgaa atttgccgtt 360
ttatattgga gtacattctt aaataaatgt ggttatgtta tacatcattt taagcatatt 420
tctcactttt tttttgctaa tgacttattg ctgtttatat ttattttaga ctatggaaat 480
gatgttagac aaaaatcaaa tttagcgatt ttctgagttc aaaataggtt ataaagcagc 540
agagacaaca cacaacatca acaatgcatt tggcccagga actgctaatg aacatacagt 600
gccgtgatgg ctcaagaagt tttgcaaagg agactagagc cttgaagatg aggagtgcag 660
tggccagtca tcggaaattg ataatgacca attgagaaca tcatcgaagc tgatcctctt 720
acaactataa agagagctgc ccaagaactc aatgttgacc cattttatgg ncgttcggca 780
tttgaagcca aattgnaaag gtggaaaaag ctcaataaaa ggggtgccct catgaagctg 840
antggaaaaa attaaaaaaa attcgtgggt tttgaaaggg gcanttt 887

<210> 581
<211> 801
<212> DNA
<213> Homo sapiens

<400> 581
cttgccagtt acatataatt ggtgactttt aagttatttg tcacctggaa cagacataac 60
ttctttagca taaaattcag atacaactgt cattgaattt atgtttccat aaaattggtg 120
gtagaatttt tagcattagg taggagaaga ggacagggaa agacagctgt gtctcaggca 180
ctgtactgtt ttacctattt tgttaaatcc tcacagcaac cctgtaggta ggtgttaact 240
gaagcagaga ggttagataa cttgctcagt gttacacact gatgataaat gacagagcaa 300
gaattcaaac tgtaatgttt cggttcttgt tatcttttat tcatcgcctt tattgnttct 360
tttctttctt tctttctttc ttttttttttt tttctttga gatggagtct tgctcttgtc 420
gcccangctg gagtgcaatg gcatgatctc tgctcactgt aacctccgac tcctgggttc 480
aagctattct cctgcctcag cctcccaagt tgctgggatt acaggcgtct gccagcacgc 540
ctggctaatt tttgtatttt tagtagagac agggtttcgc catgttggcc aggctggtct 600

0302050.00000

caaactcctg acctcgtgat ctgcctgcct cggcctccca aagtgctgag attacaggtg 660
tgagccaccg tgcctggccc tccttgcttt attttatgat tccattcagt cattantctt 720
gtcggttttt aaaaaaaggt tttattgaga tatgattcac atactatcag gtcactcatt 780
aaaagtntnc aattcacttt a 801

<210> 582
<211> 847
<212> DNA
<213> Homo sapiens

<400> 582
gagtgtttct ggtggaatgc tggattgtta atcgtgttag atggaattat gaccttgttg 60
ttgtctttat gtggcagtta agtatggttt aaagagatgt ttatgggtgc caagttgaca 120
agggtagact tgtgatggtt aattttatat gtcaacttga ataggccaca gggtgccaga 180
tatctgttta aacattattc tgaagtgtct tgagtgtgtt tacagacgag atttgcattt 240
gaactggggg actcagtaaa ggagatagcc atccccaagg tgggtggaca tcatccagtt 300
tgttgagggc gtaaataaaa taaaaggcag aggaaggaag aattcacccc ccttttttt 360
tcctgcctca ttgtttgagc tgtgacatct catcttctgt cctcagatgg atttacatca 420
ctggcttccc tggttctcaa gcctttggat tcagactgaa ttataccaca ggccttcctg 480
ggtctccagc ttatagatga cagatcatgg gacctcttag cctccataat catgtaagcc 540
actttcttgt agtactggta aaagatatat tagaccaatc tataaaacag atagctatga 600
aagagaaagg tgacaggcac aagcctaggc aaatagagaa gggttcctgg agagcctctg 660
acttgcctag gtcattgtgc acacgtggct tgcctgaatg aacatgccca ctgtgaaaga 720
ttccatttct naacacatgt gccagtaagg ggaaataaat caatggnggc tcaaactaac 780
gcccacacat ggggtggaac cccccaggaa gttgctcctt atgccnggga aaaagccngg 840
ccctttt 847

<210> 583
<211> 825
<212> DNA
<213> Homo sapiens

<400> 583
tattttaatc aacattaatt tttgggttga ctgttttgac tgatagcata aagaaatggt 60
ggcatgctaa atctgaattt ggagccataa cagcagggac ctgggagaag tgcctgatgg 120
actatcaaca caactaccta ctatctcttc tctatctggg aagtagcaaa gatctatctg 180
agaacaaaga agtcgacaga ataacattga tgacttttta aataattaat ttatttgaag 240
aatgcttgca tacaaaaagc ttcctgcagg aattttaaac aagctgtcct tggttatccc 300
aggcaatgtc agttgattta attaagttta catgcaaaag agaatacaat tgtaacatta 360
attggaacat taagttggct tataagcagt atttccactg ctcctacaat tgattttagt 420
tatttgataa tttatttaat atttgtattt agtgtggtaa actcctgtag ttcataatat 480
tttcaagagt gtcatttgta tttttgttag ttcttaatga ataatggaaa agttatctta 540
taatttcatt ggagccaaag attttaaaat aaaaataaaa acaaacacac aaataaggca 600
ccttgtgttt gtttattttc tgtcctctga tcatcaccca gttaatgagc aaacaaggta 660
ggtggcaccc atgagcctgc tgtgacattt accacggggc acattctcct aagagtaact 720
gcaaggaaat gtgtataatg ataaaatgga tcttacttga tttcttttaa tgaacattac 780
atnccanatg aatggtcctg gttncccaac ttctttgggg ggaaa 825

0052469 0052469

<210> 584
<211> 902
<212> DNA
<213> Homo sapiens

<400> 584
actgattttc ttagataata taattaaaca gaagcgtgta acagattaaa cattatgaga 60
gagaaaaact ttattgatca aacatttggc ttccaagaaa agtacctgac ctagctcaat 120
attaggtaac attatgaagt atttcctggg catgataatg acattgtggt tatatgatag 180
gtgaattatt tagggtcgaa gtgtcaaatc agtgtctttg tggagggata aagctttgtg 240
gagggatagg ggaaaatgtt cgacaattgt tgaatctaaa tagaaggaat tcacatgttt 300
attttaacat tctatcaact ttttggtata ctcttaacaa aaagaaaaaa aacaatgcct 360
gacttagatg tttatatggg tgactcaagc tatcaagtaa tggataactc ctgtgccata 420
taaacagttc caatacacta acaaaaactt cctaatttac ttgaggacat taacaaaaac 480
ctcagaagac atacctgaaa ttatgaatct tttgcatcag tgtgatgtct ccacttttat 540
ttctgatttt atttatttga gtcttctagt tttttcttag tctagctaaa tgtttgttaa 600
cattgttttt acctttcaa aaactaacaa tttagttgat ttcttcctgt ttttctattn 660
tttatttctg ctctaatttt tattctttcc ttttttctgc taactttggg cttagttttg 720
gtctttttt tctagttcct tgagatgtaa aagttgagtt gcttatttga gatctttctt 780
cctttaaaaa tagcaattat cattagaaac tttcctntta gtcctgattt gcttcatcct 840
gtagtggtca tttgtgggtt ttgctttttt aaaatttcct gattcanctt tgatcactgg 900
tg 902

<210> 585
<211> 739
<212> DNA
<213> Homo sapiens

<400> 585
gggaagtggt gtgccatgca cgtgcgtgtg gcttacatga tcctgagaca ccaggagaaa 60
atgaagggtg actcccacaa gcttgacttt cggaatgacc tcctgccctg ccttccgggg 120
ccctatgggg ccctgccccc tgggcaggag ctctcccacc cggcctccct cttcactgcg 180
actggtgccg tccacgctgc agccaaccct ttcacggcag ctcccggggc ccacggaccc 240
ttcctgagcc ccagcaccca cattgatccc tttgggcgtc ccacaagctt cgcctctttg 300
gctgccctct ccaacggggc ctttggaggc ctgggcagcc ccacattcaa ctccggcgcc 360
gtctttgccc agaaagaaag cccaggggcc ccaccagcct tcgcctcccc accggaccca 420
tggggccgcc tgcaccgcag tcctctgacc tttcctgcct gggtccggcc ccctgaggcc 480
gcccggactc caggctcaga caaggagcgg cctgcggagc ggagggagcc ctccatcacc 540
aaggaggaga aggacaggga cctccccttc tcacggcccc agctccgagt ttctcctgct 600
actcccaagg cccgggctgg tgaggagggg cctcggccaa ccaaggaatc tgtgcgggta 660
aaggaagagc ggaagggagg aggcttgccg ncgncgctgc cgcttgttgc tggccgccgg 720
ccggttgccg gccgncgca 739

<210> 586
<211> 783
<212> DNA
<213> Homo sapiens

0952945-040800

<400> 586
ttgcattggg ttagaacatg ctcctttaac ttggaggagt ttgttattac ccaccttctg 60
aagcctactt ctgtcagttc atcgaactca ttctctgtcc agttttgttc ccttgctggc 120
gaggagttgt gatcctttgg aggagaagag gtattctggt ttttggaatt ttcagccttt 180
ttgctctggt ttttcctcat cttcgcggat ttatctacgt ttggtctttg atgttggtga 240
cttttgaatg ggggtttctg cgtgggcgtc ctttccgttg atgttgatgc tattgctttc 300
tgtttgttag ttttccttgt aacagtcagg cccctctcct gcaggtctgc tggagtttgc 360
tcgaggtcca ctccagaccc tgttttcctg ggtatcacca gtggaggctg cagaacagca 420
aagattgctg cctgctcctt cctctggaag tttcgtccca gaggggcacc tgccggatgc 480
cagctggagt tctcctgtac gaagtgtctg tcgacccctg ctgggaggtg tctccccttt 540
aggaggcgcg gggttcaggg acccacttga ggaggcagtc tgtcccttag caaagctcga 600
gcactgtgct gggagatctg ttgctctctt cggagccagc aggcagaaat gtttaagtct 660
gctgaagctg tgcccacagc catcccttcc ggcaggtgct ctctnctagg gagaaaggag 720
tttatctata acccctgact ggaactgctg cctttctttc anagatgccc tgcccanaat 780
gga 783

<210> 587
<211> 827
<212> DNA
<213> Homo sapiens

<400> 587
acgatttgaa cgctctgcct tgcagctctt ctggaccgag gagcccaaag ccctaccctc 60
accattcacc aggttacagt tcttatccac gtgaatacac atggctctgt tacgaaaaat 120
taatcaggtg ctgctgttcc ttctgatcgt gaccctctgt gtgattctgt ataagaaagt 180
tcataagggg actgtgccca agaatgacac agatgatgaa tccgagactc ctgaagaact 240
ggaagaagag attcctgtgg tgatttgtgc tgcagcaggg aggatgggtg ccactatggc 300
tgccatcaat agcttctaca gcaacactga cgccaacatc ttgttctatg tagtgggact 360
ccggaatact ctgactcgaa tacgaaaatg gattgaacat tccaaactga gagaaataaa 420
ctttaaaatc gtggaattca acccgatggt cctcaaaggg aagatcagac cagactcatc 480
gaggcctgaa ttgctccagc ctctgaactt tgttcgattt tatctccctc tacttatcca 540
ccaacacgag aaagtcatct atttggacga tgatgtaatt gtacaaggtg atatccaaga 600
actgtatgac accaccttgg ccctgggcca cgcggcggct ttctcagatg actgcgattt 660
gccctctgct caggacataa acagactcgt gggacttcag aacacatata tgggctatct 720
ggactaccgg aagaaggcca tcaaggaccn tggcatcagc cccagcacct gctctttcga 780
acctgggggn gattggttgg ccacatgacc ngaatggaag cccccag 827

<210> 588
<211> 379
<212> DNA
<213> Homo sapiens

<400> 588
gaaaaagaat ggaaaatctt gaagccttag aattaggtaa ttgtggccgg gcatagtggc 60
tcacccttgt aatcccagca ctttgggagg acaaggtggg tggatcactt gaggccagga 120
gtttgagacc aacctggcca acacagtgaa actccatctc tactaaaaat acaaaaaatt 180
agccaggcat ggtggtgggc acctgtagtc tcagcctccc gagtggctgg gattgcaggc 240
ctgcgccacc acgccgggct aattttgtat ttttagtaga gacgaggttt catcatgttg 300

0050450.0050450

gtcgggctgg tctccaactc ctgacctcgt gatccaccag cctcagcctn ccaaaatgct 360
gggatcgtan gcgngagcc 379

<210> 589
<211> 710
<212> DNA
<213> Homo sapiens

<400> 589
ttaccttgtc acccaggctg gagtgcagcc tcaaactcct cttgcttcag cctctgagta 60
gctggaatta caggcttgta ccaccatgcc cagctaattg tcagattttt ttttttgta 120
gaggggtct tgctgtgttt ttcccggctg gtctcaaact cccggcctta agcagttgtc 180
ccgcttcagc ctcccaaagt gctaggatta caggtgtgag ccatcatgcc ctgcctaata 240
tactggcttt aaggaagctt tcaggtgccc acactctgtc agacttgact taattcttct 300
aggctttacc aacaccccca accccatggt tgggggtggg gcattacaac caggctgtgg 360
tcacctctga ggcacaggtg tcagccacaa tgccaccttt tccggtgagt cagcgagttt 420
gtctggaata cccctccgta ggtgagagct ggggtcctgg gctgggacca cgatgggccg 480
tagcttctca ggaagccgaa gctggccctg gccagagctg tcttgcagac ttgagataca 540
gatggcttct ttccccctcc cgttttcttt ttgaaaatgt ttttaactcg gagcatgtgt 600
cggcacggcg ttctttcacg aggacagaag ctgtcactgn acgcagcaga nacactggtt 660
ctgatccaaa gccgattgtg gcctgcttct gggtctaatt atttggcang 710

<210> 590
<211> 813
<212> DNA
<213> Homo sapiens

<400> 590
attttgcaat gatattaata atgtcattag attttctttg gatttttga aaaaaataat 60
ggttttagaa ggaaatctgg ataaatttta tctctgtcct gtgtcagaaa aatataaaac 120
ttgagttttt taaattaagg tactaagatg aataaattgc atctatagat attgaaatat 180
gactgtaatt tgataatgca ttttcattct cagtgtcatt gttcatcata atagtatcta 240
catcaccaac ttcatttaga gcttgaatct tgtaacaata gagattgaaa ataaattggt 300
ttataattaa ctctgacaga gaatgatgtt tttactttta tacttctcta tagaagtaca 360
tgtcccttaa ttttaaggaa tgaacaagtc agatggaaga tttttactga gatcaggaat 420
gaattgagta atttagtttt ctttttaaag ctggggagaa atgagcaaaa tcaaggagaa 480
atatcttgct tttgatattt attactgatg ctgtgacact ccctttaatc aatgtttttt 540
aatatgggtg gcagtatctc agttaaccaa atagttaagt aagtagattt ttgtattgna 600
tatagtaaac agtatcctaa ttgttgccaa ggagacaagg aattacctaa tgggcaaaaa 660
tgcccttata tttatttacc tcaaattcag tcacacttga ctgnatctcc acaaattcag 720
atggagagct ggaaaattta ttggagaaga ncagggttta aatctgggtt tttcaaatat 780
ggttgggcat gangaaactg aatcnttaat taa 813

<210> 591
<211> 787
<212> DNA
<213> Homo sapiens

0356450.0756

<400> 591
gcagagcggc ggcttctctc gcgaggacgg acgccattat cgcatctccc cgacaaacac 60
cacgagaatt ccgcagccca cacggtgacc aaaagccagc cccactgtga gttgaactct 120
ttcgtgttga ccggccactc tccgtgctct ggatgatgtc ggaacacgac ctggccgatg 180
tggttcagat tgcagtggaa gacctgagcc ctgaccaccc agttgttttg gagaatcatg 240
tagtgacaga tgaagacgaa cctgctttga aacgccagcg actagaaatc aattgccagg 300
atccatctat aaagtcattc ctgtattcca tcaaccagac aatctgcttg cggttggata 360
gcattgaagc caaattgcaa gccctggagg ctacttgtaa atccttagaa gaaaggctgg 420
atctggtcac gaacaagcag cacagcccca tccaggttcc catggtggcc ggctcccctc 480
tcggggcaac ccagacgtgc aacgctgtgc ctgggcgtcg gcagaacacc attgtggtga 540
aggtgccggg ccaagaagac agccaccacg aggacgggga gagcggctcg gaggccagcg 600
actctgtgtc cagctgtggg caggcggcag tcagagcatc gggagcaacg tcacgctcat 660
caccctgaac tcggaagagg actaccccaa tggcacctgg ctgggcgacg aagaacaacc 720
ccgagatgcg ggtaccctgc gccatcattc ccttncgaca tgctgnacat tnagcaccaa 780
ctggccg 787

<210> 592
<211> 805
<212> DNA
<213> Homo sapiens

<400> 592
cccttccatg aagaaaaaga aggtggagga cgtgcccagc cgcgtggtca gcgtgccgaa 60
cctcgcctcc tatgcaaaga actttctgag tggcgatctg agttccagga ttaatgcccc 120
tccaataact acatcaccca gcttggaccc aagccccagc tgtggccgga cctacaaacc 180
caaccagtct acagatgcaa aaactgccac aaggacccca gatggtgaaa cggcccaagc 240
caaagaagcc cagcagaaac agggctctcc gcaccaggaa tggttcacca agtacttttc 300
tttctaagct aacctttggg atacatcaca gaggatactt gaaaaacatt tattttaaat 360
catccgattg aaggaatgaa ctaacaccaa ccaaccaaat aatatgctta tgatttatat 420
atgatagcta aaacaaattt tggcgttaac acttcatact gttctgccag gcacagcagc 480
tcacgcctgt aatcccatca ctttgggagg ctgaggcaga tggactgctt gagtccagga 540
atttgagacc agcctggcca atatggcgaa accccatctc tacaaaatat acaaaaatta 600
gccaggcatg gtggcgtgtg cctgtggtcc caggtacttg ggggactgan gcgggaggat 660
cacttgaacc taggaggcag aggttgcagt gagccaagtt cgaacttctg cattccaacc 720
agcctgggtg acaganggag accctgtctn caaaaaaaaa aaaaaattga cattaaacca 780
gtggtattaa aagtcatcta ttngg 805

<210> 593
<211> 826
<212> DNA
<213> Homo sapiens

<400> 593
cacttccggc ctcgcgaggg ccgcaatcac tgctccgcag ttcccgcctg cattcctcgc 60
gccgtcttcc tggagtccca gctctccttc agcccgcccc aacgctgacg ctcagtcctc 120
aggcgtcgag ggtagctcct gtgaggggct cgcttggcgc acgcaaaacg ctcagcgcgc 180
accacagggc gtccgcccca accccgcccc cggaggcctc cagctcggcc ccgcccctgt 240
cccttccccg tcgcggaggc agcctagcct cgcgccccgc ccgttgcttc tgccctccgg 300

0950205.0050000

ccttcccgcc gccgtcgccg ggaccagccg ctcggggccg ggctgataca gccgcttcac 360
cgtgcccctg cccgcgacca tggcctcctc cgaggtggcg cggcacctgc tctttcagtc 420
tcacatggca acgaaaacaa cttgtatgtc ttcacaagga tcagatgatg aacagataaa 480
aagagaaaac attcgttcgt tgactatgtc tggccatgtt ggttttgaga gtttgcctga 540
tcagctggtg aacagatcca ttcagcaagg tttctgcttt aatattctct gtgtggggga 600
aactggaatt ggaaaatcaa cactgattga cacattggtt aatactaatt ttgaagacta 660
tgaatcctca cattttgcc caaatgttaa acttaaagct cagacatatg aactccagga 720
aagtaatggt caattgaaat tgaccattgn gaatacaagt gggattggtg accaaatnaa 780
taaagaagag aagctacaac caatagtttg actacntaga tgctca 826

<210> 594
<211> 800
<212> DNA
<213> Homo sapiens

<400> 594
ctcattgttt aattggcctt ctctccagtg actcttctct ttagtgtagg cagcacatta 60
acacttgaat cactgagata ctattttaag gtattcttac tccaggactc catataactg 120
caggacactg aaaggcactt tcatgatctg aaaagttatt tacattttat tttttaattt 180
tttaaaaatt taaaaaattt tgtaccccag agaaaagtca tatttacatt ttcactctgt 240
gggccattca ggtgagtatt gacttttatc atcactttgt aggtgatagt tataaaagtt 300
aatcctcaag aacagtgttt ttcagttaat gcctgggtct catctcagac attctaattg 360
ttttgtgttt taagattttc taaattccgt ggacgatttt tattttgcag cctaatttgg 420
gaactttgtg ctctaggctg tttattgcag tagagattct ttacctgcaa ttagcaagtg 480
ctgccaccag gggcgtgggg gtgtgcatgc ctttattact tgcggcttct tgatctgaat 540
aacttgactg gtgtctttaa aacttaagac ctgtgtggaa attatcacat gtacaatgag 600
aataaacact ctcagaatac aaagagctct tactaaatca aagagaaaaa gatgaaccaa 660
tagaaaatgg gcaaaaaata ggaatagaca tttcacaaaa gaagaattaa aatagcccaa 720
gaatcctgtn aaaatggtca ctttaccaat aatcaantaa aagccaaatt agagccccaa 780
tagnattttg gcccattttc 800

<210> 595
<211> 803
<212> DNA
<213> Homo sapiens

<400> 595
taagtgactt ccaggaacag ctgctaactt ccctgatttc acagccctca ttttcatgct 60
catcttttcc ctaccaccgt ctggctcctc agagtgtgtg agctccctag taggtgcagt 120
agtaatagta ggcacccttt gctgttattg ttatgaaaac tgtcagctcc aggatggtgc 180
tggaggtgac gatgatgttg atgacagggt tgttaggaat ggagttagtg gcaagtggag 240
ctacagatgg gcccacgggt atgagagcta ctaacaggaa cttggcagaa tcgtatttca 300
aatctaaatt ctctttccac cagctccttt tgctataagg gaaagccaag tggaaacgta 360
gaggcatgtg cacccagatc tcctgaaaag ggcaatagga gagggtagca gggaggagac 420
aatcctctac tgagctgaac tggaaacgcc tgattgtcat ttcttccctg ctttgccact 480
gacgcccgca gcagctgatc aggaaggtat cagatgcctt cactagctgt cactaacacc 540
tgcctcctga atcctgatcg gggagatggt gtcatcgggc cctccacata aaatatttag 600
tggcacttgc ttcccaaaga ggcaagcgtg gcctctcctt ggcatcagga acgctccgag 660

0050250 .0050250

ttacatgtgc tgggagactc tcttgttcaa gcgagtgtcc tggagcacat acctgggttg 720
agacttggag tgggaaaaan ggaaactggt agaacagaga ctagcaagnt ttngctcttg 780
agaaagcctg tgacaagtga ctt 803

<210> 596
<211> 745
<212> DNA
<213> Homo sapiens

<400> 596
agaaaaaagt ccgggagaga ctagctcaga tctgatctgt accacctggg ggttcccagc 60
ccatagctct gtaggccttc aaggaggaag aggaggggaa gggggggaag gggctgaggc 120
tcggggactc cagcctgaag tccaagcatg tgcggaagcc tagaccctcc caccttacca 180
caaacttggc tccaagtccc ctctatgctg acgcatcctt gccctcctcc tcctccccac 240
tgccctccac tagcccatcc tccctcctcc ctcctccccc cgacacacat ttatcactag 300
tgacatctca gccccccccta ccccaatcca gggacacagg agggacacag tagggttaga 360
ctgagggcca ctgatgtggc ttcaccctca gtgcttgggc aattcccaag ttacagcatc 420
tcagtcccca gagaaggcca tgctgccact gtagccgcca agggcccccc ggagtgcagg 480
gcacagagga ggaagggaga ggatgtgagc tgcaggaggc agctgaagcc aagccttggg 540
caggctctca ggtattacat acctggtggg gaggagggtt ctcccttccc taggctggat 600
ccctcacttg ctcctagtgc ctggaacctt aggtttagag agccactcta ctncttgaag 660
tctcttgatg caccttacct ggggcccttt ccttatccct ntctgcagca tttccagaaa 720
tggtccactg gagggtttca ncacc 745

<210> 597
<211> 764
<212> DNA
<213> Homo sapiens

<400> 597
agatccgctg atctagtgct tctcgaaaaa aaccttcagg cggcccatgg catgccttgg 60
actttattgt gggaagaccc tattatttaa aaatggctca actgaaatat atggagaatg 120
tggggtatgc ccaagaggac agagaacgaa tgcacagaaa tattgtcagc cttgcacaga 180
atctcctgaa ctttatgatt ggctctatct tggatttatg gcaatgcttc ctctggcttt 240
acattggttc ttcattgaat ggtactcggg gaaaaagagt tccagcgcac ttttccaaca 300
catcactgca ttatttgaat gcagcatggc agctattatc accttacttg tgagtgatcc 360
agttggtgtt ctttatattc gttcatgtcg agtattgatg ctttctgact ggtacacgat 420
gctttacaac ccaagtccag attacgttac cacagtacac tgtactcatg aagccgtcta 480
cccactatat accattgtat ttatctatta cgcattctgc ttggtattaa tgatgctgct 540
ccgacctctt ctggtgaaga agattgcatg tgggttaggg aaatctgatc gatttaaaag 600
tatttatgct gcactttact tcttcccaat tttaaccgtg cttcaagcag ttggtggagg 660
ccttttatat tacgcctttc catacattat attagtggta tctttggnta ctctggctgn 720
gtacatgtct gcttctgaaa tagagaactg ntatgatctt ctgg 764

<210> 598
<211> 777
<212> DNA
<213> Homo sapiens

0050345.0020

0002760.0045.0000

<400> 598
aggggcagag tagcgatcgt cgccaaagcg cgcggtttta tttctctccg ctttggacgg 60
ggcaaactag cttttgggag tgaagcgggt acgcagttat ccaacaatgt ctggtgagtc 120
aggacagcct gaggctggtc cctcacatgc agggctagat tggccgaacc ctgagaggaa 180
tcgggctggg gccccgggag gggtgatccg aagagctggt tcccaagggc ccaggtcctg 240
gatccaaaag gttcttgagc agattatgga ctcacctcgc cagtgtgtca ccccctcgga 300
ggtggtgcct gtaactgtgc tggccgtcca gaggtacctg ttagaggatg agccacgcga 360
cacggtgccc aagcctcccc tttattgcta tgatgtgacg atctcagatg gggtgtacca 420
ggagaagtgc tacctggacc ccagcttgaa ctctctcgta tatcaaaata ttcttaaagt 480
tggcattcaa atgagaattt ccagggtctc atgtctttac aatgagaaaa ggataggcca 540
ggggatcctg tgcatagata acgtccactg tggggagact tcagacagta tttctttaga 600
aactcccttc agaaatagag cgcaccagga gaaaccagag agcctttaag aggcgggaag 660
agtcattacc tggcgctgng gaataaccaa gatccctatg gagatatctg gntacagaca 720
agcaacctga ggaacccaac tttacgatnc ccaaataatt tccttctcat cttgaaa 777

<210> 599
<211> 819
<212> DNA
<213> Homo sapiens

<400> 599
gcgataatgt ttctgattta gaaagctgaa atacaacttg tttttataat tctgagggca 60
ttttatgatt cataacaagt gcaaatgaca ttttctagtt aatgttaaga aaaaaaaagc 120
actgaaaatt aattttgtca gcagtgttga gttttggaaa tgcaaactaa gtcaacttac 180
ttcctttccc tagaagtgct gccactgttg tgacattgtg tttcattttg taacccatct 240
actacttagg ccagatatgc attttctgga tgcaatctgt tggtttccaa tggtttacta 300
catggtgggc tctattgaca agtaggtgac aaaatctttg gcacactaac tagtgtagtg 360
tcctgtggtt tgtcatgtgc tgtgccttgt tactgcatga tgagtgtaat ttgccgtgtc 420
agtattgcaa atatgatata ttttgcatgt agagcttatg ttctcgtgtt atacatcttg 480
tattaaactt tctgagtagt aatctattgt tgaattaaaa caaatcttgc tgcatgtcaa 540
ttttgtcagt tttgctcagt ttctaatgct gttttagttt tgtgtcatct ataacaacat 600
tattactatt gacatagtgg tagagaaaac taaagttgca atattgtgat gcattgatag 660
cgttacgata acttctggaa actttgaaat aatttagaaa tgctcatttt aacttagatt 720
tataaattgg agcaattcct ttanagnttc ccttgggcac atgtcagagt tataattcta 780
aaatattggt aatgaaangg catatgggtt aatccttag 819

<210> 600
<211> 760
<212> DNA
<213> Homo sapiens

<400> 600
ttaatcaatt tgtctatctc tttatcttta caaactcatc tttaatcttt tgtttcttta 60
aaacagtctg gtttttaaag attttagttt tgaacatcga attttgtgat ataaatttat 120
ggggtcatgt atgaagaatt ttgtcttcat acttgaagtc aaaggatgaa aaatttgatc 180
cctaaagagt tcttttcaca atttttaaat ttcaataaaa taaagaatgg taggactgtg 240
attgaaaaat gtgatactaa atttttctat tgaatgatgc atatttattt ttaaaatcct 300

tctctgtact tattcattca acaaatattt attaagtgct cagtttgtgc cagccactat 360
agtaagcact gtggagtaaa aacagacttg gtctgtgcaa tcttcggatt taggttattg 420
gcagggtagg aggcaggtat taataaaata acacaaaact gcagtgaaga caagtatgat 480
tatgagcagt atggtgctgt atagataata tggtgatttg acttaataag aggccagaaa 540
aatggtttgt ttatttattt atttattaat gacagagtct tgctctgttg cccaggctgg 600
aatgcagcat tgcaatcttg gctcactgca gcctcagcgt cccgggctca agtgattctc 660
atgccttagc ctnccgagta gttgggacta cacgggccag cgcctggcta atttttgnat 720
ttttagtaga gatggctgna ttaggcagga ttctcttaga 760

<210> 601
<211> 828
<212> DNA
<213> Homo sapiens

<400> 601
gtctgcgtca gttggtcacg tggttgttcg gagcgggcga gcggagttag cagggcttta 60
ctgcagagcg cgccgggcac tccagcgacc gtggggatca gcgtaggtga gctgtggcct 120
tttgcgaggt gctgcagcca tagctacgtg cgttcgctac gaggattgag cgtctccacc 180
catcttctgt gcttcaccat ctacataatg aatcccagta tgaagcagaa acaagaagaa 240
atcaaagaga atataaagac tagttctgtc ccaagaagaa ctctgaagat gattcagcct 300
tctgcatctg gatctcttgt tggaagagaa aatgagctgt ccgcaggctt gtccaaaagg 360
aaacatcgga atgaccactt aacatctaca acttccagcc ctggggttat tgtcccagaa 420
tctagtgaaa ataaaaatct tggaggagtc acccaggagt catttgatct tatgattaaa 480
gaaaatccat cctctcagta ttggaaggaa gtggcagaaa aacggagaaa ggcgctgtat 540
gaagcactta aggaaaatga gaaacttcat aaagaaattg aacaaaagga caatgaaatt 600
gcccgcctga aaaaggagaa taaagaactg gcagaagtag cagaacatgt acagtatatg 660
gcagagctaa tagagagact gaatggtgaa cctctggata attttgaatc actggataat 720
caggaatttg attctgaaga agaactggtg aggattctct aatggaagac tcagaaattg 780
gcagtgtgct tnaaggactg gatcttnctt tacggtgcca aagcntgt 828

<210> 602
<211> 847
<212> DNA
<213> Homo sapiens

<400> 602
tggatgacca tttgatgcca gttgggaaag agactgttaa atatgaagag gagcttgatt 60
tgcatgatga agaagagacc agtgttccag gaagaccagg ttccacgaaa cgaaggcagt 120
gctacccaaa agcagttagt attgattcca gagtgtttga gggatagtta tcccagacct 180
gatcagccct gttacctgta tgtgatagga atggttttaa ctacaccttt acctgatgaa 240
ctcaacttta gaaggcggaa gctctatcct cctgaagata ccacaagatg ctttggaata 300
ctgacggcca aacccatacc tcagattcca cactttcctg tgtacacacg ctctggagag 360
gttaccatat ccattgagtt gaagaagtct ggtttcatgt tgtctctaca aatgcttgag 420
ttgattacaa gacttcacca gtatatattc tcacatattc ttcggcttga aaaacctgca 480
ctagaattta aacctacaga cgctgattca gcatactgtg ttctacctct taatgttgtt 540
aatgactcca gcactttgga tattgacttt aaattcatgg aagatattga gaagtctgaa 600
gctcgcatag gcattcccag tacaaagtat acaaaagaaa cacccttttgn ttttaaatta 660
gaagattacc aagatgccgt tatcattcca agatatcgca attttgatca gcctcatcga 720

0503615.0002

ttttatgtan ctgatgtgta cactgatctt accccactta agtaaatttc ctttccctga 780
gtatgaaact tttgcagaat nttattaaac aaagtccacc ntggcctacc aatnttaacc 840
gccctgg 847

<210> 603
<211> 798
<212> DNA
<213> Homo sapiens

<400> 603
tgaagttaat gagacaggcc tcttacttcc ttgcaaaata tgctgtaggc tttccagaat 60
cccgtgtgct cttgcaagtc tcatctactc cttacaaatc tgaatttgat aggtttctgc 120
catgcatgag aagctggtgc ctatattcag tttttattgc ccatatgcct tattgtaggt 180
acttgtattg agggaaaaac cttatatgtc caggtaggct acagagtcaa agaggcttgt 240
ccaaagtgtt atttgtagta ggtgagtgac actgcatctg cgtgtttttc ttttttattg 300
gcctttggta gtcagacttt tatgatttgt tgaattataa aatacatgta aactgtaaac 360
ctgctttact cagtttgttt gacttcattt gcacttgctc ataatgattg agtttggccc 420
ccacgtccaa aagacttgag ttcaaattgt ggttctgtca cattctctca accactgtat 480
caattaggac tggaattggt tggaatatag tggctttgac agtttcattt tttgctcagg 540
caagtaagtc cagaagtcat tagggcccca agaagcttct gcccactata tgtagacttt 600
aagcttatgg tccaaaatta gtgccagagc tcctgccatc acttctgcat tccagatagc 660
tggatggtga aagggcagaa gaagagtgtg cttcccttct ggaanacttg gaagacttac 720
taattatatc tcatttacta gaatttgaca tgctggcatt cctanctgca agaaactgng 780
ggaaatagtt tttactta 798

<210> 604
<211> 725
<212> DNA
<213> Homo sapiens

<400> 604
agatgctgcg cagcagtctc cgattcccca tcaccaattc ggctggcgtc tccgagaccg 60
cggactcccg tagggtcccc gtggccccga gttgtagtcg ggacaccccg gccgcgggtg 120
atcgtcgggt ctccacgcgc ccgggtcgct gacgcggatc cggcctcggc gccttctcag 180
ggcgccctgc aaggccgcag gcaggatgaa cattctggca cccgtgcgga gggatcgcgt 240
cctggcggag ctgccccagt gcctgaggaa ggaggccgct ttgcacgggc acaaagactt 300
ccacccccgc gtcacctgcg cctgccagga gcaccggaca ggcaccgtgg gatttaagat 360
ctccaaggtc attgtggtgg gggacctgtc ggtggggaag acttgcctca ttaataggtt 420
ctgcaaagac acctttgata agaattacaa ggccaccatt ggagtggact tcgagatgga 480
acgatttgag gtgctgggca ttcccttcag tttgcagctt tgggataccg ctgggcagga 540
gaggttcaaa tgcattgcat caacctacta tagaggagct caagccatca tcattgtctt 600
caacctgaat gatgtggcat ctctggaaca taccaagcag tggctggccg atgccctgaa 660
ggagaatgac cctttcagtg tgcttctctt ncntgaggtt ncaagaagga tcttgagtac 720
ccctg 725

<210> 605
<211> 723
<212> DNA

0508503-0508503

0060203-0002

<213> Homo sapiens

<400> 605
aacatggggc tgtacgctgc ggtggcaggc gtgctggccg gcgtggagag ccgccagggc 60
tctatcaagg ggctggtgta ctccagcaac ttccagaacg tgaagcagct gtacgcgctg 120
gtgtgcgaaa cgcagcgcta ctccgccgtg ctggatgccg tgatctccag cgccggcctc 180
ctcagtgcga agaagctgca gccgcacctg gccaagggtg ctagtgtatg agttgttggg 240
aaagggcttt cgaggggtg ggggccaatg gaaggctctg ttgggacggc accaggcgag 300
gtgttgagtt ggctcggctc aaggttcttc ggggtgtgag ctggcatgag gacctgttgg 360
aagtgggatc caggcctggt ccagcctccc agctgcctcg atttgtgcgt gtgaacactc 420
tcaagacctg ctccgtttat gtagttattt caagagacaa ggtttctcct atcagggtcg 480
ggcttccagg ctggatggag tgccctggcg cgatctcggc tcaccgcaac ctctgcctcc 540
tgggttcaag cgattctcct gcttcagcct tctgagcagc tgggattatg aaggggtggc 600
ctgcccctnc acatctgtgg gatatctcat nagcctcgat gacttacgag ccctcaaggg 660
gaagcatttt cttctggacc ccttgatgcc cgagctgctg tggttnccgc ccanacagat 720
ctg 723

<210> 606
<211> 852
<212> DNA
<213> Homo sapiens

<400> 606
agacaatgct gtaattaggt gaactctaaa actgcaacat ctgacaaata gctttaaaaa 60
tacaatgatt ataagtatgg aatcagtgaa aatatttagt ttgtattttt atgtccaaac 120
ttttccattt tagattcctt tatagacacg tcagcctaaa aatcagccta ttcgggtgtt 180
cttttgaata tctcctggca tttttgtatc taactttgtt caatctggga atttcagttt 240
tcaatatcct tgaaaatggc ttaagtgata acttccgttt cagttaaaag gaagcccgaa 300
gttgtgtttg tgctgcccac aggacagtgg gagttacagt tcatatcagg atgaccctac 360
atacccaggt cagattgacg ggaccagaag ggaacatcga cttctaatcc agctttcttg 420
tttaattatg acctaaatct aatttacttc cactgaacca tccaagacct ctggcaggca 480
gggaaatggg cagtgatgca aaaaagggag actctttgga gcttttatga atagttcatg 540
gtgaggacag aacttttcta ctttcagaca gactgcttgc tagttttatg aattcagcac 600
acgaattatg ctgtgttgct cacattcaaa ccaaaccaac gactatgttt aatgaactca 660
gtattcaaat ttattatata tgcgtatata tgtatatatg gatcccttat atttagattt 720
aactcgtagt ttatttgaag tagaaaagac tctacaaacc ggaagaatgg cttcttcctc 780
tgctctaaaa ggcattgaat naaactaana tgaatntgaa ggcatcttaa tactgcctca 840
cactattaaa tg 852

<210> 607
<211> 868
<212> DNA
<213> Homo sapiens

<400> 607
caataataat attataatgt gtttctcttc taaaataaac agattttata ctcattattt 60
taaaatgtga tcaaaaccac ataattgttt ttagtcttct gattgcgatt tttaaaaaga 120
aaattcaaag tttggcatta aatatatttt ctgtaagata atataactac atatgataaa 180

atgattaagt actctgatag tgtcactatt tcaataccat tattatcttt aacatatgtt 240
aaaacactcc agtacataac taataaagag gaattcacat ggccagcaat tttaaactgg 300
tgcagcaaac ttatcttttg tgtttgcaaa cataagagaa ctgaagaagc aagatgcaaa 360
caatgtctcc gttgttcagc atgtgtttta tgatataata cattcgttca tgttgtgtta 420
tacaaatttt gcagggaggg tcgctcgttt tatcaatttg tgtatttttt atttcatatt 480
ttgtacgcaa tcatgagcat ttttcttata aattgtacac aacaagaacc tgttgaagat 540
tagaaggaag gagcagcaca tacttttagc aatcctttta tcttaccaat cactggaaga 600
aaatgatgcc aagaagccat gtgagatatc atctctgctg tcatgttttc agaacagagt 660
gtggcttact aatgttgcca ttgcaggcta tgctttgtca agtgaatcgg gtttcatctt 720
aagggggata gtaagccaga tgttagcaat actcactcat cttcagattt cattggcaaa 780
tatactaata tttcaaaaat atgggtttca tctagaaaaa aaatggagaa tttgagtgga 840
caaatntagc ccatggcagg ntaaatta 868

<210> 608
<211> 819
<212> DNA
<213> Homo sapiens

<400> 608
actctccctg caggtgactg acggcgccgg ccgcccctgc ccgtcgcccg cccgctgctg 60
ccgcccgccc ggggtgtgga gcccggccgc tgctcgcggg ctgagtgtct gtcgctgctg 120
ccgcctccac ccagcctccg ccatggacct cttcggggac ctgccggagc ccgagcgctc 180
gccgcgcccg gctgccggga aagaagctca gaaaggaccc ctgctctttg atgacctccc 240
tccggccagc agtactgact caggatcagg gggacctttg ctttttgatg atctcccacc 300
cgctagcagt ggcgattcag gttctcttgc cacatcaatg tcccagatgg taaagactga 360
agggaaagga gcaaagagaa aaacctccga ggaagagaag aatggcagtg aagagcttgt 420
ggaaaagaaa gtttgtaaag cctcttcggt gatctttggt ctgaagggct atgtggctga 480
gcggaagggt gagagggagg agatgcagga tgcccacgtc atcctgaacg acatcaccga 540
ggagtgtagg cccccatcgt ccctcattac tcgggtttca tattttgctg nttttgatgg 600
acatggagga attcgagcct caaaatttgc tgcacagaat ttgcatcaaa acttaatcag 660
aaaatttcta aaggagatgt aatcagtgta gagaaaaccg tgaagagatg ccttttggac 720
actttcaaag catactgatg aanagttcct taaacaagct ttcagccaga accttgcctg 780
gaaagatggg tccacttgnc actgtgntct ggcttgtaa 819

<210> 609
<211> 865
<212> DNA
<213> Homo sapiens

<400> 609
gtttttgtt tttaattaaa aaaaattttt ttagctgatt gtgttgggtt gaggttgctt 60
tctggggaag aaaaggtgta ggagttgaga catctggaga tagcaggaat ggctgagttt 120
ttcttttgtg tctcctttaa gaaaacatcc tactaaagcc ctgggaaaag agacaaatgg 180
tgaagaggag aatgaaaggt tgcaggaggg agctcctgtt ttagccctgc cacctacctg 240
ggggccctct ggctaccagt gtccttggag gggcttcctt gctgcttctc ccactaaggt 300
agattttccc caccctgctt aaggctccac agggccaagg gtcttcagct gtcagaaccc 360
gggttctgag tagcataggg caagaaagca cagaagtata gattgggccc tatgggactg 420
tttgtgctta cagtggcagg gggcaggact ggtatccatg ctgtggctgg ctggagactt 480

ggcactgctc ccagacaact cccacccaag ctctttagct gcctctattt cccttcagca 540
tgagcatttg gggaatgatg gtgactggtg acacctctgc cctgagaacc ccgccacaga 600
acctacttct ttccctctcc tgccctggcc tncccactca ccacctttct gctgtgtccc 660
taggagctct ggagccttag gaccatggac gctctcaata ggaaccaaat aggccctgga 720
tgccagaccc agaccatggt gcanaaagga cccttggacc tgatcgagac aggcaaangg 780
ctgaaagtgc aaacggacaa acccccactg gtgagcctgg gcagtgggcg actnacacag 840
ccataacctt ctgccgtgga ngaag 865

<210> 610
<211> 825
<212> DNA
<213> Homo sapiens

<400> 610
aattgtgact atatcgaata agttcacaat acttattagg atgtggtgaa actgaattat 60
ttgaagtagg aagacccgaa gttcttcgcc tatgagactg gtgaagtgat ttgtagccaa 120
catgctccaa cccatctatt aagaaaacta tggcatctat taagaaaatt caaaatctta 180
aacagagaaa tccatattta gaaaacatgg ccagattaaa taggggtgtgg gttattttct 240
taaatacgtt ttgtcaattt cacgtgaaaa atgaaaaccc ctagttcatg ttacatatta 300
catttctgtt aagatgtatg ttcctctgtt tctaatagaa gttgtggtgg tttggaagtg 360
aaaattgaat gtgagcacag gccatgtaaa ggaaggagaa agtgtaaatg ttaataacag 420
gaaaactgaa tttagctctc atgaggcagt caaggaaatc attcattgaa catgttggga 480
aatacttttc atttggtgac caaataccta caaattcatt tacaaaaaag aaaaatgaaa 540
gttacctcag aactaaactc agaaatatgt cccacatggg ttcttgtaat gtttcttggt 600
gaatgtcttt atagaaagaa gtgggcatga aatgatgact cagtaattaa acacatgggg 660
gaagggaggc tgtagaaaac actggattct atatttaaaa tttcattcag ttcactaatt 720
tgtttttact gaccaaagct ttctatccta tgtagagtgt ctganaacta gaanggccca 780
tcagttgcca cttcggatga tccttttgnc tcttttcaga taagg 825

<210> 611
<211> 869
<212> DNA
<213> Homo sapiens

<400> 611
tgtcacatga cgaaagggag caagagagag aatgggaggt cccagacttt tataaacaac 60
cagatctcac gtgaactgag tgagaacaca cttatcaatc accatgggga ctcatgagag 120
gaccaccccc taccccatga ttcagtatct cccactaggc cccacctctg acattgggga 180
tcacatttca acatgaaatt tgcaggggac acacatccaa accatagcat atggttaagg 240
aagattaaga aattcaatag cacattgcct ttattatcat cgaggatgaa gatgttacgg 300
ttttcatatg tcattaagta aacaaaatga cgtgtgccac acatagtagc tcatagttca 360
ctgggaacgc agttacttgt tcagtctgtt ttctacaaag tcatgtgaga tactgatttt 420
tccttcgcat tgttgatatc tgggtgagaa taaggtattt gttaaattgg tatttccctt 480
ttttgtgttt taagtgatag tggtgtcatt caacttatct ttgcagttga atgaagaatg 540
aatgacattg agcattattg ntttgtttat ccatgtccat tattagtttt tctttgcttt 600
tgccagcagt gtgactattg gccctgccca gagccatttg caatcttaca atagttaagt 660
gttagcactg aaagatacta atgttaagaa cagatgtcta ctgnctgatt attgggaaaa 720
tattagtgtt tcttantaga agcaacacag tttttttttaa tactagattt ctcattctga 780

0032004950

gtctatacac aattttctat gaatcataaa actttgataa ttatgatagt ctaatatttt 840
actagttgna aaaatgaaac ttattttgn 869

<210> 612
<211> 866
<212> DNA
<213> Homo sapiens

<400> 612
gctggtccca gaagatggcg gaggcggggg atttctgctg tgattgggtt attataccc 60
tgcattgaca gacatctagg agaaccacat aaatttaaaa gagagtggtc cagtgtaatg 120
cggtgtgtag cagtctttgt tggtataaat catgccagtg ctaaagtgga tttcgataac 180
aacatacagt tgtctctcac actggctgca ctatccattg gactgtggtg gacttttgat 240
agatctagaa gtggttttgg ccttggagta ggaattgcct tcttggcaac tgtggtcact 300
caactgctag tatataatgg tgtttaccat acgaatgtaa agttatcgca gaaaaaatct 360
catcaggaat gaagaaggca aaaaatatct tttgtacaga aaagcaagat gaaaaggatg 420
tgaaatggta gatataccaa caaaacttca gactgtaaaa ttgccaggat gcagttttcc 480
ccttgattgg cgtgtgtgta tatatggata aatatatata tacacacaca catattactg 540
caatctgtga ttgcttcatc tgtaaatcag ttgtaaacct ttacatattt gacttaaata 600
actgtaagat atatatgtac tacattaaaa agtgttgatt aatagatgaa atttttaaat 660
taatttttta aaacatgcca tacattgtat cacaatgtta atgtgccaag atattggtcc 720
tgtcatgcag agtataagaa tgctttgaac aatttgtaga cttagtgaaa taaaataaga 780
ggaaagccaa aaacaaacaa ccaaaagcat atggggagct gnattttctc tttaacttac 840
tggtgggcct tttatttttct aatccn 866

<210> 613
<211> 684
<212> DNA
<213> Homo sapiens

<400> 613
agttgggttt ggaggcggcc gccaggccca ggcccggtgg acctgccgcc atgcaggacg 60
gtaacttcct gctgtcggcc ctgcagcctg aggccgagac tgccagaggc acatccaggg 120
ggcagtacca caccctgcag gctggcttca gctctcgctc tcagggcctg agtggggaca 180
agacctcggg cttccggccc atcgccaagc cggcctacag cccagcctcc tggtcctccc 240
gctccgccgt ggatctgagc tgcagtcgga ggctgagttc agcccacaat gggggcagcg 300
cctttggggc cgctgggtac gggggtgccc agcccacccc tcccatgccc accaggcccg 360
tgtccttcca tgagcgcggt ggggttggga gccgggccga ctatgacaca ctctccctgc 420
gctcgctgcg gctggggccc gggggcctgg acgaccgcta cagcctggtg tctgagcagc 480
tggagcccgc ggccacctca cctacagggc ctttgcgtac gagcgccagg ccagctccag 540
ctccagccgg gcaggggggc tggactggcc cgaggccact gaggtttccc gagccggacc 600
atccgtgccc ctgccgtgcg gaccctgcag cgattccaga caagccaccg gacccgnggg 660
gtangcgggc antgccgggg gccg 684

<210> 614
<211> 716
<212> DNA
<213> Homo sapiens

0050/0050 :0/2/2000

<400> 614
tttggtggtg gtggttttgt tttgttttgg agacggagtc tcactcttgt cgcccaggct 60
ggagtgcagg cttggctcac tgcaacctcc acctcccggg ttcaagcaat tctcctgcct 120
cagcctcctg agtagctggg attacaggca cccgccacca ccccccgcta attttttgta 180
tttttatttt tattttattt ttttattttt ttttgagaca gagtgtcgct ctgttgccca 240
ggctggagtg tagtggtgcg atctcggctc actgcaagct ccgcctcctg ggttcgcgcc 300
attctcctgc ctcagcctcc tgagtagctg gggctacagg tacccgccac cgcgcccagc 360
taatttttt ttttttgtat ttttagtaaa gacggggttt cacggtgtta gccaggatgg 420
tctcaatctc ctgacctcgt gatccgcccg ccttggcctc ccaaagtgct gggatcacag 480
gcgtgagcca ccgcgcccgg cctatttttt gtatttttag tagagactgg gtttcatcat 540
gttggtcggg ctggtctcca actcctgacc tcaggtgatc cacctgcccc gccccccaaa 600
gtgctagtgt tacaagtgcg agccaccgtg tccggccgat tctgaacagt tttaatacca 660
ttgctatttt tgngnttttc ctgggccttt ttttttttn ttttttttt gagaca 716

<210> 615
<211> 856
<212> DNA
<213> Homo sapiens

<400> 615
cataactcca ccttttctac aattcagtgg aaccaattta atcaaagtgc cctacttagg 60
gagaacattg ctagaaatga cagggattgg gaaaccatat ggtgcttggc agaggacccg 120
aaaccaatgt agaaactgag gagcttgggc aaagtgtgtc atttatcgtt ctggggctag 180
ggctgagtca ggtccaagaa ctgaccccct ctcagagctg ggacttcatc aaggctttgg 240
ctctggtttg aacgtggtac ttgcaggctc ttgtcgtagc accgggagac tcctctccca 300
gcaactcagg actcctagga ccagtgaggc ctgtgctatc ataatgaatt atgagtggat 360
ccatctgacc tataacaaat accacccata aacaacactg cggtgctaag caaaaatgcc 420
tgaagaccat agacagagag aatgggattt ttaaagaaac atttataaat agaaatcaaa 480
acatgtgaag ctcagaatga atttgggaaa catgatggga actgggattc actgagcacg 540
tgctgcacta ggtcaagggc agagtgtcag ggtgtggccc aacatcaggc gcatgggctc 600
tccaggccac tctgcactga agcaaattgc gccattctgt atggtgcttg gtcatacaca 660
ctgcccacag ggctctaata atttagaggc actggactga gcttctgang gcaggagcat 720
tcatctctgt ggncacatgt ttggtccagg gtctgcaaat aacattcact tgtaggacca 780
gtgagagccg acatcctttn tcaggaacaa ggccatccct ggggactgtt ccctggagtc 840
ccaggnccta actgng 856

<210> 616
<211> 781
<212> DNA
<213> Homo sapiens

<400> 616
gacaaacact taaccagctg aagaatcagg tccactcagc tgttgaagaa atggatggat 60
tagatgatgt tgaaaacagc atgttgtact ataatcaagc agtcattctt tatcatctgc 120
ggcagtatac agaagccata tcagttggtg aaaaacttta tcagttcata gagccttttg 180
aagaaaaatt tgcccaagca gtgtgttttt tgcttgtaga cctgtatata ttaacctacc 240
aagctgagaa agctttgcat cttcttgctg tcctagaaaa aatgatttca cagggtaaca 300

0502465-0502600

ataacaaaaa tggaaagaat gagactggta ataacaacaa caaagatgga tctaatcata 360
aagctgaaag tggagctcta atagaagctg caaaatcaaa gatacatcag tacaaagtac 420
gagcttatat ccaaatgaag tctctgaaag catgtaaaag ggaaatcaag tcagtcatga 480
atacagctgg aaattccgca ccctctctct ttcttaaaag caattttgag tacttaagag 540
gtaattatcg aaaagccatg aagctattaa atagttcaaa cattgctgag catccaggat 600
tcatgaaaac aggtgaatgc ttgagatgca tgttctggaa taaccttggt tgcatccatt 660
ttgccatgag caagcacaat ttgggaatat tctactttaa aaaggctctg caagagaatg 720
acaatgctgt gcacagctca ntgcaggtag cactgatnca ggtaaaaaan tttcaggaag 780
a 781

<210> 617
<211> 724
<212> DNA
<213> Homo sapiens

<400> 617
cgagcgaaga tggcctcggt gccggtgtat tgcctctgcc ggctgcctta cgatgtgacc 60
cgcttcatga tcgagtgtga catgtgccag gactggtttc atggcagttg tgttggtgtt 120
gaagaggaga aggctgctga cattgacctc taccactgcc ccaactgtga agtcttgcat 180
gggccctcca ttatgaaaaa acgccgtgga tcttcaaagg ggcatgatac acacaagggg 240
aaaccagtga agaccgggag ccctacgttc gtcagagagc tccggagtag gacttttgac 300
agctcagatg aagtgattct gaagcccact ggaaatcaac tgaccgtgga attcctggaa 360
gaaaatagct tcagtgtgcc catcctggtc ctgaagaagg atgggttggg catgacgctg 420
ccctcgccat cattcactgt gagggatgtt gaacactatg ttggttctga caaagagatt 480
gatgtgattg atgtgacccg ccaggctgac tgcaagatga agcttggtga ttttgtgaaa 540
tactattaca gcgggaagag ggagaaagtc ctcaatgtca ttagtttgga attccctgat 600
accagacttt ctaaccttgt ggagacaccg aagattgttc gaaagctgtc atgggtcgaa 660
aacttgtggc cagaggaatg tgnctttgag agacccaatg tncagaanta ctggctcatg 720
aatg 724

<210> 618
<211> 768
<212> DNA
<213> Homo sapiens

<400> 618
tttttctgat cttggcaaaa atgtttcccc acgtacaaac tgatgtcctt gtgcgggtca 60
agggaccttt gctagctgcc tgttcttcag agagccgtga gctctgtttt gttgctcttt 120
gtcatgtacg ccagatcttg catagtttac caggtcactt tagcagccac tacaaaaagt 180
ttttttgctc ctactcggag ccccactaca tcaaactaca gaaagtggag gtgctgtgtg 240
aactggtgaa cgatgagaat gtgcagcagg tgctagagga gcttcgaggg tactgcacgg 300
atgtgtctgc ggactttgca caggctgcca tctttgccat aggtggcatt gccaggactt 360
acacagatca atgtgttcag attttaacag agttgctggg tcttcgacaa gagcacatta 420
ccacagtggt ggtgcagact ttccgagacc tggtttggtt gtgtcctcag tgtactgaag 480
ctgtatgtca ggccctgccc ggctgtgaag agaacattca agatagtgag gggaagcaag 540
cacttatttg gctacttggt gtccatgggg aaagaattcc taatgctcct tatgtgttag 600
aggactttgt tgagaatgtg aagtcggaaa catttccagc tgttaagatg gagctgctca 660
ctgctttgct gcgccttttc ctctcccgac ctgctgagtg ccaggacatg ctaggacgtt 720

0 5 0 2 9 5 6 0 3 0 2 0 0 8 0

tggtgtatta ctgcatangt gggtttttca naaggaaata tatttgnc 768

<210> 619
<211> 866
<212> DNA
<213> Homo sapiens

<400> 619
agcagacgct gcccttaag gagggccata tcctacagga ctttgaagga agagtgatcg 60
ttgccacaag taaaggagtt tacatcttgg ttccattacc tttggaaaaa caaatacagg 120
atcttctagc aagccgcaga gtagaagagg ctttggtttt agcaaaagga gcccggagga 180
acattccaaa ggaaaaattt caggtaatgt acagaaggat tctgcagcag gcgggattta 240
tacagtttgc acaacttcag ttcctggaag ctaaagagct cttcagaagc ggccagcttg 300
atgtccggga gctgatctct ctctaccct tcctgttgcc cacctcctcc tccttcaccc 360
ggtcccaccc tcctcttcat gagtacgcag acctgaacca gctgacccag ggggaccagg 420
agaagatggc caagtgcaaa cgcttcctca tgagctacct gaacgaggtc cgcagcacag 480
aggtagcaaa tggctacaag gaggacatcg acacagcctt gctcaaactg tatgcagagg 540
ctgaccacga cagcctgctg gacctcctgg tcactgagaa cttctgtctt ctgacggaca 600
gtgctgcctg gctagagaag cacaaaaagt attttgcact tggactgctc tatcattata 660
ataaccaaga tgctgctgca agttcagttg tgggtgaaca ttgtgaatgg gcgatgtcca 720
ggactccaca cgctcagacc tgtatgaata catcgtggat tttcttacct actgcttaga 780
cnaggaacta gtgtgggcct atgctgatgg gtcctgcana aaagtgaaga ggtcgtttca 840
ggtttcacca agagaccttt ggatga 866

<210> 620
<211> 855
<212> DNA
<213> Homo sapiens

<400> 620
tgcattatcc aacaggtgaa gttccatttc caagaggcat gaaagggcaa gactttgaaa 60
aatcagatca tggttcttct caaaatacca gcatgtctag catctatcag aattgtgcaa 120
tggaggtttt gatgtccagt tgttcacagt gtagagcttg tggagcttta gtttatgatg 180
aagaaattat ggctggatgg acagcagatg actcaaattt gaatacagct tgtccattct 240
gtaaaagcaa cttcttgcct cttctcaata tagaattcaa agatttgaga ggttctgcaa 300
gctttttcct gaaaccaagt acctctggtg acagtttaca aagtggaagc attccattgg 360
caaatgaatc cttggagcac aaacctgtat ccagtttagc agaacctgac ttgatcaact 420
ttatggactt cccaaaacat aaccagatca taactgaaga aacaggctct gcagttgaac 480
caagtgatga aataaagaga gccagtggag atgtccaaac tatgaaaatt tcatctgtgc 540
ctaatagttt atcaaagcga aatgtgtctt tgactcgaag tcacagtgtt ggaggcccat 600
tgcagaatat tgactttacc cagcgaccgt ttcgtggcat ctcaacagtt agtcttccaa 660
atagtctgca ggaagttgtg gatcctttag gaaaaagacc caatccttcc cctgtttctg 720
tgccctactt gagtcctcta gtacttccgt aaagaacttg gaatctttgc tagaaaatga 780
aaggtgatca aggtgattca tacatcttct ttcatcaatc aacatncaat cattttctgg 840
gaaccctngg ttngg 855

<210> 621
<211> 758

0356295.0002

<212> DNA
<213> Homo sapiens

<400> 621
atgtacttac tcatcaccca gcttcaacat ttatcaacat cttgccaatc ttactgaatc 60
tatccttcct tacctttttt aaaaatgttt ccagagtgtg tcaaagctca tcccagatgt 120
cctaatgttt ctagtaaatg tttctgcaca attctaaaag acaaggatgt ttttaaaccc 180
agccccgaca ctatcatacc tcacaagatt catgctaatt cctcagtgtc ttctagtccc 240
aagtccatgc tcaagtgtcc ccccctgtcc aggcaccctc ttcaggggtc ctccatgttt 300
catagcgaga aggggccctg agagttgggc accccgggca ggctggctgg agggggcttt 360
ggaaaggaag gctttggcca gcgtgtgagg gtgcaggtct caccagctcc tgtttggtct 420
gtttcaggaa caaatgtggt atctggggct ggcggtctga gaagatggaa actgttagcg 480
gctacgaggc caaggcagga gaggctaggg gtgggggggct gggggtagga gatgaggtcc 540
aggaactcag ctcctctcca catccatccc agagtagccc ctgggctctg gaaaccctga 600
gcatttgtgg gaactcagcg ggcctgagtg cccagcccct gcggagtaca cagggctcac 660
ccacatcatg ggcccctacc cagggtaccg agatcaaaaa gangagtgtg tcctcttgac 720
ccctggggct gnatctcctt gntggtgact tcctgggg 758

<210> 622
<211> 764
<212> DNA
<213> Homo sapiens

<400> 622
gcgatctggt aggcggtgct gccgtctgtt gtacctgaga ggcttgcgca tgccgacgca 60
cggattcgag gcggggagca tgggaagaag cggccaggag tatgacctga tcattgtgac 120
caccgctagg ggaagggagg agagggtgta gaaacgggga cgagggtggg ggaagggcaa 180
ggaggcgctc gagctggtgc gcggagcatc ctgggagacg tagtccagcg ggaggggaa 240
gtcgaagact gcgcgtgctc aggagcgcgg agcggcccgc tgagcgcaga ggtgagggcg 300
gggtcctctt aaccgggagg gctatcgtgt ggacgggggc ggtggctgca gactcgggga 360
ttccggctcc ccagtgagac cggaagcgcg gggaacgaat ccgggcagtc cttgcgggag 420
cgcccagggc tagagcgaga ggcttgtcaa tcactactcg ttgccacgac gacaggcttt 480
gggagccccg cccccggttg cctaggcgtc gtctggacct accttggcac cctggagcgg 540
aagttgccgc ctggacttct gggaagtgta tttcgggacc ctccgtaggt acctgccatc 600
ttggctatga cccaagtctc tcccagggtt tcaggttgac ttggcacctt gaagaatgga 660
ggcttggccc ccaggatgan gcggcctcga aatcatgcca cccacggggg aatgattctg 720
cggtgccatn ccctttatta aacgcagatt ccttnctaaa gccc 764

<210> 623
<211> 800
<212> DNA
<213> Homo sapiens

<400> 623
tgtctgcaga agtgtggcac attttgccta gaatgacaga aggctgctat caaagagcat 60
gagagaaaga gaaagagatc atctaacatt ctaagaagtg attattacat ttgagtttta 120
aaaatgttac tattcgaagc agtgttttta tcataatttt ctattttatc aaatcagact 180
tgagtttttt ttctgattct gttatttaac catacacaat tttccctgtg taattaagta 240

0502450-0502800

atggaacact tggaggcata tgaagtcccg ctaagtaggg agcatttgag tcagaaaagt 300
gggtactctc ttcctttatg tgatgtccat ctgccattgt atttggtaag gaatagtgag 360
gtgttaccat actgtgtaca gatttccctc acttttccac ctctcacttt cctaaacttg 420
ggaactaaac attggattaa tacagtgtct ttgctgttca gattcacttg ccagatttta 480
tcaaatgtag acttaaatag gttttattgt gatagatatt tacttgctcc ctaaaactgc 540
tctcttaacc agccttacaa taaagtcaaa agtcaaagtg gtaggcttca agatgaaaca 600
taagatctgn tgactccttc ctctatttag tatatatttt cataatattc agccttttct 660
tgccccagat atcatatcta ttttacctac ccaatattta agtagtttcc atgttgggat 720
taagaaaaca naattaccat aattacctag attattgcta attgngacat atggaaaggc 780
tattaatgna ataaatctcc 800

<210> 624
<211> 877
<212> DNA
<213> Homo sapiens

<400> 624
gagtgaccac aggtgtcccc gtcgtgctca cctgcaccgg ctgcgaggag cagggagctc 60
ctcaaagagc tcaggaacgg acaggacatg gacacagtgg tctttgaaga cgtggttgtg 120
gatttcacgc tggaggagtg ggccttgctg aatcctgctc agagaaaact ctacagagat 180
gtcatgctgg agaccttcaa gcacctggcc tcagtagata atgaggctca gcttaaagcc 240
agtgggtcta tttctcagca ggatacttct ggagaaaaat tatccctcaa acagaaaata 300
gaaaagttca caagaaagaa tatatgggcc tccctttag gaaaaaattg ggaagaacat 360
agcgttaaag acaagcacaa caccaaggag agacatttga gcagaaatcc aagggtggag 420
agaccgtgta aaagcagtaa aggtaataaa cgtggaagaa ccttcagaaa gactcgaaat 480
tgtaatcgtc atctgcgcaa gaattgttgt actagtgtaa gacggtacga atgcagtcag 540
tgtggaaaac tcttcaccca ttcctcatcc ctgataaggc acaaaagagc tcactctgga 600
caaaaattat ataaatgtaa ggaatgtggg aaagccttca gtcgcccttc ctacctacag 660
acgcatgaga aaactcacag tggagagaaa ccctatgcct gtcaatcttg cgggaagaca 720
tttcttcgtt cccactctct cactgaacat gtaanggctc acactggaga gaaaccctac 780
gaatgtgggc agtgttggga aaggcttcag ttgtcccaaa tcctttgcg cccatgtgat 840
gatgccnccg ganggagacc gntgaatgca acccttg 877

<210> 625
<211> 794
<212> DNA
<213> Homo sapiens

<400> 625
gaaaagttat ttgcaaaaga taacatggat ttgctgcaaa ccgccagggg tctgcactgt 60
gattctcctt tcagggctgg ttgaaggctc catacagtat ctctatctgc cttggacact 120
tcaggcatat gtgccatata tgacagaaca tcttgcacaa cagtctgaat ttgctgcaac 180
ccttctcttg ctctgggccc cactcaaaac cggcagactt acaaattcct tcgtaaatgg 240
gccagggcag catggtaaaa tgtgctgtat attacctcct aaaacacccg tcaagtattt 300
ttttttaact ctttcctagc ataggagtac atgatgcagc aatttgtttt catttgaagg 360
agataaccaa catgcctcag gccactgaac tcctagaaat gtcacatgct caacatatta 420
tccatataat ggactagttc tgcattttat gggatgttgt gattatcaag acccctgaag 480
ccttgcttat gacagaacag gagagttgcc atagacctga gctcaaatcg tgaagatgta 540

0506290.0N2000

ctgctgtccc tgccatgtga aagcaaacac cttccaaaag tgcctgtaac caatacagca 600
ggaaaaaaag tatattttac ataaatagct gcatcccaca tgtcaaaagc cattttgatt 660
tactctagta agaataacat atttgaaaca gcagcagcaa tcaattaaat attgntaata 720
agcaatggag agatacagga aatcaccgta gaatatatca ttggttgnca aanattctgg 780
cttcttttct actg 794

<210> 626
<211> 744
<212> DNA
<213> Homo sapiens

<400> 626
actgggtacc gaggactggg tgtgtttaag gcagacagcc aggtgaggat cccagctact 60
ggggcctgct gtcatctcct gggagtaccc gggggtcagg agcctagggg actcttgcac 120
ttcacatcca gccatgctaa ttacactttt tggcaaagga aacagctagg agcagtttct 180
ttcactccta cagccccgtt ttctcagtgt ttagacctcg aattattact gggctagagg 240
gaaggcagcc tctgaagtgt ggcaggagga ggggaagtct gcctgcatct tggtgtgtct 300
gtcagatgcc agcactaata acctggcttc tgtgaggcct gtcagtgctc tcaggaatga 360
aaggggaccc ctgagaggtg ctcagtacca gcaggctgtg aatgctctct acccaccacc 420
ctcacctcct cgttaaagat ggtgctacct gccacacagc agacatctgg tcgctgcaca 480
cccgaaagac cccaaggcag tctgcccctt gtccagccac acgccagcac ccaccctcct 540
ggcccctgcc tcggcctccc cagaccagct gcacccagcc cccaacacgc acccttctc 600
cagatgtgtg cagggcctca ttttgcagag caaagacaga tgtttcaacc acacgcttta 660
ttaacttcta aaacctgtgc tcangacact cttcaacagt catgaaaagt ttgatcactt 720
gccacaagtc anggaccttt gngt 744

<210> 627
<211> 895
<212> DNA
<213> Homo sapiens

<400> 627
agcccactgc cggcggctgg gcgctgccga ggctcggggc gcgcgcagtt ggcgtctgcc 60
agtgccaaga ctgtgccgcc cccacagccg aggcgcgaaa gggggacgcc cggcctctgg 120
gccgctgcct tcgctttctc ttcgttgttg cgaacgccgt ccgctcagga ggcgccccgc 180
gaccggcgcg atgagtgcca acgaggacca ggagatggaa ctagaagcat tacgctctat 240
ttatgaagga gatgaaagtt tccgggaatt aagtccagtt tcttttcaat ataggatagg 300
tgaaaatggt gatcccaaag ccttcttaat agagatttcc tggacagaaa catatcccca 360
aacacctcca attctatcta tgaacgcttt tttttaacaa caccatatca tcagctgtaa 420
agcagagtat attagccaag ctacaggaag cagtagaagc taatcttgga accgctatga 480
cctatacatt gtttgaatat gccaaagaca ataaagagca gtccatggag aatcacaatc 540
ccatcaattc cgcaacatcg ataagcaata tcatctcaat tgaaactcct aatacagccc 600
catcaagtaa gaaaaaagac aaaaaaagaa caactttcaa aagcccagaa gcgtaagctg 660
gcagacaaaa cagatcacaa aggagaactt nctcgangct ggaactgggt ttgatgttgt 720
gaagcattta agcnaaactg gctctaagga tgatgagtag cacttggaat ttgagacaag 780
gaaagacatt ctttaaagag taaactgggt tcaaaaactt tcattactaa tttctgggat 840
ttgaggcgac tttttntaaa ccncaatttt tnggagggtc cttacattaa aaagg 895

US20050250150A1

<210> 628
<211> 751
<212> DNA
<213> Homo sapiens

<400> 628
atttttaggt ttacaacaaa attgagcaga aagcacagaa ttcccatata ccccctgctc 60
tcatacatgc ataacatccc ctactgtcag catcccacac cagaggggta catttgttac 120
aatcagtgaa cctacgttga tacatcatta tttgaagncc atagcttaca ttagggttca 180
ctcttggtat tgnacattca actgctttga caaatgtgta atgacgtgtg tctaccatta 240
tagtaccata nagaatactt gcactgccct aaaaatcctc tgtgctccac ctgttcatcc 300
caccctcctt cctaatccct ggcaactact gatcttgcta cttcctccat agttttgcct 360
tttctggaat atcatacagt tgaaatcata tatatgtagt cttttcagat tgggtttttt 420
cactttgtaa tatgtactta agtttctcca tgtcttcatg gtttgatatt tcttcttacc 480
actgaataat attaattgtc tggatgtacc acagttgttt atccattcac ttaatgaaga 540
acatcttggt tgcttccaag tttcagcaat tagaaataaa gttgctgtaa acatctatat 600
ttaggttttc atgtggacat tagttttcag ctgatttgag taaataccaa gaagcatgat 660
tggtggagta tactagtact attctaagng gttcatatgn antatctcat ttaaacctct 720
ttaaacctct gggagtacca agggaagtag g 751

<210> 629
<211> 734
<212> DNA
<213> Homo sapiens

<400> 629
tcaaacatgt gacaacatta agcaccctgg tagaggcaag atttgccagg cggctctcac 60
ataccctgc ctcccacaat actacccccg cctcccatga tatgatgaga tgacaaggca 120
ctttacctct gcattatact ccacaaaacc cgtaatccca gacaatcatg agaaaacatc 180
agacaaaccc agatcagcag acattctaca aaacaccgag tccttcccaa cactgtccac 240
ggaatgaaaa acaaggaaaa tctaagaaat ggtcacagac gagagaagac tacaagaggc 300
atgatgactg aatgcaaggg tctcactctg ctgtccaagc tggagtgtgg tggtgccatc 360
atgactcact gcagccttgg cctcccgggc tcaggcgatc ctcctgcctc agcctccaga 420
gtctctggga ctacaggagt ctcgctcttt cgctgaggct ggcttgcaat ggcacgacct 480
cggctcactg cgacctctgc cttctgagtt caagcgattc tcctgcctca gcctcccaag 540
tagctgggat tacaggagaa aagactgcag aaccacacaa ggctcacgct gcccagggag 600
aacgtcatct cagttcccat atgagtcccg atgaaaatat gacagagaaa ttctgncctg 660
gaccacgagc atcttttcat cttcgnatcc taacagccag caggcacttg gtgaaaaagc 720
tgntcaacga attt 734

<210> 630
<211> 740
<212> DNA
<213> Homo sapiens

<400> 630
agttctgtgg agcagcggtg gccggctagg atgggctgtc tctggggtct ggctctgccc 60
cttttcttct tctgctggga ggttggggtc tctgggagct ctgcaggccc cagcacccgc 120

0050250.0002600

agagcagaca ctgcgatgac aacggacgac acagaagtgc ccgctatgac tctagcaccg 180
ggccacgccg ctctggaaac tcaaacgctg agcgctgaga cctcttctag ggcctcaacc 240
ccagccggcc ccattccaga agcagagacc aggggagcca agagaatttc ccctgcaaga 300
gagaccagga gtttcacaaa aacatctccc aacttcatgg tgctgatcgc cacctccgtg 360
gagacatcag ccgccagtgg cagccccgag ggagctggaa tgaccacagt tcagaccatc 420
acaggcagtg atcccgagga agccatcttt gacacccttt gcaccgatga cagctctgaa 480
gaggcaaaga cactcacaat ggacatattg acattggctc acacctccac agaagctaag 540
ggcctgtcct cagagagcag tgcctcttcc gacggccccc atccagtcat caccccgtca 600
cgggcctcag agagcagcgc ctcttccgac ggcccccatc cagtcatcac cccgtcacgg 660
gcctcagaga gcaaccgcct ctttcgacgg nccccatnca gtcatcaccc cgtcatgggt 720
cccccgggat ctgatgnccg 740

<210> 631
<211> 478
<212> DNA
<213> Homo sapiens

<400> 631
ctcttcgtta agtcggcctt cccaacatgg cgcagtctat taacatcacg gagctgaatc 60
tgccgcagct agaaatgctc aagaaccagc tggaccagga agtggagttc ttgtccacgt 120
ccattgctca gctcaaagtg gtacagacca agtatgtgga agccaaggac tgtctgaacg 180
tgctgaacaa gagcaacgag gacggaattt cgctctgtcg cccaggctgg agcgcaatgg 240
tgagatcttg gcttactgca acctccgcct cccgagttca agagattctt ctgcctcagt 300
ctcccgagta gctgggactt taggtacgcg ccaccacgac cggctaattt ttgtattaat 360
agtggagttg ggggtttcac catgttggcc aggctagtct cgaactcctg acctcgtgat 420
ccgnctgcct cggnctncca aagtgctagg attacattac aggcgtgagc cactgccc 478

<210> 632
<211> 724
<212> DNA
<213> Homo sapiens

<400> 632
tttgctgagt ttgctgaggg aagactgttt tctgttctct ctctcacaca cagagtggat 60
gaggatgagg atgacctgga ggaagaacac ataactaaga tttattactg tagtcggaca 120
cactcccagc tggcccagtt tgtgcatgag gtgaagaaga gccccctttgg caaggatgtt 180
cggctggtct cccttggctc ccggcaggta aacagtagcc agtatttcca ccaggggcca 240
tcctgctcct ttcgccacaa ctttgtcctg ctcgtccagg ccttgggaga cgctgggtct 300
gtgacaggct gaaccgtgtg aggagcagcc ccctccctga cctggccggc ccagcactgg 360
aaggcaaagg agaggtggcg gggcaggtcc acatgtgttg gtaggatgtc atttagctgg 420
caccatcttt ttgcctcttt ctttctcctt tgctgcagaa cctttgtgta aatgaagacg 480
tgaaaagcct aggttctgtg cagcttatca acgaccgctg cgtggacatg cagagaagca 540
ggcacggtag ccactgggac cgtggtgtag ccgcaggtgg tctgganaga gtgaggcagg 600
gggtggcagt gactgaagac cattaagtgt ctttcataga aagaatggca naggagaccc 660
caggttcttc ctgagtcccc tctncttggg aaaaagtgtt cctactctct gggtcantgt 720
ctgg 724

<210> 633

US20050009000A1

<211> 677
<212> DNA
<213> Homo sapiens

<400> 633
gttaaaaacc aaggacctga tatcttataa ttcagtttaa gcctaataca gttcatgtaa 60
actccttttt tggcaattta acatatacat ggatcaagtt tagtaggttt agaggaaaat 120
gaatgtcttg ttctgaaaaa atagcagtac cagctgagct ttggggaggt gacagattga 180
gtcacttcac agcttaattc tgttatgaac tggtcccatg ggcatggatt gtcaattagg 240
gagacttgaa tcttttagat attaaatcta caggcagaca acaaagaaca cattattctt 300
ttgtaaaaat agaggaacct ggctgtctac tacagaacta gaggaaccta gcttagacag 360
aagctcatcc cacttcagca cctacaacag atttgatacc tttgagcaag attggatact 420
tttctcaaag taaatactgg gttggtaccc cagagttatg caccactgaa catggatttt 480
aacttaaaat acttaagggc agatttttac tgntagtttt cttgactaac agagcaaccc 540
agtgcagttc ctaaagactt ctgattttgt gtagcaccag ctcctgntgc attttctgaa 600
tgaattagta ttaaaaatgg agccccaaga agctggntaa atttttagcc ttctgcattt 660
aagctgtanc ccagctg 677

<210> 634
<211> 817
<212> DNA
<213> Homo sapiens

<400> 634
gtttggataa attttctctg atttgcctgt tcttaccctt tgctcatgta tctattgatg 60
tttttcatta taaatttgta gaaattctta ctacatagtg catattaatc atttgtagct 120
ctaatgtgtt atgacgtttt catcttgact ttattgatga tatattttcc tttaaaattt 180
ttaaactttt taggtagacc cttatctctt ttatagattt tggtttcctt tttttatcac 240
atggatgccc ccaccaaagt catacaaata ttcacctaca ttttcttcta ataactttat 300
tatttttaat gtttaaatgt ttgatccatc tgaaatttat ttttgtatat ggtgtaagat 360
ggggatccag ctataacatt ttgttcacat tggatacctg attgtgacat ttatttaaaa 420
tgttacccat tttcaaattt ctgagccaat atcatgattt aattatagtg gcttcatcgt 480
aagttttaga atccgataaa gcaagtccca cttcattagt tttttttttc tttatataat 540
atgtcctaga cattcatttt ttcatgtgaa aaaatgaaat gcagaatttt aataaaattc 600
taattatgat ggctgacatc acaattaaaa tcctgcattt ttgtttagag ggctctttag 660
taatattaaa tcttagcact caagagtctt cgtacatcat tgaaatcttt tggtcttggt 720
attggaatat tcttcacgta agtatatcat anctaactga atttatttct aagnattttt 780
accggtttat tcatattttg acattgggga attggnt 817

<210> 635
<211> 794
<212> DNA
<213> Homo sapiens

<400> 635
gcgcaatggg aagcaatata ctggagctga gtgtggatag aaagagcaac tttagaagga 60
gcaagcagct aatgcttgct tcctaggaac ccataatgaa tttgctttct aagtacattc 120
ccggtgtttc tgcattgggt acgattgtgt tcgtttcaga agaaatacgc cataaaagca 180

tgcttccact ttaatgtttc agttggttca ttttattggt ctcagtcttc tcgtctactt 240
atgcccatca ggaagagtcc aatcacaagt gcgcaggtaa ctttgaaact tgcaacaagc 300
atgctgtcta ctatctttgg ttatcccaaa agtattttgt ctgggtgtcc tcaacatcct 360
tttctgtcat ttacctcact tcttaaagat gctctccctc tcagatttct cttgttctct 420
tctacaatga acttctgctt cattcactgt tactgaattt tcctttgccg gcattgcact 480
attttattgt gctcactagg tcactggcgg tgacattcaa gttctgcaga tttccagcaa 540
tgccacagta ctgggcattg gctgaagcta atctagatag taatccaaag agttcaatga 600
aaagttgaga atcagaacat taggtaaaca ggtgtgtgag tgcttgtctg ggtgtgggta 660
gaggtttgac tgtctggggt ctgtaaaagc tgacaaagtc tccatgctgc ccaacttctc 720
tgacaacaag tacttctctg tgcgacaagg ncagcttgtc aaataagatg cttcatgagc 780
atatatgnac tgnt 794

<210> 636
<211> 894
<212> DNA
<213> Homo sapiens

<400> 636
aaggtcagat aagtagtaat tatgatgatg ccatgcagtt ttcaaagaaa agaagatatt 60
taccaactgc cagcagcaac agtgcctttt ctataaacgt aggacacatg gtctcccaac 120
agtctgtcat tcagtctgca ggtgtcagtg ttttggacaa tgaggcacca ttgtcactta 180
ttgactcctc agctctaaat gctgaaatta aatcttgtca tgacaagtct ggaattcctg 240
atgaggtttt acaaagtatt ttggatcaat actccaacaa atcagaaagc cagaaagagg 300
atcctttcaa tattgcagaa ccacgagtgg atttacacac ctcaggagaa cactcagaat 360
tggttcaaga agaaaatttg agcccaggca cccaaacacc ttcaaatgat aaagcaagta 420
tgttgcaaga atactccaaa tacctccaac aggcttttga aaaatccact aatgcaagtt 480
ttactcttgg acacggtttc caatttgtca gtttgtcttc acctctccac aaccacactt 540
tgtttccaga aaaacaaata tacactacgt ctcctttgga gtgtggtttc ggccaatctg 600
ttacctcagt gttgccatct tcattgccaa agcctccttt tgggatgttg tttggatctc 660
agccaggtct ttatttgtct gctttggatg ctacacatca gcagttgaca ccttcccagg 720
agctggatga tctgatagat tctcagaaga cttagagact ttatcagcct tncagtcctc 780
atctcagaaa ttgactagcc agaaggacca gaaaacttan agcttcacag gctttcagat 840
tcatcttagg agttacttgc cccgatagat cctcagaaag gccttgaanc tnaa 894

<210> 637
<211> 904
<212> DNA
<213> Homo sapiens

<400> 637
atgctgagac tacataagtg tccttcaaat aatgcagaag aaaaagatca taggcaggca 60
aaaattactt aataaattaa gctttttaaa gaagtgaaag aattatatcc agaaccaaca 120
gctcttaaat attctatttc aataaaaaca atttctatac aattgcggtg aaacttattt 180
ttggcaaata ctcttccgta agttatgaac atttctcttg ataaatttta tactaggtat 240
ataagttcct ttattggtgt tttggatgac agcaaatgac tttccataag gcagatgtag 300
attttattca cacaactttt caggagtagc tttatgttaa tatgttagga ctgtccttcc 360
ttgagcttta cagttaacca atgaaagtga gttattttag ggaatggtta gatttggaca 420
tggaccaaaa ttagttttct aatgagtggt gttaaagatg tgtaactact attacagaga 480

0962945950

taatgtaaat ggccttctac tttttaattc tctgattctg atcttgtttt gtagtaagaa 540
aggctcagta tgaatttgag gtacttaact aacttgttac agtggtggtc agtgaagaaa 600
gattctatcg ggcaggactc tctggaatgc atgtgtcaga agcccagccc aaattggcct 660
cagcagaaaa caaaacatag cgaaaagcaa atgacaattc attggctaaa gcaatggaaa 720
aataccaggg atatctagct tgagactcag ctagagccaa atattcaaat ctgggcatnc 780
aacattggat tgggctcttt caatttacct tagctgggct aaacactggt ggcttggttt 840
tggggcacgt tcttnttnaa acatggggga aaagtggccc ctaacaccgg ccaaaaatgg 900
atcc 904

<210> 638
<211> 895
<212> DNA
<213> Homo sapiens

<400> 638
attctcccaa agtgttggga ttacaggcgt tagccaccgt gcctggctct tcaagttttt 60
cagtgtatcc cttgtcagat ggatagttta caaatatatt cttcgatact gtaggttttc 120
tcttcgcttt gttgtttcat ttgctatgca gaagcttttt agcccattgt aattccattt 180
tcctatattt gcttttgttg cttgtgcttt gtaggtctta cccaaaaaat cttgacccag 240
gccaatgtcc tataacgttt ctccaatatt ttcttctagt agttttatag tttctttcct 300
gactgtgcag ggacttgctg ggagacgcaa gcctctctga gccaacaaga cctggtcccc 360
cagtgttggc ctgacagcaa cctcctcagg ggcccagtct cagctccaac cattctactg 420
cattccatct gtgctgaaac ctgctgggag acatgcacca gcctgagcca aggagaaagg 480
ggtctccttt ttggttttag aaaagagagg gagaggatac tgttttctga gtactgactt 540
tgatgaggtg ccaagcaacc ttagaaagct gctcatctgt ctcatcttgt gtcacatgtc 600
aagagtttcc cacttttgca ctaggtgttt gtagcattaa cctaagtcct ttggattgcc 660
taataacact agacctgaag cagttgaata gacttatgat tatgtgtttc tattaaagaa 720
cttagatacc tatctgaaat gtaataagtt tgcaagttcc caatttaatt tactattcat 780
actttaaatt agttaggaag actggaagaa gtttaaatgc aactactgac ctnatttcaa 840
gtttcaggca acttgcaaat tttcaagtga cagcactttt gagaaaacgg ggntt 895

<210> 639
<211> 855
<212> DNA
<213> Homo sapiens

<400> 639
actaagagac agatcatgag aggaaagaga actagaggcc aataaataaa ataattgttc 60
atatattaat gttcacatgt gaactacata tctaaaatct tggagaaaaa tcaaggcaag 120
aatttccaga actgtcctca aatagctcat ttatttaagt tttgttaaaa agcaaaagcg 180
aattgattac atttgattaa cttttcctat tccatgcaca agttacctta aaacatgata 240
aaaaccttat gggcattacc tatcacacag tacttatgca taaacttata atagtaaaat 300
tactaatgtt tgataaaata agatggaggc attacaaata gtctacagtt tgtattttaa 360
ggaattggac atgaagaatt ctagatcatt ttgtgtctat aaacccgact ttctatcttg 420
ccttgggcaa actttctgtg cctcaatgta ctctttaaat atgtgaagga tgctcttttt 480
gattaagtgt tttgcactcc tgaataaagg gcatagtata agcacaaagt atgacttaat 540
ttatcacaaa tattacacat cctatgttct tgaatgtgca cactttttc tcaataacaa 600
aatatatctt aagtcagttt ttttaatgct gtcaaaattt gtagaatttt ctttgagtat 660

0720050950

ggcatgatct cttcccaaat gcattttaca gttttttgng tgttctatag actatngagt 720
caaaatcaag agtattttga gaggatcaga agcatttaaa aatctatttt tttctagtat 780
ctttcacaga tctaaatatt tagatctctt tgnctttttct catggaatac gggggatcaa 840
attcctaatc cgnnt 855

<210> 640
<211> 837
<212> DNA
<213> Homo sapiens

<400> 640
gtaaagcatt gcttgaggtt gcccaggtag tttcgcctta cacttcttgt cccagtgcaa 60
ttattagtag agctcccttt cactgtcaaa tttccggttg gggataaatt gcattgtcgt 120
tttggtttga gataggaaga tgaggggagg aaggaggtga ggcggtaagg ggcgttctct 180
ctcttgggtc ccgcgcccaa cttccgctgg cccaaagaaa ctataatttt gaaccaacag 240
acctctgctg gcatctgcga ttgcattttt cctgttttaa caacggctgt gctagacgaa 300
gtggtgaagc ccaaagactt atttttgagc tcgctgtaag actgagaaat cacgtagtcc 360
ttcctgaaac cactaagagg aaaaatgtct gtgacactgc atacagatgt aggtgatatt 420
aaaattgaag tcttctgtga gaggacaccc aaaacatgtg agatggagtc tcgctgtgtc 480
ccccaggctg gagtacaatg gcgcgatcta ggctcactgc aacctccgcc tcctgggttc 540
aagcaagtct tctgcctcag cctcccgaga actggaagag gaggcaacag tatttggggc 600
aagaagtttg aggatgaata cagtgaatat cttaagcaca atgttagagg tgttgnatct 660
atggctaata atggcccgaa caccaatgga tctcagttct tcatcaccta tggcaaacag 720
ccccatttgg acatgaaata caccgtattt ggaaaggtaa tagatggnct ggaaactcta 780
gatganttgg anaaattgcc cgtaaatgag aaagaccttc ccgacctttt aaggatg 837

<210> 641
<211> 893
<212> DNA
<213> Homo sapiens

<400> 641
ttcagtgtgt gcgtgtgttt taaatatgtt ctactttgat catttcattt tgttctatga 60
gttctgcagt gactcagaag ttccatgata ctataactgg agtaattttg ctgtattttt 120
agccatgtcc tccaagcctc ccagtatatg ctgtgatctt tgccaaacag aatctgatca 180
gtgttacagg ggaaatgatg tgtgaggctc tacaaggaga gggtctccag ggcccacacc 240
tgagtcatgc cttgaagcaa cctcagcaca cttagcctcc cagtgattct gtgcaagtct 300
gtctcaatct tttgagctta tgttagttct ttgggggaaa aaaaatagaa acaacttctg 360
aatagggcag tatgtttggg gcagctttgt gaatacatat ctaaaattac ctccatttgc 420
catttttaa atcaattttt tttcaagcaa tcagattctt ttctcctaga ggagctgtgg 480
gcaagaaaac taatgaattc tacatccttc tcatcacctg gtttaaattg ttttctgctc 540
tgagtaaaca gtaattactg tttaagtaca tctcagcaga attttatccc aattgcaaca 600
gttcatgttc ctcctaatgt aatctctgcg gaggaaatga tcgtcaaggg aagcaggctg 660
acctgctcac gggatggcgt tcttacaatc tgcatcttat gtaatggtga ttctgtgtgc 720
ctgtgtcata attattggaa tattatttta tgcttttttt tttttgagac ggagtctcgc 780
tctgtcgccc aggctggant gcaatggccg actcagctca ctgnaagctt cccttccagg 840
tcacgccatt ctggctnatc ttccaagtag ctgggactac agggcccgcc acc 893

09509450.0200

<210> 642
<211> 898
<212> DNA
<213> Homo sapiens

<400> 642
aaacatatgt gctgctaata acagagccct agaatgcata aagcaaacct gacagaattg 60
aagggagaga gagatagttc tacaataata gttgaggact ttaataccca actttcagtc 120
atagatagaa taactggaca cagaatcagc aaggaaatgg aagacttgaa caacactgta 180
aactaaatct aacagacatc tctagaatac tctacttaat agcagcacca tacaggttga 240
gtatcctatc tgaaatgctt gggaccagag tgtttttata ttttgaagta tttgcattat 300
acttaccagt tgagcatccc aaatccaaaa atcacagatt caaaatgctg caaaacgttt 360
ctagcaaact ccagtgggca ttttctttga gtcatcatgc tgcactcaga aagttttaga 420
ttttggagca ttttggattt tcaggtttgg ggtgctcacc ctgtattctt aagtgcacat 480
gaaatattct ctggggtaga ccataggata gtctataaaa caagcctcag ctggatgcgg 540
tgactcacac ctgtaatccc agcactttgg gaggctgagg caagcagatt gtgaggtcag 600
gaggttgaga ccaacctggc taacatggtg aaaccctgtc tctactaaaa atacaaaaaa 660
ttagctgggt gtggtggcac acgcctgtag tcccagctac tcgggaggct gaggcaggag 720
aatcgcttga cccaggaact gagacggtgc cattgnactt cacctgggcg acagggcgag 780
actcatctca aaaaaaaaaa gcctcaatac atttaaaact ggtgaaatta gacaaagtag 840
ttttctgact ataatggggt gaaaatagaa accaggagtt gagaaaatgt tttaaatt 898

<210> 643
<211> 744
<212> DNA
<213> Homo sapiens

<400> 643
ttgtttgttt tttgagacag agtttcactc ttgttgccca ggctggaggg caatggcgcg 60
atctcagctc actgcaacct ccgtctcctg ggttcttgat tctcctgtgt cagccttctg 120
agtagctagg attacagatg cctatcacca tgcctgggta atttttgtat ttttagttga 180
gatggggttt caccatgttg gccaggctgg tctcgaactt ctgacctcag atgatctgcc 240
cgcctcagcc tcccaaagtg ctgggattac aggcatgagc caccacgccc agccatcaat 300
gcatttttt tatttttttt ttgagacaga gtttcgcact tcttgcccag gctggagtac 360
aatggtgcga tcttggctca ctgcaacctc cacctcctgg gttcaagcgc ttctccagcc 420
tcagcctcct gagtagctgg gattacaggt atgtgccacc atgcctggct aattttgtat 480
ttttagtaga gacggggttt ctccatgttg gtcagactgg tcttgaactc ccgacctcag 540
gtaatccgcc gcctcggcct cccaaaatgc tgggattaga ggtgtgagcc actgtgccca 600
gcccatcaat gtgttttaaa gctagctgtc agggttccac ttaatttaaa gctgggcagg 660
nagatgtgta atgatttcaa aggtaacacc tgtttggttt ctnaanggca tgccaagtcc 720
tgctgtatca aggaaagtat cctg 744

<210> 644
<211> 755
<212> DNA
<213> Homo sapiens

<400> 644

0960392 0960392

aatttggaaa atacagaaac tacctataat ttttccattg ttaacatttg agcatatttc 60
ttgtcacttt taatggtgct ttaaatatgt agcaaatgta tcatttcgta ttttaaaaaa 120
atgctaggta agcatttcct cctgtcctta aaaagctctt ttaaacaact ttaaaatatt 180
gtatagatag atgtacacaa ttttctgaat aattggagtt atatttacat cttttcactc 240
tttaggaaag gactggcctg tttctgtgtt gggttccttc ctgagtgtgg cttccagctc 300
agtggctcag acttcaagat gaagacttca gtcctggttg tgtatggtct tgggccagtt 360
accatatgtc taatgaatac ttagttttgt catctacaaa atgaaaatag taatatttgc 420
ctcaaagact attatttggg aggatctagt gcaaatgtta gtaatgtgga tattgtgtag 480
tgtcccagga tattaatgtt tttagcctct tggcttttat tctgtattgt tgccccaaaa 540
gatgatgctc acttatcttt catccagtgt aaggatatct ggaaagacaa cagaaagtat 600
agctgttttc atttcaaaag tgatcagctg cttgagctag caagcaaggc ttgcactagc 660
ttncaggcgc agtcacgcag tttcacagca ggcgcggntc cctcggagca cccagagctg 720
ccctgcggta gtcancagtg tgctgggctg actgc 755

<210> 645
<211> 733
<212> DNA
<213> Homo sapiens

<400> 645
aactcgcacc cgggtcctgg ctgcaccgca tcccctcctg cacccccctgg atggcccttc 60
agccaacggg ggcctgggcg atggtcgacc acggagctgc gcaaggaaaa gtcccgggat 120
gcggcccgca gccggcgcag ccaggagacc gaggtgctgt accagctggc tcacacgctg 180
cccttcgccc gcggcgtcag cgcccacctg gacaaggcct ctatcatgcg cctcaccatc 240
agctacctgc gcatgcaccg cctctgcgcc gcaagaggag cttcaggacg ccctgacccc 300
ccagcagacc ctgtccagga ggaaggtgga ggcccccacg gagcggtgct tctccttgcg 360
catgaagagt acgctcacca gccgcgggcg caccctcaac ctcaaggcgg ccacctggaa 420
ggtgctgaac tgctctggac atatgagggc ctacaagcca cctgcgcaga cttctccagc 480
tgggagccct gactcagagc ccccgctgca gtgcctggtg ctcatctgcg aagccatccc 540
ccacccaggc agcctggagg gcttcgtcat ggtgctcacc gccgagggag acatggctta 600
cctgtcggag aatgtcagca atcacctggg cctcagtcaa gctggagctc attggacaca 660
gcatctttga tttcatncac cccttgtgac caanaagagc tttaaggacg cccttgaccc 720
cccaacttna aca 733

<210> 646
<211> 789
<212> DNA
<213> Homo sapiens

<400> 646
gttacactta agaaagttaa caataatttt ataatatcat ataatatctt tctcatttcg 60
gttttaatgt attccagaat aggaagcctg gtgtctgttt tgatatatta cgcaacactt 120
attgtggtgt tggcattcac tagccactta aaaatgtttg attcaatgga gtattttcat 180
ataatacctt ctatggtaaa taagagttaa acaatctaaa acatcatctc atagttcagt 240
gttttcagat gaaggaaatg agatgcagag ctgttctgtg cagagctgtg actagagacc 300
aggtcttaag tctcagtgta gttttctttt ggcattatca aaattatcat tcataattta 360
tgcattgttt aggtatgtat taagtcttag ggctaaatgc taaatactta ccagaagtat 420
cttctgaaca tttttcttaa ttgatacgtg cgcatatgtc gggttttcaa aattatattc 480

0562046.0N2000

tataagatta tctgatttct tatttctagg ttgctgtctt aaacattatg ttttataaat 540
tggagattct tactatattt ataattttgg caaactaaaa attagtcctt atccatgatt 600
attttctgcc tttacatcta tatagttact ggattacttt ggtgattaag attacatctg 660
gaatcttttc aaattgccat ttttattgat acctttgagg tatggtgacc tggntttaat 720
tattctttaa catangcttt taagtatata aaagttcaaa aaataataat ttaacttctt 780
tttataant 789

<210> 647
<211> 792
<212> DNA
<213> Homo sapiens

<400> 647
agcgctggtc ggcgtctggc ggttgttttt agaggtaata cacctagttt gtggctcagc 60
atgtcaattg taacagtgca acttggtcag tgtggcaatc agattggttt tgaagttttt 120
gatgctttgc ttagtgactc acacagttcc cagggactct gctctatgag agagaatgag 180
gcatatcaag catcttgcaa agaaagattc ttcagtgagg aggagaatgg aggtattgat 240
aggcatgtat ggcctccttt atcaggactt cctcctctta gtaaaatgtc tctcaacaag 300
gacctgcatt ttaacacttc cattgctaac ttggtcattc ttcgtgggaa agatgtgcaa 360
agtgcagatg tggagggatt taaagatcca gctctgtata cttcctggtt gaagcctgtt 420
aatgctttca acgtgtggaa aacccagcgg gcctttagca aatatgagaa gtctgcagtg 480
ttggtcagcg acagccagtt cttagtaaaa ccacttgata tgattgttgg gaaggcatgg 540
aatatgtttg cttcaaaagc ctacattcat cagtacacaa aatttggaat cgaagaagag 600
gacttttag acagtttcac gtcattagag caggttgttg ccagttactg naatctctga 660
tcttgaacaa tgggaaaagt ataccttaag gcatttctgg actaaaatat tttcaatact 720
attttctctg taaaggtttc aaagntcttc atcctggcta cacggtgaaa caccgctnta 780
ccagaaaatn cc 792

<210> 648
<211> 847
<212> DNA
<213> Homo sapiens

<400> 648
aaaaataaaa taggcacatt tagaattcag agccaatatg tgcttgctta ttagtttttt 60
agctagcaac atatttgaat caggctggta attcgggtaa cccaggtagc acagattttt 120
aatgacatat ctaaagatac gtaacagcta aaattctgcc agtgagaaat tttcctgttt 180
gatattctta caaaagatgt ttatgtccac cattatctca tcagggctgt gctgaatatt 240
tgataatgag actgatcatt ccgctttttc tttcttaaaa atattagtca gagttaagca 300
aattaattat agctatcttt aagctataaa tgtgttaaca tgtatatata ccatttatta 360
tgttctactt tagtgatata ccttaattta gtgggctttg gcagggcggg ggagggggaa 420
cgttcattaa tctctgagga aaacaaaacc tgttttctac ttgagtctaa catatggtcc 480
caatttatta atacttctgt taaatttgat gtcaggtcaa cattttcag aaatgtattt 540
attctcagaa acagaaccag agagaagtta aacaaaaggt tatgtaactg gtcctttaat 600
gttgnaattg aaaacttggt ttagcgtctt ttttttcttt ctctttttt ttcttaaaat 660
gccaactaaa ataattagaa agtagcttat ttattgcatg cttatacatt gatattggaa 720
ttggaattgg gtggtaattt ctggtactgg ctttgctaga atcatatggc ataaatnacc 780
ctnatattta tcatcttggg ggctggtctg ggatcaatac atgattttgc tctcttttaa 840

0050205.00705

tntctag 847

<210> 649
<211> 761
<212> DNA
<213> Homo sapiens

<400> 649
atttttcct tcatttcaac cttggtgaat ctgacaatta tgtgttttgg ggttgttctt 60
cttggggagt atcattgtgg tgttctctgt atttcctgaa tttgaatgtt ggcctgtctt 120
gctagattgg ggaagttctc ttggataata tcctgaagtg tgttttctaa cttggttcca 180
ttcttgtcct cactttcagg taccccaatc aattgtaggt ttggtctttt catatactcc 240
catatttctt agaggctgtg ttcgttcctt ttcattcttt tttctctaat ctagtcctcg 300
tgccttattt tggtaagttg atcttcaata tctgatatcc cttcttctgc ttggtttagc 360
tattgatact tgtgaatgcc tcaggaagtt ctcatgctgt gtttttcagc tccatcaggt 420
catttatgtt cttctctaaa ctggttattc tagttagcag ttcctgtcac cttttatcaa 480
ggttctgatc ttccttgcac tgggttagaa cacgttcctt tacctcagag gagtttgnta 540
ttactcacct tctgaagcct acttctgtca atttgtcaaa ctcattctcc atccagtttt 600
gtgcacttgc tggagaggag ttgtgatcct ttgtaggaga agaggcattc tggnttttgg 660
aattttcagc atttttgcat tggatttatc ctcatcttca tggatttatc taccttgan 720
cttgagctga tgacctttgg aaggggtttt ttgngngggg g 761

<210> 650
<211> 779
<212> DNA
<213> Homo sapiens

<400> 650
tctcgagagc cggcatctcc taggagctag tcctggtcct cggctaggcg gcttggggtc 60
gcggcgtaac tggggagcca gcctgacgcc ggcggacccc gcctgtgatc ctggcaacga 120
tggatgatga cttgatgttg gcactgcggc ttcaggagga gtggaacttg caggaggcgg 180
agcgcgatca tgcccaggag tccctgtcgc tagtggacgc gtcgtgggag ttggtggacc 240
ccacaccgga cttgcaggca ctgtttgttc agtttaacga ccaattcttc tggggccagc 300
tggaggccgt cgaggtgaag tggagcgtgc gaatgaccct gtgtgctggg atatgcagct 360
atgaagggaa gggtggaatg tgttccatcc gtctcagcga acccctttg aagttgaggc 420
caagaaagga tcttgtagag gtataccata cttttcacga tgaggtggat gagtatcggc 480
gacactggtg gcgctgcaat gggccgtgcc agcacaggcc accgtattac ggctatgtca 540
aacgagctac taacagggaa ccctctgctc atgactattg gtgggctgag caccagaaaa 600
cctgtggagg cacttacata aaaatcaagg aaccagagaa ttactcaaaa aaaaggcaaa 660
ggaaaggcaa aactaggaaa ggaaccagta ttgcccgcag agaataaagg taccttcgng 720
tatattcttc tgaattttat gtgaccntta ctatgatgta aagacatact ggcnttaaa 779

<210> 651
<211> 861
<212> DNA
<213> Homo sapiens

<400> 651

0000000000 - 0000000

agatgtccgg ccggtctaag cgggagtctc gcggttccac tcgcgggaag cgagagtctg 60
agtcgcgggg cagctccggt cgcgtcaagc gggagcgaga tcgggagcgg gagcctgagg 120
cggcgagctc ccggggcagc cctgtgcgcg tgaagcggga gttcgagccg gcgagcgcgc 180
gcgaggcccc ggcttctgtt gtcccgtttg tgcgggtgaa gcgggagcgc gaggtcgatg 240
aggactcgga gcctgagcgg gaggtgcgag caaagaatgg ccgagtggat tctgaggacc 300
ggaggagccg ccactgcccg tacctggaca ccattaacag gagtgtgctg gactttgact 360
ttgagaaact gtgttctatc tccctctcac acatcaatgc ttatgcctgt ctggtgtgtg 420
gcaagtactt tcaaggccgg ggtttgaagt ctcacgccta cattcacagt gtccagttta 480
gccaccatgt tttcctcaac ctccacaccc tcaagtttta ctgccttcca gacaactatg 540
agatcatcga ttcctcattg gaggatatca cgtatgtgtt gaagcccact ttcacaaagc 600
agcaaattgc aaacttggac aagcaagcca aattgtcccg ggcatatgat ggtaccactt 660
acctgccggg tattgtggga ctgaataaca taaaggccaa tgattatgcc aacgctgtcc 720
ttcaggctct atctaatggt ccttcttttn cgggaactac ttttttggga agaaagacaa 780
tttttangaa ccatcaaacg ttctttcaag gggaatatca atggtccttg ttgggtccca 840
ancggttctt ggaaaagncc c 861

<210> 652
<211> 726
<212> DNA
<213> Homo sapiens

<400> 652
ccgcgttggg gagcaagagc caggctgggg acccaggctt ggtgtcagcc tacggtcctg 60
ggctcgaggg aggcactacc ggtgtgtcat cagagttcat cgtgaacacc ctgaatgccg 120
gctcgggggc cttgtctgtc accattgatg gcccctccaa ggtgcagctg gactgtcggg 180
agtgtcctga gggccatgtg gtcacttata ctcccatggc ccctggcaac tacctcattg 240
ccatcaagta cggtggcccc cagcacatcg tgggcagccc cttcaaggcc aaggtcactg 300
gtccgaggct gtccggaggc cacagccttc acgaaacatc cacggttctg gtggagactg 360
tgaccaagtc ctcctcaagc cggggctcca gctacagctc catccccaag ttctcctcag 420
atgccagcaa ggtggtgact cggggccctg ggctgtccca ggccttcgtg ggccagaaga 480
actccttcac cgtggactgc agcaaagcag gcaccaacat gatgatggtg ggcgtgcacg 540
gccccaagac cccctgtgag gaggtgtacg tgaagcacat ggggaaccgg gtgtacaatg 600
tcacctacac tgtcaaggag aaaggggact acatcctcat tgtcaagtgg ggtgacgaaa 660
gtgtccctgg aagccccttn aaaagtcaan ggncccttga atcccaaaag tgccttccca 720
gcttaa 726

<210> 653
<211> 646
<212> DNA
<213> Homo sapiens

<400> 653
ttttttttttt ttttctttct tttttgggcc ctcataataa gcattgttac tattggaagt 60
tgttttcaca ttctttccaa tattaaatat gtatttttt aagtaatgat aatattttcc 120
agtggctcat ttggatgaga actaccctct atttttaata ttaaaactac atccaactca 180
tcatttagcc tttggttgta cagttgtgta atgggctatg gactgttaca caccttacca 240
cctctaggcc tatgtttttt ctttccccat atattctgat ggggataaat actgttttgc 300
ctctcccata ggaatggaat acatttattc taaaatgatc tttcacagaa gtaagagaga 360

US 2005/0009004 A1

gggaaaccta aatatacctc taaattgttt gaagttggtc ccagcagcat aaaatgggtt 420
ggccccaaag ggttggaggg tgggcttggt tatcagtatt tgttttcaga atgagatggg 480
agcatctttc ctttgccacg tgctttgtgc ttgataacat catgcttggt tcaaacgaca 540
actcagcaca aagccttgag tataaattgt tggaatcaaa acatctcatt ctgatgacgt 600
ggtttaattt tttaattttt ttttttaata ngggtggnag ggangg 646

<210> 654
<211> 735
<212> DNA
<213> Homo sapiens

<400> 654
atgctctgta cacatgctgt caacaaaagc cagctctagg aacctgagtg ccagaatgcc 60
tgagggagct acagctgggc ttagttggct gggattgagc tcgctgtctg agggagctcg 120
ctctgtctct ctcacactgg cagtttacac cagccggcag ccctgagcag cagtgggtgt 180
aacttttttat aaataaggat tcattgattc attcatattc tcaatatttc ttgaagacct 240
accccgagcc aagcatggtg ccaggcagtg gggatgcagt ggagagcaaa cagccctgcc 300
catgcaaagt gtcctgtacg gtgagaagtg tgagctgcac ccacaaaggg aaagagccca 360
gtgcagcttt tgcaaaatgc agggaaggat gctgctagcc tcagggtgac ctanaacttt 420
aagctcatct ttgntttcag gagcccagtg cctcccctcc acccctaaag aatatctcaa 480
agacgtggat tttcatttca gtaagattta ggggtgcatg ggcaggcagt gctggaggaa 540
ctgggaggca ggtttggagg ctgcagtggg accactggcc cctcctggct acagtttcag 600
gccaggagct tgttggcacc tggtgcaaac tcccaaacct gaggggtccc cacaaccccc 660
cagcccatct taacctnctc ttnccccaag ctatctggtg ttggaaagcc ngcatctaat 720
gtggaaacaa gcttt 735

<210> 655
<211> 910
<212> DNA
<213> Homo sapiens

<400> 655
aaaacatgtt gatcccaatg atgtgatcac ttttgaacct ttccattaca aagcattgta 60
tagataactt tttaattcag taggaggaga aagttcattc ttggcctgtt ggctttgatt 120
attatgggta ctttaaagtc agtatttatc aagaaaggga acttgaccac cattggcaca 180
tgtgacattt aagctcttca gccttttcct ttttagttgt aggtgtttac atttcatttc 240
taagccaact ctgtatttat gagagaagtt taagccttac atcatttgat actaaagggt 300
tatttgtggt aaatgaaaaa tgaccccaaa attacagagg aatatgccag tttaagaaat 360
ggctacttaa agttgcttct ctctttcctt cttactcatg aaattaattg gtcttcttca 420
agtttcttta gattccatta aatgattaaa tcactattaa gagccattca tcaacgtgat 480
ttgtgtgtta gccaatgaat ctgtctcagc ttttgaccaa atgggtttta gacaaatgca 540
aagatctgcc tctagtccat atggctcttt ttgagtgcta gtattttgca tttcacataa 600
tgtagttatt ttgagctttt aaagagagca tttagacaaa gaagcaaaga gaggaaggga 660
ccaatcaact catcagttcc atgcatcaac aaagcatagc tagtagagga atataaatga 720
cagattgaca aactgtagga aacactggta ctctctttct gaagtttcaa gcaccatcct 780
atgtgaaagt cccttctgtc caaacaagct caaggnccat cttctcccta tacaaggcaa 840
acctgtaagg gcttnctttc caagaggtcc attgctttgg gtttcttnct aaattcctaa 900
tgggaattaa 910

0509250.0013803

0050020800 - 050ct06

<210> 656
<211> 784
<212> DNA
<213> Homo sapiens

<400> 656
aatcatgtga tccgagggaa ccgccccatc aaaactgaga tggcccatca gctatatgtc 60
cttcaagtcc taacctttaa ccttctggaa ggaaggatga tgaccaagat ggaccccaat 120
gaccaggctc aaagggacat catatttgaa ctgaggagga ttgcatttga cgcagagtct 180
gatcctagca atgcccctgg gagtgggacc gaaaaacgca aagccatgta cacaaaggac 240
tacaaaatgc tgggatttac caaccacatc aatccagcca tggactttac ccagactcct 300
cctggaatgc tggccttgga caacatgctg tacttggcta aagtccacca ggacacctac 360
atccggattg tcttggagaa cagtagccgg gaagacaaac atgaatgccc ctttggccgc 420
agtgccattg agctcaccaa aatgctctgt gaaatcctgc aggttgggga actaccaaat 480
gaaggacgca atgactacca cccgatgttc tttacccatg accgagcctt tgaagagctc 540
tttggaatct gcatccagct gttgaacaag acctggaagg agatgagggc aacagcagag 600
gacttcaaca aggttatgca agtcgtccga gagcaaatca ctcgagcttt gcccttcaaa 660
cccaactctt tggatcagtt caagagcaaa ttgcgtancc tgagttactc tgagattcta 720
cgactgcgcc agtctgagag gatgagtcag gatgacttnc agtccccgnc aattgtggag 780
ctga 784

<210> 657
<211> 875
<212> DNA
<213> Homo sapiens

<400> 657
atggcggacc gtggcggcgt gggtgaagcc gcagntgttg gagcgtctcc tgcatctgtc 60
cctggcctaa acccgacgct aggctggagg gagcgactgc gggccgggct ggcggggact 120
ggggcctcgt tgtggttcgt ggcggggctg gggctgcttt acgccctgag gatccctttg 180
aggctgtgtg agaatttggc agcggatatt tgaatggtgg tacttccata agcatggcac 240
atcttttatt gagcaagtat ctgtaagcca tttgcaacca ctgatgggag gaatttggca 300
gcatttcaga accaggttct ccttcgagga acagagaaaa tgaaaccagc agacagaatt 360
tgtcagaatg taaggtatgg agaaaccctc taaatctttt cagaggagca gaatatagga 420
gatacacttg ggtgactggt aaagagccac ttacatacta tgacatgaac ctgtcagctc 480
aggaccatca gacctttttc acctgtgaca cagatttttt acgtccttca gacacagtta 540
tgcagaagct tggagggaaa gaaatcctcc agctcgaatc aaagcagcct atcaagcttt 600
agaattaaac aatgaatata agccttccaa agtcagcagc aatctgttac acagcagcac 660
tgttgaagac aaggactgtt tcagaaaaat tctctccaga aacagccttc agaagaggat 720
taagcacagc agaaattaat gcccgtggaa gcaattcata gactgtggaa tttaatcctc 780
atgtttccaa acttttagaa tgattccata cccgtagaga aaggacatct attttccctt 840
atccancttg cccagaagac cggntgatta ganag 875

<210> 658
<211> 815
<212> DNA
<213> Homo sapiens

0050205-0002

<400> 658
aggcgggaga atcacttgaa ccggggaggc agaggttgca gtgagccgag atcacgccgt 60
tgcactccag cctgggcaac agagtgagac tccatctcaa aaaaaaagaa aagaaaatat 120
ctcacagaca ctagtgagca atcactatgt acgtttttc ctgccactta cccactgtgt 180
gacttggcaa gtcacttaac ctctctgagc cccaggctcc ttgccggtac accagagaca 240
acagtgtgat gcttggggtt cagtgtgcgc agtgactaag aggcccttcg cagaacagag 300
gcccgcgtgg gcatgtgagg agtgaggtgc cagtgcccgc ttggatgtcc gtctacccca 360
ccgttaagca tgttgctgca gctgctgctt ttctgctgta gggaccaaag catcatgagg 420
agctaacatc cttgaagttg gcaagtgttg aagtggctgc cactagggat tcagataaag 480
ggcagggaga ggcatcaggg ctgggagtgc gggtgagagg gaagcatgga gacccgtctc 540
aggagcactg agtcagcagc acagtggggc gcaattgatc cacataaagc ctcacattgt 600
tcctgcagca gtcaggacag tggtgacctt tgggattcgg ctgacagagc actgctctgg 660
ggaggggctg ggggcangag cactgtctgg tgagtggttg tgctatgccc aagacaagca 720
gctntgtcag gctaccctga gggatctgct ctatatgggc gctagtcctg gcactggctt 780
ggatggctgc tgctntgngg atcatcaccg tctgt 815

<210> 659
<211> 923
<212> DNA
<213> Homo sapiens

<400> 659
aatagagcct tccaggctga aattttcctg tcagtggaaa aaactttgga atacagttaa 60
cttaaattct tagcatattt ttattgttaa ttgtggttga gataatccaa tgccttttaa 120
agggattagt agctagcttt tgttttcaac ctaaactgtg gtgttcttgc ctaccttatg 180
caattaatga acttgtgaaa agtatgtata aatccgtttt tgtagtataa gtctttaatt 240
tgtaatgggg agttggcttt ataaaaggat attctactag agtgaatgtt cagcgcttca 300
tttatttcct gtattaaggt tatttttaaa ataaggcaca tcaagttgat tggaaaggtg 360
ttcatagagc tagaagtaag agggaaaggg ctatgaaatg gcgaccaggc atatcttatc 420
aatcaggaga cagaaagcac agtttccatg aacagagaaa gttgaatgta aagaaattaa 480
acataacagg agtaatgagg gattgactgg taagaactaa agagagctct gaagattaag 540
aaccacggat agggctgggc gcagtggctc acacctgtaa tctcagcact ttgggaggcc 600
gaggcgagca gattgcctga actcaggagt tcaagaccag cctgggcaac acggtgaaac 660
cctgctctac taaaatacaa aaaattaggc ccggccgtgg tggctcacgc ctgtaatccc 720
acactttggg angctgaagc gggctgatca cganggcaga tcgagaccat cctggctaac 780
accggggaaa cccctgtctc tactggaaaa tnccggaaaa attaacctgg gccttggtgg 840
gcaccttgcc ctgtaagtcc aaactggtcg ggaaaactga ggccaggaaa aatggccttn 900
agccccggna agccggaact tnc 923

<210> 660
<211> 808
<212> DNA
<213> Homo sapiens

<400> 660
agaagttagg ggctgcagcg gcgctggctt taggtgaacg acgtggtgag gagtgggttt 60
cgggcatgag aagtcacagg gccgtttcct agtctctctt cacttctttg ggtcttctca 120

gagaaagaag gctgccgtgg gtaggctggg ggcggagact atcgggaaga gaaaattact 180
tttcccactg aaacacaccc aagtatatgc ccagccttca tgaaagtgaa cagagaaacg 240
aagcgccttt atgtgggtgg ccttagccag gacatttctg aggcagacct acaaaatcag 300
ttcagcagat ttggagaagt ttcggatgtg gagatcatca cacggaaaga tgaccaagga 360
aacccacaga aagtttttgc atatatcaac atcagtgtag cagaagcgga cctgaaaaaa 420
tgtatatctg ttttaaataa aacaaaatgg aaaggtggaa cattacaaat tcaactagca 480
aaagaaagct ttctgcacag attggcccaa gagagagaag cagcaaaagc taagaaagaa 540
gaatcaacaa caggtaacgc caacttgtta gaaaagacag gaggagtgga tttccatatg 600
aaagctgtgc cagggacaga agtgccaggg cataagaatt gggttgtgag caaatttgga 660
agagtcttac ctggtcttca ccttaaaaat caacataaac gtaaaatcat caaatatgat 720
ccctcaaagt actggcacaa cctgaagaag ataggggagg atttcttaaa caccatttcc 780
tatattccag ncctgacttg gggaantn 808

<210> 661
<211> 746
<212> DNA
<213> Homo sapiens

<400> 661
agtggccaga gcgactcttc agggaggtgg caggaaaggc ttggaacagc tgccggaggt 60
gacggagcgg cggccccgcc cggtgcgctg gaggtcgaag cttccaggta gcggcccgca 120
gagcctgacc caggctctgg acatcctgag cccaagtccc ccacactcag tgcagtgatg 180
agtgcggaag tgaaggtgac agggcagaac caggagcaat ttctgctcct agccaagtcg 240
gccaaggggg cagcgctggc cacactcatc catcaggtgc tggaggcccc tggtgtctac 300
gtgtttggag aactgctgga catgcccaat gttagagagc tggctgagag tgactttgcc 360
tctaccttcc ggctgctcac agtgtttgct tatgggacat acgctgacta cttagctgaa 420
gcccggaatc ttcctccact aacagaggct cagaagaata agcttcgaca cctctcagtt 480
gtcaccctgg ctgctaaagt aaagtgtatc ccatatgcag tgttgctgga ggctcttgcc 540
ctgcgtaatg tgcggcagct ggaagacctt gtgattgagg ctgtgtatgc tgacgtgctt 600
cgtggctccc tggaccagcg caaccagcgg ctcgaggttg actacagcat cgggcgggac 660
atccagcgcc aggacctcag tgccattgcc cgaaccctgc aggaatggtg tgtggctgtg 720
angtcntgct gtcangcatt gaggaa 746

<210> 662
<211> 864
<212> DNA
<213> Homo sapiens

<400> 662
ggcttaatga ctggccctgc attcttcaca atatttttcc ctaagctttg agcaaagttt 60
taaaaaaata cactaaaata atcaaaactg ttaagcagta tattagtttg gttatataaa 120
ttcatctgca atttataaga tgcatggccg atgttaattt gcttggcaat tctgtaatca 180
ttaagtgatc tcagtgaaac atgtcaaatg ccttaaatta actaagttgg tgaataaaag 240
tgccgatctg gctaactctt acaccataca tactgatagt ttttcatatg tttcatttcc 300
atgtgatttt taaaatttag agtggcaaca attttgctta atatgggtta cataagcttt 360
atttttcct ttgttcataa ttatattctt tgaataggtc tgtgtcaatc aagtgatcta 420
actagactga tcatagatag aaggaaataa ggccaagttc aagaccagcc tgggcaacat 480
atcgagaacc tgtctacaaa aaaattaaaa aaaattagcc aggcatggtg gcgtacactg 540

US005525500A

agtagtttgt cccagctact cgggagggtg aggtgggagg atcgcttcag cccaggaggt 600
tgagattgca gtgagccatg gacataccac tgcactacag cctaggtaac agcacgagac 660
cccaactctt agaaaatgaa aaggaaatnt agaaatataa aatttgctta ttatagacac 720
acagtaactt ccagatatgt cccccaaaaa atgtgaaaag agagagaaat gtctacccaa 780
agccagtatt ttgggnggna taattgcaag cgcatagtaa aataatttta accttaattt 840
ggttttaata gtggttanat ggaa 864

<210> 663
<211> 872
<212> DNA
<213> Homo sapiens

<400> 663
atcaaaagaa gttcaatact aaagataaag agttttcctt attgaaatat atattgttaa 60
gcttttaaac caaatgaaag tatgagtggt catatttata ctgtagtagg ttttcataat 120
agattttcca gattaaaacc atttgttgaa atcatcaaag agatgttaat cctgctttag 180
cattgatgca aagttaaaat aactgacatt aaaaaaatca tttgggaagc tttattgaat 240
atattgagat aaggtttatt gtagtccttc tcttcatgca tactgctgtt acaattccag 300
gaggtttcaa aatccatgtg aatgacccca ttcaaccctc aaactgtcca attcctggcc 360
taattcacct tcactctgct gtagctacca gttgcaggac tagctgcatt ttggccagaa 420
ctgcatcacc ctggaaattt taaacacact ctctctcttc tgattgccct ctttttctgg 480
ttccatctca gctttattcc cactgcattg ntctttatct ttggagctct ctaaatccct 540
agctgtgcta gtggtggatg aggtgtttaa caaaggaaat gtaagatctt cctttagttg 600
ccagttcagt gtagtttttt ggaattagtt tgctaaattt cttttaaagt gatcagttta 660
gtatccaaga agtaaaatgg agcaagttga aaaattgtcc tgcctgtgtt tcagtttang 720
ttggtcctag gcgcactgct gacttctctt atgacccttg ggtagattca gtctttattg 780
gtatttgaac ttttaatggc tggtggngta ctctccttag acacatttaa aactttaagc 840
atttggcagg gggaatgggt aaggatccag tt 872

<210> 664
<211> 873
<212> DNA
<213> Homo sapiens

<400> 664
cttattttca atagttttcc tctgatgttc tgctgggtat gtaggatttt acctcgattt 60
ttctttttttc gttcatgcaa gtgtcccctt tggttttcat tataattatc attataatga 120
taattgaaaa tgaaacttcc ccatctattt ctaattattt aatggtcaca gagctatgtt 180
tattactgaa gctaaatgta acaactatga aatgtataat tgccactctg aagtctaaac 240
ttgcaaatga aatttgatat ctgagaagat atagcaaacc aaaaattgct aactgtagaa 300
ttaacatttt atagctaaga cagactgtaa gtggtatagt ttctgtatag tttctttttt 360
gtttaaaaaa aatgtactta ctcatttgga aaaaattttt aaaattcaca ttaaaaagtt 420
cttataaaat acccttcata aataaccact gttaaaattt tgctatgtat cattctctta 480
tgtttttcta tgcatttaaa ttcttatcat accaagaagg cagtgattaa gagctcagtt 540
tctggagtct gacaggcctg atgatgaatc acttaataca tgtgtggctt tcaaaaagtt 600
acttcacctc tataacctta attatctcat ctgtaaaatg aaaaataatg atactatttg 660
cttcataggg ttgncttaag aatttaagtt aaaaatgtat ataaatcaca gcacaatgat 720
taaaatataa gtctcattaa acagtagccc attattatta aattgnctat agcttttaac 780

0050302-050900

ctatcttgct tacttagtaa tatgagcatc tttctatgnc atgaacatct ttatatggtg 840
gaaaattcct tctacaatat tacttggatt ttn 873

<210> 665
<211> 871
<212> DNA
<213> Homo sapiens

<400> 665
acattcttat aacacagcac agtgactttc ttctttcaag attgtagctc agagaaaaga 60
tacaggattc aattgggggt tcaataggat agaaatggag agattccttt gtgttgtagt 120
agaggcattt tcctaaggag tatagattta tactttgcat tttcattcat catcccccag 180
aatcatggtc aaggtgtagg tcactccaca cagctgatgc tcaggttatt cccttgtgag 240
aattatgaga ataaagctcc caagatatgt gaaagtgctt aacacagtac ctggcacaca 300
gcactcaata aaagtttggc tctattatgg gatggttcaa ttctggttta aggagggaag 360
aaaggttatt atatatgtac cactaagcaa atatatatat atatatatat atttgggttt 420
ttttttccct aatattattt gggtgtcccc tgtgcttctt taggatgtag ttataactaa 480
acctgttata cttgaacatc actaagagaa gtaaattatt atgaagctag caaaaatctt 540
gaggccaaag ttgtttctta acagctttaa taatgcttgt tgattttgaa taatccttta 600
aaaagtggac catttgctta ttttaatatc acgtcagtaa aatgttagta ttaaaaagat 660
cagcttttta tggcattgaa gaatgtatct gctaagacac aaaaattgca tggtaagtat 720
aataggtgga ggaggaaagg ttgtaggccg gatgaaaatt taactgacta gaacatttat 780
tcaggagtgt aattattttc ccttacccca atcctgngna cgtgttgggt atagttccac 840
atttatccgg atttgcaaat ngacccactt t 871

<210> 666
<211> 872
<212> DNA
<213> Homo sapiens

<400> 666
agtgcttttc atgtcttcaa ttatccaagt accccaagcc tgtggtttgc ctcagtttgg 60
gtgggcatag ccaagggggt tccagggccg tccagccttc actcaaggat gactttccct 120
aggctgaggg cagtggaccc ttgacaaaat ttaattaccg tctctgctta tggctggacc 180
tcagctggca gggtctcggg ggctttaaac aaaagcagga gcctctccag aagtagatta 240
gggagatttg cattcaggcc agggatttgt acatggtgtt aattctcctc caggcagata 300
tctgcttggg aaagggctgt gtgaccctat ttagaaaaat ggctacactt tgttaacctt 360
tttcccttaa gaaggaaaaa tcattaatgg cagaagttca ggccccagag gggattttct 420
gggtgattct ttgtttcaag agtcatgttt ccccagatgt gattaaattg tccgtaactt 480
ttaactcttc cctcccccgt gctttagttg aaaaataaaa tctctgttca tatttcttgc 540
atatcatagg cttatgtctc tttccagctc tataagtcaa ggctaaagat tttttttta 600
agaaagagga aaaaaaagac atttatttga gaagacattt ttgtgtgtgc cctgctccca 660
ccatgcattc attcggtgct ggaaagtggt tangggattc taagcagccc ccttgctata 720
gctggactgt gacgcttgcc cttactgcaa gtctgcttgg ctncttcaga cctgatgcag 780
atgcttgncc gttcccacac aagcccttct ttttctctgg tcccggaaca ctggttgctt 840
ctggtactga gaaggcaatc tgggtaaagg aa 872

<210> 667

0050150 - 0050800

0956350.0420000

<211> 870
<212> DNA
<213> Homo sapiens

<400> 667
agagctgctc gtctgaggct gctgaggcga cggccggtgt cgtggtcgcg gtacctgttc 60
caacacggct cgcgggcccg tgccggctcc ggtccccggc gcggctgtcc gagcccctgc 120
ggcgggcgga cgatggtgtg gcggagcacg cggacgcggg cggcgcggcg gcgggcatga 180
aggaggatgg aagggcagga cgaggtgtcg gcgcgggagc agcacttcca cagccaagtg 240
cgggagtcca cgatatgttt ccttcttttt gccattctct acgttgtttc ctacttcatc 300
atcacaagat acaagagaaa atcagatgaa caagaagatg aagatgccat cgtcaacagg 360
atttcgttgt ttttgagcac gttcactctc gcagtgtcag ctggggctgt tttgctttta 420
cccttctcaa tcatcagcaa tgaaatcctg ctttcttttc ctcagaacta ctatattcag 480
tggctaaatg gctccctgat tcatggtttg tggaatcttg cttccctttt ttccaacctt 540
tgtttatttg tattgatgcc ctttgccttt ttctttctgg aatcagaagg ctttgctggc 600
ctgaaaaagg gaatccgagc ccgcatttta gagactttgg tcatgcttct tcttcttgcg 660
ttactcattc ttggggatag tgtgggtagc ttcagcactc attgacaacg atgcccgcaa 720
gcatggaatc tttatatgat ctcttggagt tctatctacc ctatttatat tcctggatat 780
cattgatggg aatgttggta cttacttacc aaatcttcaa gggattcaga aacagccaag 840
ccttctgtaa tggcatcaga aagcctggag 870

<210> 668
<211> 693
<212> DNA
<213> Homo sapiens

<400> 668
ggactctggc tttgaggccc cacgcctggg tgagcagggc ggggactttg gctacggcgg 60
gtacctcttt ccgggctatg gcgtgggcaa gcaggatgtg tactacggcg tggccgagac 120
tagcccccg ctgtgggcgg gccaggagaa cgccacgccc acctccgtgc tcttctcctc 180
ctcctcctcc tcctcctctt ccgccaaggc ccgcgctggg cccccgggcg cacaccgctc 240
ccctgccact tccgcgggac ccgagctggc cggactcccg aggcgccccc cgggagagcc 300
gctccggggc ttctctaaac ttggtggggg cggcctgcgg agccccgcag ccggcgggcg 360
ggattgcatg gtctgctttg agagcgaagt gactgccgcc cttgtgccct gcggacacaa 420
cctgttctgc atggagtgtg cagtacgcat ctgcgagagg acggacccag agtgtcccgt 480
ctgccacatc acagccacgc aagccatccg aatattctcc taagccccgt gccccatgcc 540
tccggggccc actccactgg gcccaccctg gacctgtttt ccactaaagc cttttggaaa 600
gcggtgattt gaggggcaag gtgcttagag atactcgctc gctggggaan gggggaggga 660
ggcantggtg gcttgaaggg tgcnccactt tca 693

<210> 669
<211> 817
<212> DNA
<213> Homo sapiens

<400> 669
taaacaacaa aagcaactga acccatgtat gcacagaaac aatcaaacac tagctcattt 60
tatagtgccc aggaaaatgt tccttctttt aaaatggatt ttatttgaaa gcgcagaaaa 120

tgaaaactag tgagatatat ttttggtatt ataataggca attggttgag gttcaagttt 180
agtttcaggt aatattatca gggaagattc catgttttaa aatagtattt atggatcatg 240
ggtaggttaa gaaagatgca ttggcatata gtcttgatag ttaagtccac gattatcatt 300
ttagaatcca ggctatgctt gctgctcttt ttatccacat tttaaattac aattgcattt 360
tttacttgtt cagtgcacac tttgatgcac cacaagtgca ttaattttga atcgtgtgca 420
atatagaaat attttgagac tcacaacatt gaaacaaggt gacaccctag ttgactttat 480
cactaatgtg atttgaacat tatttaaaca aatctagact gaacatgaaa gaaaggagtt 540
ttgggcagtg acatttttca cagaatgtat atctcaaagg tgaaagcaga gtttttccag 600
tgcaataaaa agaacagaat atgcagattt tgagctactc gctctataga ggataaccta 660
acacggctga aaattgagct gggacattca gacgaaagtg caatccatgg acagaatagg 720
gaataacagg tgtgaagaga acaaacttat cactggaatg gtttgccaaa cctgggttaa 780
ggcataaccc ttgaatggct cttntaacna actggtn 817

<210> 670
<211> 667
<212> DNA
<213> Homo sapiens

<400> 670
agtgcgcatc cggacgtagg aggtggaggt tgtggaattc gccgttcgaa agcagggact 60
aaaagcccca cttcgtctta cgttccgaaa ggaaggcgtc tgttgagcct ttctctcagt 120
cgtgagggag gcgtcgacgg cgtgcggaag tcctgagttg aggcttgcgg gatcctttcc 180
ggagaaagcg cangctaaag ccgcaggtga agatgtccaa ctacgtgaac gacatgtggc 240
cgggctcgcc gcangagaag gattcgccct cgacctcgcg gtcgggcggg tccagccggc 300
tgtcgtcgcg gtctaggagc cgctcttttt ccanaagctc tcggtcccat tcccgcgtct 360
cgagccggtt ttcgtccatg agtcggagga gcaagtccag gtcccgttcc cgaaggcgcc 420
accagcggaa gtacaggcgc tactcgcggn catactcgcg gagccggtcg cgatcccgca 480
nccgccgtta ccgagagagg cgctacgggt tcaccaggag atactaccgg tctccttcgc 540
ggtaccggtc ccggtcccgt agcaggtcgc gctctcgggg aaggtcgtac tgcggaaggg 600
cgtacgcgat cgcncgggga cagcgctact acggctttgg tngcacagtg tacccggagg 660
agcacan 667

<210> 671
<211> 687
<212> DNA
<213> Homo sapiens

<400> 671
attgtgggat ctgtcggntt gtcaggtggt ggaggaaaag gcgctccgtt atggggatcc 60
agacggtaag accctcattc agtatcctcc actgggggac ccctccccat ctggttctgg 120
ccactcagnt ccggaccagg ggctgncgct gccgaccccg ncccgcaggg ctctgggccc 180
accgtggatg ctggggtccc gatcccgcac atccgggctc gggactccgc caggttaccc 240
ctctgccctt ggcatgcctc cgcgctggag ctcgggatcg ccacccctgg gacggtcacc 300
acccaagccc cgggctctta cccagcctgg cggtcacgct gcctcctcta cccacagagc 360
cccgtcctgc tggcctccct gggggtgggg ctggtcactc tgctcggcct ggctgtgggc 420
tcctacttgg ttcggaggtc ccgccggcct caggtcactc tcctggaccc cagtgaaaag 480
tacctgctac gactgctaga caagacggta agttggggaa gaaagggcca gggtgaagga 540
ggggaccaga gtgctcctgg catgtagggt acagnaccca cggtggttgg gatgcccaag 600

CO8247.6945.00

ggacgtggca agcgccaggc gcgcttggtg aaacacttgt gtnctncacc cttcagactg 660
tgagccacaa caccaaagag gttnccg 687

<210> 672
<211> 812
<212> DNA
<213> Homo sapiens

<400> 672
aataaacact taataaataa caaaactacc tttctgaata taaatctttg caaatgtatc 60
cagataactt ccattttgtg cctgtgttca ggcatgattt attttgcagt tgccctacca 120
ttaacagacc tccatttgtc tcgtgtgtcc acacgcccca cttgtaggcc agaaataggg 180
cttcagacac agaggcttat tttttccata tagactggag tggggaaaat ttggccttag 240
ggaggacaga cacaagtcca atgggtaaac cagcgagtag taggtggaca gccgtcccac 300
acaagggttt gtatctgggc tacacagatt cccttcagaa aagcaccaat ggtgagagag 360
ttcttcactc agtaacttac attccctggt ctggtgcctt taaaaaacca tcagcaatga 420
aaaggaagtg catacacatg acaaaaaaat tcaaataggg caaaagtcag agacagcatc 480
tcctttccat tcttcatccc agtaccccag gtcctctccc cagaagtaac cactcttacc 540
cagttttagt gtctccttca gacattcaaa gcacattcgt ataaatgtgt cttttaaaag 600
tggtagtgac ctatatgtgc tgtgacatgc ttttttccct ttgtatgtgg acatttcacg 660
ttagtgtata taggtctacc cattctttca gtgactgctt gatagcctac tcctaatgat 720
ggagttgact ttnctcatac attgngctac actggcacat gtgcccataa atcggggagc 780
acgtagtact gggacaaang gtacgtattt aa 812

<210> 673
<211> 882
<212> DNA
<213> Homo sapiens

<400> 673
attaaagttt cctgtagtga aagtcagtta caaagccagt gtggacaaat gaaacagaca 60
aatattaatt tggaaagtag gttgttgaaa gaggaagaac tgcgaaaaga ggaagtccaa 120
actctgcaag ctgaactcgc ttgtagacaa acagaagtta aagcattgag tacccaggta 180
gaagaattaa aagatgagtt agtaactcag agacgtaaac atgcctctag tatcaaggat 240
ctcaccaaac aacttcagca agcacgaaga aaattagatc aggttgagag tggaagctat 300
gacaaagaag tcagcagcat gggaagtcgt tctagttcat cagggtccct gaatgctcga 360
agcagtgcag aagatcgatc tccagaaaat actgggtcct cagtagctgt ggataacttt 420
ccacaagtag ataaggccat gttgattgag agaatagtta ggctgcaaaa agcacatgcc 480
cggaaaaatg aaaagataga atttatggag gaccacatca aacaactggt ggaagaaatt 540
aggaaaaaaa caaaaataat tcaaagttat attttacgag aagaatcagg cacactttct 600
tcagaggcat ctgattttaa caaagttcat ttaagtagac ggggtggcat catggcatct 660
ttatatcatc ccatccagct gacaatggat taacattgga gctctctttg gaaatcaacc 720
cgaaaattac agctgttttg gaggatacgt tctaaaaaat attactttga aggaaaatct 780
accaaccttg gaacagaaat agacgtctta ttaaacccac atgactagac ngaggacaag 840
aaacctaaac aagcctnttn tcataaagag acaaagcccc ca 882

<210> 674
<211> 897

0050204.00000

<212> DNA
<213> Homo sapiens

<400> 674
atttcacaaa gaactttact tttgagcaga gtgtaccagg tggtaagttg gggaatgacg 60
gagaagaaga atgttgtgtg aagttagcag cagggcgcgt gtggtttggt gtggctgaag 120
aaaggggcac attttcttgg agtatagagt agaagtcaga gaagatagtg ttgaaaaatg 180
tacacaaagg cctctttctt gttgtattgt ctctttaaaa aaattctttc taattgttta 240
ttgttttaaa agaaaagcag agaaatgaat ctagaaggaa cgaatctaga caaacttcca 300
atggcctcaa caatcacaaa aatacccagt ccgttaataa ctgaggaagg acccaacttg 360
ccagaaatca gacacagagg ccggttcgct gtggagttta acaaaatgca ggatcttgtc 420
ttcaaaaaac ctacaaggca gaccatcatg actacggaga cactgaagaa aattcagatt 480
gataggcagt ttttcagcga tgtgattgca gataccatta aggagttgca agattcggcc 540
acttacaaca gtctcctgca agctttgagc aaagagaggg aaaacaaaat gcatttctat 600
gacatcattg ccagggagga aaaaggaaga aaacagataa tatcacttca aaaacagcta 660
attaatgtca aaaaggaatg gcaatttgaa gtccagagtc agaatgagta tattgctaac 720
ctcaaggacc aactgcaaga gatgaaggca aaatccaact tggagaatcg ctacatgaaa 780
accaataccg agctgcagat tgcccagacc cagaaaaagt gtaaccagaa cagaggaact 840
cttggtggaa gagattgaga aactcaggat gaaaaccgaa gaanangccc ggcctcn 897

<210> 675
<211> 838
<212> DNA
<213> Homo sapiens

<400> 675
agcagagatg catggtatag agctatcctg tgcattacga tagctgctag ccacatgtgg 60
ctgttaacac tgcagtgtgc taggtctgaa ttgagaggtg ccgtcactgt aaaatacata 120
acaggtcttg aagatttata tattaaaacc tgttcatcat ctcaataatt tttagattga 180
ttatatgtag aaataatatt tttgtagttt gaatttaata agatattatt aaaactgggg 240
ccaggagtag gggctcatgc ctgtaatccc agccctttgg gaggtcaagg tggaagaatc 300
acttgaaccc aggagttcaa gatcagccta ggcaacataa tgatacctca tctctacaaa 360
aaaataaaaa ttgaaaaatt aattacactt ggttgttttc atatttttgt gggattacaa 420
gataaaattt gaaaaataga tgtagcttgt gtttgtggct tgcattattt tgctatttga 480
aagtccaagt atagagtgag gcacagcata gactggaggc acattgcttc acttcaaatc 540
ctgatccttc cccctactcg ttttgtggtc tttggcaatt tactaaatct gtctttcatt 600
ctttgtctta tcatcttgta aaatcaagat agtgatagta cctaactcaa aatattgtta 660
tgaggatagt ttatatgtct aaatcattta gaacagtatc tggcatagag tgcatactct 720
tcaaatgttt ggtgaataag taaataaacc cactggtcat gtgcaccttn accccagtag 780
gtagaattat caaagaagta atgcagtttt taaagtagca ntttccggga atanccgg 838

<210> 676
<211> 541
<212> DNA
<213> Homo sapiens

<400> 676
agttgggcat ggtggcgggt gcctgtagtc ccagctgctt gggaggctga ggcaggagaa 60

09502950.0N2800

tggcgggaac ccgggaggca gagcttgcag taagccgaga tcacgccact gcactccagc 120
ctgggcgaca gaccgagact ccatctcaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa 180
aaatatatat atatatatat atatatatat gtataggctg ggtgcagtgg ctattcagag 240
gctcactcat tgtgcgcatg gtgcttatgg tgcctggaat agctggcact acaggcatgt 300
gttctgtgcc agntcaagtc ttcaattttg cttcaaatct ttaactttn aattgtgaaa 360
tataactgta tgcagaaaac tgcataaaac acaaaggtac tgaataacaa ataattataa 420
agtgacatct gggtcaataa ctagaccaca gtcagacccc tgaagctccc tctgtgtcta 480
gtntagtcac atccccctcc ccttgctcaa aaggttttca gnaatcacat cctttttttn 540
t 541

<210> 677
<211> 639
<212> DNA
<213> Homo sapiens

<400> 677
tacagagatg aaaaatcatc tggaattcgg aaaagggaac taattccatg gctggcagcg 60
atcgcacccg tgcacggagc cacatacatg tgcgacatac gtgtgcgctc acatgctata 120
ggtcccggcc ctcttgctgg tcttgccacc atcttcctac ccagcttggt gacctccctc 180
atggccttgc tcggtccacc ccatgtgtgt gtggcacctg ccctgggaca cccctgcagg 240
ccctctttct ctccaagggg cgcccatctc aatccccact tctgggaagc ttgcgtaccc 300
cgtgatcacc cacgctgatt cctgctcttg ggggtgtagc tggcgcccag ggttggggag 360
gatggagagc tggggaccag cacacctggg ctgtggagcc tgcagggagg gggtggaagg 420
gggggacttg aagcccagct tctattccca gcctgcccag gggagcccctt tctcctgggg 480
ggcctagtag gaccctgtgg gcacgttggg gaggagccta caggcgcctc agctgcacgg 540
gagtgtgttt gcatccagca gtttgggccc ccggccggtg gcgtctcacc tgcacgtnag 600
gctgtgtgat gcttgcaggc atctnggtgg gganggtgg 639

<210> 678
<211> 726
<212> DNA
<213> Homo sapiens

<400> 678
tgccatcacc aaccctggct ggcagccacc acgtgagagc acagccttcc taggcttcct 60
caaggagcag gttcagcggg atggagcagc tgctagcctc gcccaagggg gtctgctccc 120
tgaaaatgcc ctctttacgt ctatccagtc cttacaatct gagtctgagc ccctgagcct 180
tatcgcaaat gtggtagctg gctcatcctg ccggggccct ccactgccca gagacctgca 240
gggctccagg cacagggctg aagtcgcctc tgccctgcgc tccttctccc cgctgcaacc 300
cgggcaggcg cccacaggcc gggctcacag caccatgaca ggctctgggg tggatgccag 360
gacagccagc tccgggagca gcgtgtggga aggacagctg cagagcctgg tgctgtcaga 420
atatgcatcc acagagatga gcctgcatgc cctctatatg caccagctcc acaagcagca 480
ggcccaggct gaacctgagc ggcatgtatg gcaccgccgg gagagtgatg agagtggaga 540
aagcgcccct gatgaagggg gagagggcgc ccgggccccc cagtctatcc ctcgctctgc 600
tagctatccc tgtgcagcac cccggcctgg agctcctgag accaccggcc tgcatggggg 660
ctttcagagg cgctacggtg gcatnacaga tccttggcac antggcccag gggtnccttt 720
tcattt 726

<210> 679
<211> 893
<212> DNA
<213> Homo sapiens

<400> 679
aaaaaaaaaa aaaaatatat atatatatat atatatatgt atatgcacac acacatatat 60
tcgtatgtat atatatacac acatatacac atatgtatac atatatttat gaaaaggaca 120
tagaggtggc atatgatcgc atatgtatac atatatatat atatatatat atgccactta 180
taatagctca aaaaaattaa atggttagat gtaaacctag caaaccatgc acaagacttc 240
tgtgctgaaa actgcacaat gctgatgaag gaaaccacag aatatttcaa taagtgggga 300
gacatactgt tttcatggat ggaaaactca acctagtaga gctgtcactt ctttccagat 360
tgacagacag ttttaccaca attcctatca aaatctcagc aagatttttt tgtagatata 420
gacaacataa ttctaaaatt tatgtggaaa ggctaaggaa ccagaatagc caaaacaact 480
ttgagaaaga attaagtgga aggaatgagg ttacctaatt tcaagactta ttgtatagct 540
acagtcatca agactgtggt gtggatggag gaacagacac ttaggttcat gaaacagagt 600
agagaaccca gaaacaggcc tacacagata tgcccagctg attttttga caaaggtcag 660
aagcaagtcg gggaaggtca gcctttcaac aaatgatgcg ggggcacctg ggcacccaca 720
ggcaaaacaa tgaacagcca ccaaaggctc acactttata caaaaattaa cttaaaatgg 780
atgatggact taaatgtaaa atgtaaaaca tagtattttt taaaatggga gaaaatcttt 840
gggatcacta ggccaagagt tatgaggtta ggacnaaagc ctgaaccctt aan 893

<210> 680
<211> 731
<212> DNA
<213> Homo sapiens

<400> 680
cgagattact gaattttaca agcttgacat tttctattgg ctttataagc tcttctcatg 60
tttttattac cctcacatcc aatccgttcg agctacacgc taaatcaaat tggtatttta 120
tatttttatt tttttagagg caggatctcg ctctgtcacc caggcaggag tgcagtggca 180
cagtcatggc tcgctgcagc cttgacctcg cctcagcctc cccagtagct gggaccacag 240
gctcatgcca cgcacgcccg gctgaagcta gttttaactg aagaaaactc aaagtgttct 300
ctcgccgtta acctttatta ttgaggcatt ggctctgcta taggaaaacg aggtgacgtt 360
aatatcggtg gttgacatta accactggca agtgacagtg tggctccttg acaagtggtt 420
gctgctcata aatgtcatga aacaaaaaca ctgattttag agaagtggga ttctacagtt 480
aatatcgcca gcaaactttt attaagctct cactctgtgc caaacacatg cttgaagttg 540
gggtgaatcc gtgaccatta agatgttggc tgttcatggg cacgttatca agcaactggg 600
gtgtgagagc gaatgataag agggtgaatc tggatganga gggacttcca gggcacaggt 660
ggaggagagg cattgcagcc atagagaggc ccaagggaac agtcnagaca aggcggggac 720
agtggncaag a 731

<210> 681
<211> 751
<212> DNA
<213> Homo sapiens

<400> 681

0050505-0020000

atcatggcgt caatgcagaa acgactacag aaagaactgt tggctttgca aaatgaccca 60
cctcctggaa tgaccttaag tgagaagagt gttcaaaatt caattacaca gtggattgta 120
gacatggaag gtgcaccagg taccttatat gaaggggaaa aatttcaact tctatttaaa 180
tttagtagtc gatatccttt tgactctcct caggtcatgt ttactggtga aaatattcct 240
gttcatcctc atgtttatag caatggtcat atctgtttat ccattctaac agaagactgg 300
tccccagcgc tctcagtcca atcagtttgt cttagcatta ttagcatgct ttccagctgc 360
aaggaaaaga gacgaccacc ggataattct ttttatgtgc gaacatgtaa caagaatcca 420
aagaaaacaa aatggtggta tcatgatgat acttgttgat gccactgtta tcatcctcct 480
agcagaagat agtcctactg agaaaatgag cactttgatc attcagtctt tgaactttaa 540
cctttgactg gaagtgacct ataggcaatg aagactactt ccttttactg catttttact 600
cgtgtgcatt ctgggcgcat gttgatcgct ggttcagtcc aggcaactga catgctttta 660
ttagtcatac agtattaatg caggtgtcan gaaatgtcaa atataattcc attttttatt 720
nntatttttt taagcttttg gaaaagcttc a 751

<210> 682
<211> 798
<212> DNA
<213> Homo sapiens

<400> 682
taaaaaatgt ttacagtaat ggggtctcac tacgtttccc agcctggtct tgaacccctg 60
gcctcaagca atcctctttc ctcagcctcc caaagtgatg ggattacagg cataagccac 120
tgcgcccagc tccccgttaa ttgtatgctg aacaaacctt ccattccagg aacaaatccc 180
acttggtcgt ggcttataat ccttttcata tgctgaattt gatttgctag tattttgttg 240
aggatttttg catcaatatt catcggagat aatggtctga agttttcttt ttttgtggtg 300
tctttgtctg gctttggaat cagggtaaag ctggcctcat ggaatgagct tggaaatgtt 360
ccctcctctt catttttttg gaagagtttc aggaggattg gcgataattc ttctttaaat 420
gtttggtagc attctccgat gaagccatct ggtcctgggc ttttctgtgt tgggaggttt 480
ttgattactg attcaatctc tctcattatt ggtctgatca gactttccat ttcttcatga 540
ttcaatcttg gtaggttgtg tgtttcctct agaaattggt ccatttcttc taggttatta 600
aatttgtagg catacaattc ttcataatat tctcttataa tccttttttat ctctgtcgta 660
ttggtaagta atgttccctc tttcatttct gattgtagtt attgaatggt ctttttttt 720
cttaatctag ctaaggattt gtcaatttgg gttgatcttt tcaaagaacc aacttttaa 780
ttttngntgg ntggaatt 798

<210> 683
<211> 854
<212> DNA
<213> Homo sapiens

<400> 683
actatataat ttgtcacaat tcaatctaat cagctaaagt taaatgtagt tagaattagc 60
cacaggagaa tgtaaagcat gctttgacga agctatcggt aacacatatt gaatgtcttt 120
gagactctta gattgtacta tttgcttaat agattaatga aatttatcag atacaacctg 180
tatttccaaa aacaagctag aaggaacctg aggaatgtgg tttacatttg agatccacct 240
tactgtgttt tctactttca gaaaagattc tgtagttttg gtttttggca tctttcttat 300
actcagtttt ttctgcctta attcccattt acctgcagtt aactcatgtt tattgtgctt 360
tcatgcattg tgatatggaa tgtgtttagt aatttactcc ttataaatat ggtaaagtac 420

0023503450

agtggtatgg ttattctatg cattaagtta atgacattaa taagcttggt tatgaggggt 480
tggagccata catgtaattt aagagaacag ttaaaagtgt aacatagttt tagcttggtg 540
tctaaataat gggcagctga taaaacagct tggaccatat tgttttaaag agagcctaca 600
agcacagaaa ctagttatag atctaatgtg gaattgctga actcagaact aggccatgga 660
agtctgaaaa gcaaatatgg ctgtttcaaa ctcatttttt tggcagcttt tttatttta 720
acactttatt gaggtataaa ttgacttgaa cacacaggta aaacatacag gtttaccagn 780
gntttgacct acaacttaag tggaacctta atctaattat ttccccccga aatttcttgg 840
gttcccnttt taag 854

<210> 684
<211> 868
<212> DNA
<213> Homo sapiens

<400> 684
taaacaaatg aacaaaaaag agtgggagat gaaaataagt gtaacgggga aataatgcat 60
gcaaggaaaa aggtttggag taggggggatt tcagttttaa acagtatgat cagggtggtt 120
tcattgagaa ggtgatagct gagcaaagac ctggagtgtc ccaggcagag agaacagcaa 180
gtgcaaaggc ccttaggtgg ggactgtatc tatcttttt ggggtgtggg gggacagggt 240
gtgtcttgct ctgttgccca ggctggagca cagtggtgca atcacagctc actgcagcct 300
tgaactcctg ggctcaagcg atcctcccat ctcagtctcc caagtagctg ggactacact 360
tgtagctggg actacaagtg cgcttcatta cgtctggcta attttttaat ttctgtagag 420
aaagaggtct tgctatgttg ctcaggctgg tctcaaactc ctgggctcaa gtgatcctcc 480
tgcctcagcc ttccaaagtg ctgagattgt gcctggctgt ctctgtcttc tttggggaaa 540
agcaaggcca atgtagctga agcagagagg agagaaaggt gagggctgac tgcatggagc 600
ctctgtgggg cattgtgatg gctttgaagt caccttgctt gangaggctg cctcaaggcc 660
tttgcatatc ctgatccttc tgcctggcat acttttccct ctggtctttg ccatgttacc 720
acatncttta gatctcaaac caaatattac tccttacaca aagccctgcc taacttcata 780
cgctcatggg ttataacact tcataattac acaggccttt gnggcataat ttgatgactg 840
ctggcttctn cnttgggtat taaaactt 868

<210> 685
<211> 713
<212> DNA
<213> Homo sapiens

<400> 685
aggtgcggct actcccccgg ccccggcaga cctgcgactg gcccagtcgc ccctggggcc 60
ctttgccact cccttggcaa ggagagccga gacctcagtt cccggcggct cttgcggggc 120
acaggtgagc cctggctgcg cgcgcggccc ctcctccccg gcgcctccca gccagggccc 180
cagcccctat gatgaaagcg aagtgcacga ctccttccag cagctcatcc aggagcagag 240
ccagtgcacg gcccaggagg ggctggagct gcagcagaga gagcgggagg tgacaggaag 300
tagccagcag acactctggc ggcccgaggg cacccagagc acggccacac tccgcatcct 360
ggccagcatg cccagccgca ccattggccg cagccgaggt gccatcatct cccagtacta 420
caaccgcacg gtgcagcttc ggtgcaggag cagccggccc ctgctcggga actttgtccg 480
ctccgcctgg cccagcctnc gcctgtacga cctggagctg gaccccacgg ccctggagga 540
ggaggagaag cagagcctcc tggcgaagga gctccagagc ctgcagtggc acagcgggac 600
cacatgcttc gcgggatgcc ttaacctggc tgagaaacgc aagctgcggc ttgacagctg 660

0500204050 - 05/12/2008

gcctggcctg tntcgcctga ggcctgatgc gggcntccct gacnatgggc agt 713

<210> 686
<211> 842
<212> DNA
<213> Homo sapiens

<400> 686
ttctaatgag gacataagtg agggacactg gaaagaccaa aagagaatgg aaagtactga 60
catggtagtt gcagggtgct agtgagcagt catgccccca aatcagccac cttacataga 120
actccccaag ttcagggcca ctggatgggg ttgtgacgca gtcaagcagg gcccagaaag 180
catacaagca gttggtttca tctcctgtaa gaaagtggca tcatccctgc tttgtaaacg 240
gagaacctga cacacaccaa gagcactcct agccgtggaa aaaagccgct agaacccgag 300
gttagtctga tttttggttc ctctgaaaat tagcttttgc tggatgctag attcagttct 360
ggacttactg agtagtctct gggtttttga cattgttagg cactgtggga aaattataac 420
aggtacgtct gcgctgagtt gcttgctaat tcctaggaga gacttggaca ttttggacaa 480
ttaagaagca atacaggcca ggcacggtgg ctcacgtctg taatcccagc actttgggag 540
gctgaggcgg gtggctcatc tgaggtcagg agttcgagac cagcctgacc agcatggtga 600
aaccccatct ctactaaaaa tacaaaatta gccaggcgtg gtggcacatg cctgtaataa 660
tcccagctac tcgggaggct gangcaggag aattgcttga actggggagg caaaggatgc 720
agtgatccga gatcacgcca ttgnacttca gcctgggcaa caagagtgaa attctgctca 780
aaaaaaccaa ccnnccaaag gaagccaata cagctctttg agaaaagatc cagtcattaa 840
gt 842

<210> 687
<211> 918
<212> DNA
<213> Homo sapiens

<400> 687
gcagcgcctg gagcatgagc cgggtggtgg cgtgcacgga ggatcgcggg aggctgccgc 60
ctcgggacac cccactcaca cagggcaaaa ggatgtatac actccatctt catttaaaac 120
actggaggat tggaaaggag aaaaggaaca ggacagaaaa aaaaacagag tgttctgaac 180
atcaacacaa agtggaagaa ccttaagctg aaggtacagt atattattta cactgaaggg 240
gcttgtgtgt ggacaagaaa gcgctgacag ctcaaatgga tcccatggaa ctgagaaatg 300
tcaacatcga accagatgat gagagcagca gtggagaaag tgctccagat agctacatcg 360
ggataagaaa ttcagaaaag gcagcaatga gcagtcaatt tgctaatgaa gacactgaaa 420
gtcagaaatt cctgacaaat ggatttttgg ggaaaaagaa gctggcagat tatgctgatg 480
aacaccatcc cggaacgact tcctttggaa tgtcttcatt taacctgagt aatgccatca 540
tgggcagtgg gatcctgggc ttgtcctatg ccatggccaa cacagggatc atacttttta 600
taatcatgct gcttgctgtg gcaatattat cactgtattc agttcacctt ttattaaaaa 660
cagccaagga aggagggtct ttgatttatg aaaaattagg agaaaaggca tttggatggc 720
ccgggaaaaa ttggagcttt tggttccatt acaatgcaga acattggaac aatgtcaagc 780
tacctcttta tcattaaata tgaactacct gaagtaatca gagcattcat gggacttgaa 840
gaaaatactt ggaaaatggt nctcaatggc actaccttat catanttggg ctggtggaaa 900
tatcttccct ttcgttcc 918

<210> 688

0552469 - 0552469

<210> 860
<211> DNA
<213> Homo sapiens

<400> 688
acgtgggccg gagtcggaga ctgagtttag ctttactgag gagctctaaa tttaggcggg 60
tatgagtgat ttcagtgaag aattaaaagg gcctgtgaca gatgatgaag aagtggaaac 120
atctgtgctc agtggtgcag gaatgcattt tccttggctt caaacatacg tagaaactgt 180
ggattatttg gaagctcgga agtgaaattc tattttatca tcccaaaagc aacatggaga 240
gtttcaatac ttttgctaac cggatgaaaa atattggcgt catgaattat ttaaagatct 300
ccttacaaca tgcattatac cttctgcatc atggaatgct taaagatgct aagagaaatc 360
tgagtgaggc agagacatgg agacatggtg aaaatacgtc ttcccgggaa atattaatca 420
accttattca ggcctataaa gggcttttac agtattatac ctggtctgaa aagaagatgg 480
aattgtcaaa gcttgataag gatgattatg cttacaatgc agtagcccag gatgtgttca 540
accacagctg gaagacatct gcaaatattt ctgcattgat taaaattcct ggagtttggg 600
acccttttgt gaagagttat gtagaaatgc tggaattcta tggggatcga gatggagccc 660
aagaggtctc accaattatg catatgatga aaagtttcca tcaaatncaa atgcccatat 720
ctacttatcc actttctaaa gagacagaag gcaccaagat caaaattgga taagtgngct 780
taaanatttt ggattcaaat tggacccatc tcataaaant ggaggttggg aatttccata 840
cctttacttt aagaaaaatc 860

<210> 689
<211> 784
<212> DNA
<213> Homo sapiens

<400> 689
gtagagtgcg cgacgctttt ggcgacccga cctctggcta acctaccccc ggagccatgg 60
cctctgctgg ggtggcagcc gggcgacagg cggaggatgt attgccgcca acgtccgacc 120
agccgctgcc tgacaccaag ccgctgccgc ctcctcagcc gccgccggtc cctgcgcctc 180
aaccgcagca gtcgccggcg ccacggcctc agtcacctgc ccgcgcgagg gaggaagaga 240
actactcctt tttacctttg gttcacaaca tcatcaaatg catggacaag gacagcccag 300
aggtccacca ggacctgaac gccctcaaaa gcaagttcca ggagatgcgc aagctcatca 360
gcaccatgcc cggcatccac ctgagccccg aacagcagca gcagcagctg cagagcctcc 420
gggagcaagt caggaccaag aatgagcttc tgcaaaagta caagagcctc tgcatgttcg 480
aaatccccaa ggagtagagt gaggctgact tccttagaaa gaggggggaag ccaatggcct 540
gtctccccac taccatcccc aaacgctcct tggggcgtgg ttcctgtgga ccccagctca 600
gctcgtcaag ctgcaggggc ggggctcctg tgctgctgcg cgcgcttcgc tgtgcgggag 660
ccaagcgcaa aagcttggct tgcgcccggg gttcctcgtg tagatccata tgtctaagat 720
gcattaataa ctggaatgcc ctgctgggtg gnaagtcaag aatgcttncc tgggangctt 780
gcaa 784

<210> 690
<211> 911
<212> DNA
<213> Homo sapiens

<400> 690

09/27/2005 08:00

aaaaaaaaaa aaaaaacaat aatgagctct gaaattaaat cagtaataaa taacctacca 60
actaaaaaag cacaggacca aatgaattca cagccaaatt ctaccagatg tacaaagaag 120
agctggtagc atccttactg aaactatccc aaaaagctga gaaggaggga ctcctcccca 180
actcattcta tgaggcaagc aacatattta taccaaaacc tggcagagct cacaaaaaaa 240
gaaaacatca gactaatatt cttgatgaac attgatgcca aatttctaaa ctaaatagtg 300
agaaaccaaa ttcagcagca cataaaaaag ctaatccacc gtgatcaaat aggctttctc 360
cctgggatgc aagtttggtt ctacatatgc aaatcaataa atgtgattca tcatacaaac 420
agaaataaag ataaaaatca cctgattatc tcaatagatg caggaaagtc ttttgataaa 480
actcaacatc gcttcatgtt aaaaatgctc aataaactaa gtattgaagc aacgtacctc 540
aaaataataa gagccatctg tgaaaaatcc agagccgata tcatactgaa tgggcaaaag 600
ctggaagcat atcccttgaa aaccagcaga tggcaaggat gccctctctc aacactccta 660
tttagcatag tagtggaagt cctggacaga gcaatcaggc aagagaaaga aataaagggc 720
atccaaatag gatgagangg agtcaaacta tccctggttg cagacagcat gattttatat 780
ctaggaaaac ccccatacac gtcccaaagc ttcttgngct gataaaaaaa aacttttacg 840
aagttcagaa tccaaatcac cttaaaaaat ctttacattc tatttcccaa caccggtcaa 900
ctgngagtca a 911

<210> 691
<211> 910
<212> DNA
<213> Homo sapiens

<400> 691
gtttaataat taaaatgtga taataagata atattataag tacctgacca gaatgagact 60
aaggcagaag agaagagatt ggatgtcctc taaaattagg ccacctaaat tgtaacagat 120
aattttaatc aagagaatag tggagtactt tattaggaca taatgtgaag tgatatttct 180
gaaaacacat ttcttgaaat agttttaaaa ctgataataa aggaaaagaa actgtactta 240
gtttggagca gtggacaaaa gctgattcag aaaacatgac catattctgc ctacatgaag 300
catctgggaa gaaagggaaa gtcacacctc ctcttgagat tttaaccatt atgataaaag 360
gtatgcttta atttgttaaa aaaaaaagta tgaaagggga taatgtgaat acaaaaaaga 420
agcctagaga ttgaaaataa taataataga acatgttatt aggagatggt acttaatgtc 480
atgttggagt tggagttttc aaggttacct ctatataaaa ttggattatt ttctgttaga 540
tataatgtga caaattaaat gactttatcc caaggtacag tgaggtaaac aaaaatctat 600
tcttagatat ccttagattt ggttaactga gctgtagaag cagcgaattg tctagccatt 660
taagttattt ttgtaaaatt cagcataaac atcaatctct aatttctatc tagaagtgac 720
tttaagacat tacaaggaac attggccatt tggaaaatgc ccataaaata ctggagactt 780
attaatattg gagacttatt atcagccttt actatgctta atttaaatat gggtttcatt 840
tttacggaan aagnccagat tccttaaggc tcctggggac ttaagctccn gggcctggta 900
ttataaaaaa 910

<210> 692
<211> 756
<212> DNA
<213> Homo sapiens

<400> 692
tagtgtagac ggaagctcct ttggtgccag attataaagg tagaaatttg tggaggacat 60
cgaggagaca gaagacatgc tttatacatg tttcttttta ttttaaaaag ctttgaaata 120

0956450-D2000

catttgaatg aaaaactaag cagttgctta tgctgtcagt acctgtctct gctctttaaa 180
aagtaagcca ctgcctctta cctaaaggtc agcatgggct ccatcataca gcggtcaggt 240
ccatcataca gcggtcaggt ccatcataca gcggtcaggt ccatcatacg gcggtcaggt 300
ccatcataca gcggtcaggt ccatcatacg gcgctcaggt ccatcataca gcggtcaggt 360
ccatcatacg gtggtcaggt ccatcatacg gcggtcaggt ccatcatacg gcggtcaggt 420
ccatcatacg gcgctcaggt ctgtaactct tgacaggaag gtgcagtagc agaatggcga 480
gatgcactga gggtaaccag atgatctcat gggacttacc cagtgttagc accaaagtcc 540
catgaactga ggtgttaaaa cagaaaggcc tgtgtcctca gaacccctcc aagtcactgg 600
ccaactatga ctcatgtttg gtgatgttgg atgccagtta ataaagtcca gaacttaagc 660
ccaagaagag agctcagaag tgtttgngtt actctttatt tattgaggaa taatttacna 720
gatagtaaaa tttacccctt atatctgaca gntttg 756

<210> 693
<211> 733
<212> DNA
<213> Homo sapiens

<400> 693
atttactaat gaggcagttt gcaaagactg tccctgaagt gtagtgtagt ctttcagggg 60
gattcattta gtaagctaga ttgatttaac ctggtactgt actagcatag ggtcaaatac 120
gtgtcatcag agacctgggt atgaccaggc ttacaaaact caggaacaaa ctcagattcc 180
tactgacctc aaccaactaa actaggccaa atttctccgt gtacaaaatg gaccacgtta 240
tttacaatcc acgtggtgga gaagatggta gacatgtgga gagagtttgg ccaggtgctc 300
cattctaggt ctttttccag tttctcaaag gcagaacatt ggctcctaat tatttgccat 360
ggatatttgc ttcctgttct ggagctatgt tgtaagacag ctgtgtgatg tccatcattc 420
ttgactccag aatgaagaca gggcttgctg ttttctgtcc tgttggtatc atctgttgcc 480
ttggcgatca ctcagtgatg agtcgtcagt attttgacat gtcccagtgc ttgctgtaca 540
agaggggact cagatcaaca ggaagactct gaagacagga acctgcatgg tatcttacat 600
ctttgatact tgggtgctga tatgaagcag agttgttgat ttactttatc taggcccttc 660
tttcatctca cctggatcaa gcaactgana agtgtatcaa ggagacctgg atcatatctc 720
tatgaaatnn aaa 733

<210> 694
<211> 745
<212> DNA
<213> Homo sapiens

<400> 694
attctccagt ggcattgcca ttgcccagga ggggcccagt caccatgaga gctcccttgc 60
cttacctgga ggaagaatgt gccttcaggc cacagtcgtg ctgctagaac agtctcatag 120
ctgcagttca gctgtgcttc ctcagcctac tatcataggc ttcctcagcc ctctgtcata 180
tggctgtttt ccaaacctgt ggagtctgtt actgttcttt ctgcaaggac tcacctcctt 240
gagccttggt ttttgttgta gggattaaat gagataatat gagtggcagc tcttcatgag 300
tcctgcagtg ctaagcaaat gtcagaaatt ggtgtattag actatttatc tttgatcttc 360
tgaatggatt gctgtcatgg acacggacac ggatcttcat ctggttcatt gtatttatat 420
gtgagggatg gatggctgcg gggctccaag agcagcctcc tgaagtgagg gtggcaagta 480
tgtgacaggg cacccacaaa ggcagacgag gactctgaga accaacagga cttctctggt 540
cttattctga ggctaagaca aaaaccgcac ctgagccaga tctctcagcc tggcagctcc 600

US 2005/0250150 A1

aggacccgtg ggccctgcca ctggcccatc tcaacggcta ggacctagag catcatcaag 660
ctgcaggtta aacaggttgg ttggttctga tttgactgcc ctttcaagga cctatggntg 720
cacttgtnga tacttttccg angag 745

<210> 695
<211> 846
<212> DNA
<213> Homo sapiens

<400> 695
gatacataca cctgcaaagg ttcagctttc cctatacaca tatttgtctg ctgaatttat 60
tggaactgct accatctaca ccaccatacg cagagtagga acagtattac agctaatgca 120
caccttaaaa tattactact gggttattaa tcctgctgac agtagtggca ttacacctaa 180
aggattagat ggtccccggc catcacaaaa agaaattata tcactgaggg catttatgct 240
acttttctg aaacagctga tactaaagga tcgaggggtc aaggaagatg aacttcagag 300
tatattaaat tacctactta cgatgcatga ggatgaaaat attcatgatg tgctacagtt 360
actggtggct ttaatgtcgg aacacccagc ctcaatgata ccagcatttg atcaaagaaa 420
tggaataagg gtgatctaca aattattggc ttctaaaagt gaaagtattt gagttcaagc 480
tttgaaggtt ctgggatact ttctgaagca tttaggtcac aagagaaaag ttgaaattat 540
gcacacccat agtcttttca ctcttcttgg agaaaggctg atgttgcata caaacactgt 600
gactgtcacc acatacaaca cactttatga gatcttgaca gaacaagtat gtactcaggt 660
cgtacacaaa ccacattcag agccagattc tacagtgaaa attcagaatc caatgattct 720
taaagtggtg gcaactttgt taaaaaactc tacaccaagt gcaganctga tggaagttcg 780
ccgttatttt atctgattga taaaactttt agtaacagcc gngaaaatag aaaatgctta 840
ttgcan 846

<210> 696
<211> 600
<212> DNA
<213> Homo sapiens

<400> 696
gttttgtctc ccagcatgtg ggaaagatgt catccattgc ttctgtttcc tggaggcctg 60
ggagcaagga gcccaggaac agtatcacga agcttgagat aacaccagtt acattatcct 120
gactgcccaa aaggcagttt ttttgttttt ttttttata ctttaagttc tggggtacat 180
gtgcagaacg tgcagttttg ttacataggt atacgtgtgc catggtggtt tgttgcaccc 240
atcaacccgt cacctatatt aggtatttct cctaatgctg tccttcccca acccctccat 300
tccccatcag gccccagtgt gtgatgttcc cctccctgtg tccatgtgtt ctcattgttc 360
aactgtcact tatgagtgag aatatatggt gtttggtttt ttgttcttgt gttagtttgc 420
tgagaatgat ggtttccagc tttatccatg tccctgcaaa ggacatgaac tcatcctttt 480
ttatggctgc atagtattct atggtgtata tgtgccacat tttctttatc cagtctatca 540
ttgatgggca tttgggttgg ttccaagtct ttgctattgt gatttttttt ttttttnnn 600

<210> 697
<211> 788
<212> DNA
<213> Homo sapiens

0050-0450-0-0050-0

0508503.0470003

<400> 697
catttcactt accatttcag gcaaagttgg ctaagaacat gaggctgttt ctgatatttc 60
cttttatttt tatgtattaa tgagaataat aggtataggc catatactta ttagagactc 120
tcaatgactt atacttatta ttctcaattc atattatatc atattatact cattgaaaat 180
aagccatata cttattagag acttatttag agtcttatta gagacttatt aagagtctct 240
aataagtata tgggttgtca agctagacac aaaatagtac catctctctc cacctctcta 300
aagaggacca catcatctcc aaatgtaaat agacaagaac aaaaaaaatt gtgcatttac 360
taggcaattg aatgttctcc aaaccaatat tcctttgaac aaaatgagtt tgtttgattt 420
gagaacaatg aagtatttgg ctattttata atcataagtg attcataccc ccacacactt 480
agccctctag aaatggtgcc agaagatgaa acacatttaa ttttgccata tagaagcatt 540
gcaaataact actggtttct aataatgtac cttataatgc aaataatgtt ttaatttta 600
aaaatatcag aaaaagtaca acctttaaa ttatgtagtt gcttcttctt cataatcatt 660
tttcttgaac tggtgaaaaa ttttgtcaga agttaccact tgggacatat tgtactacag 720
cttctcgctt ggctggagaa actggttttc cagaagcaga ccttatacca gangtaaatg 780
accattat 788

<210> 698
<211> 785
<212> DNA
<213> Homo sapiens

<400> 698
tttgacttaa gaagccattt tatggggaaa ttagaatgaa tcttaaaaaa gttttttttc 60
ttcttttgat tgtattgaat tcctttgtag tgtggctttt ttaaaagact gaatctttgt 120
tctcattaac cctaggaaat gttcttgctt tctctgctta tctctttgct ctttaatatg 180
aacagaattt tttttactcc ctaaggaacg caagccattt tctgtttcta gcactcccac 240
catgtcacgc tcaagttcaa taagtggtgt tgatatggca ggactacaga catcttttct 300
gtctcaggtg atgttttatt ttttatatgt gcttagttct tagaataata ataaaggaaa 360
tatgcaaatg gcaatattgt ctgtcatcat gaccttgcca ttctatgggt aattcatctg 420
aatacttgtg gaggagtgct aattttagtg agaggaaaca cgtgaatgat tttctgcctt 480
tgagaagaca tttaaagcaa aaattgacag aaccattttt gttcgaacct ggtaatggaa 540
gacaagctat gataactgag taactgtgtg aactttctta attaacatag gatgagtctc 600
atgatcactc atttggacca atgcctatat cagcaaatgg aagcaatctt tatgatgctg 660
taaggatggg agcaggatca agcataattg aaaacctaca gtctcagcta aagctaangg 720
aaggggaaat cactcattta caggtattgg aaaaattaaa tttgctatag aagtaaatga 780
agttt 785

<210> 699
<211> 784
<212> DNA
<213> Homo sapiens

<400> 699
tactatatca tcttcaaaga tttatttatt tatttttgtt ccttttcttg gtgtggtttg 60
tgtgttgatg ggtggtgaat ttggaggaaa gaaatgagtc ttgagaaaat accttggtca 120
ttcattctta atatgtttag agaatagcaa actttcagca tattttattg agatcaaaag 180
tagcatgtga aattagacaa tgaaatgtca atttttgtat tagtttcctg gggctgttgt 240
cacaaagtac caaaaactgt gctgcttaaa caataggaat gcattgtccc acagttctgg 300

aggctgcaag tcgaagatca aggtgtcagc aagttggttc tttctgaggg ctgcgaggga 360
aaatctattc tgtgcctctc tcctagcttt tggggactca agcattcctt ggcttgtaat 420
ggcattcttc ccatgcctct ttttatatgt ctgtctctga atccaaattt ctttttttata 480
aagacacaga catattggat tggaacctag cctaatgact ccaagttgat catcagcaat 540
gaccctattt tcaaataagg tcatgtttat tcacactgag gattagaact gcaaatatgt 600
ttctttttag gggggacaca attcaaccca taagaattct gaaactttgt tttgcctttt 660
ttgattagtg ttaatacatt ttcagagtac tttatattct cagggcttag aataagacaa 720
agtaagatta ttcattcgag tatactgggt tatttagtaa gaaaatggac tgagatttca 780
taat 784

<210> 700
<211> 787
<212> DNA
<213> Homo sapiens

<400> 700
ttgctttgaa cttgggttag ggtctgtgtt tagcctgaga ggtccttgta gggaagcttg 60
tatcagaagt tctaatgggt ttgagttctc aggccatata tagcatcatg ttagtgtttg 120
agttgtgata aaaattatgg ggtttttttgt taggcctaaa ttaaaagaaa ttatttttct 180
tttcaacaat gaatctgaaa ttcttagtat aaccaaatct gatgcattta caattttatg 240
tacacattgg tgtgtttcat tttttagaaa ctgtgaagcc tcattcagat agtattaaaa 300
tacaggattt tccttttcat taatgagtcc tatgatgtaa gtgttatatt gatgttaaaa 360
tgaagtagtt ttgtaccctg ggtgcataaa attgtcagag agaattaaag gagaaagaac 420
tcaaacttca tcagagatct tgatttaatt catgtgaaga gtgtggatta cccccaaccc 480
ccaaccccat gactctaata cacattagag tgtattaact agggatggtg tgtttatttc 540
tgccttaggg cactagcttt ccaaataact tttggtatgg gcttgagcca tccctgtatt 600
catgcacaga gtttcaaggc agaaatttga gctaccctgt aacttaacag ttgaaaaaaa 660
ccctgcttcc tgtgttatct gtcttactta cactgccata gcttgcagtt tagcacttgn 720
ctttctttta cctaaggaag taatttgttg agggaactag ccctttttgct tattgaaact 780
ttgcagg 787

<210> 701
<211> 514
<212> DNA
<213> Homo sapiens

<400> 701
atccgctatt gtgcatataa tattggggac cagtcagcca tcaatgaact catgcagatg 60
agattgaggt ctgggggcac tgagggtctc ttggctgaaa aattggaggc tttgatcact 120
cagactcgag ccaaacaggc agctaccatg agtgaagtgg agtggagagg gagaacggtt 180
ccagtgaaga ttgacaaagt gcgcattttc ttattaggac tggctgataa cgaatcagct 240
attgtccagg ctgaaagcga agaaactaag gagcgcctgt ttgaatcaat gctcagcgag 300
tgtcgggacg ccatccaggt ggttcgggag gagctcaagc cagatcagaa acagagagat 360
tatatccttg aaggagancc agngaaggtg tctaatcttc aatacttgca tagctacctg 420
acttacatca agctatcaac ggcaatcaag cgtantgaga acatggccaa aggtctgcag 480
agggctctgc tgcancagca gccataggat gacn 514

<210> 702

09/02/2005 - 09:00:00

0050245-050800

<211> 765
<212> DNA
<213> Homo sapiens

<400> 702
acgccggcgc tcccaggccg cgcttcctgc gtccccaacc cggtccctga gagggcactg 60
cgccctctcc accactgcgt tccctcggct aagaatcccc cgaaccccag ccccgcgatc 120
gcggcgccca ccgaggaggc cgcccgggtg gggcgcgggg gtcgcgaagc ccgcagcccc 180
ggaccgccca gccgagacgg agccggaccc gccgcctccc gggcccttcc accgcagcta 240
tccgcacggg aggcctcgcg attgctcgga accatcccgc aggagttcag ctgatatttt 300
ctagtgtggg gcgagagatt ttgtggagcg catttaaggg gtttttgttg tgactgctgc 360
cttgtatata tttattttct ttcttggaac tgggcctcgc cctcctccca ctgacatgat 420
ggcccagtcc aaggccaatg gctcgcacta tgcgctgacc gccatcggcc tggggatgct 480
ggtccttggg gtgatcatgg ccatgtggaa cctggtaccc ggcttcagcg cggccgagaa 540
gccaacagct cagggcagca acaagaccga ggtgggtggc ggcatcctca agagcaagac 600
cttctctgtg gcctacgtgc tggtcggggc cggggtgatg ctgctgctgc tttctatctg 660
ccttgagtat cangggatta agaaggaagc agncggnagg ggccgaggaa ccttgggccc 720
aatgttccag gcaccccgaa cagggcgcct ttgggggcct ttacc 765

<210> 703
<211> 785
<212> DNA
<213> Homo sapiens

<400> 703
gaatgtaccg ccactctgtt agctcacaag gaaaataagg aaaagccagg cctcccacct 60
cttgactctt gtgagagtga agacaacatg gggcatttag aaaatatatt tttagtgtat 120
gataatgtgg gctggcccac acagcantga gcccaaagac cccctcgctt tgggaattat 180
tcatggccct gctcatcaca gcctctgata tgcatgactg taacctaggc tgagccaaga 240
atggagctca tgccagaaat ggtcctaagc atgcacatgg ccccctggaa tatcaaaatc 300
ctggggagaa agaaatcatc tttgccttgg gcagtgaagc tggaatggca catatctatc 360
tgttgccaca tctcctgcct agtggagaag ccttggaagg caacagacac tgagcaagca 420
gcagggagga gaatgtcctg gaagggcagg actctaccca agtccctaac atccccagac 480
tcttctcttc cataaactct ctaattactc tgctgtttaa atcctggttt tggtcaagcc 540
agtcaggttg cataaagaat atgaatacag tatgcatcaa agttgcttcc cagaacagga 600
agcaaaacat acaaacaaac aaacaaaata ctgatatcag tacccagggt gcccaattag 660
gtcacaccca gtggctgcat tgcagcccct gagctcctgc tgcaccgtgt gtcctgctgc 720
ccgantgggc cccaccctgg gttctgaaga tgcccttctt aatggagagc tcccgatgga 780
gggct 785

<210> 704
<211> 783
<212> DNA
<213> Homo sapiens

<400> 704
aactttgacc caaagacaac ctcttctctc ccgcttctct cgctgtgaag atggcgctct 60
ccagggtgtg ctgggctcgg tcggctgtgt ggggctcggc agtcaccct ggacattttg 120

tcacccggag gctgcaactt ggtcgctctg gcctggcttg gggggcccct cggtcttcaa 180
agcttcacct ttctccaaag gcagatgtga agaacttgat gtcttatgtg gtaaccaaga 240
caaaagcgat taatgggaaa taccatcgtt tcttgggtcg tcatttcccc cgcttctata 300
tcctgtacac aatcttcatg aaaggattgc agatgttatg ggctgatgcc aaaaaggcta 360
gaagaataaa gacaaatatg tggaagcaca atataaagtt tcatcaactt ccataccggg 420
agatggagca tttgagacag ttccgccaag acgtcaccaa gtgtcttttc ctaggtatta 480
tttccattcc acctttgcc aactacctgg tcttcttgct aatgtacctg tttcccaggc 540
aactactgat caggcatttc tggaccccaa aacaacaaac tgatttctta gatatctatc 600
atgctttccg gaagcagtcc cacccagaaa ttattagtta tttagaaaag gtcatccctc 660
tcatttctga tgcaggactc cggtggcgtc tgacagatct gtgcaccaag atacagcgtg 720
gtacccaccc agcaatacat gatatcttgg ctctgagaga gtgtttctct aaccatcctc 780
tgg 783

<210> 705
<211> 815
<212> DNA
<213> Homo sapiens

<400> 705
agcatcgagt cggccttgtt gtataaaatt gagttgttgg catgtggttg tggtgagcag 60
aagcagttat tatacattac ttggtaaaat tcatattcat atcttgtcat aaattttaaa 120
caggtcttct ttcattttcc tttacagaaa actgtaatac tgcatatgca ttttcaaact 180
atgcatattt cttcttcatt ccatgtggaa gtttttattc agcctttcag taaattttac 240
ttagcttgtc ccatggatgc cgtaggtgta aggaatatga tagtgaacaa gacagacaga 300
gctcctcccc tcagggagct ttgccatgat acacgatgat gacaatgata aaaggagcaa 360
ataatgattt gggacctgat tccaaaggga tatttctgcg acacttacaa tgaaattcca 420
acctggcacc atctttttca ctgcagaatg catggaggtg gttgcatcat gtcatttcga 480
catgcattta aatgtaatga aaggcacaag tagtgattgc aaacactaca ataagttgct 540
tgttgactct cttactgtct tccttcttat ctccctttct tcctttgtct cattctcagt 600
tttcagagct tagtcattat ttcgtaatcc tctcctaaaa tgaaatctgg agctctaagg 660
acaggaggca caggttgtgt ttgaacagca tcatcgtgct ttatgaaggg gattggaggg 720
gagattctgc cccacagtat ggcaggtctc gctccangca gcactgacta cattggtgct 780
ggttgggtaa ctgtggctcg gcangtcact ctccc 815

<210> 706
<211> 808
<212> DNA
<213> Homo sapiens

<400> 706
tatatatgga ttaaggattt aaatgtaaaa aaagaaatta taagagttcc ataccgaaat 60
gcaggtttat atttagtaaa atagtcaaga aaggtttttt ttttttttt aaaaaagcat 120
aacatcaaag cctaaaatta caaaggaaaa gagtggaaaa ttcatcccca taaatattaa 180
aaactagtgt gttgcaaata aattcaaaag ataagggaaa tactggggaa aatatctgaa 240
acatgacaga gtgtcattaa tatatcatgg gcttttacat tttagaaaaa aatgacggat 300
atctcactag tgaaaagact ataggaaatg aagaagtaat tcacagaaaa agggtcaact 360
ccatttatca gagaaatgca aatgaaatca ggattgcatt cttcacctgt caaattggca 420
gatgcaacaa tagctggtac ttactgagcc ctttctgtgt tagctactag tctaagagtt 480

US 2005/0048500 A1

accaccactc atacatatgt aaaggctaat ggagttgtaa atgtaacttt tgaggacttt 540
attgtatgta tgcgtattag tctgttctca cgctgctaat aaagacatac ccgagactgg 600
gtaatttata aaggaaagga ggtttaatgg actcacagtt ccacatggct gaggagacct 660
cacaatcatg gtanagggta aaggggtaga aagtcatgtc ttacatggca gcaggcaaga 720
nagctcgtgt aggggagctc ccctttttaa aaccatcaga cctggtgaga cttattcaca 780
tgagacngcn ttaggaaaga cccccccc 808

<210> 707
<211> 803
<212> DNA
<213> Homo sapiens

<400> 707
aggggcgggc gcgccgctgc atccccatcc tcgtcgtcgc ccggcacagc gcgagcgggc 60
gagcggcgcg ggcggccgga gcgccgaggc ccggccatgg ccaccaccag caccacgggc 120
tccaccctgc tgcagcccct cagcaacgcc gtgcagctgc ccatcgacca ggtcaacttt 180
gtagtgtgcc aactctttgc cttgctagca gccatttggt ttcgaactta tctacattca 240
agcaaaacta gctcttttat aagacatgta gttgctaccc ttttgggcct ttatcttgca 300
ctttttgct ttggatggta tgccttacac tttcttgtac aaagtggaat ttcctactgt 360
atcatgatca tcataggagt ggagaacatg cacaattact gctttgtgtt tgctctggga 420
tacctcacag tgtgccaagt tactcgagtc tatatctttg actatggaca atattctgct 480
gatttttcag gcccaatgat gatcattact cagaagatca ctagtttggc ttgcgaaatt 540
catgatggga tgtttcggaa ggatgaagaa ctgacttcct cacagaggga tttagctgta 600
aggcgcatgc caagcttact ggagtatttg agttacaact gtaacttcat ggggatcctg 660
gcaggcccac tttgctctta caaagactac attactttca ttgaaggcag atcataccat 720
atcacacaat ctggtgaaaa tggaaaagaa gagacacagt atgaaagaac agagccatct 780
tccaaatact gcggtgntca aga 803

<210> 708
<211> 799
<212> DNA
<213> Homo sapiens

<400> 708
tatatattta attatatttt gccatgcaaa acatccaaat aaatgtttag attgtgttct 60
tgttcttttg gaagctatat ttcttcaaaa caaattatta aatagttttg gaatgtggga 120
tgttataatt gcttattagt gacatcatcc atccatggcc cagtaaacac aacattctct 180
ctctttttt ttttccaaat tattgtgttt catagcaatt ctcgtaaact ttaacaaaat 240
atgcttctca taaaccttaa caaaatatac ttccccaaat tcaagctaaa atgattaatt 300
ttataatttc agtatctaat accgaaaata acctttccc aattggaaga tagttgtatg 360
tttgggctaa gtcacagagc ctcttagatc tggcctacca gatctaaatt tcatctgatc 420
cacagttctg gtgatgaaat atcactcagc cctacccgct gttgaatggc tgtgttgcag 480
ggaacttgtg atcacagagc caccaggcag gcacacatgc tgccagatgc ctatgcaggg 540
agcaccgctc cagccacctg ctttggtcca gaggctcgca gaaaaacagc atcatagctt 600
ttgtttctct gacggactaa ttttttggat ttgagtgtct atgtcgactg gtcagaggaa 660
gaagagtcag aaaaacagcc tgagcttcgg tttaaaaact gtcagttttc acaacagtgc 720
cagtctgatg tatgctcacc ggagaacatg cagcatggcc tggcttcctt cctctncggg 780
cacacctgct attcctcaa 799

0356203-050900

0508780-050800

<210> 709
<211> 799
<212> DNA
<213> Homo sapiens

<400> 709
taaacaggga aatgtctatt gtttttttcca atcgagaaac caaataaaac gtacaaatat 60
ctcatgagct ttcctcagac tttcccagaa agagtttata tttgtgctga gacaaagcac 120
agagaagttg caacctcaaa tggcttggag acagttcaca ttgaaatagc tgaagagtta 180
ggtaaatctg tagaaataag acttccactg gattaagtgt gaagaagaaa atatgacttt 240
gttttctctg tgttatagca ttctacagta tcataaactc caatggagaa ccacatttgg 300
ggcgtggctg aggtggggct aatatggtag catgtgctaa actctttcta ggatattcta 360
ttgcctctga gcttataccc agctccatta tctatatcag ctttttgagc ttaagtcttc 420
atggcaactg ccagctaaat gctcggaaaa aaaccgtttg gagtctaccc ccttctccta 480
atttatttct cctctaaatc gtggttcact ggtgccagtc atggcagagg gtgatcttct 540
taggatgcaa attagataat cttcataaca taaagcccta acttttacc ttagcccgga 600
agagccccac atgatctgaa ctccagcctg gaaggattaa aaaatctttt tgatatattt 660
gacatattta tggagtacat gtgaagtttt gntatatgca taaaatgtgt aatgatcaag 720
ccagagtatt cagggtattc gtcacctgaa catttatcat ttctacgngt tggggcattg 780
cagntctctc ttgtagctn 799

<210> 710
<211> 805
<212> DNA
<213> Homo sapiens

<400> 710
ttctgagcac cataaataca acagacatgg aaacctttc tttctttatt ttttttttct 60
gcacagaaaa agaaagaata aacctttct ttctttttc cattacaggg atgttatcaa 120
gtggctggtc aaagcagtaa ctgaagatgg attgactcag cccccaaatg gaaatcaaac 180
gtcttcagga acaggaatct tgaaagccag cagtagccac ccttcttccc agcccaacct 240
gacaaagaac accaatcagc tgtaaggggc aggcagttct ctttcctggg gctcttgggg 300
tttagtgttt tagagagaac aacaccaatc cctaagagca gcttccccca aattaacaag 360
atcttagaac ataggctgat gcttattcaa gacttagttt aactagaggc taaatttctg 420
atttcaaagg cagaacaaaa ccaggtgctt tcacccctaa aatgaatagg acttcacaaa 480
gtgaatacga agtcacaacg cagatgcaaa acaaatgcta gaggacactg cccttcactt 540
cctgcatttc aggagacagt aaagggttac agctcctcat cacttcagat atctgttgcc 600
atagagaagg agtggtgtgt agtgtgagtt ttgttaacct cgagtcctca aggacctggg 660
tttctctcct caggtcccgg gagaaaaata gcattcagcc tgcaggttcc aacacaccag 720
ggcaggtatc atcaccgcag actgcactgg aaagaaattc atggcatttc ttttatggag 780
ttganagtgg tcttggcgtt ttttg 805

<210> 711
<211> 800
<212> DNA
<213> Homo sapiens

<400> 711
gtatagtaac cactgaacta gagaagtaat ctttttaaa tggtatggca tttactaagt 60
agtcattaac acctaataga tgatatttag tgtgtgtgct gtgtggccgt caccgccgtc 120
agtcatcact ctgctttctt cctgaactgt gttgtttcgg accccatggg tgagcagtct 180
gagggaatgg ctcccgtgtc ttcatctacg gtcagttctg taacgaaaac ttctgggcag 240
cagcaagtgt gtgtgagcca ggccaccgtg ggaacctgca aggctgccac ccccaccgtc 300
gtcagcacca cgtccctcgt gcctacacca aaccccatct ctgggaaagc cacagtatcc 360
ggtgagttgc attgtgatat tatttctctc tcttttctct cattgggctg gaatattttt 420
gtttgtttgt ttgagatagc gtctcactct gtcgcccaag ctagagtgca atatcacaat 480
ctcgactcac tgcaacctct gccttccagg ctcaagccat cctcccacct cagcctcttg 540
attatcaggg accacaggca catgtcacca cacccagcta atttttgtg tttttggtag 600
agatggggtt tcaccacgtt gcccaggctg gtgttgaact cctcaggtca agcagtccac 660
ccacctcagc ctcccaaagt gctgggatta caggcgtgag ccactgtgcc cagctatttt 720
tttggagggc ttaagcaata ttttgnatgg taaattggta aaagtaatta acccagcagc 780
attttctgac agttgctttt 800

<210> 712
<211> 797
<212> DNA
<213> Homo sapiens

<400> 712
atgatcttat ttaatttaat tgttatttgt attctatgaa gtaagctata cacacactgt 60
tcagatgatg aacctgaggc ttaaggtagt taattgctcc agatcactca gctagtaagt 120
actgaagctg atatttggac agatgcctga ctccaaagtc atgctcttaa aatgcaaatg 180
atgaatatac atttgcattc tttattccaa aaaagatttt gttctttagt gataaaaatc 240
atgaaaacca cttggtctat tgctccataa atctgcttaa tcagatatta ttattgcctc 300
actaactctc ctttttaaaa gaagatccaa agatgataaa atataaggac aaaactaagt 360
aagcttctct taatggaaag taaaaatgtt tcaattttct cccttgtgtt ttaagctgaa 420
gaaagccctt gatgaagcta acttcagatc agtggaagtg tcccggacca accgagagct 480
gcgacagaaa cttgcagagc tagaaaaaat actagaaagt aacaaggaga aaataaagaa 540
tcaaaagacc caaattaagc tccacttgtc agctaaggcg aataatgctc agaatataga 600
aaggatgaag gttgtatggg aaacctcttc tcacttcctg gataccctgt gaggatgtag 660
tcagtcaatg gtgtctaggg aagacaggtt ttagaaccct accagcccca tgtattctct 720
gggaatatag ccagtggctt tggggagact tttcagngga gncactgtgg gnaaaggttg 780
gattcccatt gctgcca 797

<210> 713
<211> 818
<212> DNA
<213> Homo sapiens

<400> 713
aaaaactgat gaaggaaatt gaagaagaca caaataaatg gaaaggtatc ctatgttcat 60
ggattggaag gattaatatt attaaaatgt tcatgctgcc caaagcacta tatagattca 120
gtgcattccc tccaaaattt ttaaatttaa tgacattttt cacgaaagca gaaaaaataa 180
tttttaaata tacatatttc agaatacatt gttcacaata aagatatatg atttttgtc 240
agttaaaagt taatttttt aaaaagatac ctatagcctc ttattgaggt ggaatctgtt 300

US005750500A

gctcttggag ctacgtactg ttgactttgg ttttctggaa acatcagtgc tatttagaac 360
attaggatat ttttcttttt gaatatcaac aaaaacataa ataaaaatac tagtaatgac 420
atttacagta tgtttcacag attaatcaca tctctgagtg ggagtcttta tctgttgtag 480
gatctactct tgccattcta ttctgggttt tggttgatta gtctttcttg aacacttcca 540
gaaattggag atgtatgcct gccttaggta gcctagctta ttttattaat gaacatatcc 600
atttaaaaat ttcttcctgg taatgagtct aaacttgcct tcctgtaatt tgtatccact 660
ggtccttttt ctttggtctc cctcttgcat atgccagtac ttcaatagct ggtcccagct 720
ccattgacgc cctctctcag gatcacacat cacaggtcct tcanaatctc ctaatggtct 780
ctctgactnc agcaacacac tctctacctt tctatgct 818

<210> 714
<211> 822
<212> DNA
<213> Homo sapiens

<400> 714
cctctccccc cgggctccgc ccaccccacg ccgggaaccc acgcgggcca ctacaagccc 60
gcccttcct acgtctggtc cagtcggtct tcctccggcc cgggccctgg cccagctagc 120
cggccatgga aggtaatggc cccgctgctg tccactacca gccggccagc cccccgcggg 180
acgcctgcgt ctacagcagc tgctactgtg aagaaaatat ttggaagctc tgtgaataca 240
tcaaaaacca tgaccagtat cctttagaag aatgttatgc tgtcttcata tctaatgaga 300
ggaagatgat acctatctgg aaacaacagg cgagacctgg agatggacct gtgatctggg 360
attaccatgt tgttttgctt catgtttcaa gtggaggaca gaacttcatt tatgatctcg 420
atactgtctt gccatttccc tgcctctttg acacttatgt agaagatgcc tttaagtctg 480
atgatgacat tcacccacag tttaggagga aatttagagt gatccgtgca gattcatatt 540
tgaagaactt tgcttctgac cgatctcaca tgaaagactc cagtgggaat tggagagagc 600
ctccgccgcc atatccctgc attgagactg gagattccaa aatgaacctg aacgatttca 660
tcagtatgga tcccaaggta ggatggggcg ccgtctacac actatccgaa tttacacatc 720
ggtttggcag taaaaactgc tgaacttggt ctcaagatgt ggaactgtgg agaaattcta 780
ggacatgaac aagctatcct ttcatcgagg acagcaaaca tt 822

<210> 715
<211> 820
<212> DNA
<213> Homo sapiens

<400> 715
ctttctttat aatatttgtg atgatggaaa caaaagcctt ggaacaattg cactttaagt 60
attacacaga agtaaaagaa ctacagaaaa tgtacagcaa gacaagtgcc cggaagttca 120
ctgatccttc agaaggaaat gcgctttact gattgcaaag ccttcagaat attggagtgt 180
ggtgtgtttg ctcatctgat gctttttagt tcagttacat gtaacatcac attttttta 240
tcacgtgaaa gatgttagat ttgtttgctt ataaattttt taccactccc acataaaatg 300
ctcatagttt gggagaggaa agagggaaga ttctctcttc ttttaacaga gagatgattg 360
ctctgtatac ccattgcttc ctccctgagg ctgtcccaaa gtgaacactg atggagtggt 420
caaaatcata agattgtagc aagccaaaga tacgtatgtg acggaagcac ataagcaata 480
agcagaaaac cagaagtgca tgctgtgatg cctgtgactc cttcatcccg ctcagtgcca 540
tgtcctcttt tgtgatcttc cagaaagctc caggattcat ttgagttcca catccaagta 600
acagatgaat tatattcatg ttgtaatgca ttttgtggag tttacaaaac cggtgtctgt 660

0956469.0002

taaaactttg gaaaatgtct tagaaaacgt tggtgcttgg tgatgcttta tttggttaat 720
tatcaagaac aaattatggc aatgctagtt tctgcttacc aaaatactct gngtatatat 780
tatacatata taaatacctg ggaatgggna tgnctatatg 820

<210> 716
<211> 816
<212> DNA
<213> Homo sapiens

<400> 716
aaaattaata ataaatgtct aagctattct gctgccacaa tgtggcctta ctgctccctg 60
atatacggtg cctttctcct cccttgtttc attctcttca ctttcttctt ccagatgctc 120
gtacacccag tccccctacc tgggaaatca caacctcatt aagagctcag ctatcttaag 180
tcctatttcc tcatgaagtc taactcaact gctgcaactt ccgagtagca attaaatcag 240
ctccagcata acctcttttt tcccttgtct cctgtgttag tattatgtca ctaactttgt 300
ggggacaagg tcatataaca ctctagagca tatcagaatg acagaacatc ttcagctata 360
acctacctag ataccaatat ttgcccccaa ggcaatgttt gatttttatt ccccattatg 420
agaaacaaac tcacccctcc aaacccaaag aatggactca gagacctgga gaacagcgaa 480
agtgagactt ttaatgatgc tcttgtaata ttgggtgtct ggcagcaggc acacccagca 540
cagtttcaac aagcaattta tcccctagtg cacaggtgcc tcccccagtt cctcatgggc 600
tgtgtattat ggggtcacaa tcttcccgga cattgcctat tggcgttggg taggggcttc 660
gggtgttttc tttaaggttg cctgctgcgt ttgttgcagc ccacaatgca ttgcaatcct 720
agttagctca agggctcttc angtatttga cttatgactt aagtagctgg ggcangctga 780
taagaacagg cacacgagct attttgcagt tggaaa 816

<210> 717
<211> 777
<212> DNA
<213> Homo sapiens

<400> 717
ataaaatggg tacattatgg gcagtgtaat acaagctttc ttttcattgc ctagtacttt 60
accagcagac cacagttttg ccctggctag accaaccctc agaacaaaat catcattcct 120
tgtatttata tttgtatctg agatagtaaa caagatggct ggccaggtca acatggcacc 180
ttaacttatt tttttaatag gtaaaacttc ttcaaaagta gcttgcttgt ataagaacta 240
agctatcagt atagatatag ctatccttgg agcttatgtt tcagacagga attatttact 300
aaaataaata ataaacaaga taatgcatta tacaatttgg gcatttctcg tttctcaagt 360
gtatgcatca tggtaaatat aaactaacca caagataggt agattgattc atttcatttt 420
aatctccttg tgtaattcag tacctccata attgntctaa tcttcttccc actgtttaca 480
aattaccagt taattaactc gtgaaagaaa aattcacata tcagaataaa aataaatgta 540
tactcacttt ataaaaatca ccactgctgt ctttccttaa tactagcagt ggaaatgtaa 600
gtggcttact ctacaaattt tggtgctggc aaatacatag gcaaactgtt gggagctgct 660
ctagttacat tcctcccttc ttattccctt tttctcttcc tcactttatt gcataacata 720
ttcctgtccc aaagcattct accacagntc tatttgactc ccacttgnaa taactnc 777

<210> 718
<211> 819
<212> DNA

09/05/2005 15:09 0000

<213> Homo sapiens

<400> 718
agagaagatc aatagagaaa tccactgagg ttgtgccaaa gaagaagatc aaaaaggagc 60
aggttggctt cctacatgta gagagttaaa acattgtatt tgtaaatgtt gtggcttaca 120
ttcctgtctt aaaagaaaga gaaactttcc cccacactga gtttcctttc tggactatct 180
taacgcttct gtcctggtgg gttccagtgc tcagttttaa tacagccatc cctgtgattc 240
tgcttcaagc attttcacag aaaacaggtt tcaggagatg ggaagccagt ggtgcaagac 300
ttaaaaaatc cttcacattt atttagaagt ttctgttatc agcagaatga tttcatgttt 360
ttatgatttt tatttggaac catcattgag ttccttttt ttttttaag tttgattttt 420
ggtttaagct gctggtatat attgtttttt atttttaaa caaatcaatt taatttatat 480
tcttatattt aagaagcaga tattcataga tgatctgttt tttctgttaa tatcgcagat 540
tttttggaat gttattttcc cagtggaata ttcacctgat atcaggttgt cagataaata 600
atatttaggt aaaaaaaggt gtgtgggggg ggttgcattt tgactgaagt gtattaaacc 660
agtgtaatca atgtagtaag atcatttaaa tcaacttttc aaataaaatt ttagaagcca 720
ttcttcttta aattaaactc acaatcagat tttttcttaa ttttttggta aagaatatcc 780
attcttacag cctaaaccct gctagcaaac aaaacaaat 819

<210> 719
<211> 818
<212> DNA
<213> Homo sapiens

<400> 719
tttgctctca gcattgtgtt agaaaataaa gccagcagac aaggattaaa ccctcatgtt 60
gctgggttcc ttctagaaac aattggaggg ctaaccaagt caccttttggt ggaaggcagt 120
aaggtgagtc attgctgtgg ctggactgaa taggatagcc ttagctgtaa aattgggctg 180
acctttcaaa tggactcatg cttgccgaat gactcacgct cctgtttaca aatcagctct 240
gtgaagaaat gcagagtggg aggctctgct tgccagacgg agaccttaga cctccagggg 300
tggagaacgg agtacttcct ctggtgctcg gcttcccttc ctgggggcag atctctcagc 360
ttctggttgg tggctctcaa aatccagaca caaggtcagc tgcagccagc gtgggccctg 420
gagtagctcc agttatgggg cagcaatggc cccctctcat tttgagagct cactttgcct 480
gtggatggtt ttaatccatc tggataaact tgaggcccat gggaatacca tatactatgg 540
taaccatgta cactgctcta aagatgtggc tgctgttgta taacttttc ctttatttt 600
gtcaatttcc tattttccag agtcttgcat acccactatg tctactgtga tagtgaacgt 660
aaaaacatac aagatgttgg tgttatcctc aatctcttat tcttaatcct gaacaaatta 720
catgaaaaaa tcgttcatgg agtttttctt catataaaac tttttacaat gaacataaag 780
ggcatactat ttctttttt ttaaaaagaa cctagaat 818

<210> 720
<211> 819
<212> DNA
<213> Homo sapiens

<400> 720
gtgttagaat ttctgtccca aaaagacaaa gagagaatca aagaaatgaa gcaggcaact 60
gacctgaaag cagctcagct caaggccagg agtctggccc agaacgctca gagcagcaga 120
gcccagctct cccctgcagc ggctgctggg tactgctctt ggaacatggc attaggtggt 180

US20050003800

gggacggcca ccttaaaagc cagcaacttc aagcctttcg ccaaagatcc ggaaaagcaa 240
aagcgatacg acgagttctt agtacacatg aaacagggtc agaaagatgc tctggaacgc 300
tgtctggacc ccagcatgac ggagtgggag cgaggccgtg agcgggatga gtttgcccgg 360
gcggccctgc tgtacgcatc ttcccattcg accttgtcct ccaggttcac tcacgccaag 420
gaggaggatg actcagatca ggttgaagtc cctcgagacc aagagaatga tgtcggggat 480
aagcagtcgg ctgtgaagat gaagatgttt gggaagctca cccgagacac gtttgagtgg 540
caccctgaca agcttctatg taagagattt aatgtccctg acccttatcc agattcaact 600
ttagttggct taccaagagt gaagcgtgac aagtactcag tcttcaactt tctgacgctc 660
ccagagacag cttcttgcca ccactcaagc atcaagtgaa aaagtatcac agcaccgagg 720
tcccgacaaa tcaagaaaac catncagatg ggatacctct aaacacgaaa agaaagaaga 780
ttccattagt gaatttttaa gtttggctag atcaaaacc 819

<210> 721
<211> 825
<212> DNA
<213> Homo sapiens

<400> 721
tcccagcgtg cgcggggccc gcgggccggg ccggggtgac ctgggctgca gccatggaag 60
aacagaggga ggccctgagg aagatcatca aaacactggc tgtgaagaat gaagaaattc 120
agagctttat ctactccctg aaacagatgc tgctgaacgt ggaggcgaac tcggcgaagg 180
tgcaggagga cctcgaagca gagttccagt ccctcttctc cctcctggag gagctgaaag 240
aaggcatgct tatgaagata aaacaggacc gtgccagccg tacctacgag ctgcagaacc 300
agctggctgc ctgcacgcgg gccctggaga gctccgagga gcttctggag acagccaacc 360
agactctgca ggccatggac agcgaggact ttcctcaggc tgccaagcaa atcaaagatg 420
gagtgaccat ggcccctgcc ttccggctat cattgaaagc gaaggtcagt gacaacatga 480
gtcacctcat ggtggacttc gcgcaagagc ggcagatgct acaggcactc aagttcctgc 540
ctgtgcccag cgcacccgtg atcgacctgg ctgagtccct ggtggcagat aactgtgtga 600
ccctggtgtg gcgcatgccg gatgaggaca gcaagattga ccactacgtg ctggagtacc 660
ggcggaccaa cttcganggc ccgncccggc tnaaggagga ccagccctgg atggtcatcg 720
agggcattcc ggcaagacag agtacaccct tgacaggtct caagtttgac atgaaatacc 780
atgaactttc cgngtgnaan gcctgtaaca aggcaatttc aggaa 825

<210> 722
<211> 818
<212> DNA
<213> Homo sapiens

<400> 722
ttccaaaatg attccattcc attctagaaa tttgaagtat gtaacctgaa atccttaata 60
aaatttggat ttaattttat aaaatgtact ggtgatattt tgggtgtttt tttttaaatg 120
aatgtatata ctttttttt gaagagtgga gagtagtgat gtctagaggg agctattttg 180
tgctgaggcc actatgttct gtaaatatat aattttaaga gcaacctcac aatccctgct 240
aagtggagtt tattatttga agactaaaat ggaattccat agttcctgat aggttatatt 300
ctgagttatt attctgagtt atctacaaac atttttgaga tttgtcttta cactctgatt 360
gtagtttcca gcagcccacg cacactgcca agtaagtctc atttttttcct gttagaaatg 420
gtgaaatatc atataatcac ttataaagaa aactgatatg aaaaaatttt agagttgttt 480
gctttatggt cactcaagta gggtaagtgt tccacaaatt ccacaagttg atagtttaac 540

09/13/2005 15:09 FAX

atggatgtct gaaagccaca tatataattt cttaggattc ttaaattagt aaatctagct 600
tactgaagca gtattagcat cactatttta gattgcaaaa ataccttaat tgtgtggaac 660
tggcttgtan agtggtactt aagaaaaatg ggattctacc tctatttctg gtttagcaca 720
cttaatcagg aaaggatata ttaactttca taaaaatatt tttggtgngt gaatagggtn 780
atgatatggg aaggccccta aaataccgga ttaattgt 818

<210> 723
<211> 818
<212> DNA
<213> Homo sapiens

<400> 723
atgatcattg cctgcctgac tatgtaagat tcttgttggg agcttaagaa tagattcctg 60
agctaggcct ttggagactc tggcatgctg tgtctaggag ggagtctgta aaacaatttt 120
taatgaagaa atttaaaaat tacacaaaac tagaatagtg cattggtact caacatccag 180
atctgacact tatcactatc ttaccatgtt tgcttcattt gtcacttttt tgtttgctta 240
agtatcttaa aatcccatac attgtgttat ttcactgctg tgaacacttt gggtagatac 300
cacgatatca cacctaacag aggcagcagc agtccttcgg cttcatctca tagccagtcc 360
ttaagcaaat ttccctgatt atctcaaaaa tcatcttcta gttggtttgt tagaatcaac 420
agaatataag tcacatgatg atttcgtttt taacaatcac ctcagatgac tttgatgtta 480
gctactttga gaaccactgg aaattatttt gccaacttga aagttcaagt taggatacca 540
caattcttgg cacgtttggt ggattataaa tgtgattttg aaatattaga ggaagcattt 600
ggggttaatg acaggatatg aatttatatt agtaagtttg ataagataaa atttcctcag 660
tgaacggaga atctcagccc catgggctct aattgattgg gacttgtgta aagcgtggtc 720
cagtttaatc caactggact gnatgctgng gtctcactca tggtggggct tatttacctg 780
ncacacacac tacattgggg gatcaagttg gaaggtct 818

<210> 724
<211> 825
<212> DNA
<213> Homo sapiens

<400> 724
ataaattaaa ctttatcatg ggtatgtata taggaaaaaa taatagtttg tataaggttc 60
gaatagtttg tataaggttc ggtactatcc acagtttcag gcatacaccg ggggtcttgg 120
aacatattcc cctcagataa gagagaattc ctgtgtatgg aagagactcc tcagatacag 180
cttctcttca actgtaaacc tatgaattaa aaaaaagtta ttggtcctat ccacccccgc 240
acatacaacc tacattgtta tggcaaggat acgatgtcac atgaattgac taagtttaca 300
agagaggaaa ttgaaggcat gtagcaatcc catggcagtt gtgaaatcca tctgcctata 360
tgtcaccaat tcccccaatt ccaggggtag ggaacatttg attagtctac tttggttctc 420
tgaagttggc tccctttttct ttttctcagt tcttgacttt tttctttgag ctgtctttcc 480
ttttccatga gaaatgtcct ctttttgtag ctttctcagc ctgcttctag gctctgtccc 540
aactggcaca gttatccaca ctggcacaac ttctttaaaa agctttgtgg actttcaaat 600
tataaaccac tcactccacc agagagaagc cacacccaca aatttcttca agaagtcctc 660
tatgtacttt gaatgtcaat cagggaatga tacccctttag agtcatatat gtcttttgnc 720
tacctggaga gccgtcagct agacactggc ttaaatcttt ctgaagtacc aggtgggtcc 780
gtcactttat gatgggtcaa cttagaatct tttactttag gatgg 825

09509403.0 2009-05-05

WO 2005/046462 PCT/US2004/035800

<210> 725
<211> 820
<212> DNA
<213> Homo sapiens

<400> 725
ttaaaaaagc ctcgttagaa tttgctattc gaaaagacct taaaaaccct cacagagttc 60
taaacatccc attcattgaa aatacttttc agttaagtag atttgttttg tgcacttcac 120
aacttttagg tgacatgaat ttgaagcgta gcaaaagaaa tgtataaaga tagccttttc 180
tggtcattac catgtctact caagtttctg ttttctaggt acactctagc attgtaactt 240
tttccccctg agaagtaatt ttaagatcta tcagtctcaa tttaaatgat ctgttaatca 300
gccagagttt tagtttcata atatcgttcc attgcctgac aaagatatac acactgaagt 360
gcctttagca gacctgggac cgtcaagaat cttgttaccc tgattattgc aagatgacat 420
atttcttaag ccatttataa tctcatattc gggttgaatc tgtatttaca aataaaaggg 480
ttaaattgag gcagtttcaa gcagcattta ggaaaatgaa gtggcttcaa attttagtgt 540
ttctggttac attattttgt ttgaattata caattacata attttctgta accaaaatgg 600
taattttgat ggatttttta aatgccaaaa tccaatcatc aaggccaaag aaatgcatga 660
ttactctgat ttcttatgca ccattcagtc aagacttaac tcagaggcag ttgattcagt 720
gcttacatct agacaaagct ttaatgagtg cagacccagc ctaacagtat ttcatctaat 780
ttctttgatg gcttaagcca taagcactga ggtagctttt 820

<210> 726
<211> 643
<212> DNA
<213> Homo sapiens

<400> 726
acaagtatta tggacacact tgaccgtaaa ggcacaggag cctcggaaca agggggcgca 60
ataaagggaa tggcccgtcc ccttccagaa ccagcccaaa gaagcctggg gggtgaggag 120
tggcccccac tcctccatga ggggctgatg aggggtgggc agcctggggg aggctttcct 180
cgcaagcaca gagctctgag gctcagcccc ctggcacagg cggtcacgca tcaggacggt 240
tcctactcct cagcaccttc cgtgcagtta ccagtgccct gggaggtcac actgcccgtc 300
ggaccttggc atgctccatt cagctgacct gctgaggaca ggcatcgccg agactccttg 360
ggtcctcccc gccctccctc atgctgccac aagctgctgc tccaaggcct ggccacatgc 420
agacaggagg aagctgagct cgacattagg cctcaaggct gccatctgtc ttgtagggcc 480
tggccttgtg ggcaggggggc agtcctgtgc cttgtgggcc ctcagcctct gagggcagag 540
atgctgtcag tgccgcaggt gcatcacata cttctagcat cctctccacc ctgcattcca 600
aatgctgctt gctgcctgcc ctgcctccga tgcaggggtg nnn 643

<210> 727
<211> 734
<212> DNA
<213> Homo sapiens

<400> 727
gataggggag acggttggcg ggcatttccg tttctatgtg actatgtgac caaggcagca 60
ggggctttta cctgctaggc ggcagtcctt tggccctgag aatttgggag agaacagtgc 120
atcaggccag gctcagcaat atgtttgctc acattctttc agccttctct caccccctc 180

aacaccaaac tttcttcctt gtgagcagaa ggttggctgc tgttagcagg atcccacagt 240
gataaccagg cccttccctt cctaagccaa aacccattgt gactgcctgt ctctcctgcc 300
tctgacttct caggcagcct cctgagtgca ctgagttgta tccgagaggg tgggaacagc 360
agcatcccct aattgcagta cacggttcct tttccgcccg ccaccctgcc tttccttggg 420
ggcagctgtc tctctgtaca tgagcaaatg ggcaaaaaca gtccccaaac ccagcacccc 480
cctctccctg gctgcagccc acactgtaac atccctagtg aggctctaac atatctttat 540
taattaaaat aggtcattac aatcaacaca tttttgccga caagaaataa gtttgttttt 600
tcctgtaatg taaaaatcca tgcttcagga ttccacaaac tcttggaaag ctttttcctg 660
catccttgct tgggttttgg tgggggggna aaaaaagccc ccaaantttt ttttttnttt 720
ttccccccc cccc 734

<210> 728
<211> 781
<212> DNA
<213> Homo sapiens

<400> 728
gttgcctgag gtgggtggcg gtggaagtta agggagtcag gggctatcgc tcctcgagac 60
tcgcagtcgc ggccactgca gtcacttcgc cagttagccc ttagggtagg agtcgcgccg 120
gcagcagcca tgagcggcgg cgtgtacggg ggagatgaag ttggagccct tgtttttgac 180
attggatcct atactgtgag agctggttat gctggtgagg actgccccaa ggtggatttt 240
cctacagcta ttggtatggt ggtagaaaga gatgacggaa gcacattaat ggaaatagat 300
ggcgataaag gcaaacaagg cggtcccacc tactacatag atactaatgc tctgcgtgtt 360
ccgagggaga atatggaggc catttcacct ctaaaaaatg ggatggttga agactgggat 420
agtttccaag ctattttgga tcatacctac aaaatgcatg tcaaatcaga agccagtctc 480
catcctgttc tcatgtcaga ggcaccgtgg aatactagag caaagagaga gaaactgaca 540
gagttaatgt ttgaacacta caacatccct gccttcttcc tttgcaaaac tgcagttttg 600
acagcatttg ctaatggtcg ttctactggg ctgattttgg acagtggagc cactcatacc 660
cactgcaaan ttcccaagtt nccccccaaaa cccggaaaat tttgggggggg gnccccttt 720
taaaattttg ggggtttttc ccccccctttt ttttttcccc aaaaaaaccc ccaaaaaaag 780
g 781

<210> 729
<211> 772
<212> DNA
<213> Homo sapiens

<400> 729
aattattatc actgttgcct gaatatgtag ttccatacat gattcacctg ctagcccatg 60
atccagattt tacaagatca caagatgttg atcagcttcg tgatatcaaa gagtgcctat 120
ggttcatgct tgaagtttta atgacaaaga atgaaaacaa tagccatgcc tttatgaaga 180
agatggcaga gaacatcaag ttaaccagag atgcccagtc tccagatgaa tccaagacaa 240
atgaaaaact gtatacagta tgtgatgtgg ctctctgtgt tataaatagt aaaagtgctt 300
tgtgcaatgc agattcacca aaggacccag tcctcccaat gaaatttttt acacaacctg 360
aaaaggactt ctgtaacgat aagagttata tttcagaaga gacaagagta cttctgttaa 420
caggaaagcc aaagcctgct ggagtactag gtgcagtaaa taagccttta tcagcaacgg 480
gaaggaaacc ctatgttaga agcactggca ctgagactgg aagcaatatt aatgtaaatt 540
cagagctgaa cccttcaacc ggaaatcgat caagggaaca gagttcagag gcagcagaaa 600

0556203.0002

ctggagttag tgaaaatgaa gagaaccctg tgaggattat ttcagtcaca cctgtaaaga 660
atattggacc ccagttaaaa ggaaaaattt taaaaaaggg gggaaaaaaa aaaatttttt 720
taaaaaaaat ttttttccc tttgggggaa aattttccca aaggggggg cc 772

<210> 730
<211> 730
<212> DNA
<213> Homo sapiens

<400> 730
agcttgatgg cgtcgggctg gagagccgca gtcccggctg cagcacctgg gagaaggcag 60
accgtgtgag ggggcctgtg gccccagcgt gctgtggcct cggggagtgg gaagtggagg 120
caggagcctt ccttacactt cgccatgagt ttcctcatcg actccagcat catgattacc 180
tcccagatac tatttttgg atttgggtgg cttttcttca tgcgccaatt gtttaaagac 240
tatgagatac gtcagtatgt tgtacaggtg atcttctccg tgacgtttgc attttcttgc 300
accatgtttg agctcatcat ctttgaaatc ttaggagtat tgaatagcag ctcccgttat 360
tttcactgga aaatgaacct gtgtgtaatt ctgctgatcc tggttttcat ggtgcctttt 420
tacattggct attttattgt gagcaatatc cgactacttt tgtctcctct gtctcagtgc 480
ataaacaacg actgcttttt tcctgtctct tatggctgac ctttatgtat ttcttctgga 540
aactaggaga tccctttccc attctcagcc caaaacatgg gatcttatcc atagaacagc 600
tcatcagccg ggttggtgtg attggagtga ctctcatggc tcttctttct ggatttggtg 660
ccttgtccaa acctgggncc ccccccccaaa ttaaaccccn aanccctttt ttttaaaacc 720
cccaaatttt 730

<210> 731
<211> 693
<212> DNA
<213> Homo sapiens

<400> 731
attaagcaat tgcaatttgc agtgtgccag gcactgtgcc aagtattttg cttcgatgat 60
ttcacgtcat cttcaaaaca acctcatgag ggctgggtca gttagaacct aaacaaacta 120
gagacctggt tgcaacccct caggctctgc tgatgctgtc ccccttgtt cctgcagcgt 180
ggaccctgcc agcagccagg ccatggagct ctctgatgtc accctcattg agggtgtggg 240
taatgaggtg atggtggtgg caggtgtggt ggtgctgatt ctagccttgg tcctagcttg 300
gctctctacc tacgtagcag acagcggtag caaccagctc ctgggcgcta ttgtgtcagc 360
aggcgacaca tccgtcctcc acctggggca tgtggaccac ctggtggcag gccaaggcaa 420
ccccgagcca actgaactcc cccatccatc agagggtaat gatgagaagg ctgaagaggc 480
gggtgaaggt cggggagact ccactgggga ggctggagct gggggtggtg ttgagcccag 540
ccttgagcat ctccttgaca tccaaggcct gcccaaaaga caagcaggtg caggcagcag 600
cagtccagag gccccctga gatctgagga tagcacctgc ctccctccca gccctggccc 660
ttcattcact tggtggccgg ggncnttttt ncc 693

<210> 732
<211> 681
<212> DNA
<213> Homo sapiens

0950450.0950800

0050250-0050800

<400> 732
tggttgtgtg ggacattgtc tttggtgatt tatgcctgtg cggtcatctc agcttctcag 60
caacaactca tgacatacag atgcccattg ggatctgtac tttacagaga aaaaaaaaag 120
ctgtaaacac tttaaatttg gagccctgat ttctttttg gaattccaag tagacctaga 180
cactagtttt ccaattaggg ttgttgtaag gtctagagtt ttgtatgttg tggagatgta 240
tcatagctga gtttaggatg acaaaccacc ctcccgaata ggttacattg tttctttctt 300
tttttcttaa ttatacttta acttctaggg tacatgtgaa caacctgcag gtttgttaca 360
tatgtataca tgtgtcatgt tggtgtgctg cacccattaa ctcatcacat gtgtcatatt 420
ggtgtgctgc acccattaac tcatcattta cattaggtgt atctcctaat gctatccctc 480
cctgctcccc accccacgac aggacccagt gtgtgatgtt ccccaccctg tgtccaagtg 540
ttctcattgt tcaattccca cctaagagtg agaacatgcg gtgtttggtt ttctgtcctt 600
gcgatagttt gctgagaatg atggtttccc gcttcatcca tgccctacca aggaccatga 660
aacttcaatc ccctttttnn n 681

<210> 733
<211> 711
<212> DNA
<213> Homo sapiens

<400> 733
aggacccggg ttgcgggaga ccccaggttc ggttgggatt cccagccaga acggagctta 60
agccgggcag gcgagcgaat gacggagtag cgagctgcac ggcggcgtgc tgcgctgttg 120
aggacgctgt cccgcgcgct cccaggccgc cccgaggctt ggggtcttcg aaggataatc 180
ggcgcccggg gccgaacagc gggggcacac ggggcgctgc cgaagtgcaa ggccacggcc 240
agagctcgag cccgacgcgc tgtctggagt cgtaggttgg cgccgtttgg ggtcggggtc 300
tgaggcttgg gcgctgcctg ggccgagcgg agatcggggt ttgcctcccg tccccgctca 360
ggaccctgac gtggctgaag cggccccggg agcatgagcg ggcagcgcgt ggacgtcaag 420
gtggtgatgc tgggcaagga gtacgtgggc aagactagcc tggtggagcg ctacgtgcac 480
gaccgctttc tggtggggcc ttatcagaac gtgagtgcat ccggaggggc caggcacggt 540
gggcggggga gtgggggggcc ggtaatctgc acctatggcc ccgatctcct ccctctcgtt 600
gcagaccatc ggggccgctt cgtggccaan gtgatgtcgg tcggagaccg gacttgtgaa 660
canttaaggg ttaatttttt gggggggggg naaaaaccaa acccccccaaa a 711

<210> 734
<211> 759
<212> DNA
<213> Homo sapiens

<400> 734
agaagggagc gagagcccct gagcgcggcg gcagcggcgg cctggccctt ccagagggcc 60
agagccaggg acatgcgggc gcccgggact ccgcgttccg cgcggcccgg cgcctgagcg 120
cctccgttcc ccgtcccgga gctgccggcg gcatgatccg acacgccggg gcgcccgcgc 180
gcggggaccc cacgggtccg gttccagttg ttggcaaagg agaggaagag gaagaggaag 240
atggcatgcg gctttgtctg ccagccaacc cgaaaaactg ccttcctcac cgccggggca 300
tcagcatcct ggagaagctc atcaaaacat gcccggtgtg gctgcagctg agtctgggcc 360
aggcagaggt ggccaggatc ctgcaccggg tggtggctgg gatgttcctg gttcgccggg 420
acagcagctc gaagcagctg gtgctctgtg tccactttcc ttctctgaac gaaagctcgg 480
ccgaggtgct cgaatacacc attaaggaag aaaagtcgat attgtacctg gaaggctcgg 540

ctcttgtgtt tgaggacatc ttcagattga ttgcgttcta ctgtgtcaag tagagactta 600
ctgcccttca cacttgcggn taccccaggc catccttgag gccagcaagc ttcacgggcc 660
attcacacag gcggtgaaag tcagcctgag gatttagccc anaagtgatg gagcccctga 720
anggtgtgtg tgganggcaa aaggaaaagg ggacaagac 759

<210> 735
<211> 804
<212> DNA
<213> Homo sapiens

<400> 735
gtttattaaa gtatgtaatt cctaaaatgc ttattgaaga ccttaaatct gattgttatt 60
taaatttgtg gttcagcgat attgtgttaa ccactgattt cagagtagaa aaaatgctta 120
ttatttttaa ctttttaaag aaatggggaa tgttttgtaa cagtactcaa atagcacaga 180
atatttttca acattaaaaa catttgattg aatcctaatt tagacaagcc ataacttggg 240
aggatggtaa accatcctct gaaagattta actctttatt ggtttggaag tagtaaagta 300
tacccctaaa tgcctaggat tagagaaata attttattca ttgactcttt atggaaacca 360
aatggtatct aactctgttc cttctcagcc accttgaagg tgactattag tgtggtcttt 420
aagttgcttt tagaaatcct gaagaattca gtcttcgtct atcatattct tcagatttcc 480
ttttttgttt ttgcagttct gaggccaaaa gatgaagttt ctttgccttg cctgatgtgg 540
catcaacttt ctaattttta aacatgttac cagcgcatgt ctactgatcg tgtactgcag 600
gacctgggta gacagaaaca tacccacctc tgccctcctc accttccagt cagggcagca 660
ggggatcctc atatcctctg aggcaaagca aatggcttca ctttatgtgg aaatgaattt 720
gccagtgagc tttcgtgctt ggttgacaat aaggcatcac tgagggaact aattgggggg 780
caggtctcct tgaaggaaan cann 804

<210> 736
<211> 804
<212> DNA
<213> Homo sapiens

<400> 736
tctaagtcat taaggaattg ccacactgtc ttccataatg attgaactaa tttatactct 60
tgccaacagt gtaaaagtat tccttttttct ccacaatctc gccagcatct gttatttttt 120
gacttttttag tagtagccat tctagctggt gttagatgat atctcactgt ggttttgatt 180
tgcatttctc taattatgaa gttaataatt tcataatttt attaaatttg atgaaatcaa 240
ctcaagatgg attacagact taaatgtaaa acccaaaacc taaaaatcct agaagaaaac 300
ctaggcagta ctatgcagga cataggcatt ggcaaagatt tcatgatgaa gacaccaaaa 360
gcaattgcaa caaaagcaaa catggacaaa tgggatctaa tcatactaaa gagcttctgc 420
acagccaaag aaactaacag agcaaacaga caacctacag aatgggagaa aatttttgca 480
atctgtgcat ctgagaaagg tctaaaatcc agcatctata aggaacttaa caaatttaaa 540
agaaaaaaaa aacaacccat taaaaggtgg gcaaaggaca tgaacagaca cttctcaaaa 600
gaagacatac atggagccaa cgaacatata attctttata tacactgttg gatatgattt 660
tttaagtatt ttgtcagagg gtttttgcat ttatgttcat gacaaatacc agtctagttt 720
tcttgnaatg gcattgnctg ggtatggnat tatggtaatg ctggaatcac taaatgagtt 780
aggaagtatt ctctctaaat tctg 804

<210> 737

0956450.0200

0356203-050800

<211> 806
<212> DNA
<213> Homo sapiens

<400> 737
gaaaagcacg aactccgagc catccgcctc tcacgagagg actgtggctg tgactgccga 60
gtgttctgtg atccagacac gtgcacctgc agcctggctg gcattaagtg ccaggtggat 120
cgtatgtctt tcccatgcgg ctgcactaaa gaaggatgta gtaacacagc aggtagaatt 180
gaatttaatc ctatccgtgt tcggactcac tttttgcaca caataatgaa acttgaactg 240
gagaaaaacc gagagcagca aatccccacg ctgaatggct gccacagtga gataagtgct 300
cacagtagtt ctatgggccc tgtcgctcac tccgtagaat attcaatcgc agacagtttt 360
gagattgaaa ctgagcccca ggctgcagtg ctgcacctgc agtcggctga agaattagat 420
tgccaaggag aggaggagga agaagaggag gatgggagca gcttttgcag cggagtcaca 480
gattctagca cgcaaagctt ggcacctagt gagtcagacg aggaggagga ggaagaagaa 540
gaggaagagg aggaggagga tgacgatgat gacaaaggag atggcttcgt ggaaggtttg 600
ggcacccatg ccgaagttgt ccctcttcct tcagttcttt ggtattctga tggcaccgcc 660
gttcacgaaa gccatgcaaa gaatgcttct ttttatgcca actcttcaac tctgtattac 720
caaatagata gccacattcc agaactncaa atcagatctc tgagaactat tctgaaagag 780
accttgtcaa aaatggtacc ctttcn 806

<210> 738
<211> 716
<212> DNA
<213> Homo sapiens

<400> 738
atcctatgta ctcaagaatg caaactgtaa atcaatacct atgacttaaa ggtgacattt 60
caacaattgt acatcctgga gcctctcagg atctcaggat cattttgttc ctgtcaaata 120
tctaactttt taaataattt atgagcattt aactccactt cttacaattc caggatgaac 180
tttcttcatt ttagatgtgt atgttgtcat tcaaagagcc agttatttat tcatcaaata 240
ttattgaaca agtactatgt gccaggcact aactatattg tgcagtgtgg atataatagt 300
ggaaaaggca gtcacaacct agacctgaag cttacatggg gaggaagaga gaataaacat 360
caacttaggg gttgtaccga tagttgttct tttttttttgt ttgtctgaga cggggtttca 420
ctctgtcacc cagattgtag tgcagtggtg tgatctctgc tcactgcaac ctctgcttct 480
tgggctcgag tgattctcca gcctcagcct cccaagtagc tgggactaca ggtgtgtgcc 540
accaacgctc agctaatttt tgtagagaca gggttttacc atgttgccca ggctggtctc 600
gaactcctga gctcaaagca atcggtccgc ctcagcctcg caaagtgccg ggattacagg 660
tgtgancctg tgccanacct aattggtaaa ttgtaattgn aatgattggt aaaaat 716

<210> 739
<211> 808
<212> DNA
<213> Homo sapiens

<400> 739
gatgaactgt tttcagcccg ggtcacccca gccctggggt ggaggcccat tgaggatggc 60
cgagcagggg cgggcatcca ggcaggtcca gcagtcctgg cgggctgagg agaaggaggt 120
cagtgctcag ggagacatcc gcagagggac ctggcaggca gagctccaga agggagggaa 180

ctgcccagac agaaagctcc agaaggctgc ctgagggcct ctgaggcctc cggagtcagg 240
cgccatgcat gtggaaggtg gactcttcag catgggtggg accctagggg gctgtggacc 300
cccggcccct gggacccaca ggtgggagac aggagttcca accgccaggg ggagagtcct 360
ggaggatcct gggctgttgg cagccaccca gcagggcccg tcctgggagt ggggctggac 420
tcttcctgca ggaaaggctg ggctggacct gctctgagag gcttcagaac cagccacacg 480
aagaccaaag tgaagagcaa ggagctgaac tccacgcaga acacagcgca gcgtccttta 540
aaggaaggcc aaaaacaacc caacaaaaat gccaggtgat caaagcggtc acagcacaat 600
gtccacatcc aacgagaaat tgctgctacg tccagacgca gggaaaggtg ccgtgggaac 660
ctgagtcagc agcaacaggc ccagaagggc agccacggtg gactttgtca gacgtggacc 720
ctgaaatgac aatcacagca tgatttcang caggagcctg naatggtaca cttttggaca 780
tcggttggca aattctttta nagaagaa 808

<210> 740
<211> 773
<212> DNA
<213> Homo sapiens

<400> 740
tttcctgagg aggactgccg gtcgttcgga cgtcttgcct gtcgctggag gagaggtccg 60
ggctctccag gaaggtggct gcggcgacaa aatgaagata ttcgtgggca acgtcgacgg 120
ggcggatacg actccggagg agctggcagc cctctttgcg ccctacggca cggtcatgag 180
ctgcgccgtc atgaaacagt tcgccttcgt gcacatgcgc gagaacgcgg gcgcgctgcg 240
cgccatcgaa gccctgcacg gccacgagct gcggccgggg cgcgcgctcg tggtggagat 300
gtcgcgccca aggcctctta atacttggaa gattttcgtg ggcaatgtgt cggctgcatg 360
cacgagccag gaactgcgca gcctcttcga gcgccgcgga cgcgtcatcg agtgtgacgt 420
ggtgaaagac tacgcgtttg ttcacatgga gaaggaagca gatgccaaag ccgcaatcgc 480
gcagctcaac ggcaaagaag tgaagggcaa gcgcatcaac gtggaactct ccaccaaggg 540
tcagaagaag gggcctggcc tggctgtcca gtctggggac aagaccaaga aaccaggggc 600
tggggatacg gccttccctg gaactggtgg cttctctgcc accttcgact accagcaggc 660
ttttggcaac agcactggtg gctttgatgg gcaagcccgt cagnccacac caccttctt 720
tggtcgcgac cgnacccttt tgcgccggtt aacttcccga gcctnttatg tgg 773

<210> 741
<211> 798
<212> DNA
<213> Homo sapiens

<400> 741
ctgcccaaag cacatcttct tcctatgcta ctctctttct gtgcttatgt gaaaccacca 60
ttttctctct ggcaactcag cagccaagag aaatggctga gtcttcaagg atgaatgtga 120
cgtggtaccc aaggtcattt gatgtttcta cccttaacac ctgtttgtca cccttcttgc 180
acttgagcaa aactaaactg ctggtccctg tacttcccat ttttcccatt tatttctttc 240
ccaatagttc caccaattag aaatgtccta attcttccca ctcccttatt cttcagatac 300
atttttaagt ttaggctcaa atgccacctc cccagagttt cctctgatac ctctttgcag 360
ctagaaatga tctgtctttc tgggaactcc catagcttca tactcatatc tatctatact 420
gcttatggca cttctcactg tctactgtac cttttaactc tttatatatg tctcctccga 480
tgcgagtgta agctccctga gattagttaa cgaatctttt aagttcccgt attagatctg 540
tcgcagtgcc ttgaatatac aagcattcat tcagtagata tatgaatgaa tggattaatg 600

0005205450

ggtgatttct tatatttctt taaaatacat agaaataaag ttagtaatta ggtaacctat 660
gataacataa taatgtggac gcctggggaa accctcctca tgtttgcatc ttctacctct 720
gccattttcc tgcaattccg nttcctactt angcagtcag agagaacaat tctaataaaa 780
acactcctct ctattaan 798

<210> 742
<211> 824
<212> DNA
<213> Homo sapiens

<400> 742
gtattctttt tcttagtgtg agctctaaaa tcaatgttct tgaaaaagaa attattttgc 60
agaagttggg gaatcatgtt tgttgaatat gtataaaata gaaacatagg ctgggcgcgg 120
tggctcacac ctgtaatccc tacactttgg gaggctgagg caggtggatc acctgaggtc 180
cagagtttga gaccagtctg gccaacatga tgaaacccca tctctgctag aaatacaaaa 240
cattggccgg gagtggtggc tcatgcctgt aatcccagca ctttgggatg ctgaggcggg 300
tggatcacct gaggtcagga gtttgcgacc agcctggcca acatgatgaa accctgtctc 360
tactaaaaat acaaaaaaat tggctgggtg tggtggccca cacctgtaat cccagcactt 420
tgggaggtcg aggcgggtgg atcacctgag gtccgaagtt cgaggccagc ctggccaaca 480
ggatgaaacc ctgtctctat taaaaataca gaaaattggc cgggtgcggt ggctcacccc 540
tgtagtccca gtactttggg aggctgaggc gggtggagca cctgaggtca ggaattcgag 600
atcagcctgg ccaacatggt gaaaccccat ctctactgaa aaacacacac aaaaaaatta 660
gctgggcatg gtggcacatg cctgtaatcc cagctctcgg gaggctgang caggagaatc 720
atttgaacct gggaagcggg gcttgcantg agccgagatt gcacccctgg acttcagcct 780
gggncccaga gcaaggactc tgtcttaaga aaaacaaaaa aaaa 824

<210> 743
<211> 820
<212> DNA
<213> Homo sapiens

<400> 743
ttngaacatg taatgctact attagtaaaa ataagtgtaa ttaatgtaaa gttgtgtaac 60
gattactaaa cttgtatact tgaaatgatt gaatagttcc tagaagtcat ttgtttctct 120
tttatttaaa atgtagcaag tttctaattt taaatacata catattaaga gatgcattta 180
catttttta tttttagtta ttatggatac ataatagttg tacatattta tggggtacat 240
gtagtatttt gatagaagca tacaatgtgt gatgatcaaa tcagggtaat tcagagatcc 300
gtcacttcaa acatttatca tttatttgtg ttaggaacat tttaatttca ttcttttagt 360
tattctgaat tatataataa attatagtca ccctattgtg ctgttggaca ctagaattta 420
ttctatctaa ctgtgttttt gtacctgtta acctttccct ctttgtccct ccctccctgc 480
tccccttccc agcctcttaa ccatcattga gagagatgcc tatgtaaatc ttaagatttt 540
caaaaggagc acacacattt ggtaaagcac tctaactgta atgcacggta cacacaatgc 600
gcattttctc tttccttgct gtaacctctg gtctctcagg tccctgcaga cctttatata 660
tatgtatatg tatatgtata tccttccaga tacatataaa cacacatgcc acccttaaa 720
aacacaaacg gtancttatt ttatacactg ntctatgctn tgctcttttc atggaatata 780
cttggaaggt tataatcagt aagtctggaa ctctgcctcc 820

<210> 744

0505050.0050050

0030350-0002000

<211> 760
<212> DNA
<213> Homo sapiens

<400> 744
atttgaggct ggatgcagtg gctcacgcct acactctggg aggtagaggt gggaggactg 60
attgaggcca ggagttggag accagcctgg gcaacacagt gagaaccctc tctacaaaaa 120
atacaaaaat tagccaagtg aggtggtata tgcctgtagt cccagctact caggaggttg 180
aagtgggagg atctctcggg ccagggaggt tgaggctgca gtgagctatg atcacaccac 240
tgtactccag cctgggcaac agagcaagac cctgtctctc aaaaagagag aaaaagaaag 300
aaaacatttg agctccatag attgacattc tgatttgaac agtttcccat agagggagaa 360
ttgcggcgaa agaggcaagg cctgcccaca atgcatggtc tgggacttag ctgatgaagt 420
gctctgcacc acccagcttc gaggagatgg ggactggggt ttccccttgc ttgacatctt 480
aactacttca ctgcaggaaa ggggaggagg gacaagagga ggaccaattc cccaagggac 540
acggagaccc acattaggtt ttggaaccca cgcctggtac tatctgaatt taaaagcctt 600
gcttgactca ggcggggctg atcaaaggcc atttgctgtt ttagagtgtt cctatgtgtg 660
cttggcagac agagttgnct ttttattgct tccattccca ctaagacctn catcccccca 720
ctgncccccc aacccccttgg tgagcttggt gaagatgtgt 760

<210> 745
<211> 820
<212> DNA
<213> Homo sapiens

<400> 745
gctatcctct gaaccaattt ccttcggttt aatgtacctg tatcttgggg ttttttttcca 60
cttaatttat cctggagctc tttccataac aacacttgga aagcactctc atcctttttt 120
cactgctgaa cagaattcca ctgtgtggat ggaacatact ctatttcacc agtcccctgt 180
aaccagtcac ttggtttgtt tccaatcttt tgctttttca gagtaataac cttgtatgtc 240
tatcattttg tatgcataca ggtttatatg taggaaaaat tcctagagta ggattgctgg 300
accaatggat aaaagtatat tgtggacaga caatgccaaa ttgcctttca gagactgtgg 360
ccctgtgcac cccatcaggc atgtgtgact accaaagctc ctgtcagctg ttttatttta 420
tctcctttcc agtctcaggc tcaatgcaga actttgaggt aagcttttct aaaatgtagg 480
ctcctaaacg ccacagccag ctctgccaca tgaaggagag ctcaaatgag acagaaacag 540
cctctgggca ggatttctat cctgcacaga tatattttcc acattctggg aaaccgtgaa 600
gcttccagag ccacaattcc ccagaaacac atccccctgt ggtacagcca agccccagaa 660
caagctgtgc ttgcctggca ccttaaagcc aagcaccatg gatgccactt gccatgggtg 720
cctgcaattt caaataatga gaaattagaa atttcagctt ctcagccctn tagccacatt 780
tcangtgcat gacagcctca gtggcaagca gctactttgc 820

<210> 746
<211> 815
<212> DNA
<213> Homo sapiens

<400> 746
ttttgccttg ggtcaaaatt atataacgca tctatatgag ttatgttcaa tactctgacc 60
catcactgta ttccttggag tatactttct ttcttaaaga gataaaggta tggaacaaga 120

atcacagatg ggctatgaac ctcctgaaat tgtagttcga attatgtgtt tgtgtgaatg 180
atgcttactg tttctgattt tatttgattg ttgtataatg aaaatgatgt tggctaatga 240
tatagaaatt aggagaagaa atattgaaaa cacacacaca gtattttatt catttgtcca 300
gaggacatga aaatttaaaa tggatgcatg aaagatattg attatttaat tatatgttgt 360
gtcacattat atgattgtta aaggcaatct aataaaaaag gtagagaggg ttaaatatta 420
atttaaaagg ctgtcacatt ttgaattatc ttaatagaaa ggtcttttgt gcaaaatgag 480
aggcagacat tattgcagaa aatgccaaaa aaagagaaag aaatttccaa caagtagctg 540
caaaaaaata tgtgaaattg agaatttaat aagctaaata tctatttttg aaaagttgat 600
ggtaaaaaga aaggttataa ctagaaagga atttagatat taataatgtt ttgatggaaa 660
tgcaatcaga agaggcctat tattggtatt taggtgcaag acagcacaat ttgatcatat 720
tgctggaagg acatggagat naaatataat atttcttggt attttaacng agaaaaattg 780
gcctaggaag ttctcattta agaccccaag atgtn 815

<210> 747
<211> 784
<212> DNA
<213> Homo sapiens

<400> 747
actagcggag ccgcgaggga gaggccgcgg ccccttcccg ttgcctgcgg ccaccggccg 60
gcattcagag cccctcgcct ggcgctaaat ttaaaaacgt aacacgagca gcaggctggt 120
ctcggaaacg aaacgaaatt cggtccctgg gcctcctccc gggcgctgcc ggtccctcag 180
cgcgccgcgc cacccggaac agacccttct cccgccattt tcggcggggc tgggagactg 240
aggcccgcgg cgctgagcct gcggcgcccc ggaagaggcg ggcggcatgg ccgctggcgt 300
ggactgcggg gacggggttg gcgcccggca gcacgtgttc ctggtttcag aatatttaaa 360
agatgcttca aagaagatga aaaatgggct aatgtttgta aaactggtta acccctgttc 420
aggagaagga gccatttact tgttcaatat gtgtctacag cagctgcttg aagtaaaagt 480
tttcaaggaa aaacaccatt cttggtttat aaatcaatca gttcaatcag gaggtcttct 540
ccattttgcc acacctgtgg atcctctatt tctgcttctc cactacctca taaaggctga 600
taaggagggg gaagtttcag ccccttgatc aagttgtggt ggataacgtg tttccaaatt 660
gcatcttggt gctgaaactt cctggacttg agaagttact tcatcatgtg acagaggaaa 720
aaggtaatcc agaaattgac aacaagaaat attacaagtn cagcaaaaga gaagacatta 780
aagt 784

<210> 748
<211> 781
<212> DNA
<213> Homo sapiens

<400> 748
aaaaaaatca aagcccctct gagtaaggta cggcttgtag atgcaggctt tgtttggact 60
gagcctcatt ctaagagact taaagttaaa ctgactattc agaaagaggt gatgaatggt 120
gctatccttc aacaagtgtt tgtggtggat tatgttgttc agtcccaaat gtgtggagat 180
tgccatagag tagaagctaa ggatttctgg aaggctgtga ttcaagtgag gcaaaagact 240
ttgcataaaa aaactttcta ctatctggaa cagttaattc tgaaatatgg aatgcatcag 300
aatacacttc gtatcaaaga gattcatgat ggtctggatt tttattattc ctcaaaacaa 360
catgctcaga agatggtcga atttcttcag tgtacagttc cctgtagata caaagcatca 420
caaagactga tctctcaaga tatccatagt aacacataca attacaaaag cacttttttct 480

0506030.0506000

gtggaaattg ttccaatatg caaggataat gttgtctgtc tgtctccaaa actggcacaa 540
agcctgggaa atatgaacca gatttgtgtg tgtattcgag taaccagtgc cattcacctc 600
attgatccaa acaccctaca agtggcagat attgatggga gcactttctg gagtcaccct 660
ttcaatagtt tatgtcatcc caaacagcta gaggagttta ttgtgatgga atgcagcata 720
gtccaagata tnaaacgtgc tgcaggtgct ggaatgatat caaaaaagca taccctcggg 780
a 781

<210> 749
<211> 781
<212> DNA
<213> Homo sapiens

<400> 749
gtctgggggc actgaaggtc tcttggctga aaaattggag gctttgatca ctcagcatcg 60
agccaaacag gcagctacca tgagtgaagt ggagtggaga gggagaacgg ttccagtgaa 120
gattgacaaa gtgcgcattt tcttattagg actggctgat aacgaagcag ctattgtcca 180
ggctgaaagc gaagaaacta aggagcgcct gtttgaatca atgctcagcg agtgtcggga 240
cgccatccag gtggttcggg aggagctcaa gccagatcag aaacagagag attatatcct 300
tgaaggagag ccagggaagg tgtctaatct tcaatacttg catagctacc tgacttacat 360
caagctatca acggcaatca agcgtaatga gaacatggcc aaaggtctgc agagggctct 420
gctgcagcag cagccagagg atgacagcaa gcgctcaccc cggccccagg acctgatccg 480
actctatgac atcatcttac agaatctggt ggaattgctc cagcttcctg gtttagagga 540
agacaaagcc ttccagaaag agataggcct caagactctg gtgttcaaag cttacaggtg 600
ttttttcatt gctcagtcct atgtgctggt gaagaagtgg agcgaagccc ttgtcctgta 660
tgacagagtc ctgaaatatg caaatgaagt aaattctgat gctggcgcct tcaagaacag 720
cctaaaggac ctgcctgatg tgcaagagct catcactcaa gtgcggtcag agaatgctnc 780
c 781

<210> 750
<211> 699
<212> DNA
<213> Homo sapiens

<400> 750
ggcggagcga acatggaccc ggctgcgcgg gtggtgcggg cgctgtggcc tggtgggtgc 60
gccttggcct ggaggctggg aggccgcccc cagccgctgc tacccacgca gagccgggct 120
ggcttcgcgg gggcggcggg cggcccgagc cccgtggctg cagctcgtaa ggggagcccg 180
cggctgctgg gagctgcggc gctggccctg gggggagccc tggggctgta ccacacggcg 240
cggtggcacc tgcgcgccca ggacctccac gcagagcgct cagccgcgca gctctccctg 300
tccagccgcc tgcagctgac cctgtaccag tacaagacgt gtcccttctg cagcaaggtc 360
cgagccttcc tcgacttcca tgccctgccc taccaggtgg tggaggtgaa ccctgtgcgc 420
agggctgaga tcaagttctc ctcctacaga aaggtgccca tcctggtggc ccaggaagga 480
gaaagctcgc aacaactaaa tgactcctct gtcatcatca gcgccctcaa gacctacctg 540
gtgtcggggc agcccctgga agagatcatc acctactacc cagccatgaa ggctgtgaac 600
gagcagggca aggaggtgac cgagttcggc aataagtact ggctcatgct caacgagaag 660
gangcccanc aagtgtatgg tgggaaagga ngccaggac 699

<210> 751

0507030.0040000

0050050-0000

<211> 704
<212> DNA
<213> Homo sapiens

<400> 751
agaagccggg agggaacgag ggcggaagcg gaccagggcc aggcttgtgt tcgcagcctt 60
gccggggctg gggttccgat gtggtccccg gagcgggagg ccgaggcccc agccggggga 120
gacccggcgg gccttctgcc ccccgagtgg gaggaggacg aggagcgcat gtccttcctg 180
ttctccgctt tcaagaggag tcgcgaggtg aacagcaccg actgggacag caagatgggc 240
ttctgggcgc cgttggtgct gagccacagc cgccgccagg gggtggtgcg cctgcgtctg 300
cgggacttgc aggaggcctt tcagcgcaag gggagcgtcc cgctggggct ggccacggtg 360
ctgcaggacc tgctgcgtcg aggggagctg cagcgggagt cagacttcat ggccagtgta 420
gacagcagct ggatctcctg gggggttggg gtcttcctgc tgaagcctct caagtggact 480
ctttctaaca tgctgggaga taataaggtt ccagctgagg aggtccttgt cgctgtggag 540
ctgttgaagg aaaaggctga ggaggtgtat cgtctgtatc agaactcgcc cctctcctcc 600
caccccgtgg tggcctgtca gagctcacac cctctgtgct aactnctgcc agatgagagg 660
accttctact tggtgttgct gcatctgcan aangagaaga aggt 704

<210> 752
<211> 777
<212> DNA
<213> Homo sapiens

<400> 752
gaatcttcct agttctagtg gttggacaag tctttaactc catagcctag ctccagctag 60
gttcatgagc tggccctact gctctctcct ttccccttt cctcttatcc cattgcatta 120
gtctggattc ttgcttacag ataaccaaaa ccttagtcaa tctgatttaa gcaaaaacca 180
gaattgatag gctcacataa ctgaaattcc agggtagacc ctaaggccgg gctggatgca 240
gggactcagt catctcactc gggctaggtc tctctcaatg cctagtccct atttcatctg 300
agttggcttc cctctcaggt gggctttttc tcatggagat cctcagcagc ccatggaagg 360
agagtctgtt tttcccatca tcttgtacaa gtccccaggt tgagtctcat tggcctgctg 420
gccccatgcc catccctgaa caatactgca attggtcacc tgcagtcaca tgccctgtga 480
ctgcaggaag gtggggatgg gctagttacc caaaggaaag tccaggtgct gtgcccagaa 540
gggagaatgg atgtggggca gagcaaaccg tagatgtcta ccttacccag ccagacaaga 600
ctgcatgtaa gaaccaggct tacgggccag cccctctctg caggcccaca ctgtacactc 660
ctgaaatgcc attccttagt ctggccaacc ctcattcacc cttccaatct cagcttatat 720
agatggcttc ccatgctggc taggaactac cccacattga ctcccatctt gcatgct 777

<210> 753
<211> 755
<212> DNA
<213> Homo sapiens

<400> 753
attgtgagca cgcacaaaat agtttttgca tatccctgaa tgtgttgtag aacaggaata 60
ttctctaaaa atctcagcag gactttgatt ggatgcacac atgcattgtc cagctctaac 120
attggaatgt tctgttattt ttttatggtt ctaatatgtc ctcgtccatt tgtaatgcag 180
tgtgttgtac ttttggatga taaaatgaga attaatattt ttaaacacta ttttaccagg 240

aatgaatgac taaacattta catgaaggca taaacatttt agtgaaacca aacaaaatct 300
atgaggttat tccatggcaa acaaaaatca attatacaat atatattcta atcagagcct 360
ttaaaatatt taatttttgt tttatgttta cctttcagat aacataggtt tgagaagtga 420
actatgtgtt cactactcat ttctggactt tttattataa cttaatctta acaggtggtt 480
gtcttcatct ttttatgcct tcattcattt atttctgata ttgatgtaaa atgataacta 540
atttgttctc ttattttagg gctaccagag accaagtcat tacattgcaa cccaaggtaa 600
aactttgcct tgttaaatgt tatagaaaaa acaaacttgc ttattcatct atgtggtggn 660
ttttattatt ttttaaattt tatcttagta acaaaaaaat cagcccttct gattaacact 720
gntccttact catttgnata gtacaaattt attgg 755

<210> 754
<211> 777
<212> DNA
<213> Homo sapiens

<400> 754
actttacctc acttgtgaag gagaaagagc catcctctct acctttgttc taggtggata 60
ttctcttgct gtcagaacac catccatttt tgtagcccaa agaacaatgt ttccatagta 120
taaagttgaa aaaaaaaaca aactatattg aagcctcttt aaagacaaga taaatacaga 180
gagttatgtt aggagtataa caagtaatat tatgtctcag gccttctaat tgaaatgcta 240
agctaagctt actttttttt ttttgtaacg gagtctcgct cttgttgccc aggctagagt 300
gcaatggcgt gatctcggct caccccaacc tctgcctccc gggttccagt gattctcccg 360
cctcagcctc ccgagtagct gggattacag gcatgcacca ccatgtcgga ctaatttttt 420
gtgtgttttt tttttagtag agacaaggtt tctccatgtt ggtcaggctg gcctcgaact 480
cctgacctca gatgatccac ccacctcggc ctcccaaagt gctaggatta taggtgtgag 540
ccactgcacc cggccttttt ttttttcttt ttgagatgga gtcttgctgt ctcccagcct 600
ggattgccac agtgcaatct cggctcactg caacctcctg acctcaagtg atccacctca 660
gcctnccaaa gtgctgggat tacagatgtg agccaccgta cccagcctaa atgctaagct 720
tacttttgat gtggtaaatt atatattctc tatcccaaat acatagggag caagttt 777

<210> 755
<211> 764
<212> DNA
<213> Homo sapiens

<400> 755
accacgaagc tacctttttgg gatgattgct cgattgtttg gttttaaat ctgagaagcc 60
tagataacta atctgctttt aatcacgatg ttttaatcta cctctgtctc tttaaccatg 120
ctgtctctgg actgagcaag agggaggagg gagcctgctc accccactcc agggccttcc 180
ccagcggcca ccaactgacc tggggcgctg ctccccacag tccaaataag ctgaaagtgc 240
agctcgctgc aggccccaga gcgagcttcc cctcctccct gctctcccag gcccctgcca 300
cagcctcttt ccgtccctct ctttctgatc caggcccctc agtccaagct ttggaaaacc 360
ttcacctcat cttaaaccga actcaaatat atttattttt ttaccatacc aacttctctc 420
ccatctctag gtggctcagt ccatggccac tccctgcccc cagcctggct ggacagcaag 480
gaatccacag cccacacgtg agctccctcc tcaccccccag gcagggaagc ccctcctgcc 540
agtccctgtc ccctttcagc ccaccagtcc ctctctgctg gcggtgatgg gaggcctttc 600
tagacctggc tctttctctc ccgtctcagt ggctgcgctg ggaggcggcg gtgagaggct 660
cgcacgcctt cagcccggcc ccgggccccc gggaaggaga gcgagcagcc ccngctntgg 720

0050504050 - 0050504050

gctacngact atgggccaat agctttgacc acccggcgaa aact 764

<210> 756
<211> 800
<212> DNA
<213> Homo sapiens

<400> 756
aacagcggaa agtattagac ctcagacgat ggtactgcat aagccgacca cagtataaga 60
cttcttgtgg catctcttca ttaatttctt gttggaattt cttatacagc acaatgggag 120
ctggaaacct tccacctatt acccaagaag aagctttaca tattctgggc tttcaacctc 180
catttgaaga tattaggttt ggtcctttca cggggaatac aacacttatg aggtggttta 240
gacaaattaa tgaccacttc catgtaaaag gatgctctta tgttctatat aagcctcatg 300
ggaagaataa aacagcagga gaaactgcag gggacctctc tcaccacagg aagttgaata 360
ttggatctta attggagaat caagtagaaa acatcctgcc attcactgta aaaaatgggc 420
agatattgtt actgatctaa acactcaaaa tccagaatac ctggatatcc ggcacttaga 480
gaggggactg cagtatagaa aaacaaagaa ggttggggga aatttgcatt gcatcatagc 540
attccagaga cttaactggc aaagatttgg cctttggaac tttccatttg gaaccattag 600
acaagaatca caacctccaa cacatgccca gggaattgcc aaatctgaga gtgaagacaa 660
tatttccaag aagcagcatg ggcgtctggg ccggtctttc agtgctagtt tccatcagga 720
ctcggcatgg aaaaagatgt ctagtatcca tgagagaagg aacagtggnt accaggggta 780
cagtgattac gatgggaatg 800

<210> 757
<211> 798
<212> DNA
<213> Homo sapiens

<400> 757
gggtactgcc gtcgccgccg cccaggccgg ggaggggtgc gttagtgtca ggaagcgggc 60
tgcgccgagg tcgtagcgga accagctggc gaccccgcag aatgaaccac aagagcaaga 120
agcgcatccg cgaggccaag cggagtgcgc ggccggagct caaggactcg ctggattgga 180
cccggcacaa ctactacgag agcttctcgc tgagcccggc ggccgtggcg gataacgtgg 240
aaagggcaga tgctttacag ctgtctgtgg aagaatttgt ggagcggtat gaaagacctt 300
acaagcccgt ggttttgttg aatgcgcaag agggctggtc tgcgcaggag aaatggactc 360
tggagcgcct aaaaaggaaa tatcggaacc agaagttcaa gtgtggtgag gataacgatg 420
gctactcagt gaagatgaag atgaaatact acatcgagta catggagagc actcgagatg 480
atagtcccct ttacatcttt gacagcggct atggtgaaca ccctaaaaga aggaaacttt 540
tggaagacta caaggtgcca aagtttttca ctgatgacct tttccagtat gctggggaga 600
agcgcaggcc cccttacagg tggtttgtga tggggccacc acgctccgga actgggattc 660
acatcgaccc tctgggaacc agtgcctgga atgccttaat tcaaggccac aagcgctggt 720
gcctgtttcc taccagcact tccagggaac ttatcaaagt gacccgagac gaaggangga 780
accagcagac naactntt 798

<210> 758
<211> 797
<212> DNA
<213> Homo sapiens

0 9 5 2 5 0 3 5 0 2 0 0 0

<400> 758
tattgtcact aagaagccca gaaatggtta tcagccattg ataatttaag aagtgtcctt 60
gccttctttt gctgtattca cagatttggg aatattttta tgctttagtc atttaactag 120
agaacatatg cttactataa ttaaacaatc aaaatgcttt gttaccattt tctaagacta 180
attcatcctt aaatcagtgt catttattcg tcataaactt caacttcatt ggctttatga 240
agtgtttgaa gtggtgtttt tatggaatca cttttgattc atgtgtttaa actttgacat 300
ctgtatgtga gaattccctg tcctactctt ctaatcatcc ataagtcgac agcagtgttg 360
tttcttagaa gttggtttat tgaattggaa tataaacacg aagtaaagaa tgctgcttct 420
ccatgggagg ggttgaacac attcattgct gtagttctct tccctctcta cagttctttc 480
atattcagtt tatttatttt gatgtttagg gttacaaagt tataagtgct gccttgtagc 540
tagtttttgg aaacaattca aaatatttat tctttgactg ttttcttgtg gggagagtga 600
agggtgggaa aggggcaaga acactaagaa aattaagata aagactgctc agctgaagtt 660
ttataaaaat ctgacttgag tgtttttctc ttcatttgct gngcttgtgt aaacagtgtg 720
acaccatcgn cacaacaggc tcgggtctgt cctncccata tgttacctga agatggagct 780
aatctttcct ctgctcg 797

<210> 759
<211> 798
<212> DNA
<213> Homo sapiens

<400> 759
ctacttctaa aatttttttc atagatggga ttttcctatg ttgcccaggt ggtctccaac 60
acacaggctc aagccaaact cctgcctcat actcctaaag tgctgggatt acagacacaa 120
ggcatgacac ccaaccgagg ttctccttgt agagtaaggc ctgttaagtg gatttatcag 180
tctccctagt tcatgccacc gaaacaaaga aacaaattta ccgtgggcct aatctgtttt 240
aaacttttc ctcaatacgt agcaatggat tatcaactgc tcgatgcagg attttgtcac 300
tttatttctt ttgtgaaagg attacatata gtgagaaagt tgtcttattt gtctagctag 360
atatacatta ttggcctgtg tgatatgctg tggaaaacaa tcttaaacac tctggataag 420
atgagaataa atgactccac tgaaatagaa gtctatgcct tttaaagtga attagtacaa 480
aaacatttgc tgtggatatg atcttaaagg attgttttaa ccaagtttgt ttctatttca 540
ttacagagct ggagctagtg gaagtgagat agcacttgtg ctgttgggga aaacaaagga 600
tatgtttaat ccgaattagt ggattacttt ctagtgtatt tcatagtgtt agagtctaaa 660
gggtatgtga tagtagtcag gagatcagga ttatgaaact ggggctgcca cttgtgtgac 720
cttgtgtgtg atacttgaat gctgtangcc ttcatttcaa aagcganggg gttggaatag 780
aaacctctca naccctaa 798

<210> 760
<211> 797
<212> DNA
<213> Homo sapiens

<400> 760
tactatttaa ttatgaggag agaactcagc gacactacct gggccataca gactgtgtga 60
aatgccttgc tatacatcct gacaaaatta ggattgcaac tggacagata gctggcgtgg 120
ataaagatgg aaggcctcta caaccccacg tcagagtgtg gggttctgtt actctatcca 180
cactgcagat tattggactt ggcacttttg agcgtggagt aggatgcctg gatttttcaa 240

0962945.0026

aagcagattc aggtgttcat ttatgtgtta ttgatgactc caatgagcat atgcttactg 300
tatgggactg gcagaagaaa gcaaaaggag cagaaataaa ggaaattttt aaaaaaccga 360
gtattgtgtt ttagagtatg ttacttgttt tgcaggtatt tggaactata ttggtattag 420
aactatctat tcgtaagtcg caaaagcaga tctactagcc aaattcagca aatttagtga 480
tttgtcataa tcgttaagat attaacacta tagttataca agataaaata gtcaagcagc 540
ttgaagcaat ttcaatattt cagacattac tatagtcctg aaatgccaga gtagatggat 600
gtgtgatctc ataattaaga ctgaacacac ttcttggttt tcttctttaa taaaacatgt 660
aatttcattc catctttaaa gctttagaaa tctagaggaa aaattcagta ggaatacgac 720
tgatgtaact gaagggctta tgttaagttt tttggtctta attgtgtttg taggattatt 780
ttagaaaatc aatagca 797

<210> 761
<211> 798
<212> DNA
<213> Homo sapiens

<400> 761
aatgtgtttg tatgtttttt tttttaggag atcatgaatc agacagataa aaatcaacaa 60
gaaatcccat cataccttaa tgatgaacca ccagaaggtt caatgaaaga tcacccacag 120
cagcagccag gcatgttgtc ccgtgtgact gggggtatct tcagtgttac aaagggagct 180
gttggtgcca ccattggtgg tgtggcttgg attggtggaa agagtctgga agtgaccaaa 240
acagctgtta caactgtgcc ttccatggga atagggctgg tgaaaggggg tgtctctgct 300
gtggctggag gtgttacagc tgttgggtct gctgttgtaa acaaagtgcc cttaacagga 360
aagaagaaag acaaatctga ctgaaatata gagatacact tgcgctccac agcactgtaa 420
tgccagtggc attgaattgc taaattatgg actacaacca agtcaactgt tttggacgtt 480
tatcttctaa actgctgtgt tgaaagtatt gatgactggc tttcatctaa aaagaagaga 540
ccaatacgag cacagtatat gaaggtttct catacttaag ttccaggttt ttatctggta 600
aaatgttaca cttactcggt tgtaactgaa gatatggtat gtttgaatat ttactataag 660
tctttcagtt tgactaaaaa tgtgaaagtt gaatttagta gatgatcttc acagttccat 720
atgtataatg tgccaggtaa ctacctgccc cttaagaagg gaaccttgaa ttacataagc 780
ccgacctttg atgtgcct 798

<210> 762
<211> 791
<212> DNA
<213> Homo sapiens

<400> 762
ctgagcattg atttaccttt tggtaaatga ggataataat acctgtatca cacaattatg 60
aagatttaaa tgaaaaagca gatgtagctg ggcgcggtgg ctcaggcccg taatcccagc 120
actttgggag gccgaggtgg gtggatcacg aggtcaggag ttcaagacca gcctggctag 180
catggtgaaa ccccatctct actgaaaata caaaaattgg ctgggaatgg tggtgcgttc 240
ctgtgatcgt agctgctcgg taggctgagg caggagaatt gcttaaactg ggacccagga 300
ggcggaggtt gcagtgagcc gggatcgcac aactgcactc caacctgggc tacagagcga 360
gactccgtct caaaaaaaaa aaaaaaaaag aaaaagcaga tatatggctt ttagtaccat 420
gttagacaag aactgccaag tactcaataa ataatttatt attaatatta ttattccttt 480
tcattgtttc ccacaaccca ccttcccttt caaccaggct ggtggtgtta ctttcctaaa 540
cattccatgt ccaattttga tcttggttct cagatttggc ttttatacta taatttttg 600

0356045-0700

agtgcccttc ttcctccact ttggttattt aattactacc tatcctttca aatctaatgc 660
aagccctgtt taacaaataa atgcctttct gatagcttta ttttaaacta atctgctctt 720
tcttttagct cccttaatac tacagaaaat atgactctgn tgncctaatg catcgngact 780
tatctattcc a 791

<210> 763
<211> 801
<212> DNA
<213> Homo sapiens

<400> 763
cagcgttcac ctctcagcca agtccaatag cactcactta ggtgtgcatc tgtggctttc 60
tctctgtctg gtcagtgctc ctttatatgt ccataccccc tgccagaggg cagcattgag 120
ggtgtacaga gcccagtgtg actctcctgc agctggggac atagaagagc tctgtgacga 180
tggcagatgt ggttctccag cctcttgcct ggctgccagt gggagtagcc tgtctgttct 240
ggcacagggg gctgttccat atggagggtc agaaactggc cttcacagcc acccaggcgt 300
tccttccact tctgcacgtc ttcctttccc catgaagatt tgggtgtacc ctggttgtgg 360
tctctgaaga ctgggcaggc ctgtactttg tgaagctttc agctgtctct ggtaggcctg 420
atgaagccta tctgcagagg ttggcctgaa gccataatga gcagttctgt tcttttagc 480
ccttgtctag tttatggctc tgttgcagac atgcctttct gtgtcttggt taaaagtact 540
ggtgtgtctt tgcatttagg tgtggtctgt gagtctggga aagcttctag aggagagccc 600
tccagggttg ctctttgggg tgggagtagt gggagcggaa atggaacgct gactgccctc 660
ttaaagccag aagggtactt cattcagggc angcagttgg catgtgtagg cactcaggag 720
tcttccttca atttcagccg gccggtgttc atcatcagga gtggcanggg ttggatatng 780
gaattgaaga atgttgcctc t 801

<210> 764
<211> 819
<212> DNA
<213> Homo sapiens

<400> 764
acaaaaatgg ttgctgtagc cctgcctgat tttgtacacg tttgtctaag aattgagttg 60
gcacttaagc tcacttctca aagtataata atattgtatg acctcatttg tcctttcaca 120
aaagcacttg catcatttcc ttaagtcatc tgctccctga catgttttct tccctaataa 180
acaacttctg tctgttattc ctgccaatga tgttctgttt ctgatgccat atcctattga 240
gcgtgcccct gtactaatat cattgaaaat attgatatgc aaacacattt ccttttcatc 300
cccattctat ctttcccttt ggggacagat tgctttccaa aagctcatga acaaatattt 360
ggaatgctgg tacctttggg gcagaggtaa gggtgggcgg ggtgggggca gaaaggtaat 420
gcttaatgca gataactctt ctaatcagtg tccatggcaa tatgaacgct tgaagaaaac 480
tcagtgacat atcttgctca gtagtttctt attcctgaag aaccacaagc ataaagtgag 540
gcctcagtgc tggtgctctt ggagtatggg gaatgtgcaa atatttaact gttttgtatg 600
ctgcacattg caggtctgct catgtgcatt ctccctttgt cttcctttgn catatgtgtt 660
tttgcttttt tgaaagtgca gtctttattg naccccttctt cagcttgtag caaattagaa 720
tgcttagcat ttatggtcat tcattattgg atttgccatg taaaattttt attaccttag 780
acaagcttat aagctggtac tacataactt atcttactg 819

<210> 765

05/05/2005 10:07:00

0950350.0002000

<211> 774
<212> DNA
<213> Homo sapiens

<400> 765
tattagttag ggaattgctt cctacagtgg ttccaccaat tctgttataa ggagtatatc 60
actctcctaa tagcagtttc taagttccag tagcaccaca cactgtcgat cacttagttt 120
tattagacat taaaattagc caagccagga agtatgaaat tatttctttg ttttaattac 180
tatgaacttg tatctgattg atttatttat gagaattcaa gtgtttatta ttctcatttc 240
ttcctttatg aattattata tcttttgcct gcttttctaa tagaatgtaa aactatggat 300
tttttatata gtctacacac tattcctttt tttctgttga caagtattct aagtatcttt 360
cctcaatctc tgccctttt tataccttgc ttataattcc ctttgatatt taggagtttt 420
aaatattagt atcgtctacc accttcttcc ttaagatttt gtctataatt tgtacatttt 480
tgnttttcac tttaaggtct ttaaaccata tggcatttat tttgaggact agggatctaa 540
ttttattttt tcccatgagg ataaccagtt gtcccagcac aattcattga ctaatgtctt 600
ctttccccac tgctgaatat tcctagcttt gtcatagaat gggcttcttt gcattgcttt 660
atttgnttag ctttatgctg ggtatattgn atagtcacaa tttttttgtg tgttggtagg 720
ggtggtaaat atacatagaa tttgncattt gatctttta aattttattt ntgg 774

<210> 766
<211> 821
<212> DNA
<213> Homo sapiens

<400> 766
tttatgtaaa catatacacc tttttaacaa atatacctgg agtttttatt gacgctatct 60
tgcagtctta tgccattatt attttgttca cccatccagt tggactacct ttcacatgta 120
tcatgatttt cataaatcta aatatctcct gtaacataac tgtcttttaa ggagtgaatg 180
agtggatttt ttgatggcac cataacacag aaagcaaata tggatggaaa aatctaaaga 240
ctaaaaatga atttacctcc atcttctgat ccatttatct ccagcaacat tagcatagca 300
taggtaatac gtggactggg catttgagaa ccactgttgt agctatttcc tactcatcct 360
tcagttgtta ttccctcaga ggagactttc tggttctcca gactggattt tgtcccgctg 420
gttacacact tcaatggaac cctccacttt tccatggtaa tgcttttcac aattgaaatt 480
aaatacttgc tatatgtaat tatttgttta atgtgtgtct ccttcactag gccctggact 540
tcatgaaggg caaaaatagt gtctggttta ttcacttttt tatcccagca caagggcacc 600
tggcacacgt agttgttcaa taaatattga aataatgcat aaaaggaagc aatcatgtat 660
gtaaagtacc tggtacattt aatagtagca ataacatttc tcaaaatcat gcagttgcta 720
ttgataaact agcttatgtg atggtatggt atttaaatct atttgatttt cattttaang 780
tgaaaattga tttgcaagtg accatgcctt acaagctacc c 821

<210> 767
<211> 737
<212> DNA
<213> Homo sapiens

<400> 767
aaccggcgcc agccatggcc tctggggcgg gcggaagctg gggtcgctcc ccaccgcaga 60
gcgcagtccc gacgccctgg gtcaccttcc tgcagcccct ctcgtgggcc gtcccacctg 120

cgcccccgca gccaggccgc gtgaaggaag acctgctgga actgatgatg ctgcagaacg 180
cgcagatgca ccagctgctg ctgagtcgcc tggtggctgg agcgctgcag ccccggcctg 240
cctcgccctg ccctcaggtc tacctggagg ttccacagga agagcctgag gaggaggagg 300
aggagatgga cgtgcgggag aaagggcctt tggtgtttca ccaccactac ttgccctatt 360
tgatgccctc cccgggtgcc ctgctgccct ggccagcccc cttcttcccc acccctgctt 420
gtcagcccta cttgcaggac gtgcccagca ttcagcactg tcctgcctcc agggaaaggg 480
aggtgagagc tgtgccccca cccccacccc ccagtgccac agggactgtg ggtgctgatg 540
taccccggc ttcagactac tatgatgccg agagcctcct atgaggacag accccggccc 600
tgggaactgc accagcttct gctctggata cagccccgga gccgcttctg acctctcttg 660
tcgactnccc ggtgcccatg gntgcagtcc ttctnattcc ttaacttaac caggccctct 720
tctcctgggg gaaatca 737

<210> 768
<211> 782
<212> DNA
<213> Homo sapiens

<400> 768
ttgcaatggc gtggaccatg gctgtgagtt ccagtgtgtg agcgagggcc tctcctaccg 60
ctgcctgtgc cccgaggggc ggcaacttca ggcagatggc aagagctgca accggtgccg 120
ggaaggccac gtggaccttg ttctgctggt tgatggctcc aagagcgtgc gtccacaaaa 180
cttcgagcta gtgaagcgct tcgtgaacca gattgtggac ttcctagatg tgtcccccga 240
gggcacgcgg gtggggctgg tgcagttctc gagccgcgtg cgcaccgagt tccctctggg 300
tcgctacggc accgcagccg aggtgaagca ggcggtcctg gccgtggagt acatggaacg 360
cggcaccatg acagggctgg cgttgcggca catggtggag cacagcttct ccgaggcgca 420
gggtgcacgg ccccgtgccc ttaacgtgcc tcgtgttggc ctggtcttca cggatggccg 480
ctcccaggat gacatctcgg tgtgggcagc gcgcgccaag gaggaaggca tcgtcatgta 540
cgccgtgggc gtgggcaagg cggtggaggc ggagctgcgc gagatcgcct cggagccagc 600
ggaacttgca cgtgtcctat gccccggact tcggcaccat gacgcacctg cttggagaac 660
ctcagaaagc agcatctgtc cagaggaagg gcattcagcg caagggacaa ganctttcgg 720
aagccccatt gcgaaatgcc gaaaagcctt cgtnggaagt ttcccaaggg gnccggaacc 780
gc 782

<210> 769
<211> 767
<212> DNA
<213> Homo sapiens

<400> 769
atttacttat tcatttattc agtcaataaa attgttttga gcccctacta tgtgttaagg 60
attagatcct ggtggcacat tgataagcaa aaccagacat gatccctgcc ttcatagagc 120
ttaattctca tggaagatac agacagtaat caagtgatta aaaaaaaaaa aagtgaaatt 180
atagcagtgc aagtacaaaa gactatgaga aatataataa gtatttgagg agtattgagg 240
aaggaaacag atcagatcta aaaggttaac atgagttatc ttaataaaga gcagagggaa 300
aaacatctca ggcagatgga acagcaacag cgttagggta ggtgggaaca tgaccagggg 360
aagagttgaa agaaatatgg tgtggtcaga gcacagtgag tacaagcttg tgtgggtgaa 420
gtcagtgagg ccaaagagag aaataagagc cagaaatgct ggacttttat aaattatata 480
aaggaattgt ttcatttatt gtgtagagga agcctttgaa agatcttaag caatggcagg 540

0562303-0720000

agaacatgag ttatacattt tgaaaacatc acctcgtctc taaggtgacc agcaaataat 600
aggagcagga gttagactgt tgtctaaaca agacatgatg gtagtgtgga cttggagtag 660
agaaggagag aagtagaccc gcnggagaga ttttggagta aaatcagcaa caccaggcac 720
ctgattgaac aaaggantgg ggaggtntca aggatcaccc ccagctt 767

<210> 770
<211> 793
<212> DNA
<213> Homo sapiens

<400> 770
gaaatcttac aaatgtacaa tttgtgacaa ggctttcgtg cgtaattcac tcctgtcaag 60
acataccaga attcacactg cagagaaacc ttacaagtgt aatgaatgtg ggaaggcttt 120
taatcaacaa tcacaccttt cacgtcatca tagaattcat actggagaga aaccttagaa 180
atgtgaagca tgtgacaaag tttccatttg gaaatcacac cttaaagaca taggagaatt 240
tatactggag agaaagctta caaatgtaag gtttctgaca agacttggga gtgattcaca 300
cctggaacaa catactggac ttcacactgg agagaaacct tacaagtgta atgagtgtgg 360
caaagccttt ggcaagcagt caacacttat tcaccatcag gcaattcatg gtgtagggaa 420
acttgactaa tgtaatgatt gtcacaaagt cttcagtaat gctacaacga ttacaaatca 480
ttggagaatc cataatgaag agagatctta caagtgtaat aaatgtggca aatttttcag 540
agatcgttca catattgcag gtcatcggtg aactcatact ggagagaaac cttacaaatg 600
tcatgactgt gccaaggtct tcagtcaagc ttcatcctat gcaaaacata ggagaattta 660
tacaggagag aaacctccaa gtgtgatgat tgtggcaaag cctttgcttc acgttcacac 720
cgtcattaga catcanagaa tctatnctgg accggaaatc tttccaaatg tcatcantgt 780
ggcaagggct tta 793

<210> 771
<211> 819
<212> DNA
<213> Homo sapiens

<400> 771
taaatgaaag caacaggagc tgctccgggg actgcttttg ccagcaccca gaatcagtgc 60
tcaggctcag aaatcctgga tagaaagagc attttataaa agagaatgtg tccacatcat 120
acccagcacc aaagaccccc ataggtgttg ctgtgggcgt ctgataggcc agcatgctgg 180
cctcaccccc agtatctccg tgcttcagaa tgagaaaaat gaaagtcgcc tctcccgaaa 240
tgacatccag tctgaaaagt ggtccatcag caaacacact caactcagcc ctacggatgc 300
ttttgggacc attgagttcc aaggaggtgg ccattccaac aaagccatgt atgtgcgagt 360
atcttttgat acaaaacctg atctcctctt acacctgatg accaaggaat ggcagttgga 420
gcttcccaag cttctcatct ctgtccatgg gggcctgcag aactttgaac tccagccaaa 480
actcaagcaa gtctttggga aagggctcat caaagcagct atgacaactg gagcgtggat 540
attcactgga ggggttaaca caggtgttat tcgtcatgtt ggcgatgcct tgaaggatca 600
tgcctctaag tctcgaggaa agatatgcac cataggtatt gccccctggg gaattgtgga 660
aaaccaggag gacctcattg gaagagatgt tgtccggcca taccagacca tgtccaatcc 720
catgagcaag ctcactgttc tcaacagcat gcattcccac ttcattctgg ctgacaacgg 780
gaccactgga aaatatggag cagangtgaa actttcaan 819

<210> 772

0050-0050-0050-0050-0050-0050-0050-0050

0050250 = 0050800

<211> 818
<212> DNA
<213> Homo sapiens

<400> 772
ttttactttg ctctcctagc ttagagtaca gccaattgtt gtctggtagg gggatgctga 60
gtcatttatt catgcatttt attacctctt ggctgcaata tcaccattca ttgttcacaa 120
gccacccagc ttgtttactt tttataaatt acatgtaatc aagtcctctt gcaggtctgg 180
ctactgtaat tggcagcagc cacagagcag ggctgacaag tctgcattta tgctgatgtc 240
tcatattcag cccactctcc aagctttctt tcctcttcca tgtgtatttt agaaggaagg 300
caaatagaag gaatgcaaag agagaactgt taaggagttt tctcttttca gatgatctta 360
agatacttat agcttggcag agtccttgtg tcatttggtt gggaaaaaac aagggtctag 420
agcagtcagt ggtccttaaa cttcagtgtg cataacaatc actgggtaac ttctaaagtg 480
aagattcttg ggccctaccc tccttctaat gtttttatta agtctgggta gaggtccaga 540
aaactgcagt ttctaacttg aacccctgct gattctgaag tagatggtcc ttaggttatt 600
cttggagaaa tcctgagttg gtcatagagg gaaaaagaga caagaaataa aattcaatag 660
aagtaaatac ttataaagaa agcaagaacc aaaactgaga gagtaacttt aacctctctt 720
ctgtgagatg aaaggagtga gtatgctgtg ctgcttaaaa agataagcgt ttaagttttt 780
tctggcagtg aatgagatca aactgtcctc caagacan 818

<210> 773
<211> 762
<212> DNA
<213> Homo sapiens

<400> 773
tgcccaggct ggagtgcagt ggcacaatct tggctcacta caacctccac cacccaggtt 60
caagtgattc tcctgcctca gcctcctgag tagctgggat tacaggcttg cacctctacg 120
cctgactaat ttttgtatta ttagtagaga cagggtttca ccatgttggc caggctggtc 180
tcaaactcat gacctcaggt tatccgcccg cctcggcccc ccaaagtgct gggattacag 240
acatgagcca ccatgcccag cctctactag ctgattttaa atcagagtaa gataagtgat 300
gcttatttat atgtaccttt tctccaattc cttctcacta acactgagag gaacagagaa 360
ttgtcagaat agtaactatt gtgataatgg tatgcagcac tcattcagca cttactgtta 420
cctggcactg tgtcagggac tagacattat tttatttatc cttctagtat ttcccccatt 480
ttcagaaggg aaccagaggc ttaagattac acagctagta ggcaatagag ctggaattga 540
gcccctatct gactctagct agtgccctta attactattg naaatggcta ggaatcgtat 600
ttgtgaggat ttggtaggtt tggaaaagga ctttcttaat cctgatattc agaattgncc 660
taaaacttac ataaaagcct aacctagctt ttactggatt ggtangcttc anggatacta 720
tggggacccg gaaatatata ccccattttt taacaaagng gg 762

<210> 774
<211> 849
<212> DNA
<213> Homo sapiens

<400> 774
cctaaatgcc catctcgttg gccttggttc ggctagtggt atggaggggt gctgcctagc 60
actgacctga gagtgtgtgt gacccactga cccaatggac atcaaaggcc agttctggaa 120

tgatgacgac tcggagggag ataatgaatc agaggaattt ctctatggcg ttcaggggag 180
ctgtgcagct gacctgtatc gacacccaca gcttgatgca gacattgaag ccgtgaagga 240
gatctacagt gagaactctg tatccatcag agaatatgga actatcgatg acgtggacat 300
tgacctccac atcaacatca gcttcctcga tgaggaagtc tctacagcct ggaaggtcct 360
ccggacagaa cctattgtgt tgaggctgcg attttctctc tcccagtacc tagatggacc 420
agaaccatcc attgaggttt tccagccatc aaataaggaa ggatttgggc tgggtcttca 480
gttgaaaaag atcctgggta tgtttacatc ccaacaatgg aaacatctga gcaatgattt 540
cttgaagacc cagcaggaga agaggcacag ttggttcaag gcaagtggta ccatcaagaa 600
gttccgagct ggcctcagca tcttttcacc catccccaag tcttccagtt tccctatcat 660
acaggactcc atgctgaaag gcaaactagg tgtaccagaa cttngggttg ggcgcctnat 720
gaacccgtcc atctcctgta ccatgaagaa ccccaaagtg gaagtgtttg gctacccttc 780
cagccccagc aggtctnctg tgcccttaac acgtgggcct tccttcccca gcacggacct 840
tttctttgn 849

<210> 775
<211> 739
<212> DNA
<213> Homo sapiens

<400> 775
ctaatttatt gagttgaata cctagttcac tttttctaga tttttaagag ttataacatc 60
ttctggaatc agacaagtac attagttcac ataaacttgc ttctggcctt ttcccccatc 120
ttcaccctga tatactgata gaatcatcta gaattgtaat gccaggattg atgttgatgt 180
agtgttattg ttttgatgga cgtcttgaat tcagtttcac tggcaaaaag tcctacatca 240
gtctgagtca tatctttttg taggtgatgt gctttattct ctaaatccct ttagacttct 300
tcctcattga tatccttaaa ttttgtcata ataggtttag atatagagct ttttcctcat 360
gcgtcctgct agttcctttg atcttaaatc tttcattgtt ccctcacgtt gagaaattct 420
cagtcattac aacctcaata atttccactc ctctatgtat tttattctct cctttgaggc 480
tcattttata aaggatacta agatttcttg ttctattatc catacctttt attaaatttt 540
acttttacat gttcctttgt tttacttact tacacttact gacacttctg ggagagttcc 600
tcaacctaac tctcatcagg tcagtcattc attcattcgg ttctttattt ctgntgntct 660
agttttcata cagagaagca ccagttggca cttatttttg acccgtggnt tccattttat 720
gtgaagaggg gcatactca 739

<210> 776
<211> 846
<212> DNA
<213> Homo sapiens

<400> 776
atgctggggg aggggctggc ggcctcgacg gcagctgcgg aactaggccg agggacaaag 60
gctaagtttt tccatggttt ggactggata tcggtggaac tctggtcaag ctggtatatt 120
ttgaacccaa agacatcact gctgaagaag aagaggaaga agtggaaagt cttaaaagca 180
ttcggaagta cctgacctcc aatgtggctt atgggtctac aggcattcgg gacgtgcacc 240
tcgagctgaa ggacctgact ctgtgtggac gcaaaggcaa actgcacttt atacgctttc 300
ccactcatga catgcctgct tttattcaaa tgggcagaga taaaaacttc tcgagtctcc 360
acactgtctt ttgtgccact ggaggtggag cgtacaaatt tgagcaggat tttctcacaa 420
taggtgatct tcagctttgc aaactggatg aactagattg cttgatcaaa ggaattttat 480

US05525600

acattgactc agtcggattc aatggacggt cacagtgcta ttactttgaa aaccctgctg 540
attctgaaaa gtgtcagaag ttaccatttg atttgaaaaa tccgtatcct ctgcttctgg 600
tgaacattgg ctcangggtt agcatcttag cagtatattc caaagataat tacaaacggg 660
tcacaggtac tagtcttgga ggaggaactt tttttggnct ctgctgcttc ttactgctgt 720
accacttttg aagaagctct tgaaatggca tctcgtggag atagcaccaa agtggatnaa 780
ctagtaccag atatttatgg aggggactat taggggtttg gactgncagg cttggctgtg 840
gcttca 846

<210> 777
<211> 853
<212> DNA
<213> Homo sapiens

<400> 777
agcccaacat ggcgatgcac aacaaggcgg cgccgccgca gatcccggac acccggcggg 60
agctggcgga gctcgtgaag cggaagcagg agctggcgga aacattggca aatttggagc 120
gacagatcta tgcttttgag ggaagctacc tggaagacac tcagatgtat ggcaatatta 180
ttcgtggctg ggatcggtat ctgaccaacc aaaaaaactc caatagcaaa aatgatcgaa 240
ggaaccggaa gtttaaggaa gctgagcggc tcttcagtaa atcctcggtt acctcagcag 300
ctgcagtaag tgcattggca ggagttcagg accagctcat tgaaaagagg gagccaggaa 360
gtgggacgga aagtgacact tctccagact tccacaatca ggaaaatgag cccagccagg 420
aggaccctga ggatctggat ggatctgtgc agggagtgaa acctcagaag gctgcttctt 480
ctacttcctc agggagtcac cacagcagcc ataaaaagcg aaagaataaa aaccggcaca 540
ggattgatct gaagttaaac aaaaaaccac gagctgacta ttagaagaca cattagtgca 600
gaagcttcca ggctgtagag ccctgcttcc cttctctgac ctcacaaaga taaacatcct 660
tcacctgagt tcgtggccat ccacctctgc tctcccagac ccagtgcctg tgactttgag 720
tagtttggtc taaatgtggt gacaaacaag tcatttctgt aagacattgg gtcttacttt 780
atgtcatttt tagtaacaga acttgcagga agatgaagac aatgttgtaa tcccagcagt 840
tgctacttgn gcg 853

<210> 778
<211> 848
<212> DNA
<213> Homo sapiens

<400> 778
gaagaagccc ttcagactta acaagaatgc ccataagtaa agagaagcaa aagagaagat 60
gacaaggaaa atcagaaaga tggaacaggc tcctttcttt tctttctttc tcatacttga 120
gtcctgttta gaaccttatc atattctgcc ttgataattg agggcaggga ccattcatct 180
aacacagctg ttggtaccca atatgatttt gttgaattat taatgaaaaa cttacaattt 240
taaacatcag tgattattag tttgtaattc taactgcatt tggagctttt cagttacata 300
aactgttcct ggtcagaagc tggaaatggg gaatgtgaac atgagttgtc actaaatatg 360
taaaacagat tttcttacat gtgcatgtag atgattaagt aacaagaatg tatcctctcc 420
tgccactgta atttgggtgt gccaccatac attgcttatg aaatattgtc cagtctatat 480
aaaagaagct agagagagaa ttctcaatta ttttcagaaa gaaaacctac cagtttatgt 540
aggaacttct caaagtcctg tttcacttca tgaggtttct tggtagcctt tgcttggagt 600
ctaatcatgg aataaagaaa atcagtaacc aaactaattg nccttatatt gacaccatct 660
aaatagccaa catttattaa gaatttaata tgctgggcat tcgtcaagca ctttacatat 720

0305305.0302000

attaattcaa ttacccttaa aacttctgaa gtaggtactc ctattatcct attttataaa 780
tgaggaaaca ggctgagata ggttcagaca cccacccccg ntgatgtgcc acgtgccaca 840
cacacacc 848

<210> 779
<211> 730
<212> DNA
<213> Homo sapiens

<400> 779
acagcactat tcacaatatc caaaaagtgg aattgtccat tgaccaatga attggtaaac 60
aaaatgtggt ctatacatac aatgaaatat tattcagcct taaaaaggaa gaggaattat 120
gaaacatgtt gcagtgcgga tgaatcttat catgatgcta agtgaataag ccagacacaa 180
aaaatccaaa tgtatcattc tacctgtatg aggtacttta agtagtcaat tcatagagac 240
agaataagat tgtggctgcc agagaatgag ggatgggggа aaagggaaat tgtttaatgg 300
atacagcatt tcagttttgc aagatgtaaa agttttggag atccattgca caacagggtg 360
aatacaggta gcactactga actgtacaat acaaaatggg caagatggta aatgtaatat 420
tatgcacttt tgctacaata agaaaaagtt aacaataaag attaaaagtg tcctttttt 480
aaaaaaagaa tgaaagatga ttgagttttt ttgataggac aagagtctgg gatacagttt 540
aagtgactga aagcgaaaag aaactacatg tgatgttcat actcagtatt aaaatctggt 600
agaaaaagta atagtaaaat ttagtaacta ttatttttat tgagaacctg ctgtgttttg 660
tgcagtatac tagtaaagtg cacaggatga tcagggactc ttattcttgg caaaaaaaac 720
cnaacanaac 730

<210> 780
<211> 786
<212> DNA
<213> Homo sapiens

<400> 780
acatttttct ccaaatttta ttaatttcat agtgttttga tttgggtggc agatgacttt 60
taagcagtgg gtgtttgccg gccagatctt tcctggcatg cggactgtga ggcaaagcac 120
gggtgaaggt aggcgctaaa ggctttgggc taaagccagc acgcggttct gtgctatagg 180
agtctcccgt ttcccgtgga caggttcagc gttccttctt tcgcacaact tttttctaag 240
tgttccagtg accaagccag tcattcggac actgatttgc agtgcattgg cagtaattca 300
caaattagtt attatataag tctctctcat ccctttcaca ctagattctc agacatgaat 360
gaatttgtcg tttggaagga aagctgggta acgttttggg cacaggggaa ggaggactcc 420
ggtcttaact cccacgctaa ctttagctca agtggagttt tcaccgtggt catttctacc 480
tccggagcaa ggtgccagcg ccagtactag agcctgctta tccacatttg ccctggacag 540
gagcaggagg aagtccactt ctgtaccggc agacagagca tgtgaacaca aaacacattt 600
ctatggcata gtcaactgaa cttcattttt acatttaatc taacatgtta acacgttcta 660
acagggtttc tatgancagc tgctgtaaca tactcatcaa ctatgataga cttaacactt 720
gttacctaat gaacaaggag gatgtgcatt tcgggtttct tttgatattc nnggangtga 780
atggca 786

<210> 781
<211> 826
<212> DNA

0005305205

0050250 : 0050250

<213> Homo sapiens

<400> 781
aaaaaaaagc tgatgaggtc ggaaaaaagg gagaagaaac cgggaccctc tctgagaggc 60
aacagaagca gcaattgttt cagcgaaaaa agcagcaagg gagggagtga aggaaaaaag 120
caaaaaaggg ggcgacacgc aagtgcctgt aggggtgaaa ggagcaggga ccggcgatct 180
agggggggat cagctacaaa agaaactgtc actgggagcg gtgcggccaa ggaggaagca 240
gtgctgccag gctctgctcc agggcacagc tggctggcgg ctgccctgtc cgcagcaaag 300
gggcacaggc cggggaccgc gagaggtggc aaagtggcac cgggcgccga ggctgctgag 360
cgctcgccga gacggcgacc ggactggctg ccccggaact gcggcgactc tccctactca 420
gaacttggcc tacgtttccc aggactctcc ccatctccag aggcccccac aaaaccggga 480
aaggaaggaa aggacagcgg cggcagcagc tcaatgagtg cctacagcag aaagcctgtg 540
atttggccag gctctatggg aggaatgagg ttgttagcct gatgcaggca aacagggctg 600
ggggagccac aaatcttcaa taaacgtggg gagggcttcc ccacgttgcc tctactttat 660
caattaactg agtagctctt ctgactttta atgtcatttg gtaaaatcag ntctgtcata 720
tgttaagcag ctaaattttc tgaaaactgc ataagtgaaa atcttaccac aggctttttg 780
aatatnttta agccaccttn tttttaacct tgcaaaatct gggtnt 826

<210> 782
<211> 843
<212> DNA
<213> Homo sapiens

<400> 782
aatcttttt gcctctcaac ctgtctccca ggtagtgtac ctgtcaccat taataactct 60
ttagccgctc cctagtgatt tgacctatca gttgtcgttc acagaaaagt ggtgctctgg 120
cctgctattg aagcttatgc aggttctttc agctcctcag tcaccccagc agccatatac 180
ttgtaggaag ttgtgttggt gggcttcaca agcaggcagc tgaacacttc gtacagtttg 240
ataaaggtgg cattacattt tgaacaatag atgataagac tcccatttag accgcaaaac 300
agtgccacag gggtagacag gggtctgggg gagataagat gggtggtgag gatgaccaac 360
agcaaataaa ctttcctgtc tctttgatgc taattatctc tttgcaccta attatcatgg 420
catcatcatc atcctctgat gtttgcaaac taagagttga tgtgtttgat caggttagtg 480
aatctgtcag gtatggcatt ctgcctgttt ctgaagctta agaatgagaa gccagtagct 540
atcatgcgga agatgtgaac tgccccccag tcctcgtcct ttagcagtgt gtcattcctc 600
tgtttggaca tgtgctctct tgcttcctct cttcccctct ctgttcctga agtgtgctgc 660
ttccaacact tccccagatt aattcctacc tgcatttagg tctcaaccta ccatcacttt 720
ttcaggaaac tgctactgct ctctctattt ggcattgact gtccaactaa aatgcccata 780
tggcaggttt catttatttc ttaatatgct ctacaataac tgctggttac ttgctttttc 840
tcc 843

<210> 783
<211> 846
<212> DNA
<213> Homo sapiens

<400> 783
gttcgcgctc cttcccttcc cgtggtcgag ccgagtcctg acctgagggc tgcatcaaga 60
tcttgtcatt ccacatcatg gtttcctttg aggatgtggc tgtaccctc tcccaggagg 120

agtgggactg tctgatccct gctcagaggg gcctctacaa ggatgtgatg atggggacct 180
atgggaacct actctcatta ggtaagttcc ctccctgggg ctcagctcct gggcttcctg 240
ctccttaacc ttgaggatca agcttggggc tcagaggctc ctcacccccc gggcccaaag 300
accagacatt ttgaccatgg taccatgcag gtctggtttg cacagagagg gggacaggtg 360
gtactgggac cctccttgat ttttttttt aataggcaat gtctcgctct gttgcccatc 420
ctggagtgca gtggtgagac catagctcac tgtaaccttg acgtctttgg ttgaagagat 480
cctcctacct cagcctccca agtacctgag actacaggca tgggccacca tgcctgtctt 540
attttacttt tttagagaca gagcctctgt gttgcccagg ttggtctcaa actcctagcc 600
tcaaggaatc ctcccacctt ggcctcccat gcctttccaa cccttcctga tttatagaag 660
gagaatatta ttcattgcac acctagtacc ttcctatccc ctgaattaat ctttctgcat 720
cttgatgatc ggtggtagga tacacaagtt tataaacgaa cctgaggcta acaaatactg 780
gcacttttct taagttacac aagcctattg ggnggcanat cttgggatat ggatctgtcg 840
ggttna 846

<210> 784
<211> 846
<212> DNA
<213> Homo sapiens

<400> 784
ttattattca taagcatacc ttttcagtta ccctcatgat ttactatctg taagagcata 60
agcttactgt ttgtgtaata tttgtccctg tactttagat gggagttgct gaggtggtat 120
aaggtttggt aactgcatcc ggcctctcag ggaaataacc aagttgttca gattcttagc 180
tgtattatgt gaagttgttt gtcagcttca ttgcttacta ctgtgaaata agttataaag 240
aggaactttt aataaaaata aatggattca ctcaggggag gggtattcat tgttggtgaa 300
atatgtcgag gaccagatgc tttttggtct cccaaagacc tatcaaactg cagatctttt 360
ggctttgtaa tatattcagt tccacattta ttcattcaag atttttgtgt cctcattatg 420
tgccaagtac tgggttggac actacgtgac agagatgaac aaatccctaa tcttgggatt 480
tcacagtgga tgttggaatt tagtaccgtt tagcttcatt aggttctgca gtagtcccaa 540
gattttccaa gatcatcctg tcctccagtg ttctattgat tcaacttcag aatatatccc 600
agactctgtc cctctttact cctcactgct gttgccctgg gtccatctgc catcatctct 660
cacctggatt atctcagtag tttcccaact ggtttccttg gttccattct tgcctccttc 720
tgnctactct caatataaca gctagaacaa tcctttttaca atggaattca gatcatggtt 780
acccctctgg tcaaattctn cagtgacttt ncagttttta catgatctgg cttctactac 840
ctggnt 846

<210> 785
<211> 862
<212> DNA
<213> Homo sapiens

<400> 785
ctgtcagttc atcaaactca tcctccgtcc agttttgttt ccttgctggc taggagttgt 60
gatcctttgg aggagaagag gcgtttttca gccttttca gctggtttct ctccgtcttc 120
atggatttat ctacctttgg tctttgatgt tggtgacctt tggatggggt tttggtatgg 180
atgtcctttt tgttgatgtt gacactgttc ttttctgttt gttagttttc ccttttctgt 240
ttgttagttt tccttctaac agtcaggccc ctctgctaca ggtctgctgg aggtccactc 300
cagaccctgt ttgcatgggt atcaccagca gaggctgcag aacagcaaag attgctgcct 360

US 2020/0190200 A1

gttcctttct ctggaagctt tgtcccagag gggcacccgc cagatgccag ctggagctct 420
cctgtgtgag gtcctgactg tcccccagtc aggaggcacg ggggtcangg acccacttga 480
gggggcagtc tgtcccttag cagagctcaa gctctgtgcg gggagatcca ctgctctatt 540
cagagccagc aggcangaat gtttaagtct gctgaagctg cacccacagc caccccttcc 600
cccaggtgtt ctgtcccagg gagatgggag ttttatctgt aagcccctga ctggggctgc 660
tgcctttctt tcagagatgc cctgcccana gaggaggaat ctagagatgc agtctggcta 720
cagcggcttt ctctggctgc antgggctcc acccagttcg aactttctgg cagctttggt 780
tatgctgtga agggaaaact gcttattcac gcttantaat gacngatgcc cttttccaac 840
caaacttgag tgtnccgggt gg 862

<210> 786
<211> 837
<212> DNA
<213> Homo sapiens

<400> 786
cttttaaatg gggaaggtgc tctgaagatt tgtgccgaaa cgccctctcc tcgagattta 60
actaattgtt ctctcctctc tctggctgtt ggacgcgcac ctttccggag gatgggggag 120
gtaaccgagg tcctgagccg gtacctgaac ttgggtgaac agagaacctc aacttttgct 180
ttctagcact cgaccgcacc cagcaaggcg tccgcttact cagtggttct tagtgtttgg 240
agtgcttaag aataactggt ggtgtttgat ttcaccaagt acattcgggc agatcttagt 300
tcttgggggg gtggggctgg aatctgcggg tgtgacctcc actctaggtc tgtgctgtcc 360
agccaagtag ccattggcca catgtggctg ctaagcatgt gaaatacagc taatcaagac 420
tgaaatatta aaacacacac cagttttaga agactaggaa aaaagcaaac ttttattaga 480
tgtttatgtt gattatatgt tggaaagata atattttgga tgtgtcaaac gttaaaaatt 540
aatttcaccc atttttgtga cgtggctact aaggaatttc aggtgatgct tgtggctcct 600
cacacggttt ctattggaca gtgctgctgc aggtgattcg aaggcgggtg ggtgcaggaa 660
cccagctgag agttcagaaa ttagtgtaac tttggagaca agtgtctgtg ggggaaggag 720
ccttcggacg tggagataca actcttgctc ctaacattta tcgagtcttt aattaatgcc 780
ctgggtaact ataaggntgg aactgnattg gcaccatatt gatgatgana aacttga 837

<210> 787
<211> 835
<212> DNA
<213> Homo sapiens

<400> 787
atacaagaaa aaaatcacat ctttatgcca ataccattct ttcacaatac tagaagaaca 60
gattcagagt agaattacat aactggttgg ttacattttg catccagtga gtaacaccat 120
catcttctta gtttctatat caatttattt atttatttat ttatttattt ttgagaccaa 180
gtcttgctgt gttgcccagg ctggagtgca gtagcacgaa ctcggcctct tcagtggcca 240
gtaccacagg cgtgcaccac catgcctggc taatgttttt tgtatttttg gtagagacgg 300
gatttcacta tgttgcccag gctggtctcg aactcctggc ctcaagtgat gcgtccgccg 360
tatctcaaaa taataagagc tatttatgac aaacccacag ncaatatcat actgaatgga 420
caaaaactag aagcattccc tttgaaaact ggcgcaagac agggatgccc tctctcacca 480
ctcctattca acacagtgtt ggaagttctg gccagggcaa tcaggcagga gaaagaaaga 540
aagggtattc aattaggaaa agaggaagtc aaattatccc tgtttgcaga tgacatgatt 600
gtcatgtaga aaactccatc gtctcagccc aaaatctcct taagctgata agcaacttca 660

0302F05.001

gcaaagtctc aggatcaaaa tcaatgtgca gaaatcacaa gcattcctat catcaataac 720
agacaaagag agagccaaat catgagtgaa ctcccattca caattgctac aaagagaatn 780
aaatcctagg aatncaactt acaagggatg tgaaggacct ntttaaggag acttc 835

<210> 788
<211> 833
<212> DNA
<213> Homo sapiens

<400> 788
aataaatgca ttattatgac tgtgacagtg actaatcccc ctatgacccc aaagccctga 60
ttaaatcaag agattccttt tttaaaaatc aaaataaaat tgttacaaca tagccatagt 120
tactaaaaga tgagttaggt ggatttttat tatgtcaact agttgtacat ggctttttaa 180
aagttaatga ttattttgta attagaaaaa aatagtacgt accagggtag gaatttggga 240
aaatacagaa ccgaggagaa aacagaagtc tttgcagtag atacagggtg tctcctgacc 300
aagtgaagga ttcaggggcg gggggtgaat attgcttgac attacccacc tatggcatgt 360
gttggatgtc gtgtgattga aaggggggatg cattcccctg tatgcttgga ccacagttca 420
gtattcatgt ggaataactt gcagtgctta aaatgacaac aggcattcat cacagttatg 480
gctcttgctt atgaaggctg tgtcaacttg gaagagattt ctggggtaga cagattttgt 540
tcctgtgctg gagtctgcca cctgctggag gactctgagg ccaaaattgc ctgtgcagag 600
ttgtatagaa aatgcgtctg gaggctgggc aaggtggctt atgcctataa tcccagcact 660
ttgagaggcc gaggcgggtg gatcagtaga ggctaggagt ttgagaccag cctggccgat 720
atcgtgaaac cccatcttta ccaaaaaata caaaaattag cccagtgtgg tggcaggcac 780
ctgtaatccc agctattang gaagctgang cagganaatg tgtgaaccca gga 833

<210> 789
<211> 727
<212> DNA
<213> Homo sapiens

<400> 789
atagaaaatt agaaaagcag agaattcgag aagagaagcg agaagaacgg aggaggagag 60
agttagaaaa gaaacgtttg cgggaagagg aaaaaagaag aagaagagaa gaagaaggat 120
gcaaaaaaaa agagacagat aaacagaaga aaattgcaga gaaagaagta aggattaagc 180
ttcttaagaa accagaaaag ggagaggaac caaccacaga gaaaccaaaa gaaagaggag 240
aggagattga tactggaggt ggcaagcagg aatcctgtgc ccccggtgca gtcgtaaaag 300
ccaggcccat ggaaggctcg ctggaggagc cccaggagac gtcacacagc ggcagtgata 360
aagagcacag ggatgtggag agatctcaag aacaagaatc tgaagcacaa agataccatg 420
tggatgacgg caggaggcac agagctcacc acgagcctga acggctttcc agaaggagtg 480
aggatgagca gagatggggg aaaggacctg gccaagacag agggaagaag gggagccagg 540
acagcggggc tccgggggag gccatggaga gactgggaag agcgcagagg tgtgacgaca 600
gtccagcacc cagaaaagag cgactggcaa acaaggaccc ggccagcctt gcagcttgta 660
tgatcccagg agttcgcttn cgagcgccna gaattgtggc cggaaaccag gangatctgc 720
aaggcaa 727

<210> 790
<211> 802
<212> DNA

0050050-0050050

<213> Homo sapiens

<400> 790
atattattca gtgctaaaaa gatatgagct atcaaactat gaaagggcat ggaggattca 60
atcttaaatg cattatacta agtgaaagaa gccagtctgg aaaggctaca tactttatga 120
tttcaactct atgtcattgt agaaaaagca aaactttgga gacagtaaaa agatcagtgg 180
ttatcaggga cttcgtggga gggaaaaata ggcagagcac agagcattct tagggcagtg 240
aaattattct gtatgattta caatggtgac tatatgtcat tgtacatttg tcaaggccca 300
tagaacaggt tttgaagttg atgtgatgtt gacagtcccc ggggaggctg tgcctgcgta 360
tagaaagcag cgtatgggaa ttctctgtac tttccacttg attttgctct gagccggaaa 420
ctgccctgaa aaataaagtc tatatttaaa aaaatagtcg tagatactag acacagcatt 480
tttatcagca ttttaaaata tactatatgc aaagataata ttatatggtc aagaataact 540
ccttaatgta taaatttaaa agcaccatga aatctcttaa gaaacaatca gaagttttat 600
aaaattttaa aaaaggaaag tgaggaaaat gcctaaatta aacagtaaaa cacacccagt 660
tattcaacac caggtggcga ctggactggg tctggatttt tcttagcttg cctgactctg 720
tgactgctgc tctctgcttt cttgggctcc ttctnnctca atcttnctgg ttncagaaca 780
gatgcttttt atgtcctctt tg 802

<210> 791
<211> 859
<212> DNA
<213> Homo sapiens

<400> 791
cagtacctcc gataaaacca tcctttctcg agttggaaga gtttgtaaga atgatgtagg 60
aggacaacgc agcctgataa acaagtggac gacttttctt aaggccagac tgatttgctc 120
aattcctgga agtgatgggg cagatactta ctttgatgag cttcgtaagt tccttctttc 180
cttctttctt ggaaaggcct tactgcctaa ttaagtaact tggcatttat ttccctttgg 240
ctccaaatgc ctgattaatt ttacctgagc aaaccttaca ggagtggttc ttactaaaat 300
tcacacgcaa agtacacgga agtgctctag gtctgggcac acgtcataat gcagtaactc 360
ttctctttgt aagagtcctc aaagtaagtg aaggaaacaa aactacagca agacacagaa 420
aggtgtgagc tctggaacta cacagttcat ccattctcca tgcagtcttt cattttgaaa 480
ggagccacct tctataggta ggaaaatctt ggattcctta ttccacgggt gccctctgct 540
ggcaagtaca ggagatttgg tgaacactgt ccctccgact tgttaatgaa agaataatca 600
gaagcagtag acagcttctt ctatttcact tctcctcttc actccctcaa aaactccttc 660
caagtcctac aatgattttt tttctttttt gnttatgtat aatgntagca tcattagctt 720
ttagcttctt gaacttggtc ttatttttgc catgtaatgt aaaaatgata atctatatca 780
tggaattatt tcatcaatat tgngnatttt ccacttaaag tatacattga gtaatcgngg 840
atgactctcc tattgatgt 859

<210> 792
<211> 879
<212> DNA
<213> Homo sapiens

<400> 792
ttatctgtcc cagggatccg ttgattgcca ggtatggctt tgtggtaatt ctagcatttg 60
caacccagca atttgagcct tctgtctgcc taaatgatga ttttacattg taatggttgt 120

0602040-0702000

actaaatcct ttcgcttttg ctccatagcc gctgttgtga caagaaaagc tgtggcaacc 180
gaaatgagac tcctcagatc cagtgataat tgacaggtag ggaccactct tctttcactg 240
gattcttatt cctcattata atgaaacacc tgcccttgtg ttgctcatgg gcgagggtta 300
ggaatgcatg tggctgaaat ttgcctgttg gtcatgactt acgctgtgct gagcgatttt 360
gattcctggg aaagccatat ggaatgttct tttagaggcc tgttccttgg attgctccgg 420
tttttgtctg attcatgctc ctaaaggaat atatttttc tttcctgact ttctgtggct 480
caatcctcat gctgtgccag gaagcttcag aaataaaata ataatagttt gtgatttatg 540
aaatgtggtt gggtgcttat aaatatttaa cttttatttg aaaaatgttt gaatcattat 600
cacttttagc tacagtagtt ctgttggacg taatccatct acactttaag gttttattta 660
tgcataaaag cagtttaaag agatctgtga accaagattt tctactggta tttgccggat 720
ttgattgcag tatgagacca tattgtaagt tgattaatta tcctgcttgg cttaattttt 780
gggtttttaa acagatccat attactaatc tgacatgacc aagtaaatca ccgtagaaca 840
ataaatcngg tttaantggt cggngtaatt ttgagtcac 879

<210> 793
<211> 886
<212> DNA
<213> Homo sapiens

<400> 793
aaaaaaaaaa taaggcgggg aactggggcg ggggtgcgtt gcgggaagaa aagagaaaga 60
agtgaactgg agctttcgga cacagaagga caggaagctt gagagaaaag gagaggataa 120
tgagtgaaat gcaatgcagc acctccttgg aacacacagt tacaattcag ttcacagggc 180
acactggctc accgtatttt taactagttt ctctccccac ctccttttta aaaattccct 240
ttttgcctct gtttccaaag aaatgccagc tcaaaaccaa ggcagttgga atttaacagc 300
tctaggaagc tctagtgaga ataaaagcca aataatatga accagccaaa attccttttg 360
caacattttt ccccaaaaga aaaatacaga agatatttct tttcaagtct ctaattctac 420
ctttaaaaaa tatgtgtact aatgaacagt attcatttta aatctagaac ctgggaatat 480
attactatag gcaagacacc tttaggtaaa gagctcataa ttttccattg aatacagtaa 540
aattataaag aatgtaacaa aggctttggt aatttggtag aggggctttt tgatgaaaaa 600
aagacagatg atttagaaag cgaggaacac atcaagcctc agggaaagaa aatgtttgat 660
tggtattaat taaaacactg ctaatatatt ctaataaaat caaatttaac attctaaagt 720
aatcctcttg gtatgtcaaa ggaaaaagaa aagtattatc ttatttgcat ctctgcaatc 780
caaatgcatt tgctcattca gcagaattaa tttttatcac cagcctggtt tatctcctcc 840
aggattagtc aaagntattc tttcaactag aanggtcagg gnggga 886

<210> 794
<211> 883
<212> DNA
<213> Homo sapiens

<400> 794
ttaatctgac gaaatttatt gttgtatatt gtgtaaatta ggattctaac tattttcttc 60
gaaactggaa aagccagtcg acagctagta tgtgagggaa ctgagttttg aacccagcct 120
gtctgctgaa gccgtgttct taaccaccat gcttcgctgc ttttctaatt gagttagtat 180
taaagggatc ttactgggaa aaaaaatgta ggtacatcat tcagtaagaa aacttctctg 240
ttgctttctg ttttgcaagt agtattgata gcgtagcatt ctcctacagg tagcctccat 300
gaataaatgt ttaaaataag gaggctgggt gtagtgcctc acgcttgtaa tcccagcact 360

0506304.0002

ttgggaggcc gaagtgggtg gatcacctga ggtcaggagt tcaagaccag cctgaacaac 420
gtggtgaaac cccatctcta ctaaaaatac aaaaagtagc caggcgtggt ggcatgcgcc 480
tgtaatccca ggtacttggg aggctgaggc atcagaattg cttgaacctg ggaggtggag 540
gttgcagtga gccaagattg tgcctctgca ctccagcctg ggcaacagaa cgagactcca 600
tctcaacaaa aaataaaata aaaataaaat aaagagaaga aataactgga gtagagagaa 660
atcgaatttg tctttcatag cgtggtgcta ggtggcattt ttaggatatc agatataagt 720
aaatattctc ctggattatc tagtggtttt aatgctaaac aatatatatt ctacaatgat 780
cctaattttt taaaatccaa gagtaagaat gcttagtaat agaagcttca tcacctnagt 840
tgcctttgtg gggaaatctg gatctaagaa tttgcaaaat ctt 883

<210> 795
<211> 777
<212> DNA
<213> Homo sapiens

<400> 795
cacttccctt cccgcgatgg cggcacaggg agctgctgcg gcggttgcgg cggggacttc 60
aggggtcgcg ggggagggcg agcccgggcc cggggagaat gcggccgctg aggggaccgc 120
cccatccccg ggccgcgtct ctccgccgac cccggcgcgc ggcgagccgg aagtcacggt 180
ggagatcgga gaaacgtacc tgtgccggcg accggatagc acctggcatt ctgctgaagt 240
gatccagtct cgagtgaacg accaggaggg ccgagaggaa ttctatgtac actacgtggg 300
ctttaaccgg cggctggacg agtgggtaga caagaaccgg ctggcgctga ccaagacagt 360
gaaggatgct gtacagaaga actcagagaa gtacctgagc gagctcgcag agcagcctga 420
gcgcaagatc actcgcaacc aaaagcgcaa gcatgatgag atcaaccatg tgcagaagac 480
ttatgcagag atggacccca ccacagcagc cttggagaag gagcatgagg cgatcaccaa 540
ggtgaagtat gtggacaaga tccacatcgg gaactacgaa attgatgcct ggtatttctc 600
accattcccc gaagactatg ggaaacagcc caagctctgg ctctgcgagt acttgccttc 660
aagtacatga aatatgaaga agagctaccc gntttccact tggggttcaa gtgccaagtt 720
gggcnggcaa gccccccccg gggnaaaaga agatcttacc ggcaaggaag ccaaaca 777

<210> 796
<211> 735
<212> DNA
<213> Homo sapiens

<400> 796
aaagggccgg ctgtttcggc ggccgcggga tgcccctgcg ctgaccgcca ggggcaggtg 60
cccgcccgcg tagacgcacc cggcctgacc ccgcgcaacc atgtaaacgg cgccagcagg 120
cggacgctgg cttctccgcc tgggaccccc ccgccccgac ccgggccccg cggccctcga 180
tgaggacaca ccatgctgac cggggtgacc gacggtattt tctgttgcct gctgggcacg 240
ccccccaacg ctgtggggcc actggagagc gtcgagtcca gcgatggcta caccttgta 300
gaggtcaagc ccggccgcgt gctgcgggtg aagcatgcag gacccgcccc agccgctgcc 360
ccacctccac catcatccgc atcctcggat gcagcccagg gggacctctc cggcttggtc 420
cgctgtcagc gccggatcac cgtgtaccgc aatgggcggt tgctggtgga aaacctgggc 480
cgagcccctc gagccgaccc cctacacggg cagaatggct ctggggagcc gncggccgcc 540
ctggaggtgg agctggcaga tccggcgggc agcgatggcc gcttggcccc cggcagcgca 600
ngcagcggca gcggcagtgg cagtggtggg cggcggcggc gagccaggcg ccccaagagg 660
accatncata ttgactgtga gaagcgcatc actagctgca aangcgccca ggcccgaacg 720

0050450.0070000

tggngcttct ttttt 735

<210> 797
<211> 753
<212> DNA
<213> Homo sapiens

<400> 797
actgtgcttt tcctgcgtgc agatgaggac tttgtgtcct acacacctcg agacaagcag 60
aaccttcatg agaacctcca gggccttgga cccggggtcc gggtggagag cctggagctg 120
gccatccgga aagagatcca cgactttgcc cagctgagcg agaacacata ccatgtgtac 180
cataacaccg aggacctgtg gggggagccc catgctgtgg ccatccatgg tgaggacgac 240
ttgcatgtga cggaggaggt gtacaagcgg cccctcttcc tgcagcccac ctacaggtac 300
caccgcctgc ccctgcccga gcaagggagt cccctggagg cccagttgga cgcctttgtc 360
agtgttctcc gggagacccc cagcctgctg cagctccgtg atgcccacgg gcctcccccа 420
gccctcgtct tcagctgcca gatgggcgtg ggcaggacca acctgggcat ggtcctgggc 480
accctcatcc tgcttcaccg cagtgggacc acctcccagc cagaggctgc ccccacgcag 540
gccaagcccc tgcctatgga gcagttccag gtgatccaga gctttctccg catggtgccc 600
cagggaagga ggatggtgga agaggtggat agatctatta tgtgaaaggc agcttcaccc 660
agttttctgg actctcatgc ccccatctnc gacctgggag acttcaggaa tgacaaccta 720
cccagcctgg tggggctggc angatggtgg ang 753

<210> 798
<211> 755
<212> DNA
<213> Homo sapiens

<400> 798
tgcactccag cctgggcaac ggagtgagac tccatctgaa aaaaaaaaaa aatagaaaag 60
aaagagagga acaaaaagaa ctgcagctac gggccgggcg tggtgtaatc ccagcacttt 120
gggaggccaa ggcgggtgga tcacttgagt tcaggagttc gagaccagcc tggcctacat 180
gatgaaacct tgtctccact aacaatacaa aaaattagcc aggcgtggtg gcgtgcgcct 240
gtaatcccag ctacttggga ggctgagcag gagaattgcc tgaactgagg aggcagaggt 300
tgcagtgagc taagatagca ccattgcact ccagcctggg cgacagattg agactctgtc 360
tcaaaaaaaa aaaaaaaaaa aaaaaaaaga agtgcagata caggatagtg gaagaaagag 420
agagccttta gcagaaactc ggtgcaccct ctccccaccc ttgccctata tctgaggttg 480
ctcacctctc catggccgta gtcccaccct caccctgcct cagttattac tctctgcagc 540
caacagaatt taactgctgc cagtgaaggc tgcagctcag ccctgatttc ccaccccttt 600
gngatccctc cctgctggct tagttctgcc tagcctgggg tgctgagaac ttatggggga 660
gccctcagat gccagtgtat gctgcatgtg ccccatcctc aatctgngga atgactgtaa 720
gaccttntga tctccctggg attanaacag tggct 755

<210> 799
<211> 752
<212> DNA
<213> Homo sapiens

<400> 799

0952045.0720

atttaaatgt ctgtctaccc agacttactc gttcaaaaac tgtctcattt acattttgta 60
gaagtagagt accatagtgg atagaaccac aggctctggg gctgtcctgt ctggggttat 120
ttgctagctc taccacttaa caatcttaga caagtcactt cagtcttttt tttgagacag 180
gatcttactt tgccacccaa gctggagtac agtttaagag ctcactgaag cctctacctc 240
ccagactcaa gtgatccttc tgctttagcc tccctaagta ttgggattat aggcatgagc 300
cactgtgccc agcctcactt ctctttttt ttttttggga tgggcccttg cactgtcacc 360
caggctggag tgcagtagcc tgatcatggc tcataacagc ctcaactttc tgggctcagg 420
tgattctcct gcttcagcct cccgagtagc tgggactgca ggtgcatgcc acaactggct 480
aataattttt tgtagagaca aggtctcgcc atgttgccca ggctggtctc gaactcctgg 540
gatcaagcaa tttgcccacc tctgccttcc aaagtgctgg tatcgcaggc ctgagccacc 600
gtgcctggcc ctcacttcat tggtgatgcc ttagctccct catttgnaaa atggggataa 660
taatagcacc aacttatgtg gnggttgtga gaattcaatg atttaagcta taaagctggn 720
attcttggct tagcttatct tgaggggggn gg 752

<210> 800
<211> 746
<212> DNA
<213> Homo sapiens

<400> 800
aaaagcgacg gcgcagcacg gtgcggcgca gctcctgctc gcctttccct tcgctgggcg 60
agaggtgtct atggggcacc cgctgccgcc gccgctaccg ccaccgccac cgccaccgcc 120
gccgagtgct gtctctatgg cgaggaggag gaggaggagc gcgagctcag cgacacaagt 180
acataaataa aggataaaat attttatgaa acaaatcttc aatcaagtat aacattttga 240
tgcttggcat ctagactccc ttgtgccctc actatgccag cggcaactgt agatcatagc 300
caaagaattt gtgaagtttg ggcttgcaac ttggatgaag agatgaagaa aattcgtcaa 360
gttatccgaa aatataatta cgttgctatg gacaccgagt ttccaggtgt ggttgcaaga 420
cccattggag aattcaggag caatgctgac tatcaatacc aactattgcg gtgtaatgta 480
gacttgttaa agataattca gctaggactg acatttatga atgagcaagg agaataccct 540
ccaggaactt caacttggca gtttaatttt aaatttaatt tgacggagga catgtatgcc 600
caggactcta tagagctact aacaacatct ggtatccagt ttaaaaaaca tgaggaggaa 660
ggaattgaaa cccagtactt tgcagaactt cttatgactt ctggagtggt cctctgtgaa 720
ngggtcaaat ggntgncatt tcatac 746

<210> 801
<211> 878
<212> DNA
<213> Homo sapiens

<400> 801
atttttggag tcttccctaa ggatcctcta ccggctttc gagtcagtgc tgccgccgct 60
gcccgcggct ttgcagagca ggatgaatgt gatagaccac gtgcgggaca tggcggccgc 120
ggggctgcac tccaacgtgc ggctcctcag cagcttgtta cttacaatga gtaataacaa 180
ccctgagtta ttctccccac ctcagaagta ccagcttttg gtgtatcatg cagattctct 240
ctttcatgat aaggaatatc ggaatgctgt gagtaagtat accatggctt tacagcagaa 300
gaaagcgcta agtaaaactt caaaagtgag accttcaact ggaaattctg catctactcc 360
acaaagtcag tgtcttccat ctgaaattga agtgaaatac aaaatggctg aatgttatac 420
aatgctaaaa caagataaag atgccattgc tatacttgat gggatccctt caagacaaag 480

0552345.0720000

aactcccaaa ataaacatga tgctggcaaa cctgtacaag aaggctggtc aggagcgccc 540
ttcagtcacc agctataagg aggtgctgag gcagtgccca ttagcccttg atgccattct 600
aggcttgttg tccctttctg taaaaggggc agaggtggca tccatgacaa tgaatgtgat 660
ccaaacccgt gcctaacttg gactggctct ctgtgtggat caaagcgtat gcttttgtgc 720
acactggtga caactcaaga gcaatcagta ccatctggtc actagagaaa aaatccttat 780
tgcgagaaaa cgtggaccta ttgggaagct tgcanatctg tcttcaanct ggagacatta 840
aaacttgncc tcagtttgac aggcccaatg tggatcct 878

<210> 802
<211> 422
<212> DNA
<213> Homo sapiens

<400> 802
cttcagcgat ggccgcggag ctgagcatgg ggccagagct gcccaccagc ccgctggcca 60
tggagtatgt caacgacttc gacctgctca agttcgacgt gaagaaggag ccactggggc 120
gcgcggagcg tccgggcagg ccctgcacac gcctgcagcc agccggctcg gtgtcctcca 180
caccgctcag cactccgtgt agctccgtgc cctcgtcgcc cagcttcagc ccgaccgaac 240
agaagacaca cctctaggat ctgtactgga tggcgagcaa ctaccagcag atgaaccccg 300
aggcgctcaa cctgacgccc gaggacgcgg tggaagcgct catcggctcg cacccagtgc 360
cacagccgct gcaaagcttc gacagntttc gcggcgctca ccaccancac catcaccacc 420
nc 422

<210> 803
<211> 607
<212> DNA
<213> Homo sapiens

<400> 803
tgatatgtca ttttttttgtt tgtttgtttt tgttttgttt tgttttgttt ttgagacgga 60
gttttgctct tgttgcccag gctggagtgc aatggtgcaa cctccgcctc ccaggttcaa 120
gcaattctcc tgcctcagcc ttccgagtag ctgggattac aggcatgtgc caccacgccc 180
ggctaatttt gtatttttag tagagatggg gtttctccat attggtcagg ctggttgtga 240
actcccgacc tcaggtgatc tgcctgcctc agcctcccaa agtgctggga ttacaggcgt 300
gagccactgc gccttgcctg atatgtgatt tttaatcatt tgaacaagac tgttattctg 360
ggatcaaaag attttattat gtttttaagt gttattataa agaagatgta gttatcactg 420
ctgcaatcct agtgggattt gtacacattg gtgtatagct tggtataaaa tttgagttta 480
taatggaaat aaatatttaa aaagttaaca cttaaaaaag aagttaagtg gtatgagagt 540
ttttataatg aaaccttta gacatttana gaatancacc acatncccat tgaaaattta 600
agtgaaa 607

<210> 804
<211> 763
<212> DNA
<213> Homo sapiens

<400> 804
aggggcgggc gccgccatgg gtaacctgtt cggccgcaag aagcagagcc gcgtcacgga 60

0562045 - 07/12/00

gcaggacaag gccatcctgc aactgaagca gcagcgggac aagctgaggc agtaccagaa 120
gaggatcgcc cagcagctgg agcgcgagcg cgccctggcc cggcagctgc tgcgggacgg 180
caggaaggaa cgggccaagc tgctgctcaa gaagaagcga taccaggagc agctcctgga 240
caggacggag aaccagatca gcagcctgga ggccatggtt cagagtattg agttcaccca 300
gatcgaaatg aaagtgatgg aggggctgca gttaggaaat gagtgtctga acaagatgca 360
ccaggtgatg tccattgaag aggtggagag gatcctggac gagacgcagg aggccgtgga 420
gtaccagcgg caaatagacg agctcctggc aggaagcttc actcaggagg atgaagacgc 480
catcctggag gagctgagcg caatcactca ggaacaaata gagctgccag aggttccctc 540
cgagcccctt cctgagaaga tcccagaaaa cgtccctgtc aaggccaggc ccaggcaggc 600
ggactggtgg cagcttcgta atgtggcctc gtcttgtggg actcacgggg atgccccagg 660
gactgtggcc cacanagagt ttgggtcacg gccagcccct tgaccgggtt ncctggagcc 720
caatgcgcac ggtgctgagc agacttgcan ccacgcaggc gca 763

<210> 805
<211> 748
<212> DNA
<213> Homo sapiens

<400> 805
catttatagt caagtattgg ggatttttaa acccttacaa gatgaggcta aaagttatat 60
aacaaaatct gtagctaact tcatatagta ttcttcatac atacacacac attgattggc 120
agtgagagag aagggcagta attgaccgat ttagatatta attggtttgt tacaatctgt 180
gactctgagc taatcagaac cagaacatgt agttctgaag ctgtgtttca gtctgctcat 240
tgtaccataa ttaggaagaa ctgctttggc aaatcatgga atttgggagc ttatataaag 300
ggacttcatt atcattattc tataggaaga actgctttgg caaatcatgg aatttgggag 360
cttacgtaag gttacttcat tatcattatt ctaacttatt tttccaatga agaagcagat 420
ctgtctggag aggttaagtt gaactaaggt tttatagaaa gctggtggct aaggcagaac 480
taaaggtaac tttctaagac ccaatctgat atccttgagt cttattgtag gcttttgcct 540
ttgttaagca tactccaact aataccccaa ctaattccag gcaaatggaa gtttaatgca 600
aaagcgtcat ggaatacagc agttttctaa taatataatt tgntatttag aatatacact 660
gtcatgtcat gctatatgta aaataattag gcaaccatta acaccattat tacacagttg 720
gtttgnaaat gggntaatcc tgnctcca 748

<210> 806
<211> 847
<212> DNA
<213> Homo sapiens

<400> 806
tagcatatag tcacttgggg ctagtgcatt accatattgg tcagtgcaac acttagattc 60
tgaggatgtt tggcatactt taatttacaa aatcaaattc cttagtttga aataatgtaa 120
taagaacact ggcaaaccat tgtgagtttt cctcactaca catatttggg gctcctaggt 180
taatattatg tctttgtttg ggataactgt caatagtggt ctcctggttc aaatccaaat 240
gaggcctccc acaggtgtgg ttaatgaaaa tgcattgatt aattgtgtgt ttcttacaca 300
aaaaaactaa catcctttaa atgattagac taatgttaaa gaatattgac atgtttaaat 360
gaaatatgca acttagaaca aaatgtttag aagtaaacat ttttcaagat ataattggca 420
acttgctcat aattttctta ttctcaatca taacttaagc ctaattctca gcagaagttg 480
aattagagct tgcattcagt gacaaaacct agcagacaat tattgaacac tgcaaaaata 540

0050345-0050800

aacatgtttt ccacatctgc taaaagattt aagacagata caagccagac aagtccaaat 600
aatttactta taaaatgcaa tatacttgtt taaccaaaag gaagtatatc aaatttattt 660
gagttaaata ggcattctat tttgtaggga tgaaattttg cttataatat aatgaaaatg 720
taatgcactc tttatgatct taagaaatta tttccaacag atttttatgc aataataaaa 780
gactgcttct aaagtttaga gacgcatgag ataggatatt catattaatg ggttaatatt 840
aaatagc 847

<210> 807
<211> 768
<212> DNA
<213> Homo sapiens

<400> 807
ccaacagctt tggctaaatt aaccctggct ggacccattt tcttccattt tactcctttg 60
cccctcagg tggacaattt gacctttgat ggggaagaat atcagtgggc agcagaaggg 120
gcacggcccg catgcattct caagtcttct ctgcctttcc ccacagcctc cctctgcgct 180
cctgggtgaa cgtgattaag aacccccagt tcgtgtttga catccacaag ggcagcatca 240
cggacgcctg cctctctgtg gtggcccaga ccttcatgga ctcttgttca acgtcagagc 300
accggctggg caaggactcc ccctccaaca agctgctcta tgccaaggac atccccagct 360
acaagagctg ggtggagaga tactacgcag acatcgccaa gctcccagcc atcagtgacc 420
aggacatgaa tgcctacctc gccgagcagt cccgcctgca cgccgtggag ttcaacatgc 480
tgagtgccct caatgagatc tactcctatg tcagcaagta tagtgaggag ctcatcgggg 540
ccctagagca ggatgagcag gcacggcggc agcggctggc ttataaggtg gagcagctca 600
ttaatgccat gtccattgag agctgagagg aggagcctcg cattcctggg aagagggacc 660
tgtccaagct gtcacactgg gagtctcaga tggaaggaca agtgatgggg atcangcccc 720
agagcttgct gtccctgaga cccatcctgg ggaaaangga ggactnct 768

<210> 808
<211> 847
<212> DNA
<213> Homo sapiens

<400> 808
cagaagactg tagagctgct tttctcccag gggagaaact aatgatttgc agaagctagt 60
aatttagagt ctatggaact tgccccaggc tctcccttcc ctcctgcttt cagtggtact 120
gaggagctgt atttaatctg aacagaaaat tccattttct tctgatgatt ttgtgactat 180
atgaaaatgg aattaaggga ttgtagattt cttccccaca agcatatttt aaaatccaga 240
gtaaaaataa aaactttcgc agagtaattg agaataaagg tgagaagttt tctaataata 300
ctttaaaaaa ttctcatata cagataaatt agaagaagca tgaagacttt tccttaaaga 360
aatgttcctt tccctgcact ttgaatagat ggacaaaatt agtatgcagg gacagatcca 420
acttttgtgg gagctcatac actttggtgt cggtgcggag ggggtggttc ttctatagaa 480
aaagaatgca aaaatatctc ccttttgcag aatgttcaca ttctgcacgt gtgagctgct 540
gttctcctca cctgggcctg gagaacatgg gtgagatgct gagccccagg gcttangcca 600
gctgcctctg cgtatggagg gtgtgtgtgc ccctcagctg tgccagggag gagtcacagc 660
agacggcatg ctgccatcct aatctctgtg gcacacagga gaatgtnccc acccccaagg 720
aagtccccat gctaattcta gaatacgtgg ctatgtcacc ttacatgata atccagagac 780
tttgcaaatg ggattgaatg aagggctgga aatggtcctg gatttncang gagccctaat 840
ggtaccc 847

0520150300

<210> 809
<211> 838
<212> DNA
<213> Homo sapiens

<400> 809
taattctaca tgtgtcgatg gcattaataa ctacacatgc ctttgcccac ctgagtatac 60
aggtgagttg tgtgaggaga agctggactt ctgtgcccag gacctgaacc cctgccagca 120
cgattcaaag tgcatcctaa ctccaaaggg attcaaatgt gactgcacac cagggtacgt 180
aggtgaacac tgcgacatcg attttgacga ctgccaagac aacaagtgta aaaacggagc 240
ccactgcaca gatgcagtga acggctatac gtgcatatgc cccgaaggtt acagtggctt 300
gttctgtgag ttttctccac ccatggtcct ccctcgtacc agcccctgtg ataattttga 360
ttgtcagaat ggagctcagt gtatcgtcag aataaatgag ccaatatgtc agtgtttgcc 420
tggctatcag ggagaaaagt gtgaaaaatt ggttagtgtg aattttataa acaaagagtc 480
ttatcttcag attccttcag ccaaggttcg gcctcagacg aacataacac ttcagattgc 540
cacagatgaa gacagcggaa tcctcctgta taagggtgac aaagaccata tcgcggtaga 600
actctatcgg gggcgtgttc gtgccagcta tgacaccggc tctcatccag cttctgccat 660
ttacagtgtg gagacaatca atgatggaaa cttccacatt gtggaactac ttgccttgga 720
tcanagtctc tctttgtccg tggatggtgg gaaccccaaa atcatnacta acttgtcaaa 780
gcaagtccac tctgaatttt gactnttcca ctctatgtag gaaggcatgc cangggaa 838

<210> 810
<211> 850
<212> DNA
<213> Homo sapiens

<400> 810
gcggccgggg aaaaacccgg atgagctggg cagcagtgtt ggcagtcgcg gctgcgagat 60
ttgggcactt ttgggggtgc cggtggcccg ggccgatggc gcaaggttgg gcaggcttct 120
ctgaggagga actgaggaga ctaaagcaga ctaaagatcc atttgaacca cagcgacgtc 180
tccccgcgaa gaaaagtcga caacaacttc agcgagaaaa agcccttgta gagcaaagcc 240
aaaaacttgg gcttcaagat ggatcaacct cattacttcc agagcagctg ctttcagcac 300
caaaacagag agttaacgtt caaaaaccac ctttttcttc ccctactctt ccgagtcatt 360
tcactctcac ctcccccgtt ggtgatggac aaccacaggg cattgaaagt cagccaaagg 420
aactgggact tgagaattcc catgatggtc acaacaatgt tgagattcta cctccaaagc 480
cagattgcaa attggagaaa aagaaagtgg aattgcaaga aaaatctcgt tgggaagtcc 540
tccaacaaga acaacggcta atggaagaga aaaataaacg taaaaaagct cttttggcta 600
aagctattgc agaaagatcc aaaagaactc aggcagagac catgaaacta aagcggatcc 660
agaaggagtt gcaggcttta gatgacatgg tgtcagctga cactggaatt cttcaggaac 720
cggattgatc aggccagcct agactattca tacgctcgga agcngnttga cagggctgaa 780
gcagagtaca ttgcagcaaa gctagatata cagcgcaaga ctgagataaa agagcactcc 840
ttgacacctt 850

<210> 811
<211> 840
<212> DNA
<213> Homo sapiens

09/05/2005 10:20:00

0056203 05/20/2008

<400> 811
ccatttaaag aagatgctcg gccttaaagg aaatggcggt gcggttctgt ccatggccct 60
tccttttcag ccagagcaga gagattcaga ggatttattg aagaatttta attcagagtg 120
tgatacacac tgtggccttg atactgcacg acaagaatat ttgggtaact cattaagaca 180
ggaatcagac ttgaaaaaat ccacctcgtc agataattca agctctcatc atggtgaaaa 240
taaacaaaat ctgactgttg atccctgtga cattttgggt ggagttgata atcagcaaag 300
actgctacac attgtctggc ctcacaggtg ggagcatgat aaagatccag aaagcttttt 360
taaggtatta atgcatctta aagacttagg actcaatttc cacgtgtctg tacttggaga 420
aaccttcaca gatgtcccag atatttttc agaggccaaa aaggcattgg gatcttctgt 480
cttacactgg ggctacttac ccagcaaaga tgactacttc caagtactgt gcatggctga 540
tgttgtcatc tcaacagcta agcatgaatt ctttggagtg gcaatgttgg aagctgtgta 600
ctgtgggtgt tacccacttt gtnctaaaga tttggtttat cccgaaatat ttccagctga 660
atatctgtat tctacacctg aacagctttc aaaaaggctn cagaatttct ggcangagac 720
cagtttttat taggaaaacc atntttatt aaggggtgga aaatcggctt cccgtttttc 780
cttggggcca gcccccttaca ttgggnaaaa attcaaggtc cttctggctt taccaaccng 840

<210> 812
<211> 799
<212> DNA
<213> Homo sapiens

<400> 812
ttgctcacca ctgaaaaatg tcagtgtaaa tgtgaccgct ttaaagatga gtcaagtaat 60
tcttggaaca gggaaaaaaa tgaatttgcc aggtcaggag ttcacctgcc tttgtcagag 120
ttgaacccaa ccactcttga cctcgactca ctcccttagg gttaagaaag cccaaacaca 180
ttcctgagca cagagcaaac actcccatgt cactgaaaag aaacaaaagg atgctaaaaa 240
gtgctcagac ctgatcacat tttttccaat atttttcct ttttttttt ttttttgag 300
acagggtctt gctctatcac ctaggctgga gtgcatgttt ttgagacagg gtcttgctct 360
atcacctagg ctggagtgca tgatcatggc tcactatagc cttgaactcc tgggctcaag 420
ccatcctcag cctcccaagt tgcgaggact acaggtgtgc accacaacgt cccagctact 480
ttttaaattt ttagtagaaa cgaggtctca ctatggtgcc cagactggtc tcgaactccg 540
gagctcaagt gatcttcctg ctttggcctc ccaaagtgtt agaattacag gcatgagcca 600
cctcgcctgg ctggtttttg cctttcttat agaccctggg catgtaagca tttattagtt 660
tgcatttttg aaacagtaat ttcaatattt tagtgccaat gtcaggccgn ttaaacactg 720
nattacatat cttcatctgt ctggtggaac tattggtgng atcctagaga actgagtcct 780
attctgcctt catttaaag 799

<210> 813
<211> 748
<212> DNA
<213> Homo sapiens

<400> 813
agtcaaggag gacagtgaca tgcatgtgta ggggctgggg accaatctgt cttgggggtc 60
ccagagatgg atctgctgtg acagaggggg ccaagacccc gttcagagtg gggggagggg 120
agaggagtca caggttcaac atgaagaaca gttttaggaa gtgggagggc tggggaccta 180
cggcccatgc agtgccagat gggaccccat gcaggtgggt tgctggagga ggacagggaa 240

acagactgca gttttcaggg atgcccttgg accttctgac tcagtggccc aactcctggc 300
tgctgccctc ctcccccact cccaagacct ccaggtctga gcagctgtcc tgcggttgag 360
gtggacctgt tggggaagtc catcaggaac ctgccagggc ccgaaagaga gtgctggggg 420
ctctgtggca ggaaatgagg gaagtgtccc cagccacctc ccccccttaga ggtgtggaga 480
ttctggtcag tgggagaagc tttaaaagag cttgttctcc aggccccaaa gtagggcagg 540
agaggaggag tggcttccag gcaagtggct agacccagtc acctcattgt gaccttgcac 600
tctccangga tgtggtcccc tgggtggtgg gagctatata cccacattgc anagagcaaa 660
accaaggaag acgaacaacc actactctgg ntcttcacct tccaccccca tnccccaaga 720
aagaacgggt gcttggtgcc gggccaca 748

<210> 814
<211> 847
<212> DNA
<213> Homo sapiens

<400> 814
atgctgaaag aagcggagag tgttatcacc aggttgccat gggtcaaggt caagctgatt 60
tagcaattca aatgctaaaa gaatgtgccc gcaatggaga ctggctctgt ttgaagaact 120
tacatcttgt ggtatcttgg ctgccagttc tggaaaagga attgaatact cttcaaccta 180
aagatacctt tcgtctttgg ctcactgcag aagttcatcc caactttact cctattttac 240
tacagtcaag tctgaagata acatatgagt cacctccagg tttaaagaag aatttaatgc 300
gtacttatga gtcttggact cctgagcaaa ttagcaaaaa agataataca catcgagctc 360
atgctctctt cagtcttgca tggtttcatg ctgcatgtca agaaagaaga aactatattc 420
ctcagggttg gacaaagttt tatgaatttt ctttatcaga tcttcgggct gggtacaaca 480
ttattgacag acttttgat ggtgccaaag atgtacaatg ggaatttgta catggtttac 540
ttgaaaatgc tatttatgga ggacgtatag acaactattt tgaccttaga gttcttcagt 600
catacctgaa gcagtttttt aattcttcag ttattgatgt attcaaccaa aggaacaaga 660
aaagcatttt tccatattcc gtatctctac cacaatcctg cagcattttg gactatcgtg 720
ctgtcattga gaaaattnca gaggacgaca aacctagttt ctttggtctg nctgccaata 780
tcgctcgctc atcttcacng catgacagtt ctcaaggtat ttcacagttg aggattttgg 840
gcaaacc 847

<210> 815
<211> 808
<212> DNA
<213> Homo sapiens

<400> 815
ttgttggcct actggaaaaa aaaaaaaaaa aaaaaaaaaa aaaacacatt cgaggtggta 60
atatgatact tttaaaccgg aacctgcatc tgatatcctg gaatttgttt ctctacttcc 120
tgtatttctc ctatcatgaa tgactgctct gacaaagaat atgtcatggg acacaccttc 180
agctaacttt gctttttcat gcttgttttc aattcactag aagaaaatct aacttgtcag 240
gaagcaagtn cataatagga agtgtctgtc ttagtttgtc ttcaacagtt aanaaaatga 300
atgtttccac tcttactaca ttcttagtca cctgtccact gaccaanagc cttgtggccc 360
tgagtaatca tttagaactt ggaatcagca ggggcgctct ctctagttgc agtttaggga 420
atgggttatt agctttctag gatatttatc atgctttgaa ataatttaat gaattttatt 480
ccataagatc caattcaggt taggcttgtt tgatttttt tttcanaaaa tgtattccat 540
aaagtttgna cttagaccag acgggtgtct aagaatcatt catgagtaaa tgtgtgttga 600

0050204850 - 02-NOV-2006

atatctaccc ttgacctttt ttttgagaaa tagagtaaac acagtccctg tagtctgaca 660
gctaatgggg anaaagggta ggcttttcat cgaattaaat ttctacatgc acctttnccc 720
canaaatctt actcatggct gggctcaagt aagctttttt gaaaaatatt ggcatatctt 780
cttcctnttc cttttcctac tggcttcc 808

<210> 816
<211> 808
<212> DNA
<213> Homo sapiens

<400> 816
agagaaactg actcaggctc cttgtggata ttaatttgag gacagtagtg gtaatcaaaa 60
gtacagtaga gaacacttga cattgtgaat gtgacctctg accccaaccg ttgtaaagcc 120
aataactttg agggtgaata aggtaacact tgcttagaaa acccagccct ttcccccagt 180
ctcctgcgct cttatacatt gatactttac aactattttt gctgtacctc tcagtctttc 240
ctggataatg ggaccactta aaaaaaaaag tgattcatct tcctcaaact agaatttcaa 300
agcctaatac tacactatgt tccagcttca ctgagttttg aacaaaaaga cttaagcatg 360
ccttgtgttt aaggaaaaat aattgatgtg tgaatggaat caatcaccta ttgacgggaa 420
gggtgtcagg atgatgtagg gtgatatgcc tttaattgga taaagagaac tgtattaagt 480
ataactaatt taataactga ttgaagcacc attcttaatt ttaaaatatt tttgttaatt 540
tcttttgtgg ttttaaaaat taataatttt ttttttttg agatggagtt ttgctcgttg 600
cccaggctgg aatgcaatgg cgcgatctca gctcactgca acctccgctc ctgggttcaa 660
gagattctcc tgcctcagcc tcccaagtag ctgggattac aggcgtgtgc caccacgacc 720
agctaatttt gnatttttag tagaaatggg gtttcaccat gttggccagg ttggtcttcg 780
aactcctgan cttnaaggga tccacccg 808

<210> 817
<211> 820
<212> DNA
<213> Homo sapiens

<400> 817
tgacttttga ggcaaaatat caataggtca catgaaaagt gagatgttcc cggggacaga 60
gctggagatc aggagtgagt ggacaagaaa ggaatccaag gaaaatttcc taattctatt 120
atgatataat gtctatgaaa atatggagga gatgatatac attgagaaac acctctttga 180
agacattaag cattaatgtg tattaacttg atgcctagta taagaggatg aactaatttg 240
caacgtagta tatatggtta agagcacaga ttctagagct agactgcctg ggtttgaatt 300
ctggctttgt tattttctaa agtatgcatt ggaaaagtta attaacttct ctatgtcggt 360
acacaatggg gataatagta gttactctca taggaggctg ttgtgaagat agagtacatg 420
cacatatgta aagcatttag catatggcct ggcacatagt tcagtgcccg ctgctcttag 480
tattatttaa ggagaagagc tgtaagttgc aaaggtgatt ttaatagtga cattttggtg 540
gatggaagag attgcagaat ggaggtacca gttgcccagg attttgaaag gagcagatcc 600
tgcccccacc ctctgcccca tgcagacaat taaagggtag gaatttttat ttatttattt 660
atttttgaga cggagtcttg ctctgcgccc agctggaatg catggcgcaa tcttgggtca 720
ctgcaagctc cgcttctggg ttcacgccat tcttcctggc tnaccttctg agcantggac 780
tacagcgccc gcaacatgcc cggttggttt ttnggatttt 820

<210> 818

EP 0 952 209 A2

0052050.0052050

<211> 821
<212> DNA
<213> Homo sapiens

<400> 818
gggttgagcg ggaggcgcga tcggtccggt cggtggctcc ccgcggcggg gccgggcccg 60
atctcgggcg ggaaccgagc gcagagccgg tagcgggaag gatgaccacg ctcacacgac 120
aagacctcaa ctttggccaa gtggtggccg atgtgctctg cgagttcctg gaggtggctg 180
tgcatctcat cctctacgtg cgcgaggtct accccgtggg catcttccag aaacgcaaga 240
agtacaacgt gccggtccag atgtcctgcc acccggagct gaatcagtat atccaggaca 300
cgctgcactg cgtcaagcca ctcctggaga agaatgatgt ggagaaagtg gtggtggtga 360
ttttggataa agagcaccgc ccagtggaga aattcgtctt tgagatcacc cagcctccac 420
tgctgtccat cagctcagac tcgctgttgt ctcatgtgga gcagctgctc cgggccttca 480
tcctgaagat cagcgtgtgc gatgccgtcc tggaccacaa ccccccaggc tgtaccttca 540
cagtcctggt gcacacgaga gaagccgcca ctcgcaacat ggagaagatc caggtcatca 600
aggatttccc ctggatcctg gcggatgagc aggatgtcca catgcatgac ccccggctga 660
tnccactaaa aaccatgacg tcggacattt taaagatgca gctttacgtg gaaaaaccgc 720
gctcataaag gcagctgaag gggcacctgg cancccactt gatgccccaa acttgtcaga 780
cttttgggga tccccgccta aggcaatgct gnattggntt g 821

<210> 819
<211> 691
<212> DNA
<213> Homo sapiens

<400> 819
catactgtcc ccaaggtcca tccattctct tcctttgaa ggctgagttg tgccccactg 60
tgtgcctaga ccgcatctgg ttgacccatc catccgtcga tggacacatt atgaatggtg 120
ctcctgtgaa cactgtgtac caataagtgc tttttgagca tgatcacgtg cctggcattg 180
tgctgggctg cagtgggaaa tgaacttggt tcccatgctc tgggggtaat gttaagaagc 240
aaacaccaat agatgtttac taagagactg caatatgtcc cgtgatggga aagagcagtg 300
ttcggggaga gaattatggc aggggtggag gtgggtggct gggacaatgg tcaggtctca 360
ggaagtggcc tgaagaatgg ggaggagagg tgggcagggg tggggagggt ccaggcagaa 420
gtaacaacat gtgtgaagcc actggattgc gacagagttg cccgttggag ggattgatgc 480
ttanatttct gcttcagtgt cttctccagc aagcatccta tcagcctnca ggcccacctc 540
tccccaccat cttctcctct ctgctcttat tctagttcat tcaaactgcc tctttgctca 600
actatttctc ccactgtcca gtgagcggnt tgagtgcagg aactggtnta ttttatgttt 660
gcgccttctt ttcatatctt aataggtgca n 691

<210> 820
<211> 841
<212> DNA
<213> Homo sapiens

<400> 820
acatatatag ggtacagtac tttgcaaacc tatttatccc tgtaccacct agtaacattt 60
ttcaggaaaa tgttttgagc acacaaattt gacctgtttt aggaattcat acctttgaca 120
atgttgagga cctttttttt tctattataa agatgatgtg atattcacct atattacttt 180

ttcccaattc tctatcttta agatattttt ccaatgtatt atattcaacc ctctgcttag 240
tcccttcctt ctgctaagta aagtggtggt ttccatctgt tgctacacat cagaaatacc 300
tagctctgac cctggagatt ctgtatgaat agaaatgcca gaatacctgc tcaggattct 360
gtgttcatta caaacaccca ggtgattctg atgcagccaa ccctggtcct ccaactgatg 420
ctttggaatt gttgaaggaa aagcatgcgt gttttttttt ttgcaagatg gatgagtagc 480
ttggggcata gtttgtggtc ctagaacaca tgggttaacc atccatccta gtgagaacga 540
tagcacaggc ctccaatgac cccatgaggt gatgtactgg ctataaccta acatgagatg 600
attattatta agaaaagcag aatacttcta aatgggcttt tagccacctt cctaataatg 660
aagtaccgta tatatgatta ccatttgttt tagtttcgag taattccctt gtaaatgatg 720
ttttatttat tctttaagaa gaatactaga ttatattttc taaatgtgcc aagtatctaa 780
gaatatattc tttcccttct gctgataaga gtatccnttt aaccttaagc caaatcggnc 840
a 841

<210> 821
<211> 807
<212> DNA
<213> Homo sapiens

<400> 821
ttgaggaaaa taagcagaag aaaaataaaa atattttata ttatgctttg tgtgttttac 60
atttttatgc ggtatcttct caaagcttcc caacaatggg gtaagctaca gtctagaatt 120
gatattattc tcacttgtga ggggaaaggt ttcttggcat gagagaaatc ttacaactga 180
gtagggggtg tggaaaggat gacttaaaga tttagttggt aaaagacagt tacagaattt 240
agcaaccatt tgaatgcagg cccctaggat aaagagtcca agataactgt gaatctgagc 300
cagggttgct ggtatgtatg gtgattttat aacctacaga ggaaagtgag gaggaacagc 360
tggtttgaga tagaagattc attttaaaca tgttgatttt aaggtgctaa tgttgcatcc 420
aggttatgtc acaaaatacc caaagccaga ctggagggcg gagaagagct agcgagttct 480
ctagataaaa aagattcagg aggcagttgc atgggttgct cattttcgta tcctgtgccc 540
ttatttttc cttcatctgc tccatcgtct tccctacaat atagtcacca taacaaattt 600
gagtagaatt ttgttttgtg taaagaatat ggtagccata gaagagaaca ttgacttgaa 660
agaataatat ttataaggaa ggagttgcaa ggaacatcta gggaacataa aagtaaatga 720
tccaagaagt taatgggttg ggtggtaaag tggttatgga agctcacaac tcgggnaggc 780
tnaagcagga aaaatccttg ancccgg 807

<210> 822
<211> 872
<212> DNA
<213> Homo sapiens

<400> 822
attattatta ttatttttg agacggagcc tctgtcaccc aggctgcatt gaagtggcac 60
gatctcagct cactgcaacc tccaccttcc ggtttcaagc gattctcctg cctcacgcct 120
gtaattccag cacttcggga ggctgaggtg ggaggattgc ttgaggcctg gagttcaaga 180
ccagcctgag caacatagtg agacactttc ctctacaaaa aaaaaacaaa aaaactggcc 240
catggtggcg cacacctgtg gtcctagcct atagacccag ttactgggga ggctgagaca 300
ggagggttgc ttgagcacag aagttcaagc ctgcagtgag ctgtgattcc accattgtac 360
tccagcctgg gtgatagact ctgtctcaaa aaataaagtc agatggaatc atgctttaat 420
actagatata tggatcattg agactgtctc aaaagaataa atgttatcag aaaaaaattt 480

0956369.0002

ttactccgaa aaagaaagca tttgggttat ggcaacccta ttaatggatg aaagaataat 540
agcactctta attcaggcac tttcaagatg aaaggataat gaagaaaagt tattaagata 600
tatttctgaa ctggaaggaa agaaactaac atttagttgc agttaaacaa tatttagtac 660
aaactgagtt gacatccccg ggttataatt ttatttctat cttggggtta attgaagcat 720
gtccgccatt ccccagtaat atatgtgaaa atggctacat ttacattaag ccagatttat 780
tgctatgctt atcctgatat ttcatagaaa ttggggtatt tttcttttgg actttagtag 840
aaagttaaag caaatnttta atgctgcctc aa 872

<210> 823
<211> 808
<212> DNA
<213> Homo sapiens

<400> 823
tgtccggacc atgggcttga tttgagtacc tattgccagg aagataggca gctcatctgt 60
gtcctgtgtc cagtcattgg ggctcaccag ggccaccaac tctccaccct agacgaagcc 120
tttgaagaat taagaagcaa agactcaggt ggactgaagg ccgctatgat cgaattggtg 180
gaaaggttga agttcaagag ctcagaccct aaagtaactc gggaccaaat gaagatgttt 240
atacagcagg aatttaagaa agttcagaaa gtgattgctg atgaggagca gaaggccctt 300
catctagtgg acatccaaga ggcaatggcc acagctcatg tgactgagat actggcagac 360
atccaatccc acatggatag gttgatgact cagatggccc aagccaagga acaacttgat 420
acctctaatg aatcagctga gccaaaggca gagggcgatg aggaaggacc cagtggtgcc 480
agtgaagaag aggacacatg aaggcttgct acccccagtg gaagatcatc ccctcccctt 540
gtgtgtatgt gacagcgtgt atgtaacggc ttctgatttc tgtgaaagct gctcagcaac 600
aaacgtactt ccaccagatg tgtccccaga tccacagcag gcacatatct ctccaaggga 660
tgaccagttt tatgcttact gtgtgcttct catcccctgg ttgtggtagg tcaanggaaa 720
agagcccctt ttgatccacc caggagccaa tttaagaaag gtcccttcag gtnaatccct 780
tcaattggct ggntttggaa ccttactt 808

<210> 824
<211> 825
<212> DNA
<213> Homo sapiens

<400> 824
ttcctatatt ttatcaatga atatttattg agcacctctt ttattctagc cattttgcta 60
ggtatcccaa ggaaagccta ctgtgttctg aaaaattgga attcattaat taaattaaac 120
aggactaaca tactatactt ttccatccag agaaatgcaa aattatacct tgattcaaga 180
caaaatagtt tgtccctccc agccatagag aaagctgagt tgtttgttac ttttagatct 240
taggtacaga atctgataaa gtctaggtgg ttctgtatac cagcccttga atttataatc 300
gtagagactt gccttaaata tatgatcagt ttaggtaagt tcgagaaatt ctgaagtgtc 360
aattatgttg tattagtccg ttttcatgct gctgataaag acatacccaa gactgggtaa 420
tttataaaga aaaagaggtt taatggactc acagttccac gtgactgggg aggcctcaca 480
atcatggcag aaggtgaaag gcctgtctta catggctgca ggcaagggag aatgagagag 540
ccaagtgtaa ggggaaactc cttataaaac catcagatct catgagactt attcactacc 600
atgagaacag tatgggaggg aacccccccgc ccccatgatt caattatctc ccaccaggtc 660
cctcccacaa cccgtgggaa ttataggagt ttcaatcaag atgagatttg ggtggggata 720
gagccaaacc acaccatatn taaaaatagt atagataata gttatatgga gtctacccac 780

EP 3 050 970 A1 2016.08.03

tggaagggat acatgtttac ctggtncccc cagttanggt agccc 825

<210> 825
<211> 820
<212> DNA
<213> Homo sapiens

<400> 825
ctaatcattg agagacatga caccaagtaa ttccgaggct cagctttaat cttgacaaca 60
ttcctgtcac attcactccc atgatagaag acagattgct ttagaagact taagttacct 120
tgaccttaaa ctagaacttt ttattaacag ctgttcccaa gataaacatt taatacctct 180
ctggaaggga gagattgaga acatttactg attcatcaaa accttgggga tttccttgtt 240
ctctgaagcg tcagtgatat ttttattagc tctatttta tttcttaggt gcttagaaaa 300
attcccatct tttcccatca gtgaccattc actagttcaa aatgggaaaa acaaaatctt 360
tgttagactt tcatttcttt cggtttattc aaccttgtat tttaattgta gatagggata 420
aattatctgg tgtttgatac ccttagaaag ttcttcccac ctggagtgta aattagttta 480
accattgtag aagatagtgt ggtgattccg cagacctaga ggcagaaatg ccatttgacc 540
cagcaatcct attactaggt gtatacccaa aggaatataa atcattctgt tataaagata 600
caagcacaca tatgttcact acagtactat tcaatactat tcaatagcaa agacatggaa 660
tcaacccaag tacccatcgg tgatagacta aataaagaaa atgtggtcat atgcaccatg 720
gaatactgna cagccataaa aaggaatgag atcatgtcct ttgcangggg catggatgga 780
agtttggaag ccattatcct naacaaacta atgccggaat 820

<210> 826
<211> 837
<212> DNA
<213> Homo sapiens

<400> 826
cttttcctct gggagcttgc cgggctgcag gggagtcgag cactcggagg aggatagggg 60
aggatatgga tgattaatgc ggggtcctca cctaagggag cgtaaggggg gattgtagaa 120
agggaggcgc agatacgcga gtccacaaat gattgattga taacccttgt ttactaagcg 180
cctctcgggg ccaggagcgc agtcttcggg gagtcagaca agtagacgat tccactgtgg 240
tataaaaagc gtcacgaagg cagctcaggg agtagcgaga cgctcaggaa tgctgtctgc 300
ctatgttgag ttactgtgtc caagacgctg ccaagaggga ctgggttaga gaagaggcaa 360
ttaggtgtct gcctaccaga aactgaccac tcagtgcaga aaacggggaa ttcgtggagt 420
gggtgaagaa atgagactgt ggacaggagg gggttcgcag cttacagaga ggaatggccc 480
tcctctctat gcttcccccc tttcttttaa ttacatacct aaccctcttc acgttggttt 540
ttcagcctaa gaactctgtt tactcaacat tctaaattgc ttgatgattc ccaccacacc 600
tttcccatgt atgatttgag tatatgccct cccccacgtt gttttatgag agcttttgtt 660
gatgttgctg gtggtttcct cttcgttttt ccttcatctc ctctatgcta tttgcttaac 720
cattgtggct ggacctcctt gctctctaaa actggagtgg ctacggagac agttncagtg 780
aaacttanga tgttccatat tggcgagtnt ttcaggcttt gaaatgaaaa gttctaa 837

<210> 827
<211> 746
<212> DNA
<213> Homo sapiens

0502948.0028808

0960203.0002

<400> 827
tccatacgca ggggctgccc atgtgcggct tcaaaggccg tgtgagccga gagcgttttg 60
atcgccgact cgggcacctt tctctgggga aggttgtctg gcgcaggcgg ctggggctct 120
ggggtgcagt ggctctcgct ttaagaaaca ggatcctgta cgcagccagc atctcatccc 180
cttcgaagtc tgcggcagta atctgctcac atcaggccac gagtatggtg cgggtaggat 240
gcgtgcttct gtattctgta cctagtttcc acccgaagct acaggtgggg ctcccagtgc 300
agtgaccgtg atactcatgg gccacgtgga gtctgtaggg ctactcgctg ggctgtgctg 360
gcttctgtga gctgatgata tggacctggc ctgggcatat gaatcactgg tctgtgctag 420
cttctacgaa ctgatgatat ggacctggcc tgggcatatg aatcactggg ctgtgctggc 480
ttctacgagc tgatgatatg gacctggcct gngcgcataa gttcacaagg actttccagt 540
ctgggcatct gcccatccgt ccacacggga agggtcaggt cttgcagtca aacttctcaa 600
caacaaagga gttctcccct ggcccctgac cttcttgatg cagcctgggc agggggtggc 660
aatagcgang gcggncatga gaagctgaag cggagcgtcc gagcagatcc gggccatcat 720
gggtcctgca gnggccgcga attacc 746

<210> 828
<211> 660
<212> DNA
<213> Homo sapiens

<400> 828
aatcccagcg aggctggggc tccggctcgg cgccccttc ctcgctccct ggtccggcgc 60
cccatgccgc ccccgcccgg tccccggctc ccccagtccc ccacttaggc gggctcacag 120
atcccggggt gctggcgcgt gggccgggggg cgcgtagggc gcctgcagac ggcccctgga 180
agggctctgg tggggctgag cgctctgccg cgggggcgcg ggcacagcag gaagcaggtc 240
cgcgtgggcg ctgggggcat cagctaccgg ggtggtccgg gctgaagagc caggcagcca 300
aggcagccac cccgggggggt gggcgacttt gggggagggt ctctgggcct gggggggtgga 360
ggtgggatgg gacctcggga ggctgagcct ggggagctag ggatagctct gcggggtggc 420
ggggctgcag atccccccctt ctgcccccac tatgagaagg tgagtggtga ctatgggcat 480
cctgtgtata tcgtgcagga tgggcccccc cagagccctc caaacatcta ctacaaggta 540
tgagggctcc tctcacgtgg ctatcctgaa tccagcccttt cttggggtgc tcctccagtt 600
taattcctgg tttgagggac acctntaaca tctcggnccc ctgtgccccc ccagnccctt 660

<210> 829
<211> 818
<212> DNA
<213> Homo sapiens

<400> 829
gggaaaaagt ttgaccagcc tcagaaggct ttctctgtgt aaagaagtat aatttctctg 60
ccgactccat ttaatccact gcaaggcacc tagagagact gctcctattt taaaagtgat 120
gcaagcatca tgataagata tgtgtgaagc ccactaggaa ataaatcatt ctcttctcta 180
tgtttgactt gctagtaaac agaagacttc aagccagcca ggaaattaaa gtggcgacta 240
aaacagcctt aagaattgca gtggagcaaa tcggtcattt tttaaaaaaa tatattttaa 300
cctacagtca ccagttttca ttattctatt tacctcactg aagtactcgc atgttgtttg 360
gtacccactg agcaactgtt tcagttccta aggtatttgc tgagatgtgg gtgaactcca 420
aatggagaag tagtcactgt agactttctt catggttgac cactccaacc ttgcccactt 480

ttgcttcttg gccatccact cagctgatgt ttcctgggaa gtgctaattt tacctgtttc 540
caaattggaa acacatttct caatcattcc gttctggcaa atgggaaaca tccatttgct 600
ttgggcacag tggggatggg ctgcaagttc ttgcatatcc tcccagtgaa gcatttattt 660
gctactatca gattttacca ctatcaaata taattcaagg gcagaattaa acgtgagtgt 720
gtgtgtgtgt gtgtgtgtgt gtgtgctatg catgctctaa gtctgcatgg gatatgggaa 780
tggaaaangg ccantnagga aattaatacc cttatgcc 818

<210> 830
<211> 901
<212> DNA
<213> Homo sapiens

<400> 830
tgttgttttt ccctgtccca tacattaatt ctaggttcaa ggccatgtca ccctaaagca 60
gccctcactt cttttgcagc tgcagtgctg ttgcttaacc ataactcttg gcctctctcc 120
agactgtttt ttttttttt ttttttgca aaatgtcctt gatggtcata atggtgtatt 180
ttttaaaaat tccagttgtt tttgtaagtt ttcttatatc ccatcttaca ttcaattccc 240
cctgcaaacc tcccactaga taaaccactt cccgctctat tctttgtctt gagactgact 300
tctaggaagc ctgtccacag ctgcctcagg ccgaaggcta actaggagaa tattaggtcg 360
tgtgcttgga ttcctgttct ccaaacgatt ctaattaaaa ctagtccact acccccacca 420
acacgttcag aaggaaaaaa atgtagcaga atccccaaat gccctcatca cttcattata 480
ccatttgggt agctttatgg cacctgtagg actagttcat gccaggccca tttgtaactg 540
ttttctctag ttaaacatga tattgccatt aacagcacat taaataggat tacactgctt 600
aagaatctag gaatttctca aatatatgag aaaatgtgaa agcacaggga taatagaaat 660
ttattttata aacacatgct aggagatgga attgtgtcat gatgatccac attaaagaaa 720
catgattgaa gggaatccat tatttatact ctgactttcc attatatata tatattactc 780
caaaagaagt tattcatgtt tcctaaatgg gagcttaccc catcggggta aaaatgggnc 840
ctaacactta ttcacanggc cacaatttac tttggacatg taccttggcc tctgnatgga 900
c 901

<210> 831
<211> 822
<212> DNA
<213> Homo sapiens

<400> 831
ggaggagtac ccgccaacaa gcgggaccga gcaggaatcc gtatctggga acaggtgaga 60
gaggatgtgt gctgggcctt ggaggaaggg ggccgagacc gggccttact tctgtaacga 120
tactgtgagg catcggaagg ctagcctgtt gtgtccgttt tgaaggtcgg tgggctagac 180
tggctggcct tctaggggtg tggagacttc ccaactctgc ccttgtgctt tcctggaatc 240
cccaatatgc ccggaccccg gtttactcct ttgctgcgag cccttctctc ccgtccagag 300
ttgctccgag cctatctgct cagtcctagc gattcctgtg gggcttggga cgcgcggtcc 360
aagcaccccg gaccatatgg atgcagcacc catgggttct cgctccaatg cttctttcct 420
ccttggggcg taactcagac cctgggcacc cctctccact gcccagggga gacctgggtt 480
ctagatttgg ctctgcctct actatcttcc tacctcctag agcctcagtt tggcttgtgt 540
aaaataggat gacttaaggg tcctttcagc ccctaatcct ggggtacttt actctgtacc 600
gctccttacc cagccttgtg cacgccatct tgaaggcact gagttctagc ctgtttattg 660
taagtggtga ttagttgggt ctcagtcacc cagccatact tttttgttcc ctgcgtatcc 720

DOCKET ALARM

ttcctgtaat tgtccccaag cacatttcac aagaaggaag ggcactctgg gctaaggccg 780
gggntggaag ttattctgan gaacttgnca ccatgccctt tg 822

<210> 832
<211> 804
<212> DNA
<213> Homo sapiens

<400> 832
agtaactgag cgccagacat gaaccgcaag aaactgcaga agctgacgga caccttaacc 60
aaaaattgca agcattttaa taaatttgaa gtgaactgtc ttataaagct tttttatgac 120
ttggtgggag gagtagagag gcaaggtctg gttgttggac tggatcgtaa tgcatttcga 180
aacatcctgc atgtgacatt tggaatgaca gatgacatga ttatggacag agtattccga 240
ggttttgata aagataatga tggctgtgta aatgtattgg agtggattca tggattatca 300
ctgtttcttc gaggatcttt ggaagaaaaa atgaaatatt gctttgaagt gtttgatttg 360
aatggtgacg gattcatttc aaaggaggaa atgtttcaca tgttgaagaa cagccttctc 420
aaacagccat ctgaggaaga ccctgatgaa ggaattaaag atttggttga aataacactg 480
aagaaaatgg atcatgacca tgatgggaag ctgtcttttg cagactatga actggctgtg 540
agagaagaga ctcttctact ggaggccttt gggccatgtc ttcctgatcc aaagagccag 600
atggaatttg aagctcaagt attcaaagat ccaaatgaat tcaatgatat gtgaataact 660
aaatgtctat attgtctcaa gtgagtnaaa aaggaggcac acacatattg cttatttttt 720
ctacttagtt canaaaaatg atgttgaatt gtgtgtttca gggtgaagat gaaggtcact 780
tacatatatc atttaacatc anng 804

<210> 833
<211> 793
<212> DNA
<213> Homo sapiens

<400> 833
aattgagatg gtttactgta aaattaaaat gggagttagt tttctagaca tgtaactctc 60
tggggagtat aaaactggtc acaatgggct ttgcgttgaa gtatctgtcc ctcagatctc 120
atcagaagga gtatataata caaaaatata aattcaacct ctgtatgttt tcttctatgt 180
tttatgctgg gactcactgg agatctttgt aagtaatcaa agctggccct ttatctttga 240
ttttggcttt tagggaattc tagggacttc ctttccccaa attaaaactc attttgaggt 300
gtttggtttt gtcttttaat ttttgcaact tcaaaattga tgactcagtt ctagtgtact 360
ttatcctcga acttgtttaa aataggttac tttcttgaaa taaataataa tataatgaag 420
agatcatgac ttggatttgg gtgggggaat taaatacctt ttcaaaattg ccatcagtat 480
catcttggat gaagaaagtt cagtggttaa aagcgtcttc tgaagtgtgg tcatagtcgg 540
tgaggtttat ttcagtttgg cttctcatta caattttcag atgtatatca catatatgtg 600
aaaagtactg acaaaaataa tttatgaaat aaacacagta gggcatgang ttgtgttatt 660
tgtgaggcac aatggagcat gacttgtagt caacaaacat gggggcctga caaagctctg 720
ctgggctatt cngcaagact ctatgnggat gcctcttgta naatgggggt aataatacca 780
gcccgatctc ata 793

<210> 834
<211> 803
<212> DNA

0088202.0045950

<213> Homo sapiens

<400> 834
gtttaatatg aaggatgata agcatcaggt aaggaaaaaa ggagaaataa aaccaagata 60
tggtaatgtg aatacaaatg aaagttagca ctggtggaaa ggcaacagat ctggcctgag 120
tattttagaa agtttaaaaa atagtgaaag gaaacagtga atagaaattt tttattggaa 180
aattatgtga ggcaaaaaaa gcactaccca aaaggtctga gggaaaagat agggaattat 240
catgtagcca tctgattaat tttttgtttc cctagacccc actcctctcc ctattcccca 300
ccaccatttg gtgctccaca ttgcagacag ggcaatattt ctaaaataca aaaataggtc 360
atcatattcc ttgtagccct cagaatcaag tctgatacat gcagccaaca ggcatatgaa 420
aaactcagca tcactaatca ttagggaaat gcaaatcaaa agcacaatga gataccatgt 480
cacaccagtc agaatgctat tattaaaaag tcaaaaaata aatgctggcg aggctgcaga 540
gaaaaggaat gcttatactc tgttggtaga agtataaatt agttcaaccg ttgcagaaag 600
cagcgtggct attcctcaaa gagctaaaaa cagaactacc atttgaccca gcatttccat 660
tactgggtat atacctgaag gaatataaat cattctacca taaaaacaca tgtaggtgaa 720
tgttcattgc agcactattc acaattgcca aagaccntgg gaatcaancc taaaagctga 780
tcaagtgacc agtttnggat taa 803

<210> 835
<211> 801
<212> DNA
<213> Homo sapiens

<400> 835
aggtcatttg ttgctgcata gcaaatcacc ccaaaacata gtgacttgaa acaatttctt 60
tgggagaccg aggtgggtgg attacttgag gccaggagtt tgagaccagc ctggccaaca 120
tggtgaaacc tcgtctctac taaaaataca aaaattagct aggtgtggtg gtgtgtgcct 180
gtagtcccgg ccactcagga gactgaggca tgagacttgt ttcaacttgg gggcagaggt 240
tgtagtgagc tgagatcacg cggctgcacc ccaacctgag tgacggagtg aaactctgtc 300
tcaacaacaa caacaaaaac aaaaacaaaa cacaatttta ttatcgctca tggctttttt 360
ttttttttt tcttgcttgg ggtctctcgt ggttgcagcc agatggtagc tgcagctgga 420
ttcatctgga tggattcctg actcacatgt ctggcagttg ttgctggcat tgtttgggac 480
tgacagtgag gaccatcagc cagaacctac acatggcctc cctgtgcggc ccagtttcct 540
cagagcatgg tgggtgggcg ccaagactga gtatctaaga gagaggaact ggaattctct 600
taacccttg acctggaaac tgtcaaaaat cacttctgnc atattctgtg ggtcaagtct 660
aagagcccaa attaaagaga agggcacatg gaccctacct ttcaatggga ggagtgtaac 720
agaattttta ngttgggttt ttaaaccatn acaagagcca accatttgct aggcactttg 780
gaaaaacacc ctttntttct g 801

<210> 836
<211> 849
<212> DNA
<213> Homo sapiens

<400> 836
taaaaagcat taggcatata aatgtataaa tatattttat catgtacagt acaaaaatgg 60
aaccttatgc atgggcctta ggaatacagg ctagtatttc agcacagact tccctgcttg 120
agttcttgct gatgcttgca ccgtgacagt gggcaccaac acagacgtgc cacccaaccc 180

0050-0050-0050-0050

cctgcacaca ccaccggcca ccaggggccc ccttgtgcgc cttggcttta taactcctct 240
gggggtgata ttggtggtga tcacagctcc tagcataatg agagttccat ttggtattgt 300
cacacgtctc ctgcctcgct tgggttgcca tgtttgagcg atggccctgt tgatttcacc 360
ctgcctttta ctgaatctgt aaattgttgt gcaattgtgg ttatagtaga ctgtagcaca 420
ttgccttttc taaactgcta catgtttata atcttcattt ttaaagtatg tgtaattttt 480
ttaagtatgt attctattca tatggtctgc ttgtcagtga gccagacttg cttactatat 540
tcctttataa taatgctagc cacttcctgg attctttagt aatgtgctgc atgcaagaac 600
tttccagtag cagtgaagga gggctgcctc tccaagcttc ctaagggatg ctgccctgtg 660
tggggatgca ttgcagaggc actagtagca tgggggctag agtggggagc gagatgtaaa 720
agggtggggg gataggagaa ttncagaatg cttncagcat tagggtcctg agaacttctg 780
agttcagaga aacatgcaaa ggtgactaac aaaatagcta cttaccttgc agttctacag 840
accctggga 849

<210> 837
<211> 853
<212> DNA
<213> Homo sapiens

<400> 837
actgtttaaa caataaaatg agctatgcta cagactctgg cctcatgttt tatttttctc 60
ctcatcgtct ccttgctgtt ctgcctacat taatgttggg tcagtagtgt cccagaaatt 120
gatcttggcc cttaactttg ggggttttgt agcactgatt taattattag catctgggat 180
agttaatatt tcagttcaat atttaaccgt atatctgtgt atatctatat aatccttcct 240
tgcagttcct aataaataca gtcatcccaa gctttctaaa caatgacagt aaaaaaaaaa 300
aaaagaaagt gcagttatag aatcgcagac ctcactctct gagaaaggcc tttgagcaat 360
acgttgaaga cgatgtgtgc catgatgact ggactgtggt ctctgtgaga gaaaaaccac 420
agggcatcaa acactgaaca gaaaaggtaa gccccgggga caccctgtgg ctgtgggttt 480
agtggttaca tgaatactgc aggagagcaa tttcttcctg caaatgcctg aaaaggagca 540
gcatcttgtg tttccaagaa gcagtgctac ttttcaacac aagcaggggt gatgttccct 600
tttcacaggg agacatacac caagggctaa aaccgaggac cgggtcccaa atccagcctc 660
actgaaagca gcatttctga atggagtcag ctggagttca ataatagcta attgaaaagg 720
aatgagctta aatggttttg tgatccatct gantgatgtg cataaatgaa gcaaaaataa 780
tgcaagcttc attggaaaat ngagataaaa atgcccggga attggctntt ccaacccaag 840
acttgctgag aca 853

<210> 838
<211> 874
<212> DNA
<213> Homo sapiens

<400> 838
tgctgtgttc tggctcccct tactggaaaa ggtctacgcc aaggtccatg ggtcctacga 60
gcacctgtgg gccgggcagg tggctggatg ccctggtgga cctgaccggc ggcctggcag 120
aaagatggaa cctgaagggc gtagcaggaa gcggaggcca gcaggacagg acaggccgct 180
gggagcacag gacttgtcgg cagctgctcc acctgaagga ccagtgtctg atcagctgct 240
gcgtgctcag ccccagagca ggtgcccggg agctgggggа gttccatgcc ttcattgtct 300
cggacctgcg ggagctccag ggtcaggcgg gccagtgcat cctgctgctg cggatccaga 360
acccctgggg ccggcggtgc tggcaggggc tctggagaga gggggggtgaa gggtggagcc 420

US 2005/0042660 A1 Feb. 24, 2005

aggtagatgc agcggtagca tctgagctcc tgtcccagct ccaggaaggg gagttctggg 480
tggaggagga ggagttcctc agggagtttg acgagctcac cgttggctac ccggtcacgg 540
aggccggcca cctgcagagc ctctacacag agaggctgct ctgccatacg cgggcgctgc 600
ctggggcctg ggtcaagggc cagtcagcag gangctgccg gaacaacagc ggctttncca 660
gcaaccccaa attcttgctt gcgggtctca gaaccgaatg aggtgtacat tggccgtcct 720
tgcanaagat ccaggcttga acgccggcgg gactggggca aggccggggc cccgggcact 780
tggtggggtt gacagtcatt actttcgtgg aagcccaacg aggcattccc gggcnagcac 840
ttaccaagct tgggggttct ggaacctttt ggna 874

<210> 839
<211> 828
<212> DNA
<213> Homo sapiens

<400> 839
ttctaaaatg gctccaattt tgtgttttaa gcttcagctt aagaggaagt ttatgttcta 60
attcttgact gagaatacag tattgagatt ctctgtttta cagataacaa ctggttttta 120
ttactcatta agttcatttg catcccgtag ccctctgtaa atgtttcccc tagttgcatg 180
tacgtaaatg cacgcttatc cagtgtatat tagacatttt tgtgctaaaa tatattaagt 240
gggatttttg tagcaaagca ttctattttt ctgttcttac agtgtgtgtg tgtgtgtgtg 300
tgtgtgtgtg tatgcgtttt tttaacctta acttcagttt aaacactggt gtatttattt 360
ttttaagcaa cttgactctt agaagcctta gactgatttt tttcaataaa tattcaacca 420
aaaattataa atttattaag atgtggcctt acatatggca ttccttgtgt tcgtaatgtg 480
agatttttga tttagataaa tcaagattca ggattaaagt ttcattgtaa gttgaaatag 540
aaaatgtatt aaaatgtcta ggcttctggg aggaagttct tatactcttc tttcttggca 600
ttagaaagaa gcaatatgaa tttttgtgaa tattctaaat attcaggcaa cactgttcag 660
attgatttan gtttgtctta accaatggtc tttttttaga atttcaggta gtggcattca 720
ctgattatgc agctactatg gntttttgtat gggacgtata aatcttgatt atatccacag 780
attttaagnc tttaaagact tcctgctgga ttaacatatt gnatggag 828

<210> 840
<211> 885
<212> DNA
<213> Homo sapiens

<400> 840
tatcagaaca aaagatgtta cacactgctg gtggagaaat aaattttgaa aaacaatgca 60
aattactgtt ttggaaagaa atctggtaat atttaggctg ggcgtggtgg ctcacgcctg 120
tagtcctagc actttgggag gccgaggcag gcaaattgtc tgaggtcggg agttcgagaa 180
cagcctggcc ggcatggtga aaccccgtct ctactaaaaa tacaaaaatt agctgggcat 240
ggtggcaggc acctgtggtc ccggctactc ggggggctga ggcaggagaa tcacttgaac 300
ccgggaggca gaggttgcag tgagccggga tcgtgccatt gcactccaac ctgggcaaca 360
gagcaaaaag attccatctc aaaagaaaag aaaagaaatc tgttaatatt attaaaatat 420
ttatgtcact ttggagaatc ttcccttaga agtaaaagct ccaatacata aaagacagat 480
gaacatgtga acatggacat ttattgtaaa aattgttctt aatggcaaaa aaacccccaa 540
aaccaaagca aacactagaa tcaaagtaaa tacccatcaa ctgggaaatt gtagaaagga 600
aaaaactata gtgtatccat tccatagaat gttaatatag ccattaaggt ggacaaatta 660
aaactatgct agtggacttg agtggaattc cacaatgttc tcttgagtga aaaatgcaag 720

0050130-0050800

gtagatatta agtatgttaa atatgactcc atttttgtaa atcattaaca aaatgtctct 780
angtgtttgt cagcaatnaa cggnatctat atatggttat ttgattttat gtgcatgaag 840
aaaagttttg aagaatatca ttggcttgga aggaagtggg taatn 885

<210> 841
<211> 843
<212> DNA
<213> Homo sapiens

<400> 841
agaaactatg tagtgaaatt acatagtgat ttttcattct cgcagtaaaa atttcctggg 60
attttttttct ttttaatggg tgggaaacta cctggaaata gtggatgcca gagtcttaaa 120
cagaaggaat gaaataataa agatcagagc agaaataaat gaaatagagg ccaggaatac 180
aacagaaaag ttcaacaaaa cagagttggt ttttgaaaag gtaaacaaaa ttgacagacc 240
tttagttgga ctaaccaaga gaaaaaaaag tcaaaataca tgaaggagac attacaactg 300
ataccataga aataataaga tcataaaaga ctactctgag taaatatatg ccaaaaaatt 360
gaacaaacta gaagaaatgg ataaattcct aaaacataca acctatcagg accacatcat 420
gaaggaacag aaagtctgaa cagacctata atgagtgagg agattgaatc actaagtcaa 480
aacctcccaa caaatagaag cccaagagca gacagcttca cgggcaaatt cctctgaaca 540
tctaaagacg aattaccacc aacccttctc aaacttccaa aaaaactgag caggagagaa 600
cacttcccag attcatttta tgaggccagc attaccctta accaaagcca gataaggaca 660
ttgtaagaaa ataaagttac aggccaatat ccttgatgaa cagttgcaaa aatcctcaac 720
aaaatactag caaactggaa ttggaatagc accattaaaa nggagccgta cacccatgga 780
tcaagtgagg atttttncct ctggaatggt aaaaaatngg gttcaaccat tatgcccaaa 840
tca 843

<210> 842
<211> 742
<212> DNA
<213> Homo sapiens

<400> 842
ttccggtccc ggctcagcct ccgacccagg tggtctggag cctgccggga gagtggtggc 60
atctgagagg ctggtcgtgg actgtggttg ggggaggtgg gagctgtttt aaccgtgtgc 120
cccctctcct gtgccggcgt gggcatcccc cggggcagtg gaacgcgggc gctcctccag 180
cttccgagtc cagccagcct gggcgcgggg cgccgccccc gagacacccg aggagtccgt 240
tcctccctgg ttacgtggac tgtggagctg gtctcttgtg gctcagcgcc gtgcggaggt 300
tgaagcgtac ctgcggaggt cgcaccaggg cgtgaggagg aggaggaagg gcatgagccg 360
agcttgagga atccgtgctc caaactctac actcaagggt ggcccttggg tagggtgaag 420
atcccctgtc tttatcctag ttccacacct tggtgtgggt tactgggtgc aggatgaact 480
gtcgctcgga ggtgctggag gtgtcggtgg aggggcggca ggtggaggag gccatgctgg 540
ctgtgctgca cacggtgctt ctgcaccgca ncacaggcaa gttccactac aagaaggagg 600
gcacctactt cactggcacc gtgggcaccc aggatgttga ctgtgacttc atcgacttca 660
cttatgtgcc tgnctcttct gangaactgg atcgtgccct tgccaaggtt gttggggagt 720
tcaaggatgc acttgngcaa ct 742

<210> 843
<211> 636

0050204.0050204

<212> DNA
<213> Homo sapiens

<400> 843
gggaaataac atctataatt aactataatt tagatctctt gttagtatta gattgctttt 60
tcttgtgtta ttgtcaactt gtttggtttc tgttggaact gggggaaaga ggaagaatct 120
tacctgcata ggatgtggag gaggcctatc tgaaaaaatg atcaattttg caattatcct 180
caaattcgta taaatcatgc agagtctaac taaaggatgg gaataggaag caaaacaaag 240
tatctgtaag aggaccagag ggattagaac tatcaagtga taaatactac taggtggatg 300
aaaatagtag caaatcaggt tacataaaag ctttcttttc attggattta tttctcaatg 360
catttattta tacattctac ttgctttaac tctgtggtat cttagagata taagagatac 420
cgaaacagtt ggttttgccc caacttgtgg agagtaaata tgaacatttt agggccatgg 480
gcactataga tgattactaa gttagataat acaagattac tcctgtagct gatgacattt 540
aagtaatgat agtgcccttt caaaattcaa aattcttttt tctttattat ttatttattt 600
ttagtacttt cccactttgt ttttttttt tttnnn 636

<210> 844
<211> 856
<212> DNA
<213> Homo sapiens

<400> 844
gtgaggacat gagatttggg aggggccaga gatggaatga tatggtttgg ctgtgtcccc 60
acccaaatct catcttcaat tcccacatgt tgtgggaggg acctggtggg aggtaattga 120
atcatggggg cagatctttc ctgtgctgtt cttgtgttag tgaataagtc tcacaagatc 180
tgatggtttt aaaaagagga gattccttgc acaagctctc tgtgcctgct accatccatg 240
taagatgtga cttttctcct tgccttcctc cctgattgtg aggcttctcc agccctgtgg 300
aactgtgagt tctccattaa acctcttccc tccattaaac ctcttccctt tgtaaattgt 360
ccactctcgg gtgtatcttt atcagcagca tgaaaatgga cgaatacaca tatataaaaa 420
ttttacatgt ataaaaatga agctgctctg acagaagctg ttagccttgt gctttgaaat 480
tctcttgtgt agtacttttc cccacctctt ccttgagtta cattactaga attgaacatg 540
gagatcaatt tgaaaaccac tttctagtct agattcttcc ttttctagat gaggaagctg 600
aaacctattg agtttataat tatccttttc tttggtttta atctgtaaag ttatctggat 660
ttagaacaga gaagaaaaaa atacatctaa actaacactg attctaggac ctttcaacan 720
tgtgcaagtc tgaaccgtct tnnctggttt tggtcatggt atcactactg gtggtctggg 780
gaatcatgcc caaanttaat gcaatactct cttaaattaa gttnnctaag gcttttataa 840
cccntttttct taactt 856

<210> 845
<211> 864
<212> DNA
<213> Homo sapiens

<400> 845
ttttaataat gttgcaaaac tctccaaaca ctactctgtg tggatgtctt tcagaatatg 60
atgaatacta gtagtcttat tctgcccttt tctctctatc acaatatata cattctatat 120
tgcatacaca tattttccaa atattacata tagtttcatg taatttatag acctattaag 180
gcccaaccat tttcttggat aggggattct ttagaagtcc agcttaaata aagcccgtat 240

US005750800

agaaagtttt tttaaaattt atacataatc acctaaagta accttatcta ctgaactctt 300
agtacatgct actggaacct tttatcatgt ttcttcctgg cttgcattac aacactgttg 360
acatatctca gccttacttc taggcttctt tgagagcatg actcatgttt gtattcctca 420
ctgaggttga atgaataaga gaaactacag tagtaggaaa aaacagtaca tgtagatatc 480
aatgaatatg aaagggtcaa atggatctat tatagtaagc acaaaatcaa ctgacaccag 540
caaagtaaac ccaaaatttt taatggtatt ttaatagatc aagaggagca agcagatttt 600
tgagacagtt gtctcctact ttctctatca cagggagtaa ttttaaaaga aaaatgggag 660
gggtaagttt ctttaagaga aaattgtagt ttaaaacagg tcatgggata attagaaata 720
atttaatttc tttagaggat tttaatcttt caactgcttg caattagatc ctaangcaat 780
aaaaggaata aggagatttg gaaaaccatt gctgnaatct ctgaagaaaa gtggacattt 840
ngggagtagg ttgaaagcaa agct 864

<210> 846
<211> 767
<212> DNA
<213> Homo sapiens

<400> 846
tagtttaaat aaatacattt aaatcttgtt aaaatttaat tgtttctggc tgggcacggt 60
ggctcacacc tgtaacccca acactttggg tggctgaggc aggaggatca cttgaggtca 120
ggagttcaaa gccagcctgg ccaacatggc aaaacctcat ctgtattaaa aatacaaaaa 180
ttagccaaat gtggtggtac acgcctgtaa tcccagctac ttgggcatct gattcacaag 240
agtcgtttga ccccaggagg tagaggttgc agtgagctga gatcgcacca ctgcactcca 300
gcctggacga tagagtgaga ctctgtctca aaaaaaaaaa aaaaaaaaaa aaaaattatt 360
tccataaaga atagatcaac atgtaggtat aatgcctgct gttacttaat aggcaagatc 420
acgtctctgg ataccagcac catgagagca gccatgaaac caggctggga ggacctggta 480
agaaggtgta ttcagaagtt ccatgcgcag catgaaggag aatctgtgtc ctatgctaag 540
aggcatcatc atgaaggtaa gcatctctaa atgatttttc ttaaattatt gcttcctgtg 600
ggagctttct gtcaatgatt cctggagttc accttgggaa cagagctggt gactgttctc 660
gtgagctgct catctggccc cagtgttgcc atctaaagga aaatttaaca ggagaacctg 720
taggacagaa naatgatgaa agtnnaacag gagatgatag tgtcaca 767

<210> 847
<211> 868
<212> DNA
<213> Homo sapiens

<400> 847
gtatgtgttt ttaaactcca atgatataag ctgtaattat aatacaaagc aactaaatta 60
attttaatta ttccaaataa ttagcttttt tcataaaaag ctagttattc caaatattag 120
ctttttttcat gaaaagctag ttattccaaa taattagctt ttttcataaa aagctagtta 180
ttccaaataa ttagcttttt tcataaaaag ctagttattc caaataatta gctttttttca 240
taaaaagcta gttattccaa ataattagct tttttcataa aaagctagtt attccaaata 300
attagctttt ttcataaaaa gctagttatt ccaaataatt agctttttttc ataaaaagct 360
aatttaaatt tggggcaagt gtattattaa tggtacatat tgtattaaag tttgtgtaat 420
gtaatataaa gtggccacat tacaaaatat aggttgtttc agcttgcaaa attaaacaac 480
tgtataaaac aaatttataa ctgattgcta gtaagaggta ccatgtaaga attgtgtttc 540
cagctgaatg aagaaatttt aaaacctggt tccatatatt acaaatcatg agccaggact 600

0509249.0002

ttggtagggg aggaattggg ggctttggct cccaaaaatc tctgtcacat acccccctccc 660
caccacaagt acacaatcta tggaaaactt ggcttatcat aattacagct ttaagtaatt 720
ttcccttctc tttggatatt gnatatttgc atattgaaga ngtcaaaaca cagtaataca 780
tgcatattaa gagaattgca ttcataaata gtcaagatat actaaaaatt ggcatttgaa 840
attgaagcac tagagtgctt aatngatg 868

<210> 848
<211> 746
<212> DNA
<213> Homo sapiens

<400> 848
tttttgcgat ttggtgtgtg tataaggcac agtcttctga attactgagg aagcatgact 60
gctgttcttg tctgcaaggt gcatgctttt ttttttttt tttttaaatc agaaaccact 120
attgtataga tttcttgaga gcagggactt tgttttgttc attactgtac ccatagcctc 180
tagaacagca tgtggcacgt agtaggcagt gagtaaatat ttattgaatg aaggtatgaa 240
actgtctcat ttacttaaac agcaggcttt tctttaatgt tccttggttt gccccttttg 300
ttaggtcttc ttttttttct tttgagatag ggttgctcta ttgaggctgg catgcagtgg 360
tgtgatcttg gctcactgca gcctccgcct cctgggctca agcaagcctc ccatctcagc 420
ctccttagta gctgggacta caggcgtgca ccaccacatc tggctaattt ttgtactttt 480
tgtagagaca cggttttgcc atgttgccca ggctggtctt gaacccccttg gctgaagtga 540
tctgcctgcc tcggcctccc aaagtgctag gattgcaggc aagagccact atgtccagcc 600
ttttttttt tttttaaaca gagtcttgcg ctgctgctca ggctaaaagt gcactggcac 660
gatcagggct cactgcacct tgacctcctg ggctgaaact gcctcctgcc tnacttccgn 720
atgcctaccc ccaacttnac cccaca 746

<210> 849
<211> 837
<212> DNA
<213> Homo sapiens

<400> 849
atcatagtag aaccaccgtg ttctaacctt attgtgtatc accataacag tttattgtgg 60
ctctgatgtc ataaaggaag agacatggag gaagaaaaag ggggaaaaac gtagtattta 120
aaattcttta gtctttttct actacatagg ctgcgagatt tccttcaaat tttattaaag 180
tataaattat gtatgtaaac taatgtcccg aaataagctc ttaaagctta ctttagctat 240
ttaaaggatt tatggctttc tgtgtttttc tttttgttaa tttaattttt ttttttttctt 300
gagccagagt ttgagatcgc tcttgttgct caagctggag tgcaatggcg cgatctcggc 360
tcactgcaac ctctgcctcc tgggttcaaa cgattctgcc tcagccaccc gagtagctgg 420
gattacaggc atgtgccacc atgcctggct aatttttttt gtatttttag tagaaacggg 480
gtttcaccat gttagccagg ctggtctcaa acttctgacc tcaggtgatc cacccgcctt 540
ggcctcccaa agtgctggga ttacaggcat gagccgccac gcccggccaa ttttattctt 600
aatttaaata gttttcccgg gtttatcaag aatctttaaa ctttattcct tccataaagt 660
cattattatg accacaccca gtggaagagg aggaatgaaa gatgcaaact ttaaggtttc 720
angatatttg aagtgttggg tgcattgaga cccgtagctg ataataatcc ctttaaattt 780
ccccgtttat taaagggtta aggccttttn ctcaatccca agtcctaaaa tngntgg 837

<210> 850

0956-0956-0956-0956

<211> 772
<212> DNA
<213> Homo sapiens

<400> 850
cttagacgct ccccagatga ttctaatgag cagcctggtt gagaactact tcacgtggta 60
gcgcctcctg cccagaaccg tgggatatag ccctgggcaa accctcacca ggatcaggcc 120
tgtcttccct atgaggtgta acctatgctc caggctctgt aatgttcccc caggcaagag 180
cttcctcctc cagatttaag ggtgcccagg ctgggagact gtcccctgtc tttcccaggt 240
ggtcctgtgc ttcttgggct catcacagga aagacctgtc ccaggtgcaa ggtctctctg 300
atgtagaagg cctcccctga gatggacagt ctgggggatc ttcccacgtg aacctgtctc 360
ttgctccgca ggtgtaaggt atgcccactg accttttca ccaagtcaga gatgcagatc 420
cactccaagt cgcacacaga ggccaagccc cacaagtgcc cgcactgctc caagtccttt 480
gccaacgcct cctacctggc ccagcacctg cgcatccacc tgggcgtcaa gccctaccac 540
tgctcctact gtgataagtc cttccggcag ctctcccacc tccagcagca caccaggtga 600
gtggcctgcc tgctgccctg ctgcagcccg actcagctca cacccgtggc ctggcacatg 660
gagccagtgc aaggangggc aagggacctt ttcaggtgcc cattgcctcg ggtcacggnc 720
cttgtggacc taactggnct tactggtggt actggacccc gtcccactgg tt 772

<210> 851
<211> 714
<212> DNA
<213> Homo sapiens

<400> 851
ttaactgaaa aaagtagaac gttgaacagg gcacaaatta tcattttgtt tatataacga 60
atacacacac aaaatggaat tcatttttta aaaaatataa cttatccaat gcctacaacg 120
ttccaagcat ttttatagtt gctagcactg ccatggtgaa caaatttcta ccacttcatc 180
ttgttctaat ttgctttaac ttactactac gtaaatcaat ctgacttaca tatatatatt 240
tcttgttttc catcagtctt tccctactgg agtgtcaact tgatcagagc aggaactttg 300
tctgtcttgc ccaccacttt tcctccaaca ctagggaagg gaattgagga gcctccctgt 360
agagcagaga gaaccagtga tggaaatgca acaccatctg gattagaaga agagggctga 420
ggcaaagaga aggcaagagc aaaggaaggc aggaagcagt tgcaggaaac aggggtgaac 480
tgaagagctg gggtccagga aaggtggagt agagaaggcc aaggagacac agagaggtgg 540
cagacaggtg ggaagaagcc gtggtgggga atttcacagg gagccttagg agagttgntt 600
tttttttgg gacggagtct tgctctgtcg cccaggctgg agtgcagtgg gtgcgatctc 660
agctcactgn tcactgcaag ctctgcctnc cagattcacg ccattctnct ggct 714

<210> 852
<211> 866
<212> DNA
<213> Homo sapiens

<400> 852
ttgccaaaaa ataaaaaaaa ataaaaaata aaaacttgcc taagtttctt ctcttacatt 60
ttatttagga tttgccctta gacattattt agtgcttttc tgaccctgta gggacggtga 120
gaataattga aacactagtt tcttaaaatt tctgttaaaa ttggttaaag gccatagaat 180
ttttttttt aagctaagca tgttatagag aggtatccta taagaagcaa ggggcaggta 240

0020070209A1

aagactttag agatgtatag tccagtgtgt taattaaagg atactaccta cttctaattc 300
ggtatgtatt aatcttttct gatatatctg ttaaagtact cttcgcatat ttttaaaaaa 360
ttggcatttt aaagtatagt ctttgatggt agaaatgtga gattgacaaa aatcatgtcc 420
tcttatgtat gaatttagtc ttacacagtt cttcatatga tggaatctaa aacaaatgta 480
gtcttgaaaa cttttagtct actttggtta catgtgttta ttattgctca ccttatagat 540
taacagcaga aaagtataaa ttttaatatt tctacctttc tggcttgagg tctacagcat 600
taatttctga ccagttaatg caaactgaga ttcctattgt cctaagaaaa tctgggaagt 660
tagtaacaca aacacatctt ttgatttatt tcaggaccac cataaaccca ttttgaatta 720
ttcaacccat tgctggaact tcttgaggta tgtattaatt aagaagttgg cctattaatt 780
gggaatggtt cnttaagaac tttaaagttg gattattaaa aatttttggg gccttaaaag 840
tttggccaat nantcaaaaa ccaaaa 866

<210> 853
<211> 847
<212> DNA
<213> Homo sapiens

<400> 853
aaagattagg gaggaaaagt cgcttaaaaa tatatatata gaaacacata aacaaattct 60
acaaacattc atgcttacgg ctataactga aaaaacggat gagccatcat agtattccta 120
tcttactgaa agcgaagggt tatttgtcta atctaaggca aaaatgaggg tggaaattga 180
gtacaaagaa agatatctgg gccctaagca tgctctaaaa tcccaccatc caataaatcc 240
tgcaacttca ttttccaatt tcattatcac tctcttaagt atttcaaaag atcagcatcg 300
tcaatatcag tgtcccaatg actcaccagc tctgacagcc tcattctcca ggacaaccct 360
attaaaaata aaacggatat atttggaggg gacaggcgtt ctagggccct ctttgcccaa 420
caagtgtaga atcttagtag ccagaacagt gtgttcacag tcctcaatga attcacaaag 480
gtgggctagg cctgcttctt tactctcagg gttctcttcc acaatgctga ttatacagtc 540
cacaatggcc cgcttgtact caaagcctcc ctggcaaaaa agaagataaa actgccattc 600
attctaggga cacattttgg agaaatgctt acactccaag gtttatgctt ataatattca 660
aatttcattt cccacctttt atgaaagaag caaaagtgtt tttttctnca agtggggaaa 720
gcaaagcaat ggcatgttta gtaataagac agtaaccaga cttagtgtct acttgagang 780
catactgaga tgataaggaa atcttaaaac actatggnat ttcatggcaa tcctaagaat 840
ttaagan 847

<210> 854
<211> 698
<212> DNA
<213> Homo sapiens

<400> 854
gaaatggggc ccccagacgt ggaggaggag gagggaggag gccaggggga ggaagaggag 60
gaggaagagg aggatgaaga ggccgaggag gagcgcctgg ctctggaatg ggccctgggc 120
gcggacgagg acttcctgct ggagcacatc cgcatcctca aggtgctgtg gtgcttcctg 180
atccatgtgc agggcagtat ccgccagttc gccgcctgcc ttgtgctcac cgacttcggc 240
atcgcagtct tcgagatccc gcaccaggag tctcggggca gcagccagca catcctctcc 300
tccctgcgct ttgtcttttg cttcccgcat ggcgacctca ccgagtttgg cttcctcatg 360
ccggagctgt gtctggtgct caaggtacgg cacagtgaga acacgctctt cattatctcg 420
gacgccgcca acctgcacga gttccacgcg gacctgcgct catgctttgc accccagcac 480

0050204650

atggccatgc tgtgtagccc catcctctac ggcagccaca ccagcctgca ggagttcctg 540
cgccagctgc tcaccttcta caaggtggct ggcggctgcc aggagcgcac cagggctgct 600
tccccgtcta cctggtctac agtgacaagc gcatggtgca nacggccgcc ggggactact 660
tangcaacat cgagtgggcc ancttgcaca ctctgtta 698

<210> 855
<211> 755
<212> DNA
<213> Homo sapiens

<400> 855
aacctagaaa aggcaccact gaaagtactt gaaaactggt ggtcagtact tgaacctcca 60
ctattcctca agatagtaga acttttaag gaagttgtgg tacatctttt gaaactctac 120
aagatcggta ttccccttc tgaaagaaga attttcaaca gttttcttca tactgcatta 180
aaggttttag aaatactaca tagggtaaat gagaaaatgg gacagattat acagtatgat 240
aaatttttata tacatgaagt acaagaattg atagacataa gaaatgatta tatcaactgg 300
gtccaacagc aggcctatgg aatggtaggt tttctgtgca atttgtgatt tcatttttat 360
gtatatgtat ctaataaaaa aaggaacaat tgcttggttt tgaaatgaga aagtttttc 420
agaactttta tccagaactt acttttaaa taataacaca ttgcaaagga gtgctatata 480
ttttacaata tttatatgca aacattctac tcttttacca aagccaaacc aaagaaatgg 540
attacactgt aaaacaaaac anaacaagac aaaaaaaacc tacaagtgtg aaatggattt 600
ttaactcttt tattttccat gaggttgcct cttatttctc cagtgttgaa aatactggca 660
ttcttcatac tggaactnct aagaatgcat tattggtgng aaattggtgc ttcaagacta 720
ccaaaagang actgggtgtg gtggctcatg ccctg 755

<210> 856
<211> 793
<212> DNA
<213> Homo sapiens

<400> 856
agcaaatttt acatatttta aacgagaaaa ttggtaatgt gagaccaaat tgcgtgtact 60
atagctggga gaacttttg aataaggtct gtctgaacgt ttctttttgc tctaagagta 120
atttttgagg aagttgaaaa cttatggaag agatgagaaa caagtggttt atcctaaata 180
ggtatttttt atcagtgagt tagattgata tggagtcatc tcacttggat ttatcccagt 240
agctgagtga acttctgttg tttcccttct agactcatat gtagcctcag tgttagagat 300
gaagaatata gatacgaaac ttttcagaat agtgtttgca agtagaaggt gcacgttatt 360
cattggttta acaactctct tgattaagaa aattcaggct ttttgtcagg gcagcataaa 420
tacctaaatt agacctcaaa attttagtaa taattcgtca ttgtatattt agcttgcagt 480
tgtaatcatg tgacttttat taataccagt agctctggaa atatgactct tttaagacat 540
atttacagta gaaagttaaa attagtattt taatttaata tttagttaat gtggttgagg 600
cttaggtatt tcacacttaa gaaatctgtg gtaattggtc atgattgtgc ttttcacagt 660
ttatttattt agagacaagg tctcactctc ttgcccaggc ttgagtacag tggcgtgatc 720
tcgntcactg cacctctgct gccggctcaa gtgatctnct acctnaacct tgcagtactg 780
gactattgca tgc 793

<210> 857
<211> 834

0962046.0-0702000

<212> DNA
<213> Homo sapiens

<400> 857
gcagaaccag aaaaaccatg caactacttt aaccaccttc tactcctttc atcggaaatg 60
aggtaggtac aaggtacgag gtgtgaggtg caacacctca aactgaagtg aaacacccga 120
accaagattt ttcttatata ggcaattaaa ctgcttgttt caaatttccc tttagttgga 180
tgtggcaatc tggagcaatt tcctcatagt actatgaaat ataaatggtg agatttccaa 240
ctagatccac aaatgcctag gtagttagaa accaaaagtc aagaaaccaa aagtcaacaa 300
ctgaagtact ttagaaacca tgaattaact acccacatta accccactcc accaaaactg 360
ctctagacct tatcattacc aaattattat tttcctagac acactatttg acagttgaga 420
ctctgctctt aaatcactcc cttattagca tttcgccctt ccaattcacc cctcagatga 480
ctcaaacata ttttacttag tgatttcccc atgtttcagc cattgcctct ttcaacagtt 540
gtctctacct gtttttctac ttgtaaacac ccttcccctg ccatttcacc atcaatacat 600
tatttggagg gaattcatta gggacatagt tctaagaagg gtaaagaagg aaaatcatta 660
agtgagaaaa catttattat gcagtaggga atggtatgga cttacaggaa tcaagggagt 720
acttttaaca attatttaga atgtatagca ttctgacctt tttcagntaa agtgctatca 780
aaaccaaacn gaagttggta gggacaaaca ggctaggaat cccagtggat antg 834

<210> 858
<211> 751
<212> DNA
<213> Homo sapiens

<400> 858
gcatcccggg actgaacccc tcctcccttt cacagattac ctcatccgag caagattcct 60
ccctccctcc ctcctagaga cctgatcccg ccacatcccc gcctccctct ctgggcagat 120
gtgttactcc tagggcagtt ttcctctcgg gcgtctctcg ggtgatggcc tcatccaggg 180
ccacgttctc ctggcccttg gggatcgtgt cccttccagc accttgcttt cgaaaacccg 240
atgaaccctc gcgccatccc cgggccaggt ccctatactg ccagccactc ccccttcctt 300
cacctccacc ctctaccccc accccaagca gaccgatcct cccccatccc gcccttctct 360
tctcgtcatt tcattattga tccacctttt cctaggccaa tcctggggct tggaaggggt 420
gggggaagcc aggttggggt gaggagagta gataagggac agttatactt tagtgtggtg 480
gcggtggttg ctttgggatg ggagaaaaag gattatcaag caaagttatt ccttagaaag 540
gacttggggt tgnctctgat tcttgtaagg ggacccaagg tggatgaagg gtcagagcgt 600
tgccccttcc ccattagtac tggggcaaga acggagttgc ttctataaac attattcggn 660
cccccttnagc aaaaaggaaa gttgcccaag gaaagggaag ttganttcaa gttcaaccag 720
tggcgttgcg catttggttt ccattggatg c 751

<210> 859
<211> 832
<212> DNA
<213> Homo sapiens

<400> 859
gtgatcggtt tccggtcagt ggtgtggtac cgggtacccg gagacgtgta tcggacggtg 60
ggccgcagcc atggccgaga gaaaacctaa cggtggcagc ggcggcgcct ccacttcctc 120
atcgggcact aacttacttt tctcctcctc ggccacggag ttcagcttca atgtgccctt 180

0050205-0020000

catcccagtc acccaggcct ccgcttctcc ggcctccctg ctcttaccgg gagaggattc 240
cacagatgtt ggtgaggagg acagcttcct tggtcagact tctattcaca catctgcccc 300
acagacattt agttacttct ctcaggtatc aagcagcagt gatccttttg ggaatattgg 360
acagtcacca ttaacaactg cagcaacctc agttggacaa tcaggattcc ccaagcccct 420
gactgctctc ccttttacaa ctggatccca agatgtctcg aatgcatttt caccatccat 480
ttcgaaggct caacctggtg ctccaccttc ctcactgatg ggaataaatt cttatctgcc 540
ttctcagcca agtagtctcc ctccttcata ttttgggaac caaccccaag gaattcccca 600
accaggatac aatccatatc gccatacccc tggcagcagc agggctaatc cttacattgc 660
accaccccag ctgcagcagt gccaaacacc angcccttct gctcatcctn cacttctgga 720
ccccctgtca gatgtacnag atgcctcagt tgaccattgg tggttgtggt gcatggcatt 780
ggacctggtg tgacttacgc tttangacat tattgatgtg nggatgaatt ta 832

<210> 860
<211> 841
<212> DNA
<213> Homo sapiens

<400> 860
aaacgcaagg cttgaatttt ctcggggcct tatgatgctg gttcttgaga agttagccac 60
tgatattcct tgtctgctat atgatgacaa tctcttctgt catttggtgg atgaagtact 120
cttgtttgaa agggagctac acagtgttca tggctatcct ggcacttttg ctagttgtat 180
gcatattcta tcagaggaaa cctgttttca gagatggttg acggtggaga gaaaatttgc 240
tcttcaaaaa atggactcaa tgctttcctc agaagctgcc tgggtatcgc aatataagga 300
tatcactgac gtggatgaaa tgaaagttcc agattgtgca gaaactttta tgactctact 360
cttggttata actgacaggt ataaaaatct tcccacagct tcccgaaagc ttcagttcct 420
ggagttacag aaggacttag tagatgattt taggatacga ttaacacaag tgatgaaaga 480
agagactaga gcttcccttg gctttcgata ctgtgcaatt cttaatgctg tgaactacat 540
ctcaacagta ctagcagatt gggctgacaa tgttttcttt ctacaacttc aacaggctgc 600
actggaggtg tttgcagaga ataatactct gagtaaattg cagctaggac agctagcctc 660
tatggagagc tctgctttga tgacatgatt aacctcttag aacgtttaaa gcatgatatg 720
ttgacccgtc aagtagacca cgtttttaga gaagttaaag atgctgcaaa attgtataaa 780
aaagaaagat ggntggcctt gncatctcag tcagacagcc atgatgtccc tgtccantcg 840
g 841

<210> 861
<211> 858
<212> DNA
<213> Homo sapiens

<400> 861
aaagagtgta atctcacgta tcactaaggt gctgatgagt cccaaatcat aatacctacc 60
atgccttttc tgtatgacat ttccagctgt tggacatctt tttgtttttt gttttttttct 120
cccctagacg gagtcttgct ctgtttccca ggctggaatg cagtggcacg atctcagctc 180
actgcaacct ctgcctccca ggttcaagcg attcttctgg tctcagcctc cggagtagct 240
gggattatag gcacatgcca ccacgcccag ccaatttttg tatttttagt agagatgggg 300
tttcaccatg ttggccaggc ttgtctcaaa ctcctgaact caggtgatcc accagcctcg 360
gcctcccaaa gtgctgggat tacaggcatg agccaccacg cccggccttt ttttttttc 420
ttttcttttt gagatggagt cttgccctgt cgcccaggct ggagtgcaat ggcgcgatct 480

0956303.0002

cggctcgctg caacctccgc ttcccaggtt caagcgattc tcctgcctca gcctcccgag 540
tgtgggatta caggtgcgca ccaccacgcc cagctaattt ttttgtattt ttagtagaga 600
cggggtttca ccatgttggt caggctggtc ttgaactcct gacctcgtga tccacctgct 660
ttggccttcc aaagtgctgg gattacagac atgagccacc acccccagct gctggtagac 720
atctttatct ggatgtccta cagataactn acatgacttc actggttgcc attgcagtta 780
aagcatgact gccttcaaag cttgaaacat gagaatcatc ttaacaaatg gggatttctt 840
taattcaaca gatattnt 858

<210> 862
<211> 863
<212> DNA
<213> Homo sapiens

<400> 862
aaaatcctat agacagacta caggggaaaa atcccagagc ccctacaaat ccatctccaa 60
actcaaatga gaactgagct caaaaagccc actagcaaac cagaagtgtg ctagccaccc 120
acttaaactt tctttttcag acatctcttt cagatataca ttttccatta ctatccaggg 180
agacaaaata agcccttaaa cctcccttca ctcagacatc gtatgatgaa tgtcagacat 240
cctactgata tggtttggat gtttgtccgc tccaaatctc atgatgaaat gtaatcccca 300
gtgttggaga tgaggcctgg tgggaggtgt ctggatgatg ggggcagatc cctcatgaat 360
gggttagtgc catccccttg gtgatgagtc agttcacacc agatctggtt gtttaagtgt 420
gagtggcacc tctccctccc tcttttgctc tggctgttgc tgtcaccatg tgatatgctg 480
gctcctcatt gccttccacc gtgactgtaa acttcttgag gcctcaccgg aaagatattc 540
cagcaccaca cttctcgtac tgtctgcaga accttgagcc aggcaggtgt cttttcttta 600
taaattaccc aggctaaaat ggcatcatga tttctcccac taatcttcag actgttaata 660
ggatgcactt tactcctgtg actagattgt gttaccagta caaggaaagg gagaccacct 720
gggtggtcct aaccaaatca tgagaaccct ctggaactcg attggccctg gctggtaacc 780
aaggaggagg tcagagagtc caagcctgtg aaagattccc cgcatcatta ctggntttag 840
agttgaaggg ccacatggng agg 863

<210> 863
<211> 861
<212> DNA
<213> Homo sapiens

<400> 863
gaaatgaagg caagaatttt gaatttttaa aaaccaacta agactttgat cacttgttga 60
ggatgtttct ctctcataaa tgaaagaaaa acgtattcac aagacaagaa gtataaaaag 120
ttgagaggaa tgacaactga gtccactcac tcgaagaatg tcagtacttc atcatcttct 180
ttgggcaaac atacacaaat gcatcataca tgtgtggtga gcttatcacc agtgatggtt 240
ttctgtgcta gaaatgactc ttaatttgaa ttttggagtg ctttttctct ttttttttaca 300
atgtgtgttc caactctttg tgttaaatag atttaagtaa aggaggtaaa tgctaaattc 360
atagtgtttt ttacctgtat cacttccctg tgtattatgg aaaaattaga gattttaacg 420
ttattcaaag ttttactgga agcaaaactg tgccagggac agagatatac aatttaagtt 480
ttctcttttt ggcaactgca cttgcttaaa atgtactgaa tgtcagctgg atttcacagc 540
atatcagatt tacagtcttt gtcttatcaa ggcctttact gtatgtttta tactaaccag 600
atgggaaaca cattgagcat catatctgac atgtatgcct aagggaggag ctcccccatg 660
gatcatggcg ttaatgttta caggacactt actattctta gcattattga tgtttgcttt 720

0205205.0205200

ctctactttt gaggaatctg tgagcaatta ttccgaatgg gcagttttca cagatgatat 780
agatcagttt aaaaccccag aaagtgcaag atttcagacc cacccaaagc ttgaagaaaa 840
gtatgcttca tncaagttta t 861

<210> 864
<211> 877
<212> DNA
<213> Homo sapiens

<400> 864
cttctacaag gaaacaaaag gaaaccgaat tcactgctca ataaatgtgg gaattcctgg 60
agttatctac attggcagct gtcatgagtg gttactagga atctagctaa atccctaagt 120
aactgggcga tggatttggg tgggggaatt gtcacacctc tgcttataag agaggatgga 180
gtcgtgtagt tgggcttccc acgtgacgtc taggtcctag aattgtgttc tgtggacaga 240
cagtccagca cgcatgtttt gaatacttcc tacgggccaa gaattggact aagtaagact 300
ttcaggttga agaaggctta gtccctgccc ttgtggaggg catggttcag attgagagag 360
aaatgaatat gtaactatgg ttaattataa taaccagtca aagtactaat tactagaggc 420
atgagaaggt gttgtaggta ccagaggggc caacctattt tgcccttgtg gatgagaaac 480
ttatcacaga gggtgacatt taggatggtc ttcgctgcat gtagtaggta ctcaaggaac 540
atgcagcttg ctgtgtgctg atatttctta aaattctttt gtgcctattt tatcagtctg 600
tgggccaatt tgcaaattag ttattaaaag gtattgcttt cagtgagaaa gctttatgaa 660
atgggccagc cctcctcctt gttagaatga gtggccgctt agcgatttca tgtttggccc 720
acttggagct gtggctgacc tatgggccca gacatgtanc tggtgttttc acaaatagcc 780
ctgaacctgg atcccatgag cacacttcta cttttcaagc agttgcttgg aagaacccat 840
atcttatncc agcatgcccc ctaaacccaa aagnttt 877

<210> 865
<211> 874
<212> DNA
<213> Homo sapiens

<400> 865
aggcatttta ctaaccaata ctcattaagc atagcgtgga ttcatatgac atcaaggagc 60
tattttattt ggtaaaacga aaaagcacaa gaatgaacga acgcaagaac tgaaacagtg 120
gagacaccta gaatgacttg tctaagatct aaatcatttt gttgtcttcc cagcgtactt 180
attatcctga tcattgtcat cagcattgtt tgggtccttt tagcacagat ttctcaaaat 240
gggtaactcc ataacagttg gaagcttacg aattcatata atttgtaaga ggtcaatttg 300
gaagtaccta tctattttaa aattccaata acctgggaat ttcatcccat gtctagagtc 360
ttttatgtaa aatatttcca caattaggag aaatatgtgc atggggattt tctatgtagc 420
ggtgttttga tggaatagaa aattgggata aaccaaattt ccatcacgaa ggaaatagta 480
atatgctgaa taataataca gcgaatatta tgcaggcttt aaacatcaaa aaagagttca 540
acttctgact tccgatgatg gtgttgaagc aggtcactgc tggtttacat ttgattttca 600
tgtgggaact ctggaagtcc gccttagtga ttttacatgt ggctaaattg agctaatgac 660
aagctgttcg aagtatggca aaatggaact ttaaaacagt atcttgtcaa caaccaagag 720
gacctgtttc acataaagcc cacgcattca tctgcctgtc catcattctg nctggccaca 780
cgggcatcat tccgttagtg gactgaatgc ccgtgtcgag ctgacaagcc catacctcct 840
ggtcctagtc acccttaatt cttcaacaag tcct 874

0050050450.0 : 0050050450

<210> 866
<211> 820
<212> DNA
<213> Homo sapiens

<400> 866
cttcctgggg ggctgtggcc tgagccctgc acccactggg gactatggct tcccagcaga 60
tggcaagcca tatgtggcag gtgcgctgac agccattgtg gccggcgagg aggagctccg 120
tggcagctat aactgggact acctgctgag ctggtgccct cagttccaac cactggccag 180
tgtcttcaca gagatcgctc ggctcaagga tgaagcgtgg cccacccagg agccaagtct 240
gtgcccccca agccagcaaa cacagctgca gcccgggcca tcttcccacc agcttctcac 300
cgctccccca tcagccatga aggctccctg tcctcagctg ccatgtcccc cagcttctca 360
ccctctctgt ctcctctggc tgctcgctca cccgttgtct caccatttgg ggtggcccag 420
ggtccctcag cctcagcact cagcgcagag tctggcctgg agccacctga tgacacggag 480
ctgcacatct agctgtggcc caggctgggc cccgacctgg gatgcgcaca gtgtccccaa 540
cgcaggcccc actctgagcc tgccctgggc agcctcggac tatgactggc tacggggagg 600
ccaccaccag gccccagctc tccaccctga actccccagc cccctcagag tactaggacc 660
acagaagccc tgttgctact gacctgtgac caggtccaat gtggggagaa atatgaagga 720
ggtagcagcc ctgggttctn ctcntgaggg atccctgccc tgaccagcac cctgagatgg 780
agctgagact ttatttattg ggggtaaggg ggattnggag 820

<210> 867
<211> 871
<212> DNA
<213> Homo sapiens

<400> 867
gatttcctta attaagatga tcagaggaga cttccaagtg gagatggtat ttgacatgag 60
cagaattttg aaatcaggaa agggctatca tcaaggtgat ttttttaaaa aacttgcttt 120
aaatatttat tgtaaaaagc aaagctgtaa aaactattta agctgatact tctgcctctt 180
aatttgtttt catgtgaata atttttaagt aattaaatgg cattttagtc gggaaaaata 240
gaaaatatga aacatttata attcttaata ttctgaaaac tcttcaagtt ttcagcatgg 300
tagaagtaga ttattttagc tatttattta aactcaattt tcttcttgtt ttaaaaaacc 360
atagcctttc gttgttgttt ctcttctttt tgacaactat tgccaaataa gttttatgga 420
atacttgggt ttttcttccc catgtaatgc tgggcagtta gcaatagttc tgaattcagg 480
tcacttctct gttgataagt gtaaaatgca tatctatagg tcagtgctaa caaggggtct 540
agttagcttc ttagctatct gcagaatata ttttcttttc atcacaaaac aagtaagact 600
agatttggca tccttcatta tcccaaaatg aagcaaaact acttgagtca tttggattat 660
gcccaggaaa acatattgac tcagaaagat aaacaaggct gggcgcagtg gctcacgcct 720
gtaatcccag cactctggga cgccaagcgg acagctcacc tgaggtcagg agttcgagac 780
ccgnctagcc aacagggcga aacctcgtct ncagtaaaaa tccaaaatta ccggcctggt 840
ggtggcccct gtaccccagc cctcaggagg t 871

<210> 868
<211> 822
<212> DNA
<213> Homo sapiens

0080204.0050250

<400> 868
gttgaagatt ttcctgagac ctcagagccc gtttggatac tgggtagaaa atacagcatt 60
ttcacagaaa aggacgagat cttgtctgat gtggcatcta gactttggtt tacatacagg 120
aaaaactttc cagccattgg aggttgtcgg gacatttcac tctccccacc tcggacacag 180
gctggggctg catgctgcgg tgtggacaga tgatctttgc ccaagccctg gtgtgccggc 240
acctaggccg agattggagg tggacacaaa ggaagaggca gccagacagc tacttcagcg 300
tcctcaacgc attcatcgac aggaaggaca gttactactc cattcaccag atagcgcaaa 360
tgggagttgg cgaaggcaag tccataggcc agtggtacgg gcccaacact gtcgcccagg 420
tcctgaagaa gcttgctgtc ttcgatacgt ggagctcctt ggcggtccac attgcaatgg 480
acaacactgt tgtgatggag gaaatcagaa ggttgtgcag gaccagcgtt ccctgtgcag 540
gcgccactgc gtttcctgca gattccgacc ggcactgcaa cggattccct gccggagctg 600
aggtcaccaa caggcccgtc gccatggaga cccctggtac ttctcattcc cctgcgcctg 660
gggctcacgg acatcaacga ggcctacgtg gagacgcttg aagcactgct tcatgatgcc 720
ccagtccctg ggcgtcatcg ganggaagcc caacagcgcc cactacttta tcggctacgt 780
tggtgaaggg gcttaatnta cctggacccc cacaccaacg cn 822

<210> 869
<211> 818
<212> DNA
<213> Homo sapiens

<400> 869
ttccagccct ggccccacct tcccttcagc agtccgtgtt gtctgggtag tctgtggcca 60
gtgtagccct gttgcagagt gaggtctccg ctgaaaggag aactggcgtg gtcgttgttt 120
gaaaagaatc aggccccagc aaggttcact ggaagctaac actggacgca gcagagtctg 180
ggtctgacag gaggtcagcg tcaccatttt gagggtgatg gacatgtttt ctgcactcta 240
gcactgtgtg gaagcgctgg ctgacagcag cctggctgtc cgaattccaa agaaatgggc 300
tccttctaaa tattcaggtg ctgctgcata ctcgggagca cacgctttcc ttgcccttgc 360
aggtgggggt gtccttggat ggagagggtg ctcctctgtg ccgcgtctca gcagccccac 420
cagagctgcc tccccttccc catgcaggtg cagggagctc acctgaggct gaggcaggcc 480
caggcccagc acttgcagga ggtccggctg gtgccccagg accgtgtggc cgagctgcat 540
cgcctgctca gccttcaggg agagcaggcc aggaggcgcc tggatgcaca gcgggaagaa 600
catgagaaac agctgaaagc cacagaagag cgggtggaag aggcggagat gattctgaag 660
agtatggaaa tgctccttca agagaaaagt ggataagctg aaggagcagt ttgaaaagaa 720
cacgaagtcc gacctgcttg ctgaaggaac tgtaccttgg agaacgccca cctggtgaga 780
gcactttaag gccaccgagg agaagcaanc nangcgcc 818

<210> 870
<211> 738
<212> DNA
<213> Homo sapiens

<400> 870
tttatatttt acccaaacaa ttagtaaact ggtagttgaa aaggaaagga ttaagtaatg 60
tagtttcttt ctccacattc tgctgctgct tgaatcccat tccaaaacag tttagcatca 120
tatattatta ccactctctg aatatcactg ttgttgatat gcttaacata ccttgatctt 180
caaaaaggaa aaaaagcgag aaagagaatg agttttgggg agttgtctct tttgtcttta 240
catgacacaa agcatgaaac atgttttctt tttcagcagt cctttgccat gtgttatgac 300

0050350-0050800

tgaatgttgc tccccaaata ccatcacacc gggggttaga gcttcaacct ccagtatgat 360
ggtattgagg ttagagcttc aacctccagt gtgatggtat cggggttaga gcttcaatct 420
ccagtgtgat ggtactgcgg ttagagcttc aatctccagt gtgatggtat cggggttaga 480
gcttcaatct ccagtgtgat ggtatcgggg ttagagcttc aatctccagt gtgatggtac 540
tgcggttaga gcttcagtct ccagtgtgat ggtatcgggg ttagagcttc aatctccagt 600
gtgatggtat cggggttaga gcttcaatct ccagtgtgat ggtactgcag ttagagcttc 660
aatctccagt gtgatggtat tagggttaga tcttcaatct ccantgtgat ggtatcangg 720
ttagagcttc aacctnca 738

<210> 871
<211> 872
<212> DNA
<213> Homo sapiens

<400> 871
ttagcgtctc agttgcgctg cagccgggga ggaaggagga ggccgagcct ggggcggagt 60
ttgggctgac tggggctgga ccgggcaaga cgccgccgct gcccggatgt tgcgatggct 120
gatcgggggа ggccgagaac cgcagggact ggccgagaaa tctcctttac agacaatagg 180
tgaagaacaa acccagaatc cctacactga actgctagta ctgaaggctc atcatgatat 240
tgtacgattt ctggtacagt tagatgacta cagatttgca tctgctggtg atgatggaat 300
tgtagttgtg tggaatgccc agacagggga aaaactttta gaactgaatg gacacactca 360
aaagataaca gctattatta catttccttc cttggaatct tgtgaagaga aaaatcaact 420
catcttgaca gcctctgctg atagaacagt tattgtgtgg gatggtgata ctaccagaca 480
agttcagaga atatcatgct tccagtctac tgtaaagtgt ttaactgttc ttcagagact 540
agatgtttgg ctttctggtg ggaatgacct gtgtgtgtgg aaccgaaaat tagatctcct 600
gtgtaagact agccaccttt ctgatacagg tattagtgct ttggttgaaa tacctaagaa 660
ctgtgttgtg gcagcagttg gcaaagaact gataattttc aggttggtag cacccacaga 720
aggatcacta gaatgggata ttcttgaagt taacgcctnc ttgatcacca ggataatatt 780
ctctcattga ttaatggcaa tgatttgagt tttgcaccgg ttccacgttg gaaaacttga 840
tcatttggga tccctgactg ggacctgcag gc 872

<210> 872
<211> 863
<212> DNA
<213> Homo sapiens

<400> 872
ttttttttt tggtggaggt ggggtttcgc cacgttggcc aggttggttt tggactgctg 60
acctcaggtg gtccacccac ctctgcctcc cgaagtgctg ggattacagg cgtgagccac 120
cacaaccagc ctccctttg tcagcttatc accccaccct tatgacctta tttaacctta 180
attacctccc aaaggccctg tctccaaata cagtccctgt tggaggtcag agcttcagca 240
tatgaattta gtcatgggta ggtgacacaa ttcagtccat aacagatggt caaagtctga 300
cccatagtgt tcaacagctg ctgttagtta ctctccttgg ctagtagtat gccttgaggc 360
attaaagaac aaacacacaa agctagtgtg gtgtaggagg caccctgaga agttctgtga 420
tgggctctgt ctcctggtgc tgcagaggaa ggcatttgtg tgtaagtgac tggtggcctc 480
aaccatggga gggtctcaga tttcaacatc ctcctaaatc ccttgggggt gtttttgtgg 540
aattcagatt ctgcctaaca ggctggggag gtacaggcta agggcctaca tttcttttct 600
ttttcttttt tgagacacag tctcactttg tcacccaggt gaggcgatca tggctcaatg 660

0050204500 : 0050204500

tagcctcaac ctcccccagg ctcaagcgat ccttccacct cagcctcctg ggactacagg 720
cacataccac cacagctggc taatgnattt ttttgtagag acgaggttca ctatgntgcc 780
cagctggctt gactctgggc tcagtgatcc tctgccttgg cttccaaggg ctggggntat 840
agggggagcc ccacacctga tca 863

<210> 873
<211> 588
<212> DNA
<213> Homo sapiens

<400> 873
aagttacaaa actgtagaaa tagagaagag attggtggtt tccagggctt aaggaaggga 60
ttagggtaag ggaggtgagt ggatgtcacc ctaaagggca gcccctcggg atcctggtgg 120
tgataggaca gttctgtggc tgtgtccacg tcagcatcct ggtgaccctg tgatatagtg 180
acacaggctc ctaccatggg ggaaagaagg cacgtgagac ctctgtattt ttacttccaa 240
ctacacgtga ctacacttat ctcaaaatga aaagtttaat taaaaagaaa aacctcggct 300
gggcgtggtg gctcatgcct ataatcctag cactttggaa ggccgaggca ggtgggtcac 360
gaggtcagga gatcgagacc atcctggcca acatggtgaa accctgtctc tattaaaaat 420
acaaaagtta gctgggtatg gtggcgggcg cctataatcc cagctactcg ggaagctgag 480
gcaggagaat cattcgaacc cgggaggcgg agattgcagt gagccgagat cgtgccactg 540
cactccggcc tggtgacaga ncgagactcc gtctcaaaaa aaaaaann 588

<210> 874
<211> 888
<212> DNA
<213> Homo sapiens

<400> 874
atacttagag ctagaggaga ggcccctaca catgtccacc atcatccttc gggctcattt 60
aacacttact atttctatac tgnaaatggc aacaagattt tccctacctc aacctgactt 120
tgagcaggag ctgttgctgg ctaagcagcc tgaacaattc acatgctcag aacagagcct 180
actcgacccc ctccctccca gagcagtcgg ccccagaaga aggagagacg gttcaacgtg 240
ctcaaccaaa tattctgcaa aaacaagaaa gaagagcaga gagcccatca gaaggatccc 300
agcagggacc gatacagaga ggaggacacc tcagaagtca atgacatcat caccaccttt 360
gatagcatcg tgggtaccaa ctgccaagaa cagcctggtg atcaggtggc tatggttgaa 420
tttaagaaga aaacctcaga caattcaaaa tatctcttac cagaaaagaa accgctggcc 480
cgtaaggggc ttccaccaat cagaacgcag agtctcccac ccatcaccct gggcaataac 540
ttcctaacag cctcccatag ggccacttcc catgcaggcc tgagctctgc tcctcatcat 600
atggcccagc gatctcagaa aagtcgaagt gagcaggatt tattaaataa cagaactggc 660
tgccagatgt tactagataa cccctggaag agtgattcta atcaggtatt ttcctacaaa 720
gtttgggact gtgtcttctt ctgataagct gctggacaga ttgctcagtg tccgggctgg 780
tcaccaagag gtttccgtgc caccacacct tcgccatcta cttaatccat catcaggaca 840
aaattttagg attctttncc caacggaccc aaatcagggn ctttcttt 888

<210> 875
<211> 852
<212> DNA
<213> Homo sapiens

0050150 20050000

0508150.00800

<400> 875
aataaacaaa cccgtaaact gttttataca gagacagcaa aatcttggtt tattaaagga 60
cagtgttact ccagataaca cgtaagtttc ttcttgcttt tcagagacct gctttcccct 120
cctcccgtct cccctctctt gccttcttcc ttgcctctca cctgtaagat attattttat 180
cctatgttga agggaggggg aaagtccccg tttatgaaag tcgctttctt tttattcatg 240
gacttgtttt aaaatgtaaa ttgcaacata gtaatttatt tttaatttgt agttggatgt 300
cgtggaccaa acgccagaaa gtgttcccaa aacctgacgt taaattgcct gaaactttaa 360
attgtgcttt ttttctcatt ataaaaaggg aaactgtatt aatcttattc tatcctcttt 420
tctttctttt tgttgaacat attcattgtt tgtttattaa taaattacca ttcagtttga 480
atgagaccta tatgtctgga tactttaata gagctttaat tattacgaaa aaagatttca 540
gagataaaac actagaagtt acctattctc cacctaaatc tctgaaaaat ggagaaaccc 600
tctgactagt ccatgtcaaa ttttactaaa agtctttttg tttagattta ttttcctgca 660
gcatcttctg caaaatgtac tatatagtca gcttgctttg aggctagtaa aaagatattt 720
ttctaaacag attggagttg gcatataaac aaatacgttt tctcactaat gacagtccat 780
gattcggaaa ttttaagccc atgaatcanc ccgcggtctt accacggtga tgcctgtgtg 840
ccgagagatn gg 852

<210> 876
<211> 800
<212> DNA
<213> Homo sapiens

<400> 876
gcagtaccaa gtttgtgcac cacgtcatga gcctctacga aaagcagctg tcccaccagt 60
ccccagaatg actgcgcttc tcctacaagg ttctctgggc actgcccagc ctgagtctcg 120
gccctcaccc agggccctgc ctcgggtcct gggcctgctc cccgcttcct ccccttcagt 180
cagctccctc tgtcctctgt cagcctggcc tgacccctac cctccagcat tgctcttcct 240
actgtacata ttggggagtg gggggcaggg tcgggaaggg acatgccagg ccaggcctgg 300
ggccccgggg cctgacccac accacgcaga ccccgggctc cagttttaa cgatggttcc 360
atcaatacct gatccagaat gtttccgtgc tacactttgt gtcctgctgc aatgtgttct 420
gtctgtccat ccatctctgc cctctgtacc ggacactgtg tctcctcagc caggaagggg 480
taatgagctc cagcccctaa gcaaccggac ttgcctgcct cggcctcacc cgcacttctc 540
ccaaaaggca gatgacgggg agttaggcat ggggagctcc agaaggtcac cagagagctt 600
tcagctgagg gagagttctc taggttggag tgggcatcac agccagggtg gcctctgggt 660
gtcagatgct ctcaggaggg tgcccagcct gtgaggcact ggcaaggtan ggggcagatg 720
gggcatggag aacccagagg atctangccc tgttggggaa ggggaaggga gctcaaggnt 780
tgggtgggga cttaagccca 800

<210> 877
<211> 817
<212> DNA
<213> Homo sapiens

<400> 877
attgttttta gagatggggt cttgctgtgt tgtctgggcc ggagtacact gggtactcac 60
agatgtgatc attgcatact acagccttga actcctgggc tcaagtgatc cttctgtctc 120
agtttcctga gtacctggga ctagaggtgt gtgccaccat gctggttatc tataagcact 180

tttacattta tttatttatt taattcttgt agtaactctt tgtggtaggt actattatcc 240
taagtatcct ataagaaaac tgaggcactg cagtttgaag taacttgctc agggtcactc 300
agccaattaa tggtggagca gcggtttgaa cccaggctgt ctagttccag agcctatagc 360
cataactact gtcttatatt atccctaaga atatgtaaac gacgtcaaac cccgatccta 420
tttgcattcc cctccccacg ggtaactatc ttgaatcaga gccaatacta cactattgca 480
ttagggtata atttaatcat taggggatag ttttcatgca gaaactagaa agcactgatg 540
agattctact catgttcctt taccagcttt agttataaag gggaagcggg aaaatggaag 600
cacgtagagg ataangtgat aacctncacc ttaccatctt ccttnttccc cttaaaaaag 660
aaatggaatg ttgagtctat ctggaatgtt gacaggttaa aaaaggagct gttgaagcct 720
gtcgtcacag tagcatcgaa aaggtgaaaa atttggctnc acttggagtc cttggaaatg 780
gcaaggtgtg tnattgggaa tattgggcta ttggtng 817

<210> 878
<211> 859
<212> DNA
<213> Homo sapiens

<400> 878
ccatcatgca tcttcaggtc tgctagagca aaccctgagg gctgctttag agagggttat 60
caagggagac ttcttggagg aggtggtttc tgactgactt gaatgccagg actgtttgcc 120
ctgccccctg ccatctctcc ttcccagatg gtgctccaag aggcagcttg tggacctggt 180
gatggaaggg gtgtggcagg agctgctgga cagcgcccag attgagatct gtgtggctgc 240
tggtgagtga ggagcggcac cctgccccan agcagcaaca ggcttggcag cggctctgca 300
acaggggctc atttcccgcc ccatcaaccc cacgggtagc ggctgtcact gtgcaccctt 360
tgtgatgagg ctganagggg aagtgatgca gagccgggga aggtagagct ttggagaagc 420
cagagccccc actctgcact cctgcccacc ctcatcccag caggctgggg tggtccacag 480
ggggccactg tggcttgata cccctctgaa acgagacacc tcccctgacc accttgtgga 540
tgcccagggt ctgaaggggt gggagcatgg tgccctgtga gctgatgctc anggagcata 600
gttgggacag gactggcttg anagcctaca ggcttaggat gaatgccttc ttcccaaaac 660
acccaggttc tgccccaaaa gcattccagc tcctnctttc aggctgtggc tttttccata 720
gaaaatctgg tctcttccct tggggctctg gctcttccct tgaagtcatc aggcaccttg 780
ccctgcattg ggggtttntt tcccaaaagc attnctttc ccgttccccc aacttccctt 840
anccaaaaag ccctttcaa 859

<210> 879
<211> 870
<212> DNA
<213> Homo sapiens

<400> 879
agggaaatgt ttgtactata tagaatccat atatttgact gcaagttaca aagttttaag 60
aacatgatgg ttggtctcta atatatttgg aactgattca taagaaaagt tattaaaatt 120
atctttgaaa cacctcttga agctaattta ttagaaaaaa tatttcagtt ggaaggctgt 180
agaagtaatg tttaaatgct aagtcataag ttcaggatat ttcttttcta tttggttgtg 240
caaaatgttt ttcccagtta tttaatcgaa gtaattcctt ttaatagaaa gagtcagtta 300
aaattcagca ttcatggata gatttttgga acgaaaaagg gtaagtataa gaaaatattg 360
caaacacatt aaaacagttg tatggtgcag gaaaagaaga ttggaaaaag accaaaacac 420
acttctccag caacactcca tcagcttttt aaaatttaga gctatctgct aatttttcc 480

0056205.00000

ctcttccttc tcaataaatg aaacaaacac tgggcagctg caggtttctc ccaatcatgt 540
ctctttatgt aaagacagta acatgcaaac acttttagtt tacatccctc attcacagtg 600
taaagcagga aatggtgtgg gagatgtgag accattctga ggtcagcgat agcccaaagg 660
ctctgcagta ttccctccaa tggccaanga ttccgtgtgt catctgcagg agtgagtagg 720
cctgctgnat ttcttgnaac tgctgggtgg tacaaaataa gttaccatgg tttacacttt 780
aaaaaaaaaa ccngaaggac atttgcttta attgggtact tactaagttt aacccctagg 840
ntatggcaca gntgctaaaa aatcatgggg 870

<210> 880
<211> 704
<212> DNA
<213> Homo sapiens

<400> 880
cttcttctta aaagagaaac gctgcgcgcg cgaggtgggc ccctgtcttc cagcagctcc 60
gggcctgctc gctaggcccg ggaggcgcag gcgcaggcgc agtgggggtg agggcgcgtg 120
ggggcgcaca gcctctggtg cacatggctt cctccccggc ggtggacgtg tcctgcaggc 180
ggcgggagaa gcggcggcag ctggacgcgc gccgcagcaa gtgccgcatc cgcctgggcg 240
gccacatgga gcagtggtgc ctcctcaagg agcggctggg cttctccctg cactcgcagc 300
tcgccaagtt cctgttggac cggtacactt cttcaggctg tgtcctctgt gcaggtcctg 360
agcctttgcc tccaaaaggt ctgcagtatc tggtgctctt gtcagcatcc tcattgagtt 420
ccagagctcc tccacctgca gaagtcaggg tgcagccaca gctcagcagg acccctcaag 480
cggcccagca gactgaggcc ctggccagca ctgggagtca ggcccagtct gctccaaccc 540
cggcctggga tgaggacact gcacaaattg gccccaagag aattaggaaa gctgcaaaag 600
agagctgatg ccttgtgact tcctgctgtg gaangatctt ttcaaccggn agtatttgaa 660
tcaccacaaa aagtaccaag cacattcacc aanaagtctt ttct 704

<210> 881
<211> 734
<212> DNA
<213> Homo sapiens

<400> 881
acaactggcc tgaccttcaa aggccttcac agctcctgcc ttcatgttac cgtctactat 60
gttcctcgtg caccttccac tcagcacaaa caggctgcac tgcctccgaa acacatcact 120
tgaatcctac ctctgctcct ttgtccatct gaatcaccct ctccacattt ctgaccgtgt 180
aatcctgatc tcacttcatg aggcagttcg cttctctttt gcatttagct ttccccgggg 240
tacactgtca atagcctact gtctgatgtc atcagtcagc acttcatcag aggcaattat 300
gtccacagag cttttggcta attactgtca ctcctcttta catgtgtgca tatgcatatc 360
atctttccct aatgagactg gaaatcatga ttcattccct ggagcagtgg tttccataag 420
tgaccaaccc acagaccagt gcaaactggc tgcaaaagag cttcctctga ggaacttatt 480
agaatgcaga ttctttgact gcatgggaga ggaggatctc ataaatctgg gtgtaatagg 540
cacagaacgt taggtgtaat atgggcggga ctctggactc agcatatcca acaagctgct 600
ggctgattcc gacgatgccg atgaattgcc aggttgggaa ctgctgcccc cagagaacct 660
acaganagct ctgtacgtgg tangtgctca ctccctattg nttgggtgta tgcctcctga 720
tatgaacttg atcg 734

<210> 882

US 2005/0009004 A1

0030050450.0030020070

<211> 817
<212> DNA
<213> Homo sapiens

<400> 882
tctttgatgt ttataacaca agttgtaatt ggcacattac aaaacatttt ctacaaacag 60
gacagggtat gctataagta acattcttac tgcagaagat gacaggcgtt ggttatttgt 120
acttctcttg ctcaattatt acagttttaa acataaagac aatgatttca agttttattt 180
gatgaagaaa caggaatgct tcatgattga ggatcagtat gatgactgaa gaccttgatt 240
ctagcgtgct cagtagttta gttccttaga catgcctttg gtttcagtca tttggtgagt 300
atttagtgcc tctcacatgc actgcactgt gcggagagca cttggattac aggaagcatg 360
ctctgtactc tcagtggtgt gttcagttga agaaacacat aaaataactg aaagatattc 420
agttactaga ctaggtagta ttgactaagt tcaggagttg agaaaaggat tagatcagtg 480
aaaaaataga ctgccttgtg agcaatagca gatatgggct gcgctttgaa acgaacaggt 540
gggatttgca gggaagggta ttctgattgg gataatggct cgtaggagac agtgaagatc 600
aggactacca aaatggaatg gatgggcctg ttggggatta gcagaagtgc ttangtgggt 660
ggaattacag anggctagga aagctagaca gactagtcaa aatgagacct gatgtgaaag 720
ggcactaggg cccagccttt ttaatctgaa agctctgctt cctctggtnc tttatcctgg 780
tgctggttgg tgaccccata atatttggnt accncat 817

<210> 883
<211> 763
<212> DNA
<213> Homo sapiens

<400> 883
gttgttgagg cccttcttgt gtatctggag aaaatagagg ttctgactcc tcaggagcaa 60
aaaacataac ctgaagaggg aggaagtgga tttggggttc accatttctt ggggcacact 120
tgattgaaaa ctgagacttc tgaagagaag gccagaagat acaaagacag accatcccag 180
ttgaatgctg tcttccaaga acagaagaaa atgatccagg cccaggtaac tgacttttgg 240
tttgttttat tctttccttt gttccataat agatttgtag aagcctataa acatcaattt 300
cactaatata aaaagtataa atttcaaaaa gcaggatctg gagagaagta agcttagttt 360
ttaaactcaa tatcatgcaa aatagtagga taaggaatat aatgttcata gcattaacac 420
taaattatga attttgtgac accatgcatg gctggaggat cctgtggatt atattagctg 480
tcagcttgca tctaatatct ctgacagcca atgtcacaag aaaatcataa tttacatggt 540
atgtcctgtt tttgaagata aaacagatta cttcctgggg gttgccatta tttcatggca 600
ctttggtctc aggaaatttc ttcagtggtt cttcctagag ttgatgtggt ggatggtgtc 660
cagaatagca gccttctcat aaattcagat gcaaggtttc ctgtggctgg ttcttgaagg 720
actccntata tactggtacc nggaatanac ttaagccaac cgt 763

<210> 884
<211> 771
<212> DNA
<213> Homo sapiens

<400> 884
tttggaggag aaaggatcac aatgaactcc tgaaacatac aacgtgctag tttctttcat 60
gcctctgagc tcttaagtct tcagagagag aggcaggcag gtataatgca gagaacacag 120

gctttggagt tagaacctga gttggaacct cactgtaatc agctacctgt gtggttccct 180
gaagttgcat gtctccaact gtaaaatgag gcagaatcat gcctgccttg aagggctgct 240
gtgaggaatg actaaaacaa catatttggt attgaatact catcattttt agtattctgg 300
aaataagaga acaaatttta ttataaggca agggggctga agtgtgggac tcagaggatg 360
cagatggagg aggacagtcg tgccatgggg agcatcctgt gtgcatcaga tgcagtttaa 420
ttgctgagag tccacaatac caaggaagag ggcgcccctc aggaagctta tggtagagtg 480
gagaatacag gaaacaagta acaaactaaa tcacagaaga agaaacattc aagtcactat 540
caaaggaata agaaacagca cattcagtag gagggttcag tcaagagcag agggctttgc 600
caggcgtggt ggtgcacgca tgtaatccca gctactcggg aggctgangc aggagaatgg 660
cgtgaacccg ggaggcggac ttgcagtgag ctcaaatcgt gccactgnac tccacctggg 720
tgacaaacag actctgctta aaaaagnctc tatcangaag ttgaagaaat g 771

<210> 885
<211> 845
<212> DNA
<213> Homo sapiens

<400> 885
aacaggtacg aaaaaatcag gctactaagc ccactgttaa tatagacgca gaccaattgt 60
taggaacagg tccaaattgg agcaccatta accaacaatc agtgatgcag aatgaggcta 120
ttgaacaagt aagggctatt tgcctcaggg cctggggaaa aattcaggac ccaggaacag 180
ctttccctat taattcaatt agacaaggct ctaaagagcc atatcctgac tttgtggcaa 240
gattacaaga tgctgctcaa aagtctatta cagatgacaa tgcccgaaaa gttattgtag 300
aattaatggc ctatgaaaat gcaaatccag aatgtcagtc ggccataaag ccattaaaag 360
gaaaagttcc agcaggagtt gatgtaatta cagaatatgt gaaggcttgt gatgggattg 420
gaggagctat gcataaggcg atgctaatgg ctcaagcaat gaggggctc actctaggag 480
gacaagttag aacatttggg aaaaaatgtt ataattgtgg tcaaatcggt catctgaaaa 540
ggagttgccc agtcttaaat aaacagaata taataaatca agctattaca gcaaaaaata 600
aaaagccatc tggcctgtgt ccaaaatgtg gaaaaggaaa acattgggcc aatcaatgtc 660
attctaaatt tgataaagat gggcaaccat tgtcgggaaa caggaagaag ggccagcctc 720
agccccccaa caaactgggg catttccagt tcactggttg gtcctcaagg gtttcaagga 780
cacaacccct acngaaatac ccccacttna gggagtcagc caatnccaca attcaacagt 840
tgtcc 845

<210> 886
<211> 827
<212> DNA
<213> Homo sapiens

<400> 886
ataaatagag ccggttttgt ggtgttttca ctactcggtt ggatgcctca gccatagtaa 60
gtgggaaagt gagcgagcaa gcgagctact agcgaccgga ggaaagtgaa caggggggaga 120
agggaacagc aagaacagga ctccagagcg ataaacactc gctggagagg gagacgcagg 180
aagcgatgaa agagatgtct gcaaacaccg tgctggacag ccagcgtcaa caaaagcatt 240
atggaattac ctccccaatt agtttggcat ctcctaaaga aattgatcat atttacacac 300
agaaattaat tgacgccatg aaaccatttg gagtgtttga agatgaggaa gaattgaacc 360
acaggctggt ggttcttggt aaattgaaca atttagtaaa agaatggatt tctgatgtca 420
gcgagagtaa gaacctccca ccttctgttg tggctactgt tggtggtaaa attttcacat 480

US 2005/0260186 A1

ttggatccta taggcttgga gtacacacca aaggagctga cattgatgca ctttgtgtag 540
ctccaagaca tgtggaaaga tctgattttt ttcagtcttt ttttgaaaaa ttgaaacatc 600
aagatggcat tagaaactta agagctgtag aagatgcctt tgtacctgtt ataaaatttg 660
aatttgatgg tattgaaatt gatctagtct ttgcaagact ggcaatcaaa ccatatcaga 720
taatttagat ctaagagacg actctcgcct ganaagcctt gatataaggn gtattcgcag 780
ctttaaatgg gttgtanaag ttactggatg aaaattttgc catttaa 827

<210> 887
<211> 783
<212> DNA
<213> Homo sapiens

<400> 887
gtaggagtcc gcggcagcct ccgggtaagc caagcgccgc gcagtgctga gttcccgcac 60
gccgcagagc catggagatc ggcaccgaga tcagccgcaa gatccggagt gccattaagg 120
ggaaattaca agaattagga gcttatgttg atgaagaact tcctgattac attatggtga 180
tggtggccaa caagaaaagt caggaccaaa tgacagagga tctgtccctg tttctaggga 240
acaacacaat tcgattcacc gtatggcttc atggtgtatt agataaactt cgctctgtta 300
caactgaacc ctctagtctg aagtcttctg ataccaacat ctttgatagt aacgtgcctt 360
caaacaagag caatttcagt cggggagatg agaggaggca tgaagctgca gtgccaccac 420
ttgccattcc tagcgcgaga cctgaaaaaa gagattccag agtttctaca agttcgcagg 480
agtcaaaaac cacaaatgtc agacagactt acgatgatgg agctgcaacc cgactaatgt 540
caacagtgaa acctttgagg gagccagcac cctctgaaga tgtgattgat attaagccag 600
aaccagatga tctcattgac gaagacctca actttgtgca ggagaatccc ttatctcaga 660
aaaaaaccta cagtgacact tacatatggn tcttctcgcc cttctattga aatttatcga 720
ccacctgcaa gtagaaatgc agatagtggn gttcatttaa acaggntgca atttcacagc 780
agc 783

<210> 888
<211> 740
<212> DNA
<213> Homo sapiens

<400> 888
gggcaaagtt ttggcggagc catcgctggg gctgagcgcg cccccggggg gagatcgggg 60
agcgcccgat gccgggcggc cggagccatt gacccgggac gccgccgtcc gctgagcagc 120
cgaccacccc gccgcctccg gtgcatgggg actggctgag gagccagcat gggcaactgc 180
gtggggagac agcgccggga gaggccggca gccccgggac acccccgcaa gcgagcagga 240
cgcaatgagc ccctgaagaa agagcggctt aagtggaaga gcgactaccc catgactgac 300
gggcagctgc ggagcaaacg ggatgagttc tgggacacag cgcctgcctt cgagggccgc 360
aaggagatct gggatgccct caaggctgcc gcctatgctg ctgaagccaa cgaccacgag 420
ctggcccagg ccatcctgga tggagccagc atcaccctgc ctcatggcac cctctgtgaa 480
tgctacgatg agctgggcaa tcgctaccag ctgccatcta ctgnctgtca ccgncggtga 540
acctgctgct ggagcacacg gaggaggaga gcctggagcc ccccgagcct tcacccagcg 600
tgcgccgtga gttcccgctg aaggtgcgcc tgtccacggg caaggacgtg aggctnaacg 660
ccagccttgc cgaacaatgg ggcaactnaa gaagcaactt gcacgcccag gaaggcattg 720
agccattgng ggaacggtgg 740

US 2003/0186300 A1

<210> 889
<211> 839
<212> DNA
<213> Homo sapiens

<400> 889
agttcgccgc ttgcaccggg accgatgcca tctgagacgc acgcgatgct ggcgacgctg 60
gcgagggtgg cagctctgcg cagaacctgc ctcttctccg gccggggcgg cgggaggggg 120
ctgtggactg gccgcccgca gtcagatatg aacaatataa agccattgga aggggtaaaa 180
attctggatc taacaagagt cctggcggga ccttttgcta ctatgaattt aggagatctt 240
ggagcagaag ttataaaagt ggagagacca ggagctggtg atgatacacg aacttggggg 300
ccacctttg ttgggacaga aagtacatat tatctcagtg ttaaccgaaa taaaaaaagt 360
attgctgtta atatcaagga tccaaaaggg gtgaaaatca tctattgttc catcacaggg 420
tatggtcaga caggtccaat ttctcagcga gctggttatg atgctgttgc ctcggctgtt 480
tctggtctga tgcacatcac agggcctgag aatggagatc cagttcgccc aggagtagct 540
atgactgatc ttgccactgg cctgtatgca tatggagcta ttatggctgg attgatacaa 600
aaatacaaaa ctgggaaagg actgttcatt gattgtaacc tgctgtcatc ccaggtggcg 660
tgtttgnctc acatagctgc aaattatctt attggtcaaa aggaagcaaa acgttggggt 720
acagctcatg gcagtatcgt tccttaccag gcttttaaaa ccaaggatgg ctatattgga 780
attggagcag gaaataccac agtttgncac cgncttgcaa gancttggat ttgcctgaa 839

<210> 890
<211> 769
<212> DNA
<213> Homo sapiens

<400> 890
gtgcctaaca gaggtgtcct ctgacttttc ttctgcaagc tccatgtttt cacatcttcc 60
ctttgactgt gtcctgctgc tgctgctgct actacttaca aggtcctcag aagtggaata 120
cagagcggag gtcggtcaga atgcctatct gccctgcttc tacaccccag ccgccccagg 180
gaacctcgtg cccgtctgct ggggcaaagg agcctgtcct gtgtttgaat gtggcaacgt 240
ggtgctcagg actgatgaaa gggatgtgaa ttattggaca tccagatact ggctaaatgg 300
ggatttccgc aaaggagatg tgtccctgac catagagaat gtgactctag cagacagtgg 360
gatctactgc tgccggatcc aaatcccagg cataatgaat gatgaaaaat ttaacctgaa 420
gttggtcatc aaaccagcca aggtcacccc tgcaccgact ctgcagagag acttcactgc 480
agcctttcca aggatgctta ccaccagggg acatggccca gcagagacac agacactggg 540
gagcctccct gatataaatc taacacaaat atccacattg gccaatgagt tacgggactc 600
tagattggcc aatgacttac gggactctgg agcaaccatc agaataggca tctacatcgg 660
agcagggatc tgtgctgggc tggctctggc tcttatcttc ggcgctttaa tttcaaatgg 720
nattctcata gcaaagagaa gatncagaat ttaagcctna tctctttgg 769

<210> 891
<211> 773
<212> DNA
<213> Homo sapiens

<400> 891
gagcggacac agccccacgc gcggggccat gcaggtggcc atgaacggta aggcccgcaa 60

09/05/2003 09:50:45

agaggcggtg cagactgcgg ctaaggaact cctcaagttc gtgaaccgga gtccctctcc 120
tttccatgct gtggctgaat gccgcaaccg ccttctccag gctggcttca gtgaactcaa 180
ggagactgag aaatggaata ttaagcccga gagcaagtac ttcatgacca ggaactcctc 240
caccatcata gcttttgctg taggggggcca gtacgttcct ggcaatggct tcagcctcat 300
cggggcccac acggacagcc cctgcctccg ggtgaaacgt cggtctcgcc gcagccaggt 360
gggcttccag caagtcggtg tggagaccta tggtggtggg atctggagca cctggtttga 420
ccgtgacctg actctggctg gacgcgtcat tgtcaagtgc cctacctcag gtcggctgga 480
gcagcagctg gtgcacgtgg agcggnccat tcttcgcatc ccacacctgg ccatccatct 540
gcagcgaaat atcaacgaga actttgggcc caacacagag atgcatctag tccccattct 600
tgccacagcc atccaggagg agctggagaa ggggactcct gagccagggc ctctcaatgc 660
tgtggatgaa ccggcaccat tcggtcctca tgtcctgctc tgtgcccatc ttgggctgan 720
ccccaaggac atantggaga tggacttttg ccttgnagac acccaacctg cgg 773

<210> 892
<211> 749
<212> DNA
<213> Homo sapiens

<400> 892
ccctaagtga gaggaccaac agttccgaca gcgagcgctc cccagatctg ggccacagca 60
cgcagattcc aagaaaggtg gtgtatgacc agctcaatca gatcctggtg tcagatgcag 120
ccctcccaga aaatgtcatt ctggtgaaca ccactgactg gcagggccag tatgtggctg 180
agctgctcca ggaccagcgg aagcctgtgg tgtgcacctg ctccaccgtg gaggtccagg 240
ccgtgctgtc cgccctgctc acccggatcc agcgctactg caactgcaac tcttccatgc 300
cgaggccagt gaaggtggct gctgtgggag gccagagcta cctgagctcc atcctcaggt 360
tctttgtcaa gtccctggcc aacatgacct ccgactggct tggctacatg cgcttcctca 420
tcatcccccc cggttctcac cctgtggcca aatacttggg gtcagtcgac agtaaataca 480
gtagttcctt cctggattct ggttggagag atctgttcag tcgctcggag ccaccagtgt 540
cagagcaact ggacgtggca gggcgggtga tgcagtacgt caacggggca gccacgacac 600
accagcttcc cgtggccgaa gccatgctga cttgccggca taagttccct gatgaagact 660
cctatcagaa gtttattccc ttcattggcg tggtgaangt gggtctggnt gaagactttc 720
ctttcacagc aggcgatggg gacnattct 749

<210> 893
<211> 745
<212> DNA
<213> Homo sapiens

<400> 893
atttcattaa tttgatcttc agtcactgaa acccttttctt ccattgatcg aatcagctac 60
tgaagcttct gtgtgtgtca cgtagttctc gtgtcatggt tttcagctcc ttcaggtcat 120
ttaaggtttt ctctacactg gttactctag ttagcctttt gtctaatctt ttttcaaggt 180
ttttagcttc cttgcggtgg gtttgaatat cctcctttag ctcagagaaa tttgttttta 240
ccgaccttct gaagcctaat tctgtcaact cgtcaaagtc attctccatc cagccttgtt 300
ctgttgctgg cgaggagctg tgatcctttg aaggagaaga ggcactctgg tttttagaat 360
tttcagcttt tctgctctgg tttctcccca tctttgttgt ttttatctac ctttggtctt 420
tgatgatggt gacctacaga tgtggttatt ggtgtggatg tccttttttgt tgatgttgat 480
gctattcctt tctgtttgtt agttttcttt ctaacagtca ggtccctcag ctgcaggtct 540

US 2005/0059006 A1

gttggagttt gctagaggtc cactccagac actgtttgcc tgggtatcac ctttggaggc 600
tgcagaacag caaatattgc agaacagcaa atattgctgc ctgatccttc ctctggaagc 660
atcgtcccag aggggcatac ggcagcatga gatgtcagtc agcccccact gggaggtgnc 720
tncctggtan gctacacggg ggtca 745

<210> 894
<211> 833
<212> DNA
<213> Homo sapiens

<400> 894
taaaatgtag acattggtgt cctgtattcc aggttgaatt taaaacaggt atggggtttg 60
acacaaaaat gatactgnat atgaaggtta ggtaaaatat gtatttgaag tgaggctatc 120
agggtactat gcaggctttt ggggcctggc ccgaaacttg gaatgcagtt tttcatagaa 180
acccacaatc agtttacaaa tagacttttg aaacactggc taggtggtat ctgaagtttt 240
ggcccattgc aagctgtgtc tgaattgcaa gcatgaggga agtaaaaagc atcccaaatc 300
agaaattagg agatctgcca ttaaacctta ttaccttgac aaaccattta atgtttggat 360
gatagcttcc tccttttaaa aatacaattt ggattatatt gatctaagtt atattttagc 420
tcaagattcc tgaagttcac agtggttttt aaaaattttt cttaagaaaa aaaaaagaac 480
aaaaaacttt tccaagcttg aatatacata atcagccctg tttccccttg tacctcaaat 540
catggcaaca aggaagttga atttctcttt tgagactttt gaaccttctt cacattcatt 600
tttaattgtt ntgttttaaa acaatatcat tttgggaagt gaggggaagg gatgaagcac 660
atgttttcaa agtcttgctg tctgcctcta ccctagtctg agattacata tggtagtttt 720
ggccagggga aagtgcttgg gatttcacct ttatactcaa gtgangctca tgaaagtggt 780
catttaaagg gaantggaag gnggtcatgg aattagccaa gcccttttact ggg 833

<210> 895
<211> 814
<212> DNA
<213> Homo sapiens

<400> 895
tctgcagcca cgagaagcaa agttgacatt tctggatcac tctccccaga cgcgtcactt 60
gcccacaagc gggacacggc agtctcgctg agccagctgt gcagagggac agatggaaga 120
aagctagaga tgctgcttcg tgggcgctga agttgcagaa cttgggctgg ttttctttct 180
tcccatcccc cctcctcctg acaaaccaca tcttgactca gatggtcgaa agaaaaactc 240
tttcagttat ttgatatttg ggaaccctcc aggagaccat aacttatttt tgagggaggc 300
tccttctctc cctttgctgg gaacacacac acacacacac acacacacac acacacacac 360
acacacacac acacacacag ctgtacacca tggtggttca ggctgcagtg gctccgaata 420
gatcccaaag acttttactg aaaattcctt atggatctct gagaaggcgc ancgttgaaa 480
ggatgacgga gggccgccga tgtcaagtac atcttcttga tgacaggaag ctggaactcc 540
tagtacagcc caagctgttg gccaaggagc ttcttgacct tgtggcttct cacttcaatc 600
tgaaggaaaa ggagtacttt ggaatagcat tcacagatga aacgggacac ttaaactggc 660
ttcagctaga tcgaagagta ttggaacatg acttccctaa aaagtcagga cccgtggttt 720
tatacttttg tgtcaggttc tatatagaaa gcatttcata cctgaaggat aatgctacca 780
ttgagctttt tttctgaacg cgaagtcctg catt 814

<210> 896

US 2005/0048500 A1

0030250.0002000

<211> 818
<212> DNA
<213> Homo sapiens

<400> 896
tcttcccttc ccgcgatggc ggcacaggga gctgctgcgg cggttgcggc ggggacttca 60
ggggtcgcgg gggagggcga gcccgggccc ggggagaatg cggccgctga ggggaccgcc 120
ccatccccgg gccgcgtctc tccgccgacc ccggcgcgcg gcgagccgga agtcacggtg 180
gagatcggag aaacgtacct gtgccggcga ccggatagca cctggcattc tgctgaagtg 240
atccagtctc gagtgaacga ccaggagggc cgagaggaat tctatgtaca ctacgtgggc 300
tttaaccggc ggctggacga gtgggtagac aagaaccggc tggcgctgac caagacagtg 360
aaggatgctg tacagaagaa ctcagagaag tacctgagcg agctcgcaga gcagcctgag 420
cgcaagatca ctcgcaacca aaagcgcaag catgatgaga tcaaccatgt gcagaagact 480
tatgcagaga tggaccccac cacagcagcc ttggagaagg agcatgaggc gatcaccaag 540
gtgaagtatg tggacaagat ccacatcggg aactacgaaa ttgatgcctg gtatttctca 600
ccattccccg aagactatgg gaaacagccc aagctctggc tctgcgagta ctgcctcaag 660
tacatgaaat atgagaagag ctaccgcttt cacttgggtc aattgccagt ggcggcagcc 720
ccccggggaa agagatctac cgcaagagca acatnttcgt gtacgaagtt gatggcaaag 780
accataagat tacttgtcag aancttgtgt ctgctgcc 818

<210> 897
<211> 810
<212> DNA
<213> Homo sapiens

<400> 897
tgctacaacc ccgggcagga agagctcgtc gcggtagcag cggtcgaagg ggaccaagct 60
ccagagggcg ggcgcccgag ccgtgcgggg agcgggcggg gcagccatgc tcctgtctgg 120
gggcgatcct tctcctgctc cccttacacg ccaacctatg cccacctggc agccgtggcc 180
tgcggcctgg agcgctttgg ccagtcccca ctcccagtgg ttttcctcac tcactgcaac 240
tggatcttca gcctcctgtg ggagctcctg cccctctgga gggctcgggg cttcctctcc 300
tctgatgggg ctccactccc tcacccaagc ctgctctcct acattatatc cctcacctct 360
ggcctctcat cccttccgtt tatctaccga acctcctacc ggggctctct gtttgctgtg 420
acagtggaca ccctggccaa gcagggtgcc cagggggtg ggcagtggtg gagtttgcca 480
aaggatgtgc cagcccctac agtgagtccc catgccatgg gcaaggggcc caatttgctg 540
gcattacagc tgagtgacag caccctggcc gacatcattg ccaggctgca ggctgggcag 600
aaactgtctg gctcctaccg tttagttctg cctttaactc actcagcctc gacaaggaga 660
gtggcctgct tatgttcaag ggagataaga agcccaaggt ctgggtagtc ccgacgcaac 720
ttcggaggga tctgattttc tctggcatga cattcccttg ggggcccacc agaggcccga 780
agagacctac aagaaattgc gtttgctngg 810

<210> 898
<211> 816
<212> DNA
<213> Homo sapiens

<400> 898
taagttaatt catactggag aaaaacccta caaatgtaaa gaatgtggaa aagcttttca 60

ccgatactca atccttagta cacataagaa aattcatact ggggagaaac cccacaaatg 120
tggagaatgc ggaaaagcct ttaactggtc ctcaactctt attacacata agataattca 180
cagtggagaa aaaccctaca aatatgaaga atgtggcaaa gcttttaacc agtcctcaca 240
ccttatgaga cataagaaaa ttcatagtaa agagaaacct tacaaatgtg aacagtgtgg 300
caaggtcttt aagaagtcct caactcttac tgcacataag atcattcata ctggagagaa 360
accttacaaa tgtgaggaat gtggcaaagg ttttagccaa ctctcaaacc ttactaaaca 420
caagaagatt catactagag agaaacccta caaacgtgaa gaatgtggca tatcttttaa 480
ccagttctca caacttgcta tacataagat gattcacact tgaatgaaac cctacaaatg 540
tgaacgatgt ggcagttgtt ttaactagtt ctcgaacttt actatgcata agaaaattca 600
aactggagag aaactctaca aatgtgaaga atgtggcaaa gcttttaacc aagtctcaac 660
acttactata cataagataa tttatactgg agcaaaacct tggaaattca aagaatgtgg 720
taaaacttat aatcctcaaa acttcttaca cctaaaattc atgcaggaga gaaccccaca 780
aatgtgaaaa atttggtaaa ttctttacaa atcttc 816

<210> 899
<211> 814
<212> DNA
<213> Homo sapiens

<400> 899
attctttcat tattatgaca taagctacct gggtccactt gtctttttt ttgtttgttt 60
cacagaaaag atgggttcga gttcagtggt cttcatcttc caagcatcat tactaaccaa 120
gtcagacgtt aacaaatttt tatgttagga aaaggaggaa tgttatagat acatagaaaa 180
ttgaagtaaa atgttttcat tttagcaagg atttagggtt ctaactaaaa ctcagaatct 240
ttattgagtt aagaaaagtt tctctacctt ggtttaatca atatttttgt aaaatcctat 300
tgttattaca aagaggacac ttcataggaa acatcttttt ctttagtcag gtttttaata 360
ttcaggggga aattgaaaga tatatatttt agtcgatttt tcaaaagggg aaaaaagtcc 420
aggtcagcat aagtcatttt gtgtatttca ctgaagttat aaggttttta taaatgttct 480
ttgaagggga aaaggcacaa gccaattttt cctatgatca aaaaattctt tctttcctct 540
gagtgagagt tatctatatc tgaggctaaa gtttaccttg ctttaataaa taatttgcca 600
catcattgca gaagaggtat cctcatgctg gggttaatag aatatgtcag tttatcactt 660
gtcgcttatt tagctttaaa ataaaaatta ataggcaaag caatggaata tttgcagttt 720
cacctaaaga gcagcataag gaggcgggaa tncaaagtga agttgtttga tatggnctac 780
ttctttttgg gaattcctgc cattaattaa agaa 814

<210> 900
<211> 819
<212> DNA
<213> Homo sapiens

<400> 900
tttttgtatg caccacgggc ggcggtggtc ggtgcgggag gagggagggg agcttgcggg 60
cccgagaggg ggcgacggcg gcggcggtgg cctgaggagg cccgagcggc ggcggtggcg 120
gcgaaggccg aggcgtctag gtgtttttgg aagagctgca gccctcttct cacagatgag 180
ctacgaggag atgatgacac tgactgagca gcacctggag tctcagaacg tcaccaaagg 240
tgcccgccac aagatagccc tgagcatcca gaagctgcgt gagagacaga gcgtcctcaa 300
gtccctagag aaggatgtgc tggaaggcgg gaacctacga aacgctctgc aggagctgca 360
gcagatcatc atcactccca tcaaggccta cagtgtcctc caggccaccg tggctgccgc 420

0956269.0002

caccaccacc cctactgcca aggatggggc cccgggggaa ccaccgctgc caggtgctga 480
gcctccccta gcccaccccg gcacagacaa aggcaccgag gccagagccg ggaccatgtg 540
acggcgctgg ccctcgccac cgccgtcccc cgaccctggc cccaggcccg gcaccatgat 600
gttccgagac caggtgggca tcctcgctgg ctggttcaaa ggctggaatg agtgtgagca 660
gacagtggcc ctnctgtcac tttcgaaacg ggtcacccgt acccaggccc gcttncttgc 720
agcttttgcc tggagcactc actggccgga cttgcaatga catncacctt gctggagtcg 780
gaggccaaca attgcttgcc atcgtcagcc agtggnaac 819

<210> 901
<211> 808
<212> DNA
<213> Homo sapiens

<400> 901
tttatttccc aactcacatt tgaggtttac aagttttgct tagtgtgctt ggtgctactc 60
gatcaattga gacacagttc ctctctggtg ggggttcatg tctgtgtcca gacatcttgt 120
tggctgtgct ctaatcacag tgatcatttt gagctgttgt taagaaaaaa catggcttcc 180
aacatagatg ccttgttttc tccaacaaat atttaagcta tattgccacc tccattttag 240
ttgtttccct ttagatctgg ctgtcataat ttatctgttt tgcttcatcc aagatgattg 300
ctgtaaacag gcatagggtg ctgtcttccc ttctaggcag cccagtaatt ccatctcaga 360
taatttctag ttacctgttg gatacttacg tgaaggtctg aataaattat gatcattacg 420
aacatgatac atgagtaatg aattaaaaga aatatttaaa agttttatat tttaagtctc 480
cagggagtaa ggcattgaga aaatggggta aatatttctt gtcgaagaga aatcaaatat 540
gggtgaatca ttgactactg ggagtccttg ggtttattct cagatctttc acttttggc 600
agtattctgg aagcaagtta gtgacttgac tgaagctcag tttgcacatc tgtgaagagg 660
acagtaattt ctggtctcat agggctgtta agagcatgga atggaatcca attcggcttc 720
atctatcttt attttcatgt aatctgtcag gcaccatgtt agtggaatgt cttggaaata 780
atgaatcgta tagccttggt ctcaagga 808

<210> 902
<211> 812
<212> DNA
<213> Homo sapiens

<400> 902
gtgtttatgt ataagattgg tcaatgggtt cagtccaatc ggttcatgtg tagtctgttt 60
tttaaaaatc tggaataagt ttgtgtgtat cctgctaaat gtcatcttat ttgctttagc 120
ccatcatccc attgtttggt tcccatgtct gccaccaaat gtctccttct tagattcata 180
tcatctgaaa atttgttaag cctgttaact ttgtattcat ccaaatccac ataaacatgt 240
tgaacaggat agagctgagg acagagccct gtggcatgct actaaagact ttcctccaga 300
ctgacatgga tcaagcattt ttggggtatg gtaactcaac cagttctgaa tccacttagt 360
atgataacac aatccacaat ttctcatgtt cttcatcgaa atatcattag agagagacag 420
agatatctag ttttcagtta gaaagataag attatagttt aatagagaga taagggctgg 480
agagaaattt ggaagcaatc tgtatcaggt tttgtcacct ggctaccaca gaatcccctg 540
gggaacttcc tggcttcacc tggagattct gattctgtag tctggagtgg gactaagaat 600
ctgtgttctt actaagttcc ccaggtgatt caaatgcagc tggtctgatg actgatgttg 660
ggggaccaca gatctgtatc actgggatag ctggggcaga gaggatggat aaagttctct 720
gaggagagtg tttcatgggg ccgggaggan ggctaaggat aacactgagg agtgcgcatg 780

0082705950

ggagaaaagg aaagagagcc naagaccagg ga 812

<210> 903
<211> 757
<212> DNA
<213> Homo sapiens

<400> 903
ttacagccaa gggtcaggat taggatgtaa actcctggga gtgtgtgtgt gttttatcct 60
ggtntctctc gtggtgacta attccttgct tgtgcattnc aagagctcaa aatatttttg 120
ctctttgcaa tggtctgaat gtattctccc aaaattcata tgttgagact taattgccaa 180
tgtggtagta atgcaataaa tcagattata tctttgtaag ctttaagaga taattaagtt 240
atgagggtag agccttcatg gaaggaatta aggctcttac aaatgggctt aagggagtgg 300
gttcattacc ttctatccct tcctccacgt gaggacacgg catttactcc ctctggagca 360
tgcagcaaca acataccatc ttggaagcag accacagtgc aatcaaattg gaacacaaga 420
ttaagaaact cactcaaaac cacacaccta catggaaatt gaacaacctg ctcctgaacg 480
acttctgggt aaataatgaa attaaggtan aaatcaagaa gttctttgaa accagtgagg 540
acaaagagac aatgtaccag aatctttggg atgcagttaa agcagtgttg agggaaattt 600
atagcaccga gtacccacat caaaaagtta gaaagatctc aaatcaacac cataacatca 660
caactaaaag aactagagaa ccaagagcaa gcaaacccca aagctagcag aagacaaatn 720
ntnaaaacat caggatcaga gcagaactga aggagat 757

<210> 904
<211> 729
<212> DNA
<213> Homo sapiens

<400> 904
gagaggccgc gtcctcagct ggtcctagac atgcgtggcg tcggggctgt ggcacggtcg 60
ggtccgggct tgaatgcacc aaggaaaggc catttgtggg gacatagcaa gaaggcagct 120
gtctgcaagc caggaggaga accctcacca gaaacctcac agaaatcggc caacaccctc 180
atctcgggct tccagcttca gagcaacgag aaaacaaatt tctgttgtgt cctggttccc 240
atttgtaatt ggcaccctaa tgaaaccgtt ttctgtagcc ctggaaatgg ctgaaaatga 300
ggggagggaa ataaagtgct ataattcaga gcatggagca caccttcctg gttcacctga 360
gctggattcg gagaggtaaa atggccatta cctcgtctaa gctgccactt acagacatct 420
gcttaggaat caggcactgg atcacagcca taccctactc attaacacct gggggacctc 480
aggcatgtca ctcgaccttc tgtgagcctc atctataata tgggaatgat atctcctact 540
tcactgaggt ttgtgaggac tggagatcga acatgtacct actgggccct ctagaaatgg 600
tagacatcat cactgctctt tcagacatgc agcaggaggg ggaaggtgcc atttaaagca 660
ataattgact gcanggttgg ttttttttctt gagacngagt ctcgctctgt aactcaagct 720
tggantgca 729

<210> 905
<211> 840
<212> DNA
<213> Homo sapiens

<400> 905

09/25/2003, EAST Version: 1.03.0002

gagagtgtaa aatagaacaa ctggctgggc gcggtggctc atgcctgtaa tcccagcact 60
ttgggggccc gaggcgggcg gatcacgggg tcatgagatc gagactatcc tggctatcat 120
ggtgaaaccc cgtttctact aaaaatccaa aaaaaaaaaa aaaaaaaaaa aaaaattagc 180
cgggtatggt ggcgggcgcc tgtagtccca actagtcggg aagctgaggc aggagaatgg 240
cgtgaacctg agaggtggag cttgcggtga gcccagatta cgccagtgca ctccagccca 300
gacgacagcg cgagactgtg tctcaaaaaa aaaaaaaaaa gtggaacaac cgctttgaaa 360
aataattcgc ctctcaataa ggccaacata catctaccct atagcacagc aatgtcaatt 420
ctagaaattt atccaacaaa aataaaagca tatatttaca caaaaacctg tttgagaatg 480
cacctaagtc ctttatttgt aaaagctaat tctgaaagca atctgaatat tcactaacag 540
actaatgaat aagcaaactc tgacaaatac gtaggcaact cagaaatatg aggaaaaata 600
aacaaatgat acacacaaat atttggctaa atctcaaata tgtatttatg ctaaagaaaa 660
taaaccagat acacacttac acacacatcc tgtaggaatt ctaattattg gaatttgaag 720
atgaacaaaa ttaatcaatc atgatagaaa ttntaagggt ttaatnccga gttatttggg 780
atgctgaagc cggagaatcg cttgaacccg ggaggcggan gttgcaggga cctacattgg 840

<210> 906
<211> 838
<212> DNA
<213> Homo sapiens

<400> 906
ggattgaatt gcactgaaat gaaataactg cttaggcatg tatctttaca tatgatccca 60
gtattgcaaa gtacaagaga gaaaaagtta ttttatagct aaaatcagga aattataaaa 120
acaggaaata ataacaagag ttttaatgaa agataagtga aaatgctgta acttttgtt 180
tgcatgtttg tctgtttaaa attgaggtat aattatgtaa actaaaaaat catctatttt 240
ggctggacgc agtggcttac gcctgtaatc ccagcacttt gggaggccga ggcgggcaga 300
tcacttgaga tcaggagttc gagaccagcc tgaccaacac agtgaaaccc catctctact 360
aaaaatacaa aaattagcag ggcgtggtgg cacacacttg caatcccatc tgctcaagag 420
gctgaggcat gagaactgct tgaacccaga ggcagaggtt gcagtgagcg gagaccatgc 480
cactgccctc cagtcagggt ggcagagcaa gactccgtct caaaaaaaaa agagagagaa 540
aatatatata tattttactg ttcaatttga tgagtttcag caattttata tatctttgtt 600
aaccaccatg caacacaaca tacagaacat ttccatcaca cttcaaaatt cccttgcgtc 660
tttttccagt cgatactgcc ccttcccact agtaatcatt cttctgactc ctctcactgt 720
agatttgctg tgcctgttca tgaatggaat catacaatat ttggtctttt gngtttggct 780
tctttcattc aatacagtgg tttttgagaa tcatctggtt ggtgcttata ttancagt 838

<210> 907
<211> 838
<212> DNA
<213> Homo sapiens

<400> 907
gaattatgcc aagcatttgt ataaggctaa tgtttagcag gaagcattca tgatcaacga 60
tttatcttga aaataagatt ccttcgtctg agggattgat ctgtatgtgt gtgtatattt 120
agtttctcat gacaagaaaa atggtattca gtcagctata atatcagtat ctataatcta 180
tttctcggta aacatatttg tacatataca cgtttatttt tctaatttaa cagatgtcct 240
tggtatttat ttgcattttg tcatagcatt cttgctcata tgacctgcac tccagcctgg 300
gtgacagagc cagacttatc ccaaaaaaat aaatgtacag tttacagaga aatactagac 360

0050-0050-0050

acaggtaagt tgaaaataaa tagattgaaa agcatatttt aagaaaacag taaaagattg 420
aagtgactat attaatatca ggtaaaatag attgcaacag aaaaattttg tatcaggtaa 480
tgtggattct tcatagtaac aaaagttcat caggaggaca tatcaatcat aagtgtatat 540
ttatttaatg cagaatgact taatacatga aaactgacta aaggcagaaa tagttccaca 600
atcagattga gattttaatg taactctttc agcaactaat aaaaaaaaat tactcagaag 660
atttggaatt tattattagc cattcttgat catattgatg gttattaaac gttatatctt 720
acagctagag aattctcatt cttttcacat gcatatggta cattcaccca aaaccagagc 780
atgctgggct ttgacatgct gggccataag gtccaaagga ttaagattat ntngagtn 838

<210> 908
<211> 786
<212> DNA
<213> Homo sapiens

<400> 908
tgtccagtct ggtctcgaac tcctgacctc aagtgctcca cctgcctcag ccttccaaag 60
tgctgggatt acaggcgtga gccactgcac ccggctagaa ctcactttct ccaaatccct 120
ctgcttcgaa tttcaccgtc ttcagctctt tctagttctg ggcctcacca gcctctcatt 180
ctgcctgttt tcaaacctta cgatccccaa aaattgtctg gttctgggcc tctaactccc 240
tctggctcta tagtctatga ctaccagatt cttttggttc tagaattcac taacttcctc 300
tggttctaga cctcttccta taaattaatc cctcttgttt tagatctcac accctccaac 360
gccctctggt tccagatctt atattcagtg atttcctctg gttctggacc ccacaactcc 420
aagcttccta ttggttccag ttctcctgat cggtaataca tttggttcca aatccagacc 480
tcttaatctc tctcttttt ttttttttt ttttgagaca gagtcccact ctgtcaccca 540
ggctggagta cagtggctca atctcggctc actgcagcct ccacctcctg ggttcaagca 600
attcttgggc ctcagcctcc caaatagctg ggattacagg catgtgccgn cacgcccagc 660
taagttttat atttttagta gagacagtgt ttcaccatgt tggccaggct ggncttgaac 720
ttccgaccta actggatcca cccggcttaa gcttccaaag tgctgaaant acnggagtga 780
gcctgg 786

<210> 909
<211> 836
<212> DNA
<213> Homo sapiens

<400> 909
caagatgtct gctcaccaaa ctcacttgct tttaatgctt aggaatatgt atattccagt 60
attccttgta tgaaaataat tagtaatgtc agacattgtt gtaacactgt actaagtaga 120
agtctagggt tagcttgaat gaatgttaac tttctctgtg aattttgact gcttacaatt 180
gctggtacct ggtagcattt attttccctc aagtacctag taaccttatg aaggtaggga 240
gggtagatgc tctaccacat tccttcagct gtattgagtg ttccatttgc ttatcaattt 300
agagctcttc tatggaaaga gggtgaaaat ctgttttgtg cctctttttt ttgtatgtaa 360
atgtgcaatt atactggatt ttctcttgta aaaaacacta caattctttt actgaagctc 420
ctaaactgcc atttgcctga ctccagcaat taattctgcg gtgactcatt gggcttccag 480
tacttctgtt gattagatat ggtcccaaaa gaaagagcaa aatggaaaat gcgatccatg 540
tcaccaaata taattgctac aagtaacatg aaatacagct caccaaaaca ctaaactttg 600
ctcttgagca attatatagt ttgatgtcct tttaaaaaat aagaaaagct aggttttatc 660
atactaaaat tttattttgn atatgatgnt tggtttttta aacttactaa cataaggatt 720

US 2005/0059020 A1

tcctttaata ttccaaatca agtcttgaaa cagtattcca acatgaaatc ttatctcctt 780
gcttttaaac ttaangctat ttactatcta aaggactttt ctatggnaag cccggg 836

<210> 910
<211> 832
<212> DNA
<213> Homo sapiens

<400> 910
tcttaatttt acaagcgagg aaatgagagt gtttcttgta ggggtgtagt gagaatttaa 60
taaaacagtt taaggaaaga aaacaaaagg tagtattgct gcactttcta gatggtaaaa 120
agcaaaccac catgtctgtt taatatatat cacctgctgg tccctcggtc tagcaggctg 180
aactgtgtgc ctgggaattt tcttctcgct gtgtgcaccc ctttacgtca cagggtggac 240
tctcttcaga gtcctagtgg agcagctggc caggctgaca tgatctgaca acattgtagg 300
ttaccactac catctctcac cgtctcactt tcttcctagg ggtctcctgc tgccagctaa 360
gtgtgggaga acttgtgcac gtatctcccc tccgaatccc aacgatgggt aacgccagct 420
ttggctccaa ggaacagaag ctgctgaagc ggttgcggct tctgcccgcc ctgcttatcc 480
tccgcgcctt caagccccac aggaagatca gagattaccg cgtcgtggta gtcggcaccg 540
ctggtgtggg gaaaagtacg ctgctgcaca agtgggcnag cggcaacttc cgtcatgagt 600
acctgccgac cattgaaaat acctactgcc agttgctggg ctgcagccac ggtgtgcttt 660
ccctgcacat accgcagcaa gagtggcgac ggcaaccgcg ctctgcancg ccacgttata 720
cccgggccac gccttcgtcc tggnctactc agtcaccaag aaggaaaccc tggaagagct 780
gaaggccttc tatgaagctg atctgcaaga atcaaaggta ccaaccctgc at 832

<210> 911
<211> 830
<212> DNA
<213> Homo sapiens

<400> 911
cacatttctc agaagcacac cattctgctc tgcaaatatc tttgtaggag aaattggaaa 60
ttgacaaata cattcactta aattttgctt tgtgctgaaa attgaggaaa aatttaaatt 120
ggccatttgc acattattag tagtaaatca acccatgtaa agatggaaac tatggtcatt 180
tcaaaagtga ttttcatttt tggtaagtgg gtcctacagc attatgtcct catatttgtg 240
agttattgca ccctggctag tattttcatt gctgccttat gtttatttgc tgcaaatccc 300
tctcaaaact gtgtgcattg gttataatgc taatgaggaa gataattcaa actaaaattc 360
aaatcataat agctttagga ttttagagag atagtataag gttaactcat tttcagcatg 420
tgcagactta attatgcatg ggatgaaata cagtaggcaa gtctcagcct aataataaat 480
aattgaaaaa tataacctgt acaatattta aactggcttt aatattactt aattatcaca 540
ttattctttt tcattcatca tttcttttcc aattctctca ccctaccatt aagacagtaa 600
tgattttata agatgtagat ccggtattaa gttttgcttg ctctactgnc tcaaattatt 660
ataacttctt tggtattact ggcttggttc tggttgnctt tcacaagtct ttgactcagt 720
agtagtagca aatgacagag atcttcaagt gtcttaatgc ttgncaatat aatattattc 780
cacttgatag gatgtgtccc cagatncatt nccgagttta atcggtggtc 830

<210> 912
<211> 475
<212> DNA

US005750350-020300

<213> Homo sapiens

<400> 912
ataatgtgct gttcttgtta ttactgctat tctgtgtcat cactctattc cttctctact 60
ggatcattct catcaaccta ggatctctct ttttttttg gagagagggt ctcactctgt 120
cactcaggct ggagtgcagt ggtgtgatca tagctcactg cagcctcgaa ctcctggcct 180
caatccatcc tcctgcctca gcctccagag tagctgggac cgcaggtgta caccaccatg 240
cccacctaat tttttttaa aaaaaggcca ggcatggtgg ctcacacttg tggtcccagc 300
actttgggtg gccgaggcag gcagatcatg aggtcagaag ctcgagacca gcctgaccaa 360
catggtgaaa ccccgtctct actaaaaata gaaaaattag ccggtcatgg tggcacacgc 420
ctgtaatcac ggctactcag gaggctgang cacngagaat cgcttgaacc tgnga 475

<210> 913
<211> 740
<212> DNA
<213> Homo sapiens

<400> 913
cactccatgc cctgtgaatg aaacagatgg ctttcctgac ctctaatcaa agcctaccca 60
tattgatctg ttccttctag tccttagtat gtgctacctc ttcttttctg tgccgaagtg 120
gtgagtagcc aatagttatt tcctctacca gtggtatttt actaggcaat tattggaaat 180
agaatgctgc cacccggtag tgataaatct aacatttctc gtagaagata taggtggatt 240
agttactccc tggggcaata tggattagtt cctgtgtcct tcaaattgca ctcaccaagc 300
ctgagccatg ctttactgct gaaacatcct agcagagaga agtaagtggc tcagggtggc 360
cctcttgtgg tggacaagca ttcccaggac tctgctggtc actaaagaaa aggtagccct 420
caaacagtcc tttttattat ttttgatttt attgtcatca ttatcagtat cctccaagtc 480
aagaatccgt aaataataca atgagatgct aaaaacaagt ttgaaaaatg tgagcaaggt 540
ctgtttctag ttttaaaata gcccacattt ctcaaatatg ttactgtttg gttcagaatt 600
tggaccacta cctaaaaaga acagatcatt caaacgtgtc ttttgaatat ttctgtcatc 660
tggaaatgcc tgcgcataag ccccatgacg gatgtgcttg gctaaaaaac ctgttgacgn 720
tttggggntt ttcccccccc 740

<210> 914
<211> 742
<212> DNA
<213> Homo sapiens

<400> 914
tagtaaagta aaaggagcta tcttcttctg ttccataaat gtttaatgag gatgttagat 60
tatctagggg gatagtgaga tgaataagat agaggttttg aactcaaggt gcttatgtgc 120
taattatgtt atgttgcaag taatattaaa atttttcatt gttttgatat ttaaattgct 180
tcatcattaa tttttcatca ctaaatagtt tttctttgcc agagggagac tgatcaggaa 240
tgggggctag agcacatgac atatgttctc tgtagcgata gctattggaa tttcaaaatt 300
tattttactt gaaaacacaa taaatggtag ttgctgctgc tattgttatt tggagcctaa 360
aacagaataa agaactgatc cttaggattt tctagtcata ccagtggaat gagccacatg 420
ttttagggag ctcacttgac ataaagcaaa gttattactt tgaataatgg ttgccatata 480
gttgtgagtg gacacactga tagttaaagt agctgcaaat gcatttgtct tattttattt 540
gtggtatttt ccttctttgt tacttctaga cccttgctaa aggagaaaat ctagaaaact 600

0950304-0950600

tagagaaata tatagtgatt aaataaatag gtaatagtta atgagtatta aagctcttct 660
gctttcagta ttaaaatatt ggatttttgg aaatgttctt aaattgacag agtaaaagag 720
gttttnaaaa aaaatttttt tt 742

<210> 915
<211> 721
<212> DNA
<213> Homo sapiens

<400> 915
caatggacag gagtgggctc cctgaccttc aaggaagatt tgagctatct gggaaaaaca 60
gacagtatcc actggatgca ttggaacccc aacccagcat tggggatatt aaggacatta 120
aaaaagcagc caagtctatg ctagacccag cacataaatc tcatttccac cctgtgaccc 180
caagtttagt attcttgtgt ttcatatttg atgggttaca ccaggcatta ctgagtgttg 240
gtgtgagcaa gaggtctaat actgtggttg ggaatgagaa cgaggaaagg ggtactcctt 300
atgctagcag attcaaagat atgcctaact ttattgccct tgagaagtca tcagttctcc 360
gccactgctg tgacctttg ataggcattg cggctggatc aagtgataag atttgcacca 420
gcagtctcca agttcagaga cgattcaagg caatgatggc atctattgga agactttcac 480
atggtgagag tgctgatctg ctaatcagct gcaatgcaga atcagccata ggttggatca 540
gctcaagacc atgggttgga gaattaatgt tcacacttct atttggagac tttgaatccc 600
ctctacacaa gctacgcaag tcaagttagt tgccaagaaa gcacagatga caacctatta 660
atgctgtgag aatgtttcta gatcagtgca tggatggctn cattgctcta cnggccattg 720
n 721

<210> 916
<211> 728
<212> DNA
<213> Homo sapiens

<400> 916
tctcagttga atgcaccaac tggtttgagt cctgtgagca ttcagtcagt tgaaattaaa 60
gattcctcat ttctcctgat ttctattctt gtctcaatct taaatttaga gaccagttgt 120
ttttatgata tcagccattt gatttttttc attttctatt taagaaatat gaagaaaaaa 180
tacaccaaga tggtcaaatt actacacaaa tcagcaccag cacagtctga tagctgcaaa 240
tgtccattca tctgctgtgt atgtatatcc agaatcagcg taggaagtcg ttcaggatat 300
cagtatataa tgcacagaag tgtgggttgt ttgaaagcca aacaggagaa tcacatgaat 360
ccaggaagtg gaggttgcaa tgagccgaaa tcctgccact gcattctagc ctgggcacag 420
agcaagactc catctcaaaa aacaaaatgg tccagcaagg tggctcacgc ctgtaatccc 480
agcactttgg gaggctgagg caggcggatg acaaggtcaa gagatcgaga ccttcctggc 540
caacatggtg caaccccatc tctactaaaa atacaaaatt tagctgggca tggtggcacg 600
cacttgtagt cccagctact tgagaggctg aggcaggaga atcgcttgaa ccggaaggca 660
gaggttgcag tgagctgaga tgcgccattg cactccagcc tggcgacaga gcgaaaatna 720
aantttn 728

<210> 917
<211> 711
<212> DNA
<213> Homo sapiens

0050203-0050728

<400> 917
acacttccat gcacatttca agaatgcaga tggacacctc tccctttggt gctactgtct 60
gagggtgtaa gattttaaag tgagcatctg gcggtagtag cattttaga tatattcttg 120
gctaagtttc tcattgcagt gcctttcttt cctgccagta gtttcacagc tatttatcca 180
gcttggagaa ccttccctaa tttcatatct tctagccaag tttttacatg tctgtcacca 240
caacataaac atgtgagttg aataactttt aaaagcagag tctgtctgta aacaagtttt 300
tgccttctac tttcaattgc cttcttagat gagctaagtg ttgaacggcc ggctcagtgc 360
tgtttttggg actatggaat gcatcttcct ccaccactcc cctcatttaa tgaaaggact 420
ttcttctctc tccatctagc acagtaatcg ctaatccctt agacaatgtt ttcccaaaat 480
ttcaggcagc tattctatca acaaactgat aattaaactt gtgtcacatc tttgatattc 540
tgttgtatta attctgttgg ggtagtcttt aatcttcgtg aaacttttc tttccatatt 600
aggaaatatt ttcctaatat ctctaaagcc taacttgtcc atctgactta ctgnctgaat 660
cttcccaact tatgcatgcc cacttttatt ggttaaattt gnttcttttt n 711

<210> 918
<211> 741
<212> DNA
<213> Homo sapiens

<400> 918
ggtagtggct gctgtgaccg tctcccagca tatcctaaga atggaacttt ctcaggattc 60
ttcatggctc atggaagaaa acatataaga gcatgcagat cctgtgtatc tacggcaggg 120
aacattagct ccctgctcag cctccatgga accacaggat tgtattgtat attcctagga 180
gtgaaactgc tgggtcatat ggtatctgtg tcatctgttt gaggaaccac cagacggttt 240
ttctaaatgc agcatttttc tgttcctaac aacagcatat gggggttctg atttctccac 300
atcctcacca atgcttgtta ttgtttgact ttttgattct agccacccca gtggatgtga 360
actgatatct cactgtggtt ttgatgtaca tttctgtatt agtcagctag ggctatcata 420
ataaaatacc ataggctggg tagtttaaac aacagaaatt ctcatgattc tggaggctgg 480
gagtccaaaa tgaaagtact aataagttgg tttctggtga agcgtctctt cctggcttga 540
agacagccac tttcttgctg tgtgtccatg tggcctttcc tctgtgcaca tgcagtggga 600
gagagagaat actctggtgt ttcttccgct tcttataaag atatcagtac tactggatta 660
gggtcctttc ctgtgacctc atttttaccc ttttgcctc cttgaangcc ttgtctgcaa 720
aaaaaatttt ttancccccc c 741

<210> 919
<211> 744
<212> DNA
<213> Homo sapiens

<400> 919
aagcttttaa taaggagaag gaagagctga agaaatggca cagtgttctt agaatgacag 60
atagtcctat ggggactgca gcataaaagt gaaaaatgta taagataaac ctttagatgg 120
taagcaaggc aagattctca aattctgtat gaatcagctc cacctccgcc ccatggacag 180
tagatgaccg ttaatggctt ttaaggaaag atgcaacctg gaaataaaga aaaaaaactt 240
gttttagaat ggtaaccact ggcaatatga agaataatta gactaaagaa gagaggtagg 300
ataatcatgg gcattggcag tggaattgaa agagtaattt cagaagcaga atggtcagat 360
gttggaggtg attggttata gagtttaaga attgtactga ttttctattg tgtaacaaac 420

US6309850-20011030

tacccaaaa cttaatggct taaagcaact attatttctc ctgattctgt ggttgactgg 480
atggtcgtct gctgctcttg cttagactta ggcatctgca tttagctgag ggttcagcca 540
gggctggaca tcctttaatg gcctcattcc catgtctggg gcctcaggtc agatagctgg 600
gactaccggg tctcactcca gaagaggctt cttcagagca tggtagtctt ggggttctaa 660
gagaatgaga gtagaagctg caaaacctct tgaaactggg gcttgggagt cacacatgac 720
ttttttttnc ccccttttn cccn 744

<210> 920
<211> 742
<212> DNA
<213> Homo sapiens

<400> 920
ctacaaagta gttcctgttt cgctctcaga ggtttattta ctccagtgca atatgaagtt 60
cccaacccag tcttcctttg accgggtgat gcctctcctg aatgtggcag tggcctctct 120
ccacccactg actgatgagc atatcttcca ggccatcaat gctgggagca ttgaaggcac 180
actagaatgg gaggattttc agcagagaat ggagaacctc tccatgttcc taatcaagcg 240
cagagacatg actcgtatgt ttgtacatcc ttcttttcga gaatggctta tctggagaga 300
agaaggagag aaaaccaaat ttctctgtga tccgaggagt ggtcacacgt tacttgcctt 360
ctggttttcc cgccaagagg gaaaactaaa ccgacagcag actattgaac tgggacatca 420
catcctcaaa gcacacattt ttaagggttt gagtaaaaaa gttggtgtat catcctccat 480
cctccaaggt ctctggatct cttatagcac agaaggtctt tccatggcac tggcgtcttt 540
acgaaatctc tacactccaa atataaaggt cagccgactg ctgattttgg gaggtgccaa 600
tattaattac cggacagagg ttttaaataa tgctccaatt ctatgtgttc agtcccatct 660
tggttacaca gaaatggtag ccctgctgct ggagttcggg gccacgtgga tgcctcttcc 720
tttnggggna aaaaaaaaaa aa 742

<210> 921
<211> 745
<212> DNA
<213> Homo sapiens

<400> 921
ccgcaaaatg ccgtgactgg gtagcttata aacaaaagta atttgtcacc attcttgagt 60
ctcagaagtc cactcaaggc acagactgtg cctggtgagg gcccactttc aggttcataa 120
gtgatacttg gctatatcct cacatggtgg aaagaacagg acagcactct ggagtctctt 180
ttatcagggc actaatcaca ttcatgaggg ctctaccttc ctaattgaat catagcccca 240
cctcctaata ctatcatatt ggtaattaga cttccacata tgaattttgt gggggacaca 300
aacattcgga gtatagcaca ggttcacagg aaaaacgtaa ggaaaagagt actcagaata 360
tagggtgata gatacatata attttaaggt aattcaaagg agggagtgat taacttgtga 420
ctgaatcaac aaagactttt tgatgagttt gtagctgagg ttaagcataa aacagttttt 480
tagtggaaaa tttgaagcat gtcattgttg ggcagaggaa ttgacatgta ccagaaaatc 540
agaagtatga aacatcagat gctaacagaa agagacaggt acatcaatat ttgtaaagca 600
aagaaatgag gatgaaaatc agtaggaaca agccatatta agaaagtata ttgactattt 660
taaagtaaca gactgtgtgt tcatttattc ttttggtcat tcttggagtt tcttattcac 720
atttnaaaaa annggggggg gggga 745

<210> 922

09529890.030808

0508150.00700

<211> 739
<212> DNA
<213> Homo sapiens

<400> 922
gcacacatat gtctaggata gccagcattc aggaaaattg ctgtgaacct cctgttttta 60
attttaatat agaaaaagtc tttcaggttt gtgacacgaa gacagattta gcttcccact 120
tgtcagcaaa tttgtaaaaa cctcaaaaca aatgaatatt tggaattcac tctaagagat 180
acaaatcctg aatttctaac tatcttctca aatattactg aggccagcaa gatgcaagtg 240
ttctacaaaa taatgaactg ttctaagtga cagtgttgat gctggaagtg gaatgttatg 300
ttttcgctca gctgtattca ttcagaaagt ttttcttgaa catctgccac atgaggtgca 360
gagaatactg ccaggtgcta gtttttccag tatttgactt ctgattacta tttccttttc 420
tcatctttag tttttcaaga ttttgcttta ccaaaatagt aaagccttta tcatcagctt 480
atattgaata atgttgtaat tggtttcaat caaagtttct cctcaggtac ttgggggccc 540
ctagccttct aaggaactcc caggcaccta cttaacaagg ccagctacac actcagtatg 600
tgataagccc catgatggat gaaggttaga attcaaagac ctggttggag tcctagatgt 660
ggagacagga tgatcaggtc acacttgtta gatgactaac actatcagta gaagcttncc 720
ctttttttg ggggggggga 739

<210> 923
<211> 727
<212> DNA
<213> Homo sapiens

<400> 923
tttctaactt aaaagatttt tctggagaag atagatttaa gaatgttgaa ttactccaac 60
aattgttttg aaccaagata attttttttc atatcatgtg aggcttcaag gatttgaggc 120
tacacatgtt agattccaaa ttcttttaaa atgctttcct gatttaataa caaacagcat 180
tttccttctt tttaatatgt ctatcttgag atatggttta aatgaaacag atcttgaaag 240
ggtctctgag aaggaaattt tcatggcatg tcctctagca ccagacttga ctgcaccagg 300
tcaggggata aacagcactt tgcagatgag tgtgctttat tttgaggccc tcagacactt 360
catgagaccc ctgtattctg gaattcactg cctcactact gctgatatac acaatgctat 420
gaaaaatggg gaaccattac tcatatattt gctaattatg atacctctca cctcttcccc 480
tcttttccca tcctcttctc ttttccccca accaaataaa aaactaaaac aaatacatat 540
atttgtttta ttttttgctt atttagtttt actgtcttat tccttaatgt gtgcacctgt 600
agtctcagct actctggagg tttaggcagg aggatcactt gagcccagga gttctgggct 660
gtagtgcact gtgctgatcc actaagttct gcatcagtat ggtgacctcc tgggagttgg 720
ggggnnn 727

<210> 924
<211> 743
<212> DNA
<213> Homo sapiens

<400> 924
attgtaccca gagtgcagag ccgcctttcc agcatgcagg ggctgctcag cgtttagtca 60
catcaagaaa tagaacagaa ttcagccatg gccccaagaa agagaggtgg acgaggtatt 120
tcattcatct tttgctgttt ccgaaataat gatcacccag aaatcacgta tcggctgcga 180

aatgatagca actttgcgct tcaggccatg gaaccagcat tgcccatgcc ccctgtggag 240
gagctggatg tcatgttcag taaagcattc ctcagcccac aaatgccctg aaatccttca 300
actggtctaa actgcccgag aacaaactgg aaggaacagt atggaccgaa attgatgata 360
caaaagtctt caaaattcta gatcttgaag acctggaaag aaccttctct gcctatcaaa 420
gacagcagga tttctttgtg aacagtaact ccaagcagaa agaagcagat gccattgatg 480
acactctgag ttccaaactt aaagttaaag agctttcggt gattgatggt cggagagctc 540
agaattgcaa catccttcta tcgaggttga aattatccaa tgacgaaatc aaacgggcaa 600
ttctaacaat ggacgaacag gaagatctgc ccaaggacat gttggaacag ctcttgaaat 660
ttgttcctga aaaaaagtga cattgaccta ttggaggaac ataaacacga actggatcgg 720
gggggnaaaa tttttgnggg ggg 743

<210> 925
<211> 721
<212> DNA
<213> Homo sapiens

<400> 925
tctattgtgc ggctgcagga ggtgtcgagc ggcgttattt ttttttgcgg tttgcctttt 60
ttttttcttt ttttttttg gaaccgcggt tgtttaaaag cctgagggaa cctggagggg 120
ggctcccact ctctaccttc tttcctccga gtttgtgact ccgagatgga caaagtgtgt 180
gctgtttttg gaggctcccg aggcattggc agagctgtgg cccagttaat ggcccggaaa 240
ggctaccgac tggcggtcat tgccagaaac ctggaagggg ccaaagccgc cgccggtgac 300
ctcggcggag atcatttggc atttagctgt gatgttgcta aagaacatga tgttcaaaat 360
acatttgaag agatggagaa acatttaggt cgagtaaatt tcttggtaaa tgcagctggt 420
attaacaggg atggtcttct agtaagaaca aaaactgaag atatggtatc tcagcttcat 480
actaacctct tgggttccat gctgacctgt aaagctgcca tgaggactat gattcaacaa 540
cagggagggt ctattgttaa tgtaggaagc attgttggct taaaaggcaa ctctggccag 600
tccgtttaca gtgccagtaa aggaggatta gttggatttt cacgtgctct tgctaaagag 660
gtagcaagaa agaaaattag agtgaatgta nttgcaccag gttagtgaaa actttatttt 720
t 721

<210> 926
<211> 813
<212> DNA
<213> Homo sapiens

<400> 926
tcatcaatgg atgaatggat tttttaaaat gtgatacata catatatata tacatacata 60
catatatata tatgcacaat ggaataatat tcagccataa aaaataatga aatcttgtca 120
tttgcaacaa catgaataaa cctagagaca ctatgttaag tgaaataaac tgagcatagg 180
acaaatacca cattatctca ttcatatgag gaattttaaa aaattgatgt catagaagta 240
gggagtagaa tactggttgc cagaggttgg agaaagcaga gcggcagggg agatagagat 300
aaacggttgg tcaacaggta caaagtaagc tacacttaga taggaggaac aagttctgtt 360
gttctattgc acagtaggac gactatagtt agtgataatg tatatttcaa aatagctaga 420
agagaggatt tttaatgttt tcaccacaat gaaatgataa tgtttgaggt gaggaatttg 480
ctaattaccc tgatttgatc attacacaat gtatacatgc attgaaacag tatactcctt 540
aagtacatat gattgttatg tcaattaaaa acaaaataaa actaaagaag aaattgctaa 600
gggagtaaat tccaaatgtt ctcaccacaa aaataagtat ttgaggtgat ggatatgaca 660

09509450.0200

attagctgga ttccattatt ccacattgta ttcataaatc ataacatcct gtaccccata 720
aatatataca attataattt gcaatttaca atttaaaata aaaattaaaa aagaattgat 780
ggttctgtaa ataaattagt taattcaaaa can 813

<210> 927
<211> 811
<212> DNA
<213> Homo sapiens

<400> 927
ataccaatgt caatgcagat gtgcaaaagt tgcagcaaca gttacaagac attaaagagc 60
agacaatgtg ccctgtgtgt ctagatcgtc tgaagaatat gattttcctt tgtggtcacg 120
gaacctgtca actctgtgga gaccgcatga gtgaatgtcc tatctgtcgc aaggctattg 180
aacgaaggat tcttttgtat taactaagac acatggtgta ttttgttagc taatgtatct 240
agtcatgaga tcttaatagg cttttgatct agttggaagt tctgatgagt taatttctaa 300
tatcatagtt tctttactag agtataattg ggctgtaaat gtaccagaac aaaaaaccct 360
acaaaatggt gttggaaatt gtgtttcttg tttttgtttt aaatttgaaa catcaaattc 420
atgtaactca taggataatt tacctttggc ttctaagagg aaagtccttt aaggatatcc 480
ttttttaaaa aattgcattt ttctcttata atttgtaaat ttgttggatc tcaaaagaca 540
taattctttg tgatcagtta tccttcattt catcgtggtt ttacacagtg agttgataac 600
gggttctctg agaagtcatg catcaaataa aagaggcagg tcaaacaatt atgtcacatg 660
gtaaattata aaatgacagt acaagttcca gatagttaag ggaataccga anggatgatt 720
ctttttttaa gataacagga agttacccac atgtttggtt ctgaattcnt agagtaaatg 780
gaacatagaa tgagggaata atgactttgc n 811

<210> 928
<211> 813
<212> DNA
<213> Homo sapiens

<400> 928
tgttctggaa gatagtccag ctggcaaaaa tggaaccttg aaacctggag atagaatcgt 60
agaggtggat ggaatggacc tcagagatgc aagccatgaa caagctgtgg aagccattcg 120
gaaagcaggc aaccctgtag tctttatggt acagagcatt ataaacagac caagggcacc 180
cagtcagtca gagtcagagc cagagaaggc tccattgtgc agtgtgcccc cacccctctc 240
ttcagccttt gccgaaatgg gtagtgatca cacacagtca tctgcaagca aaatctcaca 300
agatgtggac aaagaggatg agtttggtta cagctggaaa aatatcagag agcgttatgg 360
aaccctaaca ggcgagctgc atatgattga actggagaaa ggtcatagtg gtttgggcct 420
aagtcttgct gggaacaaag accgatccag gatgagtgtc ttcatagtgg ggattgatcc 480
aaatggagct gcaggaaaag atggtcgatt gcaaattgca gatgagcttc tagagatcaa 540
tggtcagatt ttatatggaa gaagtcatca gaatgcctca tcaatcatta aatgtgcccc 600
ttctaaagtg aaaataattt ttatcagaaa taaagatgca gtgaatcaga tggccgtatg 660
tcctggaaat gcagtagaac ctttgccttc taactcagaa aatcttcaaa ataaggagac 720
agagcccact ggtactactt ctgatgcact gtggacctca gttcatttaa aaatgtgcaa 780
catctggagc tttcccagga tcaagggggn ttg 813

<210> 929
<211> 814

0305205.0004000

<212> DNA
<213> Homo sapiens

<400> 929
acagcgctaa aaaggcctgg aggttcggac tgggtggagc tcaacacagt gtggcaaagt 60
ggctgcagcc agactgcctc tctagattcc tcttcactgg gaagggcatc tctgaaagaa 120
aggcaccagc cccagtcaag gggttataga taaaactccc atctcactgg accagcgtat 180
ctgggggaag gggcggctgt gggcacaact tcagcggact ttaaacgttc ctgcctgctg 240
actctgaaga gagcagcaga tcctgacaag gagggctctc ccagcacagc gcttgagctc 300
tgctaaggga cagactgcct cctcaactgg gtccctgacc tccatacctc ctgatgggga 360
gagacctccc aacagcgatt gtcagacacc tcatgcagga gagctctggc tggcatcagc 420
ctggtgcccc tctgggacaa agcttccaga agaaggagca acagcaatct ttgctgttct 480
gcagcctaca ctagtaatac ccaggcacat aaggtctgga atggacctcc agcaaactgc 540
agcagacctg cagaagacgg gcatgactgt tagaagaaaa agtaacaaac agaaagcagt 600
aacatcatca acataaggaa ccccccataca gaaacaccat ccaaagatca aaggtaggta 660
aatccataaa gatgaggaca aaccagcaca aaaacgctga aaattncaaa aaccagaatg 720
cctcttctcc tncaaatgat tgcaacttct ctctacaagg gcacaaaact agacagagaa 780
tgagtttgat gatttgacag acgtaggctt taaa 814

<210> 930
<211> 816
<212> DNA
<213> Homo sapiens

<400> 930
cgatatgcca cacagtactt ccaggtggag ggataccgcc aatgacaatg agggccactc 60
ggatggcctg gcaagaagag ggagaggcga gagttcaagt ggctatcccg agccaaagta 120
ccctgaagac aaacgggaag cgaggagtga ccaagtgaaa ccagaaaagg tgccgagacg 180
acgacgcacc atggccgacc ctgacttctg gacgcacagt gatgattact acaaatactg 240
cgacgaagac tctgacagtg acaaagagtg gattgctgct ctgcgtcgga aatatcgaag 300
ccgagagcaa accctgtcct ccagtggtga aagctgggag actctgccgg ggaaagaaga 360
gcgggaacct ccacaggcta aggtgagtgc cagcactggc accagccctg gccccggtgc 420
tagtgccagt gccggggctg gcgccggggc cagtgctggc agcaatggca gcaattacct 480
tgaagaagtt cgagaaccat cccttcagga agagcaggca tccctggaag aaggagaaat 540
tccttggctc cagtaccatg agaatgacag tagcagtgag ggggataatg attctggtca 600
cgagttgatg caacctgggg tattcatgct ggatggaaac aacaaccttg aagatgactc 660
cagtgtgagc gaagacctag aagtggattg gagcctcttt gatggatttg cagatgggtt 720
taggaatggc tgaagccatt tcctatgtgg accctnagtt cctnacctac atggcacttg 780
aagaacgcct gggcccaggc aatggaaact tgcctt 816

<210> 931
<211> 656
<212> DNA
<213> Homo sapiens

<400> 931
agagaatccc ggctcctgct gcaataagag gctgttctgg aagctctggg gttcgggtct 60
ttgtccctgc aggttggtgg tgggatgaaa caggagacag cgggcttgga ggcaccactg 120

0962345-0700

ggaggcggga ccgacgtgcc acagttggtg ggagcagagg cgtgggcaca tattgagggg 180
gcggggcctg acgcacaggt gcgggccgcg gaccccggct ggggctgaaa gggcggcgct 240
gctgggaggg cgggcgtgga atccccgcac tgaagccagt tccagaggcg ccaaagcggc 300
tgggcgaagc cggtggcgcg ggaaaggggt ctgcagaccg cccgagcctg ggaggtctgc 360
ggggaggctg cgctccggca ctgcatggac cttgtgcagc attccgtgca cgccattgta 420
agatcagcat atggacagtt ctagggagat gcctctcatt cccagaagag gactacgaaa 480
cgcgtgcaca ccgtcctact gcctggcgag tgtattagta gggtttcccg gtgtctttca 540
gcaagtgaag attctccttg tgtcccattc ctacgcatcc catccatgtt ttagtttata 600
ggagtttata aaagatctgg tttctangga agttggggat ccanatgatg gncctg 656

<210> 932
<211> 810
<212> DNA
<213> Homo sapiens

<400> 932
taaaatactt tcagttttca cattttgaca actggcaatc ttgaatggtc aaaaatgaat 60
tatctgtgtt ataccatttg ggccttgttt gcttgttttt gcctctggtt cttacattta 120
tcattaaaat ctccactgta gaaagcagtt gggtgaagca aggaggaaat tgaaagtcaa 180
tccatatgga tgttgcttag cagcttttgt aaagtacaat aacaaatctc cctcacaaat 240
gagagaaact aaaaggactt gttaaataaa actccaaact taagtctgct tctaggaatt 300
gtatttattt atcgtttcaa gtatatcttt tcatactgac tatgagtaaa gcaaagcaat 360
agattgtttg aaagtctata gtttatgatg agctttgtct tttcttttct tcttacttca 420
ggctttgagt tacacaggta gccacatgaa agtccactta cccagcttag tagagaatga 480
aatcctgaaa gaggatggat caataattaa aaggtttggg ttagcatggg gtgatgcttt 540
gccaactaac accataaaaa tttttccaat tttaagaaaa gaaggggaga atccctacat 600
ctaccctaaa gaggatagaa aactgcctac tctcctgtat tataatactt tggtcaagta 660
atggatctat tgaagtatca tccctgaagt atcctcttga tacttcaaac ataatactaa 720
gtcatancaa gaatgagact cacgcttaca cagtctgact ccctgggttt agcaagccat 780
caacttaatt gaagccagcc tgatggtatt 810

<210> 933
<211> 309
<212> DNA
<213> Homo sapiens

<400> 933
acggttgccc ggcaacaaca agtcccgtcg ggtggcagcg gctggcggca aaacctctcg 60
agtgagcccc tgcccgagtg ccgcggggga gaggccgcga gcgggaccga gaagtgggct 120
gggagcagag gtcgcggagg tggcgagcga ggccggggcc caggcgggga ccggcagggg 180
cccgggagtg gcgggcacgc cagggcggcc gacctcggct caagggcgcc tcgagggaaa 240
cgcgctgaag ctggacttgc tgacttncga ccnggccctg gacaccaccg ctncccgtgt 300
cccctgcat 309

<210> 934
<211> 806
<212> DNA
<213> Homo sapiens

0050-0050-0050-0050-0050

<400> 934
agttcaatgc gagctgagca gacagggctg caaggaaatc tggcgcggtt caatacctcg 60
tctagcctgg gttccagtat ctaatttttt ttttgtttta actgacaaac tcatttctct 120
actgggacag gatgctgtgc tggctggaag ttccatttct acagcaagaa tcctatctgg 180
aaacacagaa gttgtcctct agccacagca gctcgaactt ttttgattgt cgttgctgct 240
ttctcccatc acccccatcc ccttttgaca aagatccaac tgtaaaaagt cttacgtaac 300
agttcaggac tacttcggtt cttttactgg gtaagcactt tcaatttttt ttttttaact 360
aaaagccatt ttaaaattga atctgttgag gggcttgact aaaatctttt aagtaatttg 420
tgtaatggaa tactgtcagt ggatttttc gtctcatttc tgcacgtgct cctttgttct 480
cagaacagaa gcttttttata cacatcccat aacgcagctg gagagagtta tgaagtcagt 540
tattataagg aacacaaagg ttgctttcca ttctttgcct ttagataatt aatttttttg 600
ttttcttaaa atggagtatt taaagaagga agaaattcac aagaaataaa ctgttggaga 660
atttagaaaa gtttgaagtt tttaccacct tttctatctc tagttttgtg tggccaaaca 720
cttgtgccgc ctggggcggt gggggtagag gcaagcatag acagagagga actaaccaga 780
catggacaaa ggccgagcca aaaccn 806

<210> 935
<211> 692
<212> DNA
<213> Homo sapiens

<400> 935
acttctgggg cagccgtgag cagcgggcac acgggcagcc acgaaagcag cagcgagggt 60
ggtgcaaaca cctcataact acaccgaatc cagtagcgcc tggcgccccc ggcgcgcaag 120
gccgcctcta ctccgcctca tctttgtccc aagtcctttc acagcctgcc ttcctcaaac 180
ggcccgatgc gcccccgtct ttgccggagt aagcagaccg ccagcagccg gcccgcaggt 240
cagtcgaccc tctctggatg caggtcgccg ggaaaacccg gagcggagca tccctcgggc 300
cgggaaacgc cctcggcgcg cacccactgg cgcgcatgct cagtccgcgc ggcggctgcg 360
agtaggaagc tccgcgcggc ggcgggggcg gcgacggcga ctggcgggtg ggagtggagg 420
caccggctgg cgggcggggg tacagggacg gggcaggggc tcccgctcca ggttccttga 480
agcacttncg accgcgaagc ccggcgcgag aagcgagcta acccaagagc caacaacgag 540
cgcggagagg gcagcggact gagcggagcc gccggccaaa agcgggctcg gagcccgggt 600
ctccgncgct cgggacccgg ctaggcggcg gcgggggcng catgttccac tggatncccc 660
tgtggcggtg caaccgtcat gtggagagca tt 692

<210> 936
<211> 814
<212> DNA
<213> Homo sapiens

<400> 936
tagatgaaat ccttttcgg gccaaactca attgttttaa cttaaaaaaa aattcattca 60
gtttaagata aaataatgct tccttaataa aactaaaaac aaaaagcatc tttagaagct 120
gtgtagcgta ctttatttat ttatttattt ggagacaggg tctcactctg ttgcccaggc 180
tggagtacag tggcacagtc tcagttcatt gcaacctccg cctcccgggt taaagcgatt 240
ctcctgcctt agcctcatga gtgactgaga ctacaagtgt ggaccaccac gcctggctaa 300
ttttggtatt tttttggtag agacagagtt tcaccatatt ggctaggctg ttctgttgac 360

0550450 0420000

catgaggcac catacctggg ctgtgtagca gacttaaaaa aataagattt gaagttagaa 420
cttaaggctt tgggccaatt aatagttttg tttgtttgtt tgcggcggaa tctcgctctt 480
tcacccaggc tggagtgcag tggcgcgatc ttggctcact gcagcctctg cctcttgggt 540
ttaaggagtc ctcctgcctc agcctcctaa gtagctggga ctacaggcgc atgccaccac 600
acctggctaa tttttgnatt tttagtagag atggggtttc cccatgttgg ccaggctggt 660
ctcaaactct tgacttcagg taatcctnct gactcaacct tccaaagtgc tgggattaca 720
ggcgtgagcc atnacgccca gccccagtta atggntgggg taccttgagc aattcactta 780
atctctgana ctcagttgct catttgtaaa atgg 814

<210> 937
<211> 773
<212> DNA
<213> Homo sapiens

<400> 937
ttttgttttg aaacttttg tagagatgag gtcttgctgt caagaccagc ctggccaaca 60
tggtgaaacc ccatctctac taaaatacaa aaatgctggg cgtggtggtg ggcgcctgta 120
atcccagcta ctagggaggc tgaggcagga gagttgcttg aatccaggag gcggaggttg 180
cagtgaactg agatcacacc actgcactcc agactgggtg ccagagcaag agtctgtttc 240
aaaacaaaca aacaaaaaga actttaaaga tctgggccat tgtcgaccca taacattaaa 300
gcaaactttg tgagatttta cattttaatt ctattaatac tgctgtttta attgaggaac 360
taatcaggta aagattctgt ccaccttcaa tgcttctgta aactanagca ttttatcttg 420
taaaatatat gtttttcaag gtgttattct gacacttctt aatgtttttg anagacaggg 480
tctcgctctg ttgcccagtc tcaaactcct gggcttaagt gatcctccac ctcagcctgc 540
cgagcagctg tgactacagg tgcacaccac tgcacgtggc ttgatggttt ccctataaaa 600
tataatcatc gactgagtca cctgaatcct tttggaacta gatgggagta aacacaccca 660
caaataagtg cttatcaaga gtattccatt tcccgtcatt actcaaggct gcacanattt 720
tnctaagtgc tcatcaaaag ntcagtaaat aatgtagggc tatttcataa atc 773

<210> 938
<211> 835
<212> DNA
<213> Homo sapiens

<400> 938
cattangaga gaacaatgta aaactgaaga aaaacttgac ttacttactt ctaaatgtgc 60
tcacctatgc atggattctg ntaaaacttc tgatgatgaa gttggttctc ccaaagaaga 120
aagtagaaag tttactaatt tccaaagccc gaacattgac cccacagaag aaaatgattt 180
ggatgattct ttaagtgtaa aaaatggtga tagtagtaat gactttgtga cttgcaatga 240
tatcaatgaa gatgattttg gtgattttgg tgactttggc tctgccagtg gctcaactcc 300
acctttttgtt actggtactc aagattcaat gagtgatgcc acttttgaag agtcttcaga 360
gcactttcca cattttagtg aaccaggtga tgactttgga gaatttgggg atataaatgc 420
tgtttcttgc caagaggaga caatattaac aaagtcagac ctaaaacaga cttctgataa 480
tttatcagaa gaatgtcaat tggcaagaaa atctagtgga acaggcactg aacctgttgc 540
aaaacttaaa aatgggcaag aaggtgagat tggacatttt gattctgtgc caaatattca 600
ggatgactgc aatggttttc aagactctga tgattttgca gacttcagtt cagctggtcc 660
tagccaagtt gtagattgga atgcttttga ggatgaacaa aaagatagtt ggtcttgggc 720
tgcttttgga gaccacaggc tactgaatct catcatcgaa aggaagcctg gcagtcacat 780

0952-0402-0000

aggacagatg aaaatnttgn tactccagga acccccaaac gcacagtggt ccctt 835

<210> 939
<211> 740
<212> DNA
<213> Homo sapiens

<400> 939
ttatttataa aatcagtaga gagtactagc aatgcgtcat tctattatag agaagcttgt 60
actgtagtga gatgataatc tcttagagaa aaggggaagg caggagagga agcggaatct 120
gccagcttaa agtcacagca tccaaatacc tcaagtcctc actccaggtg aaaggagtct 180
atgcaaaact gtcccaaaaa cctcacgatt cctgcttctt tcttcctcca tgtgtcaagg 240
ttgaaaggaa ttctgccact tccacgtgct tctgttgtta tatgtaccgt cattattttc 300
ctaccttatc ccagccccca gctgcaaaac aaactgtcat ttatcaaata cttgcctgac 360
cccaaatgct gagatctagt ataattttaa gcatatacaa aaaagacaaa aacatcccta 420
ctcaaatgta atctgttttt gtgtctgaca tcaactttta aaatttattt tttaattaat 480
taattaattt tttttaagag acagggtctc actgtattgc tgggctggag tgcagtggca 540
caatcacggc tcactgcagc ctcaagcgcc tgggctgagg caatccttcc atttcagcct 600
tccaagtagc tgggactaca ggagcacacc accatgccca gctaattntt ttaattnttt 660
gcagagacgg ggtctccctt tgtgcccagg ctggtctcaa actcctggng tcaagcaatc 720
ctgctttcat cttccaaaag 740

<210> 940
<211> 745
<212> DNA
<213> Homo sapiens

<400> 940
gctgcagatg gcggaaatgg atccggtagc cgagttcccc cagcctcccg gtgctgcgcg 60
ctgggctgag gttatggctc gcttcgcggc caggctgggc gcgcagggcc ggcgggtggt 120
gttggttacg tcaggcggca ccaaggtccc actggaagcg cggccggtgc gcttcctgga 180
caacttcagc agcgggcggc gcggtgcaac ctcggccgag gccttcctag ccgccggcta 240
cggggtcctg ttcttgtatc gcgctcgctc tgccttcccc tatgcccacc gcttcccacc 300
ccagacttgg ctgtccgctc tgcggccttc gggcccagcc ctttcgggct tgctgagcct 360
ggaggccgag gagaatgcac ttccgggttt tgctgaggct ctgaggagct accaggaggc 420
tgcggctgca ggcaccttcc tggcagtaga gttcaccact ttggcggact atttgcatct 480
gttgcaggct gcggcccagg cactcaatcc gctaggccct tctgcgatgt tttacctggc 540
tgcggctgtg tcagatttct atgttcctgt ctctgaaatg cctgaacaca agatccagtc 600
atctgggggc ccactgcaga taacaatgaa gatggtgcca aaactgcttt ctnctttggt 660
taaagattgg gctcccaaag catttataat ttcctttaaa gttggaagac tgaccccgnc 720
attggnaatt aaatcgaagc ttcgg 745

<210> 941
<211> 803
<212> DNA
<213> Homo sapiens

<400> 941

0505345.0020

ggacggagat gtgctttatg acgagtacat tcttcccccc tgccacattg tggactaccg 60
aaccaggtgg agtggtatcc ggaagcagca catggtgaat gccacaccct tcaagattgc 120
tcgaggccag atcttgaaga tactcacagg gaagatagtg gtggggcatg ccatccacaa 180
cgacttcaaa gcccttcagt actttcaccc caagtccctc acccgtgaca cctcccatat 240
ccccccccctc aaccggaagg ctgactgccc ggagaatgcc accatgtctc tgaagcatct 300
caccaagaag ctgctaaacc gggatatcca ggttgggaag agcggacatt cctctgtgga 360
agatgcccag gccaccatgg agctatataa gttggttgaa gtcgagtggg aagagcacct 420
agcccggaat ccccctacag actagtggca gtggggacgc tggtgatatg aggaggcaga 480
ggcagcaccc aggagaaaca gggcagtgga ccaatggaca gctccaccag ctccacatct 540
ttggaagcta gatttgggga gagagaagct ctaccccaga cttaataccc attgaaattt 600
cacctcaggt gttgtgtcct gtgtctggtt aagtgtccca tggaanggga aagccttcac 660
gtcagaaccc aaccctatac cttntacttc ttaaatggtg ctaaccacan gtgtcccaag 720
gtgctcttgt gcccagttaa gatttttaac tttcaagggg caagggcata ctggggaaat 780
gnantttccc aaactggcct tat 803

<210> 942
<211> 731
<212> DNA
<213> Homo sapiens

<400> 942
gaagctcttc atttcggttc tgaatgccta ttttggggaa acatttctgg gattatgaca 60
gacatttcaa tgacaacctg ctctaggagg tttcctgcat tgtcattgtt aagtccatct 120
atttattcct tcttttaaac cagaatttct ggcctgtaat tttactgaga aatagaaata 180
ctatctttac aataggtgat attctaactg tctctacagc atgatggctt tgcagctatt 240
tgaaagttga accccacata tactctttgt taaactgtta ttttgattct ggttgtttct 300
gaaatgcgta ttggaaatgc agcattgttt gaatatctat tgtgtgtgag ttgctttcta 360
aatgtacctt aatccttaca aacctggagg aaaaaaatgt ttttgaccct gttttacaag 420
ttcgtgaact gaaatttaca taggtatttt ttgtatgccc aagccatact gccaatgtca 480
gaactagaac ttgaacccaa gttgtgactc tcctttacca cttgatcagg agtttgctga 540
tttagccaag taacttgtaa gatcttcaca tgctttcttt tagtgggatt gcccagcaaa 600
gtgcttatca ngtgatgatc ccagtgaagt atgtcacagt tatgcagtaa cttaangctg 660
ctgtaatacn gagatacatt gaagtcatta gtacttttca gggccccaaa tggatcttta 720
atgggtatnt a 731

<210> 943
<211> 742
<212> DNA
<213> Homo sapiens

<400> 943
gattacaggt gtgagccacc atgcctggcc tcacccagaa acattttgaa tgagcttaat 60
ggaagtagaa gtctttgtta gtagttctct gtaaacattt tcactttctt catgggacga 120
tcctttccgc ccccacttaa ggcacccagt cctggctggg ccctggacac attgctgaga 180
tgggctgacc accaatacca ggcccagtca ttaaaagtac ctgatgttag aagatcaagt 240
gttaaatgtc atagcctaga aggagcagtt ctgggagaag aacccagatg tcctcagtgc 300
tccactccat acgagccctg ggatgctggg gtgtgagcta ggccgtgcac aagccattag 360
aaggtgttcc acacagggga gcgtctctac ccccttatcc atgatgtcca cacccagctg 420

0962946-0720000

gctggcaaga tcacgggcat gctgctggag attgacaact cagagctgtt gctcatgctg 480
gagtctccag aatccctcca tgccaaggta agcaggagcc cgggcagcag ggagcccgag 540
ggggcaggag gagagctaac gacaagggct ctcctagtgg agccagtgga tagctgtttg 600
gccagataaa gtgtttcttc ttgctaatac ctgaaggcct gctgaatctt aagagtggaa 660
ggggccttan gtaagggttt gctacttnag ccctttcgta gactaattct gggntggtct 720
tgtaggtagg gcttttggtc ca 742

<210> 944
<211> 745
<212> DNA
<213> Homo sapiens

<400> 944
ttgcattcat aaaaattaaa attattcatt aaaaacaccg tgaatgaaat taaaagtcaa 60
aatgtaagcc agaaaattat ttacaatgta tgtgtcagga aaagacaata cccttcaaac 120
tttgagagtt tacatcagaa agaaaacagc aaatgacatg atccaaactt gataaaggac 180
atgaaaaaga gccagcactt agtatgtttt ctgaatgaat aagtagccaa cagcacatga 240
aaatgcgtgt aatccatttg taagcagaga aatgcaaact aaaacagtaa agtgtcattt 300
tcatttcctg gattggcaaa gggttttatg tattttactg atagtgctca atattagcag 360
taaacaacaa atggtgagta aatatgagct tcggaacctc agggaaatga tctccttatt 420
tcaacctgta gattccttcc tacaaccagt gtctacagag cacctactat gtgccaggca 480
cagcctaagt cctgaaggtg tagtctccac tgagaaggtg atatttgcac aaagacctga 540
aagacaggag tgaactgtgt ggataactgt gggtacccct acaggcagag gagtagcaat 600
gtgggtccca aggtgggacc acatcagaca tgttcgagga ctagctgagg gagagaggtg 660
ggaggtcaga ggagatgggg gccggctctg ctggcccgca cgagcactct gggtgcagaa 720
ggccaaangt gggangtcan aagaa 745

<210> 945
<211> 508
<212> DNA
<213> Homo sapiens

<400> 945
agcatctgta acaagtatgg agagatgcct gtggacaaag ccaaggcacc cctgagagag 60
cttctccgag gtcnntctcc ccatccccta ncttgtgtcc tctcgtccct tcccacctgt 120
cttctccctc tgtaccacag cttaggttgt ttttcttccc tagagcgggc agagaagatg 180
ggccagaatc tcaaccgtat tccatacaag gacacattct ggaaggggac cacccgcact 240
cggccccgtg agtcaccact gtgggaagaa gggttgtaaa aggaaataat cctggcctct 300
tggggctggg ttagggtgaa gctgggtacc tgacctgccc acactcttag gaaatggaac 360
cctgaacaaa cactctggca ttgacttcaa acagcttaac ttcctgacga agctcaacga 420
gaatcactct ggagaggtga cccctgccct tcttgccctt ccctcactaa acccccataa 480
attacttgct tngtacctgn nttaagtt 508

<210> 946
<211> 798
<212> DNA
<213> Homo sapiens

0538045.0002

<400> 946
actagaaaga tggcggagca agacagaaga aaggaaaagg gctcaggttt aagcgactgg 60
aatcattcct acatgattcc tggcggcaga gacgtgacaa ggtgcgtctc agacgactag 120
aagtgaaacc tcatgccttg gaattgccag ataaacattc cttggccttt gttgtacgca 180
tcgaaaggat tgacggcgtg agtttactgg tgcagagaac cattgcaaga cttcgcctaa 240
agaaaatttt tagtggtgtc tttgtaaaag tcacccccca gaatctaaaa atgctgcgta 300
tagtggaacc ttatgtgacc tggggatttc caaatctgaa gtctgtccga gaactcattt 360
tgaaacgtgg acaagccaag gtcaagaata agaccatccc tctgacagac aatacagtga 420
ttgaggagca cctggggaag tttggcgtca tttgcttgga agacctcatt catgaaattg 480
ccttcccagg gaagcgtttc caggagatct catggttctt gtgccctttc cacctctcag 540
tggcccgtca tgctaccaaa aatagagtgg gcttcctcaa ggagatgggc acacctggct 600
atcggggtga acgcatcaat cagctcatcc gtcagctgaa ctagacccag gtgccaaact 660
gcggtaaatt ttttatcagt gaagtggaag catgtgtttt gntttggaaa tttttatcaa 720
gtatcttcag agaagattat ttcctgcttt atcttcagaa actggaaang gtcaaaagaa 780
aaagacgtan cttggctt 798

<210> 947
<211> 829
<212> DNA
<213> Homo sapiens

<400> 947
tcttaaatta ttcagtctga gcctctgtct ttgggataaa gatagatcca tatgactttt 60
taaattctaa ttagggttga atgttttaag gatgaaagat gggaaagttg tctagcattt 120
gctcttagtc actccttcag gccctctcct agaccagcct atatagaaac agcccacgca 180
gcagctaatc caggggccag ggctgtcgaa agccagctgc tgttcccaca gcgactgaaa 240
aagaaggaac atgatgtatc ctgcttttct aatagattgc cttaatgtgt gctgctaaga 300
tgggatgctt ggactgtaaa ttttaatcct atcttgtgcc agtaactctc catgctttga 360
ttccaaagtg tatgtttcca ccgtggatgg agtagctcta agtgcttgag gagacagctt 420
tcacgtgtat ggtatttata atgtaaactc tgagggccca attcttaaat ctaaagggca 480
ctggaagaaa gagtgtggtt agttcaaata atttgctttt atccaaagtg ctccctccgg 540
aaaaagtagg tctctgtagg taaaatgtgc cttcctgact aaacagctcc tccaccctgc 600
ctattgagct ggggcagtga caggagcctg actcctctcc ctgcccaatt ttcccctcca 660
gcctggctca gcctccctgt agcatatgtc acacttcctg ccangtttat ttctgcagca 720
ccctgcagga gacagcagtc tctgattcac agacctcatg ttatccttag atgcctcttg 780
gatttgcttc acttttnctg gccctgctgn gagtctnatc ttcccttca 829

<210> 948
<211> 766
<212> DNA
<213> Homo sapiens

<400> 948
tttttcccaa gcctggaaga actcgtcatg ctctttgtag cgtggtgctt ctgttgctca 60
caggatgttt gccacacgag tcactcgaga gaatctctga gtcctggcaa gggctttctg 120
aggcttcgtg tattagcagc tgttgtcttc caactcagcg gcaggtttgc ctttccccac 180
ggacactctg gaccttgtag ctcctcaagc ttccctgtct attgagcaga taggaagccg 240
tgtcaaatat gtggcacctt gaggaaatgc ctagtgaatg acagacaact tgcctttgat 300

0962945.02800

gattttcaag agagttgtgc tatgacgtgg caaaagtatg caggaagcag gcggtcaatg 360
cctctgggag caaggatcct tttccacggt gtgttctatg ccgggggctt tgccattgtg 420
tattacctca ttcaaaagtt tcattccagg gctttatatt acaagttggc agtggagcag 480
ctgcagagcc atcccgaggc acaggaagct ctgggccctc ctctcaacat ccattatctc 540
aagctcatcg acagggaaaa cttcgtggac attgttgatg ccaagttgaa gattcctgtc 600
tctggatcca aatcagaggg ccttctctac gtccactcat ccagaggtgg ccccttccag 660
aggtggcgcc ttgacgaggt ctttttagag ctcaaggatg gtcagcagat tcctgtgttc 720
aagctcantg gggaaaacng tgatgaagtg aaaaaggagt ngagac 766

<210> 949
<211> 838
<212> DNA
<213> Homo sapiens

<400> 949
gtttgtaaaa tgaatgggag tggttgcctt tagaatattc aggtaggatg tttagtggat 60
gttgtaaaag agcatctaga gcttagaaaa caggaggaaa ggttgagatt tagaagtcat 120
gagttttcta aaagctaaag ccctgagtgt caggagatgt gggttttaat gtagagtctg 180
tcattatatt gtcctggggt agtagtcact tctctggcat tggcagtcct tgtttgtaaa 240
ataaaactct agacttgatc tcacaggcct ctcccaactc tgaaactttg ttctaaagaa 300
gaaaatatat tctcttaaaa tttcgtgggc tagtctataa gggaaaaaag atgctttagc 360
aatggtttgg ggtatatgat gtcatgaaag taatattctt tttactgtcc aagtcagtaa 420
tttactgtgt agagaattgg aaatggacca gaggcagttt cccagaatag gtcattattt 480
ggtgttagta attggtcatt cacgcatctg catacccttt gtttccttaa gtaactctcc 540
tttctggtaa ccaccttagg tttgtcaagg tggaagtcat gtggtcaaat caaatggaaa 600
cacaagtgtg ttaggtatta gattcatttt cctgtcccca aagtacccgt ttggtaatgc 660
tggcagaaga catacatgcg gccaacaatc ataggaaaaa aagctccaca tcactgatca 720
ttagagaaat gcaaatcaaa accacaatga gatcgtatcc catactagca gaatggctat 780
taaaaagtca aaaaataacc gatgctgcna gtttgtggag aaaaaaggac cncttntc 838

<210> 950
<211> 804
<212> DNA
<213> Homo sapiens

<400> 950
gatgagggtc tgcggggccg ccaaaggagc ccacggatct cacccacctg cggctgcagc 60
agactggtct cctccacttc cttcagcgcc agcagcgcgt agccgaccgc gtgctcaaac 120
agcacgtgca acagcacctg gaacgggagc cggggcgcga gcgtcaacgc aacctcagcg 180
tctgccggaa cccgttccca gggcaggcgc aggcgcaggc gcaggcccag gcccaggccc 240
aggccctgtc tgcggcccga acgcaggccg aaacccccac cgtcgcgtcg cccgcgcccc 300
gcaaccactc ctcaccatgg cgccagctcc cgggttcggc tcgcaatgcg gctagcgcgc 360
tccggcgcgc ggaaccaggc tccagaggcc acgcccccgc ccccccgacc aatcggaggc 420
cggggacgac accatctccg gcctttggag gggccgccca gggtggtatc gcccggagcg 480
cgggctgggt ggtgccgagc gcgggcgagc gggccttttc cggcctctgc agctgcgcgg 540
gcgggcgtgg ttgccgggga cgcgcggccc ccggtcgggc actgcaggcg gcgaaacgac 600
ttgggaaggc cctttcgggg taatagtccg gttctgatgt tcttgtcata tgagttacgg 660
gcagcaganc tgggtgaaag tcggggcggg aggtccgcgt ggggcgcggc gtccattcca 720

US 9,562,046 B2 07/2017

gacagagacc gcttgctacc gggttcccgc tttgtccntg ggcttgggnc ccaaaacctt 780
gggcccactt cccnggacca agcg 804

<210> 951
<211> 850
<212> DNA
<213> Homo sapiens

<400> 951
cacgaagcag ggaaagggat ctggtaaaac ctaaatatga cctggataga acagatccat 60
tagaaaataa ttatactcca gtctcttcgg tacctagtat ttcatctggc cactaccctg 120
tacctacttt gagcagcact attacagtaa ttgctcctac tcatcatgga aacaacacta 180
ccgaaagttg gtctgaattt catgaagacc aagtggacca taactcttac gtaagaccac 240
ccatgccaaa gaaacggtgt agagactatg atgaaaaggg tttttgtatg agaggagaca 300
tgtgtccttt tgatcatgga agtgatccag tagttgtaga agatgtgaat cttcctggta 360
tgctgccttt cccagcacag cctcctgttg ttgaaggacc acctcctcct ggactccccc 420
cacctccacc aattcttaca cccccacctg tgaatctcag gcccccagta ccaccgccag 480
gtccattgcc acccagtctc ccacctgtta cagatgatat ttcttattct ttggttttga 540
caggaccacc acctccactt ccagacctat gtatagacac agagtgcatg cacaaaggcc 600
caacttgata ggactaacat caggggatat ggatttgcca cccagagaaa agccttccaa 660
taaaagcagt atgaggatag tagtggactc agaatcaagg aaaagaacca ttggttctgg 720
agagcctgga gttcctacaa aggaagaact tggtttgata aaccaaattt taatnggaac 780
aaaccagccc aagcttttca anaagaaggg tcaattttgg gaaatgaaaa tnccaagctt 840
gaactttaaa 850

<210> 952
<211> 833
<212> DNA
<213> Homo sapiens

<400> 952
cctgcacatg atcaaacaga tcctcctaaa acacaccttt tgaaatgttg aacataatag 60
tgtatgttaa ttaacagctc tatgaagaaa atccatttcc atgactgaag cattggatat 120
aaatatggtg tcctgctttt tttgtagaaa atgtaatttg aggatgaatt ttctgcttta 180
aaggcatgtg tgtttttaaa attatgaatg tagatgtgtg attgtctgag tgagtgaaac 240
tacaagaggt aaaaaataat gggtggttga aaaggggtta aaatgtatgt gccaagttct 300
actagaattc catttgaaat agcaccttcc ttaggtttca tggacaaata atgggaactt 360
ctaattttga tcaatcccat taaaaaaagg ctctttcctt tagagaaact ctattttgat 420
gtcaatatag attactgtat gaagtagctt tgtgtctgtt acctgtccat gagcatacaa 480
cattgaatac aattgggtgt attctttcag ttttacacaa ttaaagtata cacacagatg 540
tagcttatct gttttttttct taaattgttg ccctgaaaaa atttcttgca tatgaattgt 600
aaaatgtaaa tacattttta taaccaatgt tttgatctta ttgaatgtta ctttgaaaat 660
gtataactat tgcctgcaat gtagatgagc cttttagtag agctgattta ttccagtaac 720
ttcttccata ttttctcact aatctccgtt agccaaaata tgccagaaat gggaaagaga 780
ggagaaaagg cattacatta acacctatct ggnctatcta ctcctanccg ggn 833

<210> 953
<211> 757

09/13/2004 09:45:56 AM

<212> DNA
<213> Homo sapiens

<400> 953
gtatttaatc tttacaacaa tcctatcagg tatataagcc cattttacag atgagaaact 60
gagacacact gaagttaagt aacttgtaag aagtggaact ggccttgatc agaggtagtc 120
tggcttagag cccaccttct tcacctgtac aacaaagcac tcactagaga ttggccatta 180
tcattatcaa cattattatt aattattatt attattatta ttcagccagg agttaagtta 240
tgaagggact catatttgaa ttatgaagga actcaaaatc ccacagtcac ataaaccagt 300
ttcaggatga aatcggcatg ccttcctttt gttcaaaggg ttgtacagct aattagtatg 360
taaatctcac ttctttgaat tgaacacatt ttagagtcat ctattacaaa agtgctgcat 420
gcttgaaaca gaaagcttgc aaaatctgta atctcagcac tttgtggggc tgaggcagga 480
ggatcacttg aggccaggaa ttcaatacca gcctgggcaa cataaggaga ccctgtctct 540
acaaaaaaaa aaaaaaaaaa aaaaacaaac aaacaaacaa aaaactaatt aattaattaa 600
ttggctgggt atggtggtgc aagcctataa tcctagctac tcaggaggct gaggtgtgag 660
gatcaagaag atcaaggctg cantgagcta tggcatgccc tgnactccag cctgggtgac 720
ataggtagta gacctgctca aaaaagaaaa gaangaa 757

<210> 954
<211> 818
<212> DNA
<213> Homo sapiens

<400> 954
gtattctgtt agtaagcatc attgcctaga tttgaaccca aattttctta ctataaattc 60
tgaactgtta cattcccagg tgtattagtt atctactgct gtgtaacaaa ctaccctaga 120
cgtagtggtt taaaacaaac atttatcacc tcacagtttc tgtggttcag gaatccagga 180
gaaacttaac tggatagttt tggcataggg cctctcaaaa ggatgctttt taaggaataa 240
aggtaatatg catgcttgag gatcacatta acgtggcaca gcttttctta aagagtgtta 300
aagagaagaa tgcagaagtg gcaaagaatt aaaaaaaacc ttaaggctta aactttatta 360
aaataagatg atgaccaggt tagttggggc agcaagtatc tgagattcta ctggggctca 420
aaaatctgtt ttcaggctca cctaatggtt gttggtaagc ctcagttctt caccacgtgg 480
gtctctccgt agggttggta ggcatggcag ctgtctttcc ccaaagcagt taatctaaga 540
gagaaaaggg gagcgagagc ccaggatgga agccatagta tcatgtataa cctaatctca 600
agtaacatat catttctaat ggtcacacag accaaccctg ttgcaatgtg gaaagggact 660
atatgagtgt gtgaatacca gattggggtc catcttgcag gctggtccca gttgcacagc 720
tagtaagctg cataactaag ggtaaaantc atgtctgacc cccggagctg gtctctttaa 780
tcatgctggg ataagtgatg gagggaaana tttgnata 818

<210> 955
<211> 719
<212> DNA
<213> Homo sapiens

<400> 955
gcggaagagg tgggctggtg gaggcggggt cgagatggcg gcgcctttga ggattcagag 60
cgactgggcg caagccctca ggaaggatga aggggaggcc tggctgagct gtcatccccc 120
agggaaacca tctttgtatg gcagcctgac ttgtcaagga attggcctag atggcatccc 180

0562946.0720

agaggttaca gcttcagaag gatttactgt gaatgaaata aacaagaaaa gcattcatat 240
ttcatgtcca aaggaaaatg catcttctaa gtttttggca ccatatacta ctttttccag 300
aattcataca aagagtataa catgcctgga catttccagc agaggaggtc ttggtgtgtc 360
ttctagtact gacgggacca tgaaaatctg gcaggcttcc aatggagaac tcaggagagt 420
attggaagga catgtgtttg atgtgaattg ttgcaggttt ttcccatcag gccttgtggt 480
cctgagtggg ggaatggatg cccagctgaa gatatggtca gctgaagatg ctagctgcgt 540
ggtgaccttc aaaggtcaca aaggaggtat cctggataca gccatcgttg atcgggggan 600
gaatgtggtg tctgcttctc gagatgggac agcacgactt tgggattgtg ggcncttaac 660
ctgcttggga gtccttgcag aatggggntc ttctatcaat ggaattggcn gtgggtgct 719

<210> 956
<211> 777
<212> DNA
<213> Homo sapiens

<400> 956
ccagagcagg ggacagtcct gggggctgca ggtcagtgca atgaaaccta gcccactggc 60
tcttaccctt aaaagaaata ctctgtgtca aatggaaaac tatgttcctc attctaatca 120
ccaggataac cacagtcctc tttggaatag cattttaaaa gttgcaacat ggttatgaca 180
cacttgcttg tcagtgtctt aaaactaccc ttcacaagga agcagagtat cctcgtttcc 240
actgaaaatg aaacggagac ttctgcctgg gaagtgtagt ccctggaata ggccaggtcc 300
tctggcccct cggtcccaca tgagctggaa ggctcagctc ctgccccatt cccactccca 360
cccctccccc acggtgccaa gcccagcagg acggcttcct gggcaactcc accatgggca 420
caccctggc cctcagggct gttgcctgga gaactcattg gcctcctggg aggtccccag 480
ttgccaggac aaggctatgt gggatggctt ctccaacaac aactcgacat ctcctctgca 540
ggggtgcccc tgacacaaca gctggccact gggccttccg gcacccaccc tgtctatgca 600
cggggcttgc attctgatct cagcagtctt ctcaaggagc aataatcttg gctcagctct 660
tatcgngctg gactgatgaa tgggggtgcc tggtgaggnc ccaacctttt cacagagttc 720
acacatactt caggngaatg tggggaatca gttggagacc cacctggcan gctttct 777

<210> 957
<211> 832
<212> DNA
<213> Homo sapiens

<400> 957
tcagagcttg tctccaggtt gagaattacc tgttttccac tctgagggga ttagaaagat 60
actgttttaa tgggttataa aacttgtgtg aagaagattg gccttctcca cctctcctgt 120
gaaataaatt gtttgaaaac tctttgaaga gaaatggctt cagtatattg ttctatctct 180
gctaccccaa agcccagaga acaaatatta agtataaatt gctaggctag gtatgtcata 240
tgtggcagct ttgacatgta aaccaaaaga ctgagccaag tctcaatcaa tgtacaggtt 300
attttgccga ggttgaagac acactaggga aaagagacac aagctacagt atgatctatg 360
gcccctactt tctccaaaga ggattttgag ggcttcagta tttaaagggg aaaagtaggc 420
aggaggagaa aggaggaaag aacanaaaaa agagggagag catggtcaca ttcttaggag 480
gctttgattc acactcactg aatccatgtg ttgcacgtgg caaggaatgg gtagaggaac 540
agtcgattat gtatgtcccc tgctcagtaa aactgcactt tacaaaagat aaacagaata 600
ggggaagaag tcaaatatgc atttatctca ngctgggcag tggggatggt ttgtactctc 660
ctcttgtccc atacttgggg aggccacctg gggagacatg gcctcttgta gctatctgtt 720

0056205.00200

taggaacaaa aggaaagaca gtgttctgtg acccactttc aagcttaact tttccctttg 780
gtatagtgag tttggggtcc caanatgtct tttcctttcn cagatgtatg an 832

<210> 958
<211> 798
<212> DNA
<213> Homo sapiens

<400> 958
tatancacag aaggtctttc catggcactg gcgtctttac gaaatctcta cactccaaat 60
ataaaggtca gccgactgct gattttggga ggtgccaata ttaattaccg gacagaggtt 120
ttaaataatg ctccaattct atgtgttcag tcccatcttg gttacacaga aatggtagcc 180
ctgctgctgg agttcggggc caacgtggat gcctcttctg aaagtggcct gactcccctg 240
ggatatgctg cagcagcagg gtacctgagc attgtggtgc tgctgtgcaa gaaacgggcc 300
aaggtggatc atttggataa gaacgggcag tgtgctttgg ttcatgctgc actccgaggt 360
catctggagg ttgtcaagtt tttgattcag tgtgactgga cgatggccgg ccagcagcaa 420
ggagtattta agaagagcca tgccatccaa caggccctca ttgctgcagc cagcatgggt 480
tatactgagg taagaagtag gcaataggat tgtttttca agctctgtat tgaaggaccc 540
aggaaaccag gagaaaagat tgcacgaaga caaaattgcc aaccaaatta atgtgaattc 600
gtgatcgctg ctctgaataa taaggagatt aaactccatg aagcacttta ctcaaatgcc 660
aaagtccctc aaattatagg tatagaaagg tgccaagttg gaaaggaccg tggaaatgat 720
ataattattc tccatgtttt cctnnctgtt taacagacag tggcaccaan gctcaaagag 780
atgaattatt gangtgta 798

<210> 959
<211> 812
<212> DNA
<213> Homo sapiens

<400> 959
ctaagaatag acgtccaaag ccacacaaag gaaggtgtta tagaaaaaca gaggctgggc 60
acagtggctc aagcctctaa tcccagcact ttgggaggcc gaggtgggtg gatcacgagg 120
tcaggagatc gagaccatcc tggctaacac ggtgaaaccc cgtttctact aaaaatacaa 180
aaaattagcc aggcgcagtg gtgggcacct gtagtcccag ctactgggga ggctgaggca 240
ggagaatggc gtgaacctgg gaggcggagc ttgcagtgag ccgagatgga gccaccgcac 300
tctagcctgg gcgacagaga gaaactctgt ctcaacaaaa aaagaaaaga aaaacagagc 360
aactgggtga ttgtattgaa aggaagggtc tttggaacct tgattgacaa gttctaccag 420
ttgcagcgaa ggaggctttc cattgagtta tgtgctcatg acattcttag tcatggactg 480
acttaacttt cttgatctta aataagtaaa tcctttcttt cttttctccc tgttgtgttt 540
tcttccccac tcatttgccc ttcctctctc tttcttatag gtttgatggg atggaaattt 600
tatattacca gagtacaaaa gtgggcttat atcttttcac aaatagaagg cctatctcaa 660
tggtaaagct actggttgga ngtagtgata catggcgtac tctattctgt taaggtctag 720
aagtcttcat aggaaggata agtccacatg angntcgcat acttcagatc aatattgagc 780
ttgggtccat gcagtanaag aaggctgatg ta 812

<210> 960
<211> 825
<212> DNA

0052450.0720

0002720 : 6946950

<213> Homo sapiens

<400> 960
actactttaa atttcacatg agtcaaagaa gaacccatgt agccaagaca atcctaagca 60
aaaagaacaa agctggagac attacaatac ctgacttcaa actatgctac ttccaagcct 120
acagcaacca aaacagcatg gtactgatac caaaacagac atatagacca atggaacaga 180
acagagactt cagaaataac accacacatc tacaaccatc tgatctttga caaaactgac 240
aaaaaaagga atggggaaag aatcttctct gcagtaaatg gtgctggcta gccatatgca 300
gaaaagtgaa actggacccc ttccttacac cttatacaaa aattaaatca agatggaaac 360
aagacttaaa tgtaaaaccc aaaaccataa aaactctaga agaaaaccta gacagtacca 420
ttcaggatat aggcatgggc aaaggcttca tgacgaagat gccaaaagca attgcaacaa 480
aagccaaaat tgacaaatgg tatctaatta aactaaagag cttctgcaca gcaaaagaaa 540
ctatcattag aatgaacagg caacctacag aatgggagaa aatgtttgta atctacccat 600
ctgacaaaag tataatatcc agaatttaca aggaagttaa acatatttac aagaaaaaaa 660
caaccctgtc aaaaaatggg caaaggatat gaacagacac ttntcaaaag acattcatgc 720
agccacaaac atatgaaaaa cagcccacat actgtcatca gagaaatgca aatcaaaacc 780
ccatgagatc catctatgcc agtcagaatg gcaatattta aaagn 825

<210> 961
<211> 765
<212> DNA
<213> Homo sapiens

<400> 961
aaaaaagcag cagaacctgg aagtccacgg ggagcttgga tgccaaaggg aggacggctg 60
ggtcctctgg agaggactac tcactggcat atttctgagg tatctgtaga ataaccacag 120
cctcagatac tggggacttt acagtcccac agaaccgtcc tcccaggaag ctgaatccag 180
caagaacaat ggaggccagc gggaagctca tttgcagaca aaggcaagtc ctttttcct 240
ttctcctttt gggcttatct ctggcgggcg cggcggaacc tagaagctat tctgtggtgg 300
aggaaactga gggcagctcc tttgtcacca atttagcaaa ggacctgggt ctggagcaga 360
gggaattctc caggcggggg gttagggttg tttccagagg gaacaaacta catttgcagc 420
tcaatcagga gaccgcggat ttgttgctaa atgagaaatt ggaccgtgag gatctgtgcg 480
gtcacacaga gccctgtgtg ctacgtttcc aagtgttgct agagagtccc ttcgagtttt 540
ttcaagctga gctgcaagta atagacataa acgaccactc tccagtattt ctggacaaac 600
aaatgttggt gaaagtatca gagagcagtc ctcctgggac tacgtttctc tgaagaatgc 660
cgaagactta gatgtaggcc aaaacaatat tgagactata taatcaagcc ccaactncta 720
ttttcgggtc ctnacccgca aacgcantga tggcaggaaa tccca 765

<210> 962
<211> 608
<212> DNA
<213> Homo sapiens

<400> 962
ttaggaaatg cagttttagt aggattgtat ggactgaagt agagaattaa gtgaagaaat 60
ttttaactga ggagaatccc ttaatgtggt tttggtttgg aatttttttc ttaaattttt 120
gtagatacat actaggtata tatatttatg aggtacacaa gatattttga taacggcatg 180
caataaataa tcacatcagg gcaaatgtgg tatccattac ctcaagcatt aatcctttaa 240

ttgtattaca taactaaaaa agtataaatg gattgatttg gggtttttt accttatatt 300
taaaaataac ctttaaaaat cccacatact gaatgccaca tgaactaaaa gcatgaattt 360
attaccaaaa gttgtttgta aatctaatat ttcatatgga atcttactga acagcattca 420
ggagatttct tgttggctaa ttcctcttga gtctttttgc aaagtaattg tattctttat 480
tccatctatc tattgtttac atttatgtat tgagggagaa cgtagagttt agttttgagc 540
atttttgttt gagtcgttca ttaaacatca agtggagatc ttgagtgaca attaantnga 600
ttcnggga 608

<210> 963
<211> 714
<212> DNA
<213> Homo sapiens

<400> 963
ttaactcctt acttgaaaca tttagactat ctagatgttt agaagtgccc gatgtatatt 60
aaatgtagag gtagtaaaat accaatttgt aaatatcttt ttgctaaaat tcataggaaa 120
tacttttgga agttgaattg tgaagccacc tttgtgagca gtatattact gtctatactt 180
gctcaatggt ttagaggagg tgggagggaa gaaattgcaa aagataatat gctagtgtgt 240
tcatacttgg acattttcag acaccatttt tctgtatgtt ttgtgcattt tgttttgctc 300
tgtatatagt gtatataatg gacaaatagt cttaattttt taacatctag aggttgccag 360
tgtatgacaa agtagtaaaa ttaacatatt ttgtatgctt tgtgttgaaa ttcataggaa 420
aacttgtctt ctgtaattga cttttgcata ggaatttgtt cagccatctc taagcattac 480
acatgcgtgt acttgtccac tgaattgaag gcagagaagg aagagaagag ggaatgattc 540
aaggccaaaa tggtcacatt tagaagatcc ttagatgata accattgnta tgtgtgtgca 600
gtttatttaa cagtgcccgt gtacatggtg gacaagctat gaaatatcta gtctttanat 660
gtttggaagt gcttgatgta ttttaaagna ntagtagtag aataacactt tttg 714

<210> 964
<211> 776
<212> DNA
<213> Homo sapiens

<400> 964
ttctcttatg tgtttttaaa ttagcccttc atataaactt caaattttag gtaggggagc 60
ttttatggtt ccctttatgc cagtgaggaa acagccagag aggttgagta acttgtccag 120
ggttatatgg ttaataagtg gttaggatta gtaactaggc cagacccttc tatggcctgt 180
ttttatctct aagatgatcc ccagtatgtt agacttgaaa ctatggatgg agtgaaaaat 240
attctctgca aatacatcaa cactctgaaa gccattgttt tctctgttta gaaagtagtt 300
gaaaaagtag tgagaaacta gagcttttc ttttctggtg ttagtttcag cttcctacct 360
tgaagggaac cttaaggccc aaaccttctt ttttacattt gaggattcta agtccatgca 420
tctcggaaac tatggagacg ggaacttctt gtgtgagttg gagagcagtt gtagaccgtt 480
atcatttcca tcggtgcgga tgctctttgg gtggtggtgg catagaagat ctgttntggt 540
tacctttatt gacaagctct actgtgtgac tggcagttca gttcagcaga taggtttcca 600
gcactaatct taggcactgg gatagattcc cgagatgcaa aactgaagaa aataccttga 660
gacaagtcag tgccatctca aatatnattt cctcagaaat caagatttta gagcatttga 720
tggttttaaa ttagagtcct ttcaactaat accngtatga agtttttnaa accctt 776

<210> 965

0956294.0470800

0052600-0052950

<211> 736
<212> DNA
<213> Homo sapiens

<400> 965
atcttccggt cgtgggccat gccgggggcg ggcccggaac cgccacgggt gagtcgggtc 60
gtggctgctg ccgggtcctg cgcgctccgg actgaggtgg cgtccctggg ccggacggcg 120
gtgtcccggc gtggcgggaa gccggcactg gagcgggagc gcactgggcg cgggaccggg 180
aggcgcaggg accggacggc tcccgagtcg cccacctgac ggtaccgaga gggcggcgcc 240
cctccgagca gagccgtccc ggccactccc ctgggatctg acttggctct tgcggtcgcg 300
ggcaccgtga agccctgggg tgtgcgtggc tcctcctgct agaagaagtc ttcacttccc 360
aggagagcca aagcgtgtct ggccctaggt gggaaaagaa ctggctgtga cctttgccct 420
gacctggaag ggcccagcct tgggctgaat ggcagcaccc acgcccgccc gtccggtgct 480
gacccacctg ctggtggctc tcttcggcat gggctcctgg gctgcggtca atgggatctg 540
ggtggagcta cctgtggtgg tcaaagagct tcagagggtt ggagcctncc ctcttacgtc 600
tctgtgcttg tggctctggg gaacctgggt ctgctggtgg tgaccctntg gaggaagctg 660
gccccaggaa aggacnagca ggtccccatn cggtggtgca agtgctgggc atggtggcac 720
aacccttgtt ggcttt 736

<210> 966
<211> 854
<212> DNA
<213> Homo sapiens

<400> 966
aaggatatgg aaaaactgaa caatgccatc agacttgcta attgacattt ataaagtgtt 60
cctccctcaa atagcagaat atacattcct ttaaaatcct cagggagcat tcagaaaaat 120
agatgacagc cagagacata aaacaaacct aaaaatgatt aaaagaattg aaataatcaa 180
aagtagttat cttaccataa tgagatttaa ctagaaatca acaaaagaaa gataattgat 240
aaatctctaa atactaggaa attaaacaac ctacttctaa gtgatctgtg aatcaaagtc 300
tcagagaaag cagaaaatat tttgaagtga acaaaattga aaatgcaata tatcataatt 360
catatgaagt agctaaatca gggcttagag ggaaatatgg aggattaaac cctcatatta 420
gaaaagaaaa aaagaactgc aatgagcaat ctaagcttct acctaaagaa actagaaaaa 480
gaagagcaaa acaagtctaa agcaagcaga aagaaggaat tttataaaga taagagtaga 540
tatcaatgaa tttgaaaaca atagtggaga aaaccaataa aattaaaaat ctggtttttt 600
aagtatatca agagctgata aacctctagc cagattgaca aggaaatatg acataaatta 660
ccattgtaag gcatgaaaga nggcatatca ctatagtccc cacaaaaata taataagcaa 720
acaccatcaa gagctctgtg cacataaatt cacaatatag atgaaatgga ccaaatccta 780
gaaggaagaa gctggccaaa cttaccccaa atatcccttt atatctcaat aaattaatgn 840
ntaattggat ctta 854

<210> 967
<211> 461
<212> DNA
<213> Homo sapiens

<400> 967
gagtgaggtt tggctgccac caaagttact tctagtcctt gctgtccact cctgccctca 60

gtctggacct gcccaaggac ccctgcaatt aggcctccca tgcagaggtc agtgagagcc 120
caagccaatt gctctaggcc ccgtggctgg ctacttatgg ggcactgtcc tgaccagctc 180
tgctaagatg ctcctggccc ctccctccac cccgtccaga ggacggaccc ccagcgccgt 240
ggagaggctg gaagccgaca aagccaagta tgtcaagacg caccaggtga tagctaggcg 300
acaggagcca gccctgcgtg ggagtcctgg gccgctcacg ccgcaccct gcaacgagct 360
ggggccccct gcatcgccca ggacgcccag gccggtccgc cggggaagcg gcaggcggct 420
gccgaggcct gattccctca tcttctaccg ccagnaangn t 461

<210> 968
<211> 805
<212> DNA
<213> Homo sapiens

<400> 968
agatagggaa ggagggcggg tcggggagga gggatgcggt tcggcggagg cggccgccac 60
agggacttgc cgccatcacc cctgctgcca ccaccgcagc ctcgggctcc cagggcggac 120
acggccaccg cctcagcggg agaggagtct ccaccaggac tgaccgctgc cgcccagcac 180
gtccaggtaa ggtactcaac tgtgtggggt actacataaa tcctgaaaga ctacaataaa 240
gtggtgatgt ctcgggaacc caccccacct ctacctggag atatgtctac tggtcccata 300
gcagaaagct ggtgttacac acaggttaaa gtggtaaaat tttcctatat gtggaccatt 360
aataacttca gtttttgtcg agaggaaatg ggtgaagtgt taaaaagttc aacattttca 420
tctggcccaa gtgacaaaat gaaatggtgc ctgagggtaa acccaaaggg attagatgat 480
gaaagtaaag actacttgtc cttatatttg cttttagtca gctgccccaa aagtgaagtt 540
cgagcaaaat tcaaattttc ccttctgaat gctaaaaggg aagaaacaaa agcaatggaa 600
agccaaagag catatcgatt tgtgcaaggg aaggactggg gttttaaaaa attcattaga 660
agggactttt tgcttgatga agctaatggt cttttaccag atgacaagct tacattattt 720
tgtgangtga gtgtggtcca agattcanta aacatatcag gacatactaa ttcaaatact 780
ttgaangtgc cctgatgtcg tctac 805

<210> 969
<211> 543
<212> DNA
<213> Homo sapiens

<400> 969
aattcaccgc ttttgattca ccaattgtga cttgatctcc aacacgctgg gtaaataaaa 60
gaagactgag tcatggagcc catatcctcc ggtaactgcc agtgccctgg cttgggtatg 120
aattgtttgc agcacttcag gccaaaggga gtgtggtgca ctgctgcact ctaggggtca 180
aacttggatt ctgtaatgat ccattactga aagcgttctt gatctttata tataggtttt 240
gtgggttttt ttttttttta acttaagtct gtttaagtta cagaaaacat ttaataaata 300
ctttttgtgt gtgactttcc tcacgattct tcatcatact acttttaaat ttgtgtttaa 360
gttttgtgga ttctgctaaa tgaactttat tcacattcat aaagaacact gtactttgtt 420
cttatgtata gctcctaata atcctgatga cttggtaaca agtaaaaact aaaacccaga 480
ccgggcgcag tggctcacac ctgtaatcct agcactttgg gaggccaagg canntggatc 540
gan 543

<210> 970
<211> 445

0050204.0050204

<212> DNA
<213> Homo sapiens

<400> 970
tgtattaatt tgcaaataaa tgtctatctt attattttga gagatttaaa aaattttagt 60
tcttcaaaat tgcattttca cattttgaat tacgttatct ttgacaaata cagaagatgt 120
caaattttgg tttattttct ttggttctaa tttatatttt tgtttaaaac tatatttttc 180
actatagact ctttctgtct ctcgaggtcc ctgtataatg aaaaagaagg ctggaaaaag 240
tattaacatt gtcaaaatcc aggaaaagta gttggtcatg atattgatcg ttaactttag 300
aaacttttg tatcttgtgg gttaaattag gattactatg tggtagtgat aaatgatgtt 360
aattagggcc gagtgcagtg gctaacacct gtaattccag catgtaggga ggcttgaggt 420
gngaggatgc ttgnatccng gagtt 445

<210> 971
<211> 841
<212> DNA
<213> Homo sapiens

<400> 971
ttttggatta cccggatggg ccctaaactc gatgacaggt gtccttataa aaaatacaca 60
tagagggaca cagacacagg ggagaaggcc atgcggagat ggaggcagaa tgatgcagcc 120
acagcatgga atgcctgggg ccaccgggag ctggagaaga catggcagga ttcttctctt 180
gagccttcag aaggagcaca gcccaacgga catcttgact ttggacttct ggcctccaga 240
actgtgcaag gattaattgt ctattgtttt aagccgccca atttatggta gtttgttaca 300
acagctctag aaaatgagta tcatttctga gggcttcagc cttaaaatgg gcctagatag 360
gagaagtgcc cactttactg agctttgggg aggactagaa gggatgcctg taagatttgc 420
ccacacccag cacctggaga gcacttgatg aaggttagcc ctcatacaga gcatcattta 480
ttacccggcc tttggctgct ctgccctgaa cccttgcaga gcccacggaa gccagccctt 540
cacattgcca tcttcttgtg tctgactcgt tgccactggg acccctgagc ccagcccagc 600
gtgttcctgg ctcaggaatc tcagaggaat caaatctgac tcccagaccc aggctgcaga 660
ggcctctctg agccattatt accagggctg ccagagcgag actatgaaca tncacatgtg 720
gcgttttaat attttaccca agaagtcatt ttctttcacg attcagacac agaagactcg 780
aagaattaaa gtgagaaagg tcctcaggnc tgcatgattt ccgccatggc ctggaggatt 840
t 841

<210> 972
<211> 821
<212> DNA
<213> Homo sapiens

<400> 972
caccacaaac cattctgttt tggacttcag taagctcaaa gagaaaagaa aacactagaa 60
ttccgttttc tcggtatacc caaatgtcaa ttaggatttc cctgtaagat caagatgtta 120
ttgtttatct atctgcttaa cctggggaaa gacaatttcc tctaaatttc tgtaaattct 180
ggggttcgag gacaaggtgt tggggtccct ctggctctaa gctcctactc cttaactttc 240
caccaaacag tcttagaata cgtctataca tgtagaaacc ctgactgaag gtttttgaaa 300
aggcagtgac tgagattgtg ccaatgaaga tagtttgaaa ttgaatgctg gcaatccctg 360
ttcctgaaaa ccctccagcc acgtctgcaa tttgaattct agtctcctgc catgttctta 420

05052450.0720800

gctctctctt cctatcctct tcttttatg ctctagcccc cgaaatttct gttcatttac 480
actcagagct atttagttac ctcatttgtt gctcagcttc tgccttcagg gtctcacctt 540
cttgctgctt ttaattaagg tgttttccta caaggagcta atttcagccc aagagaaatt 600
tttgtgctag ctgttcagat catttttttc accttgcttt aatggtttca tcttcagtag 660
gatagacata gactaaactc ctatggcaac ataaaggcca ctttggattg acccatcacc 720
aggagtgggg gcaatccant tggtcccact ggcaccttag gaattgggta cttcactggc 780
tagcacaggt ttctttncta cctganaatg gggggtcata t 821

<210> 973
<211> 868
<212> DNA
<213> Homo sapiens

<400> 973
ttagttatct tcaaaaatgc tgtgactgtt cagttcaatt gacctaaact tcaggtgctt 60
ttgtgttata cgggttcttt ttttggaact gatgagaatg aattggaatc tcctattttt 120
taggcagagc aaccatcgaa ccctgtatgc taacaataag acatgaccag gcttcattct 180
cccacggcag aatatttatt tctgtctctt agaggaaggg ttaactccca ggtggtgttt 240
gtgttgagtt ttagaacaat ataaaattct aacagagcat ttttataatg gatgtgccat 300
gtgttcactt aattgaaact cattctgcaa ggctggtaaa atggagcaaa acggggaaaa 360
aaaatcaata gttaagaaag gttaatagca cttgattctc ctaaatagcg ttttttttcat 420
atgtgttcat ttacaagaaa cgtaagtcat tggaatggat ttcaacctgt tgagtgatac 480
ttctttaaaa aactttgcat acattttaag agtgcgagta atcattttaa tatttgctcc 540
ttttccccta tggaaacaac ctgaaaacat ccacctcctc acctaattga gtaattggtt 600
atgccagatt tttaaacaga gattacttca cttattttat agcttctgta attgcattaa 660
ggggaagcca cataacaaat gcatggggca cagctacatt tttgtaactc atctacagga 720
ttccttgaat tgtgcacagt gtgctcctgg gatggctgtc tgcganaggt gacaatgtgt 780
gttcttatgc tgcttttgca ctttcttata ggcgtcagag tcctctctct acgcaatgct 840
gtgcaaagtt catctggttt ctctctgg 868

<210> 974
<211> 807
<212> DNA
<213> Homo sapiens

<400> 974
gcgggtctgc ggccgagcca tcggctcgcc tcggctcgac tggaggggag gaggaggagc 60
aggccgagcg cattcgcgct ggagcttgcg aggagcgcag ggtggagcgc gccagccggg 120
gtcctcggat ctggcccagg tgaggaattt taaattggaa caagagcaag aaaaaaacaa 180
aatcttgtca gaagcactgg agacgctggc cactgaacat catgaattag agcagtctct 240
ggtgaaaggc tctccacccg ccagcatcct tagcgaggac gagttctatg atgcgctgtc 300
agattccgag tccgaaaggt ccctgagtag attggaagca gtgacagcac gctcctttga 360
agaggaagga gagcatttgg gcagtagaaa acacagaatg tccgaagaaa aagactgtgg 420
tggcggagat gctctctcca atggcatcaa gaaacacaga acaagtttgc cttctcctat 480
gttttccaga aatgacttca gtatctggag catcctcaga aaatgtattg gaatggaact 540
atccaagatc acgatgccag ttatatttaa tgagcctctg agcttcctac agcgcctaac 600
tgaatacatg gagcatactt acctcatcca caaggccagt tcactctctg atcctgtgga 660
aaggatgcag tgtgtagctg cgtttgctgn atctgctggt gcttctcaat gggaacggac 720

0505050-050200

tggaaaacct ttcaacccac tgctgggaga gacttatgaa ttantgcnag atgaccttgg 780
atttagactc atnttccgac aggtcaa 807

<210> 975
<211> 834
<212> DNA
<213> Homo sapiens

<400> 975
gaaccggaag atggtgtgag ccacgggctg ccgggggcct ggggctcggc gtcggtcccc 60
gggggatgtg gagagctggc agcatgtcgg ccgagctggg agtcgggtgc gcattgcggg 120
cggtgaacga gcgcactttt ggcgagaact acgttcagga actgctagaa aaagcatcaa 180
atcccaaaat tctgtctttg tgtcctgaga tcaaatggca cttcattggc cacctacaga 240
aacaaaatgt caacaaattg atggctgtcc ccaatctctt catgctggaa acagtggatt 300
ctgtgaagtt ggcagacaaa gtgaacagtt cctggcagag aaaaggttct cctgaaaggt 360
taaaggttat ggtccagatt aacaccagcg gagaagagag taaacatggc cttccacctt 420
cagagaccat agccatcgtg gagcacataa acgccaagtg tcctaacctg gagtttgtgg 480
ggctgatgac cataggaagc tttgggcatg atcttagtca aggaccaaat ccagacttcc 540
agctgttatt gtccctccgg gaggagctgt gtaaaaagct gaacatccct gctgaccagg 600
ttgagctgag catgggcatg tccgcggatt tccagcatgc cggttgaagt aggatctaca 660
aatgtccgaa taggaagcac gatttttgga gaagcgggat tactcaaaga aacccacccc 720
ggacaagtgc gcagcagacg tgaangcccc gcttgaagtg gcaccaggag cacttgagcc 780
nagggaatac ttgagagccc taacttttgc cctaacctaa attttcantt tcga 834

<210> 976
<211> 745
<212> DNA
<213> Homo sapiens

<400> 976
gtaatttcag gagcacagta agtgtagccc cacccaaccc cattagttca tttatttctt 60
ccacaactgg ggaggcagtg aaatgctgca gttaaacact tgggctccag aattggactg 120
cacgacttta ctctccagct taccacttgc cagccgtgtg acacgggtga gttactcgac 180
ccctctaagc ctctattttc tcatttgtaa aatggagctg ataatattgt cttccttaca 240
gagaatcaaa tgagataata tgcttggcat atgattgccc ttgaagaggt ttcactttat 300
tgaaggagaa agacaaatat ttttttgtaa ttactgtata gtgagtatgg taggtgctat 360
gaaagaagtt gttgaaattt taaacttaga gtttcatgtc tttttcaggg tataacataa 420
gtggttaaaa tagcaaggac tttgaagtca gacctgagtt taaatccaaa ttccaccagc 480
taaatgacct tgggcaagct gcttcacttt cgctaagtct cagtttctta tgggaataga 540
gtaggatgat gattttatat agctactagg acacagtgag ccttcaataa attgtgaccg 600
ttactattat tgntattcct attattagtc aagtttgata cctgggtgat gcatgtggtt 660
tgtaaatatt tatattttgg tttgacacag tgaaggaaga caaggganga attggtgaan 720
gaggntagga aagaatttcg agggc 745

<210> 977
<211> 814
<212> DNA
<213> Homo sapiens

0956456.0020

0962345-020200

<400> 977
taaacttttt accaagcttt ttaaagatga catcaggtat ctgttgacaa tggacaaact 60
atggcggaaa aggaaacctc cagttccgtt ggactgggct gaagtacaaa gtcaaggaga 120
agaaacgaat gcatcagatc aacagaatga accccagtta ggcctgaaag accagcaggt 180
tctagatgta aagagctatg cacgtctttt ttcaaagagc atcgagactt tgagagttca 240
tttagcagaa aaggggatg gagctgagct catatgggat aaggatgacc catctgcaat 300
ggattttgtc acctctgctg caaacctcag gatgcatatt ttcagtatga atatgaagag 360
tagatttgat atcaaatcaa tggcagggaa cattattcct gctattgcta ctactaatgc 420
agtaattgct gggttgatag tattggaagg attgaagatt ttatcaggaa aaatagacca 480
gtgcagaaca atttttttga ataaacaacc aaacccaaga aagaagcttc ttgtgccttg 540
tgcactggat cctcccaacc ccaattgtta tgtatgtgcc agcaagccag aggtgactgt 600
gcggctgaat gtccataaag tgactgttct caccttacaa gacaagatag tgaaagaaaa 660
atttgctatg gtagcaccag atgtccaaat tgaagatggg aaaggaacaa tcctaatatc 720
ttccgaagag ggagagacng aagctaataa tcacaagaag ttgtcagaat ttgggattag 780
aaatggcagc cggcttcaag cagatgactt tctc 814

<210> 978
<211> 812
<212> DNA
<213> Homo sapiens

<400> 978
ttaattgctt tcttccaaat ggattgaatc acttctttta aagtgtttta attaattttt 60
atctatagaa caaaataaca aataagtatt tttttttat accataatgg tcacccacag 120
cctgtgtata ctaagaccat gcatactgat aatcagcttt attttacaaa agagtttcgc 180
tttacccctc tggtaattaa tggattctgg gtatttatta aaaactttaa cacaaagact 240
gttaaatacc accagtccag ctttggcaag gcactgttgg ctttgtttat ctccatcatc 300
atccaaacag actaccaatc ctgatcccag cccaatcttg ggcccttgaa aaaataactt 360
aacatcctaa ctacaaggga gaaactcctt tcaaattaat gaacctggct gacttatata 420
gccttaaaat tatggaaatg acaagggtta caatgtcaga atgagcagta aaccttcccc 480
agtcctatca gagcaaactt tctggggttg catcccctca gaaacccatt tggggcccaa 540
tctcaatgca catatcagtg cgcaaagcac taaaattcca ggcaacactt tgtattgaga 600
gaagccaaaa ttttggtcag gccctgggac atctaaagtc accaatgtaa ctacaccata 660
cagattaaac cctcacatga tcatgtaagc tatgcagtta cccaagctgc atcatttaga 720
aaacctgtca gtttttatgg aaaccattcc tagtcaagga cactttaaat atatagtcta 780
aataccgnta angtaggccc actagctgtg tt 812

<210> 979
<211> 811
<212> DNA
<213> Homo sapiens

<400> 979
ctcttttccg ccgccgcctg ggaggggacc cgggctgcca ggcgcccagc tgtgcccaga 60
tggatgggac agagacccgg cagcggaggc tggacagctg tggcaagcca ggggagctgg 120
ggcttcctca ccccctcagc acaggaggac tccctgtagc ctcagaagat ggagctctca 180
gggcccctga gagccaaagc gtgaccccca agccactgga gactgagcct agcagggaga 240

ccgcctggtc cataggcctt caggtgacca tgcccttcat gtttgcaggc ctgggactgt 300
cctgggccgg catgcttctg gactatttcc agcactggcc tgtgtttgtg gaggtgaaag 360
acctttttgac attggtgccg cccctggtgg gcctgaaggg gaacctggag atgacactgg 420
catccagact ctccacagct gccaacactg gacaaattga tgacccccag gagcagcaca 480
gagtcatcag cagcaacctg gccctcatcc aggtgcaggc cactgtcgtg gggctcttgg 540
ctgctgtggc tgcgctgctg ttgggcgtgg tgtctcgaga ggaagtggat gtcgccaagg 600
tggagttgct gtgtgccagc agtgtcctca ctgccttcct tgcagccttt gccctggggg 660
tgctgatggt ctgtatagtg attggtgctc gaaagctcgg ggtcaaccca gtgtgggtcc 720
tcattgccaa gcagagccca cccatcgtga agatcctgaa gttttggctg ggttnccaat 780
catnctggcc atggtcatca ncagtttcgg a 811

<210> 980
<211> 810
<212> DNA
<213> Homo sapiens

<400> 980
tctttttctg ttcacagaag tggggatttt tttggtgttt gttttgtttc agaaagttct 60
ttcttccctt tccctactta taataaatat tattgtatag atgttactgc tcaagttagt 120
gttatgatat caatgactta cagtgagcca tgatatataa aatgacagat ttaaagatta 180
aagttccttg tacttttaaa aacaaagaat cacagtcttt ctttaaagac acactttaaa 240
aagagtgtca cactccttta tttctgtaag gatgagtatt ggtggggtat ggagaggtga 300
gtggatatct atttcagata gttttcagca tgagtcattg atttcacagc acatccagat 360
gatcaagagt ggtgccaatc attgttaaag aaaagttgtt ttgtttttt aaatgaatag 420
agttgactat gtggcaaacg aatatttctg tattgtttgc ttcagcagtg ctgaagagtt 480
ggaattataa atataacaca gtatgttatt aattcacagg aaatcttagc aaatgcagct 540
gtgaattaaa atgtagttta aggaatagaa agcaaggaaa tattaattga atccattcat 600
ttgcttagta tnttatgtag aaaatttaag agtattgtat acccttttgag aattaattct 660
gtatatcagc agaactctgt ttaggtggta ttaaatgcat ttgctgctgc tttcaaaaaa 720
aatttgtttt ccttttggat ttataaattg gtcatncang atgcagaaat agtcttattc 780
cctgctgatt ggtcacttaa tgattaaatg 810

<210> 981
<211> 746
<212> DNA
<213> Homo sapiens

<400> 981
cttcttagcc gtggctgcct cagcacctcg aggatcgaca tggacgctct cgaggactac 60
gtttggccgc gggcaacctc ggagcttata ctcctcccag tgacgggtct ggagtgcgtg 120
ggggaccggc tgttggcggg tgagggtccc gatgtcctgg tgtacagctt ggactttggt 180
gggcatctgc ggatgataaa gcgagtgcag aacctgcttg gccactatct tatccatggc 240
ttccgggtac ggccagagcc taatggagac cttgacttgg aggccatggt ggctgtgttt 300
ggaagcaagg gactccgagt tgtgaaaatt agctggggac agggccactt ctgggagctt 360
tggcgctctg gcctgtggaa catgtctgac tggatttggg atgcacgctg gcttgaggga 420
aatatagcct tggccctggg ccacaactca gtggtgctat atgaccctgt agtagggtgc 480
atcctgcaag aggtgccctg cacagacagg tgcaccctct cttcagcctg cctgattgga 540
gacgcctgga aggagctgac catagtggca ggtgctgttt ccaaccagct cttggtctgg 600

0960204 - 0960204

tacccagcaa ctgcctttac cctatacctc tctgcacgtn ccaccccgtt ttgctgtgtg 660
ctcaccccca ggatgtgtac ccggttgtag taggagctga aatccatgct gagctgtacc 720
agaataaaga atagagtgta gagtgt 746

<210> 982
<211> 808
<212> DNA
<213> Homo sapiens

<400> 982
tttagtaaga aacatattaa tcacgtggaa ggattcatag ttttcctggt atttcacttg 60
aaatagtttt aaaagtaaga ccttgcaagg aacatggatg tttttgtcta aattctgaaa 120
tgatcacctt tacactaatt tcctattttc tcttcgctct tgtttgagat aattattaga 180
ctgaaatagg ttctttgtag tacatttcta atcttgcaag tacacttgaa agtctacata 240
cccagagaaa ataagtgtag aatcatgatt ttagcatgag gattttaaaa ctttttccat 300
tattctatct tgctggctta aaattagtac agctttcttt cttgttttgt ttatattttt 360
acctttgaat gtttcttcat gtaaaagtgt gttgagagga ttgagggaga gggtttatgc 420
tgctgtggaa atatttttcc ttctttttgg ttaaatctgc tccccccttgt ggtataatct 480
aggtcattat agtgctcata tttaatatct cagaaagata ataagttctt gagtgtttac 540
tccttaccag atgttaggct aaatgcttcg tatacatttt ctcattcaat catcacagcc 600
acctttggaa agagatataa ttatcattca gccctattgg atagatgagg aaacacagga 660
ttagaaacta taactagtga gttgtagaac tatgagttga acttaaattt gctcattcaa 720
aatcccataa ccttaatttc tctgtcatac catcttcaag agcactccag aaggaaaact 780
ttctcattga gggctacaga aatcttgc 808

<210> 983
<211> 812
<212> DNA
<213> Homo sapiens

<400> 983
atacacaata caatactatt tggctatttt aaaaaaggaa atggtcttat tcacaacaac 60
atggatgaac ctggagaaca tgatattaag tgaaataagc caagctcata aaaacaaata 120
ctgaatgatt ttacttgtat gtgggatcta aaaatgtcca attcacagaa gcaaagacta 180
gactagtggt tgccagaagc tagagggtta agggattggg gagatgttac tgaaataaca 240
caaaatttca tttagacagg aggaataact ttaagagatc tattgaacat cacagtgaga 300
acaatatatt gtatatacta aaattaccaa aagaataaat tttaagtgct ctcaacacaa 360
ctgtctggcg gcggcagcat ggcggcgggg gcggctgagg cagctgtagc ggccgtggag 420
gaggtcggct cagccgggca ctttgaggag ctgctgcgcc tcaaagccaa gtccctcctt 480
gtggtccatt tctgggcacc atgggctcca cagtgtgcac agatgaacga agttatggca 540
gagttagcta aagaactccc tcaagtttca tttgtgaagt tggaagctga aggtgttcct 600
gaagtatctg aaaaatatga aattagctct gttcccactt ttctgttttt caagaattct 660
cagaaaatcg accgattgga tggtgcacat gccccagagt tgaccaaaaa agttcagcga 720
catgcatcta gtggcttctt cctatccagc gctaatgaac atcttaaaga agatctcaac 780
cttcgcttga agaaattgac tcatgctgnc cc 812

<210> 984
<211> 808

0950450-0950800

<212> DNA
<213> Homo sapiens

<400> 984
ttagtacgag tactgaaaca ttccaaaatg tattctttaa gatagaattg tatttggaat 60
acaccagttg tatacttgta ttagtttgtt ttcatgctgt tgataaagac atacctgaga 120
ctgggtaatt tataaaggaa agaggcttca ttgactcata gttccacatg gctgaagagg 180
cctcacagtc atggtggaag atgaaggaag agcaacggga catcttacat ggtggccagc 240
aaagagagag cttgtgtagg gaaacttncc tttataaaac catcagatct cgtgagactt 300
attcactatc acaagaatag cacaagaaag acccaccctc atgattcagt tacctcccac 360
caggtccctc ccatgacatg tgggaatcat gggagctttg attcaagatt tgggagggga 420
catagccaaa ccgtatgaat actttcatct ggttcatgga aactgtaatt atagctgcat 480
gctctggaga caaaatgcct gggttcaaat tttcatgtgt ctagttctta gctgtgtgac 540
cttacccatc agatttcccc taatctctaa tcagcacctg tnaactagaa ataataccag 600
taataacctc atagggattt tagaaatacc aaatgggana atccatanaa agtgtttagc 660
tcaatacctg gcccataata agcattcata atgtattcta gtaattgtag aatagcagca 720
ggaggagtaa aagaataaag cangatgtca ggcagaaata aactactctc gaatcctttc 780
tttaaaataa nagtgttcat gttgtnga 808

<210> 985
<211> 808
<212> DNA
<213> Homo sapiens

<400> 985
agagctattg gggctcggtg gcggccgcag tggggtggag ggggcagggc gtggtgaggt 60
aaggtgagtg ccgtagtggg gttccctgga gccatggcct gctccattgt ccagttctgc 120
tacttccagg acctccaggc cgcccgggac ttcctctttc ctcacctgcg ggaggagatc 180
ctcagcggcg ccttgcggag ggaccccagt aaatcaacag actgggaaga tgatggttgg 240
ggagcatggg aagaaaatga accacaagaa cctgaagaag aaggaaatac ttgcaaaaca 300
caaaaaactt cctggctcca agattgtgtt ttatccttat ctccaaccaa tgatcttatg 360
gtgatagctc gagagcaaaa agctgtattt ctagtgccaa aatggaaata tagtgataaa 420
ggaaaggaag aaatgcaatt tgctgttggc tggagtggtt ccttaaatgt cgaagaaggg 480
gaatgtgtaa ccagtgctct atgtatccca ctagcaagcc aaaagaggag ttccactggg 540
cgtcctgact ggacctgcat tgtggtgggt tttacttcag gttatgtacg cttctacact 600
gagaatggtg tgctcttgct tgcacagctt ttgaatgagg acccagtact tcaacttaaa 660
tgcagaacct atgaaatacc acgacatccc ggcgtgactg agcaggtagt gtaaaaaatt 720
gtgttccaac agtaacagtg gcattatttt gaagcagttt ctctcctctt ttttaggtag 780
aaacttaaaa gagatctttg tcttgngg 808

<210> 986
<211> 787
<212> DNA
<213> Homo sapiens

<400> 986
tcctggtcgt catggtgtgg tattccatct cccgggaaga caggtacatc gagcttttt 60
attttcccat cccagagaag aaggagccgt gcccccaggg tgaggcagag agcaaggcct 120

0962946.0972000

ctaagctctt tggcaactac tcccgggatc agcccatctt cctgcggctt gaggattatt 180
tctgggtcaa gacgccatct gcttatgagc tgccctatgg gaccaagggg agtgaggatc 240
tgctcctccg ggtgctagcc atcaccagct cctccatccc caagaacatc cagagattga 300
acaatgcccc agtggctggc tatgagggtg acgtgggctc caagaccacc atgcgtctct 360
tctaccctga atctgcccac ttcgacccca aagtagaaaa caacccagac acactcctcg 420
tcctggtagc tttcaaggca atggacttcc actggattga gaccatcctg agtgataaga 480
agcgggtgcg aaagggtttc tggaaacagc ctcccctcat ctgggatgtc aatcctaaac 540
agattcggat tctcaacctc ttcttcatgg agattgcagc tgacaaactg ctgagcctgc 600
caatgcaaca gccacggaag attaagcagg atgcggaatt tggtcagagc cgttcatgtc 660
agagctcanc agaatggcag ctgaccctgg gagatcactt gcctgttctg agaaaggcct 720
gcaattgngt cttcacgatg cttttncaag acagccaagg caggtataat tttcctnaca 780
agaaaga 787

<210> 987
<211> 840
<212> DNA
<213> Homo sapiens

<400> 987
gaaaatatgt actaattaaa agagggaaaa gagtaacttt acagtggatg aagcctggca 60
atcatcactt taagcaagtg gtcagagtta atattatcag taatggtcaa atcaaaacca 120
tatgcaagaa gactctaaaa tgcaagaaga ctcctgaagt acttcttacc aaagatgtag 180
aacttaaatt cagtcataac aatacatgag acaaacccaa gttagagcac agtctgcaaa 240
ataactggcc tgtaatcttc aaatgcatca agatcatgaa agacaaggaa agagtgaaga 300
gctgctccag ttggaagaga cttaaaacta aatgcaatgt atgatcctag attggatctt 360
tttgctctaa ggacattaat gggccagtta gtgatatttg aaggggatcc gagggttcca 420
ttgtagtaat atatcagtgt taatttttaa atttttatta ggttgggatt attttggaaa 480
ataccattat tcatagcgaa tacaaagtag aatatttggg gatgataatg catgattaca 540
acaaatgttt caggagaaat atgatctttg tagtggtctt gcaacttttc tgtaagtctg 600
aaattgttta tgcataaaag gttaaaaaaa ggttaaattt tgnttttata actaataatg 660
gattanggtc atgtgaaagt actttagagg aaatgagact tttgagaaca tcatccctga 720
agacgttgaa acactgagtt acctcatgga taatttaata gggtatgcag ctgatttttc 780
taccttaatt tcttggttgc agnatctacc catacttaga atggctggng gtaaaaaatg 840

<210> 988
<211> 412
<212> DNA
<213> Homo sapiens

<400> 988
cataaaatgt agttatgtac ctgtccacaa ggatttttaa gtnaatcttt ttgaaatcca 60
aataatcata atcatttata caaatattct ctgaccacaa tgccaaaaaa agaaagaaat 120
caaggattag aagacaagtc gaatgacatg tgtttgggaa tagaaaacta ctcttagaag 180
ctagaaggaa gaaaattcaa tgcttagagc cttacctatt gaaacggatc tagggagcag 240
ttaaaagcca tgaatatatt gatataaaat caagaaggcc aaaaattagt tacactgagt 300
gttcaactca aaaagctagt aagagagcca ggtattaaaa ttttaaaaca acancagtaa 360
aacgtatgga agtaaataat aaaagtaaag gcagaggtca atgaatatat at 412

0956946.0972000

<210> 989
<211> 840
<212> DNA
<213> Homo sapiens

<400> 989
attgccttat gttggttttc tcgaacacat tggccgaata ttggatcttc agttggagga 60
caacaaatgg gcctgcaatt gtgacttatt gcagttaaaa acttggttgg agaacatgcc 120
tccacagtct ataattggtg atgttgtctg caacagccct ccatttttta aaggaagtat 180
actcagtaga ctaaagaagg aatctatttg ccctactcca ccagtgtatg aagaacatga 240
ggatccttca ggatcattac atctggcagc aacatcttca ataaatgata gtcgcatgtc 300
aactaagacc acgtccattc taaaactacc caccaaagca ccaggtttga taccttatat 360
tacaaagcca tccactcaac ttccaggacc ttactgccct attccttgta actgcaaagt 420
cctatcccca tcaggacttc taatacattg tcaggagcgc aacattgaaa gcttatcaga 480
tctgagacct cctccgcaaa atcctagaaa gctcattcta gcgggaaata ttattcacag 540
tttaatgaag tccatccttt ggtccaaagc atctggaaga ggaagaagag aggaatgaga 600
aagaaggaag tgatgcaaaa catctccaaa gaagtctttt ggaacaggaa aatcattcac 660
cactcacagg gtcaaatatg aaatacaaaa ccacgaacca atcaacagaa tttttatcct 720
tncaagatgc cagctcattg tcaagaaaca ttttagaaaa agaaagggaa cttcagcaac 780
tgggaatcca gaatacctaa ggaaaaacat tgcttaactt cagcctgatt tggaggcncn 840

<210> 990
<211> 780
<212> DNA
<213> Homo sapiens

<400> 990
atgtgtgtct acactcaagc atcttcctct taatactcta ctgaggataa aggacacaaa 60
gtaatttttg aaatatcatg ctggctactt ttagagtata ttagtgtgag tagtgactta 120
agaggtcagg tttaagagaa gtagcaacat acttctatta tttacatggt gatttttttt 180
ttataagtcc ttccttgaag gcagacttag atatttcaag acctccttag aaaaattttt 240
cagcaccttc tgtgctccaa attgagtcag tttgcatcat gtttcagtgt aactgagtaa 300
caggctagca aattctctgc tttcttattc accaaaatcc aaaatagaac tcacaaaaac 360
tccttccttc ttccccccat cctgaaaaaa caccctactg tggcccccc cagtagagga 420
acagaccaga aaaaaaaaga gtaaacagag ccagctgtaa ctatagcact ttgctcagta 480
ctgtgagctt gctagagctg gcacattttt tataatacag atgcataaat gtactgtctg 540
aggcagagga attgcagcat ccccttagt atttcttgac tgccttggtc taaagtatgt 600
tgcacaggag aagcctncct aaacccagaa taaaatactt aatttggtat ctatttttta 660
aaattgngcc ttctatgact taatttttca taaaggnttg tagaaaacca ccttttttag 720
actttcacan gggtttttcc aattcagact ttcggggcta tggcttactc ttacacatnc 780

<210> 991
<211> 838
<212> DNA
<213> Homo sapiens

<400> 991
tttcactgga tgccgtatct ctgaaggata ctctagttat gctggttgtt gacatgtcaa 60

0952946 07200

agccttggac tgctttggat tctttacaga aatgggcaag tgttgttaga gaacatgttg 120
acaaactgaa aatccctcct gaagaaatga aacaaatgga acaaaagttg attagagact 180
tccaagaata tgtagagcca ggagaagact tcccggcttc tccccagaga agaaatactg 240
cgtcacaaga agacaaagat gacagtgtag ttttacctct gggtgcggat acacttacac 300
ataacttggg cattccagta ctagtagttt gcacaaagtg tgatgccatt agtgtattgg 360
agaaagaaca tgactacaga gatgaacatt ttgattttat tcagtcacat atccggaagt 420
tttgtttaca gtatggtgca gcacttattt acacttcagt aaaagaaaac aaaaatatag 480
acttagtata taaatacatc gttcagaaac tatatggatt tccctataag attcctgctg 540
ttgttgtgga aaaggatgca gtatttattc cagcagggtg ggataatgat aagaaaatag 600
gaatattaca tgaaaatttt caaacattaa aagcagaaga taattttgaa gacatcataa 660
ctaaaccacc tgttcgaaag tttgtcatga gaaggaaatt atggcagaag atgatcaggt 720
ggttcttatg aagctacagt ccctttttagc aaagcaacca ccaactgcag cttggaaggn 780
ctgtggatgc cttaccaaga gtcccaggan gcttcccacg aacaccaaat agatctgt 838

<210> 992
<211> 714
<212> DNA
<213> Homo sapiens

<400> 992
tcaattctaa tgtatttcct acttccagtc aaatatgacc cacatcttgt cttctctaag 60
tcagaatgtt ttacatgaca gacagagcct cagttctcct tttttaaaag aagtctcagc 120
tttgggaagg tggaggttgg aggacaggca ccaggttgac ttttcttcct ccatttgttt 180
tgttttatta tttgccacca ggaggggttt cgggaaatga ccaagcgtct ccacaattta 240
ggggcaggtc agggtacctt ccactgtgct tcatgaggtc agggtacctt ccactgtgct 300
tcatgaggtc agggtacctt ccactgtgct tcatgaggtc agggtacctt ccactgtgct 360
tcatgaggtc agggtacctt ccactgtgct tcatgaggtc agggtacctt ccactgtgct 420
tcatgaggtc agggtacctt ccactgtgct tcatgaggtc agggtacctt ccactgtgct 480
tcatgaggtc agggtacctt ccactgtgct tcatgaggtc agggtacctt ccactgtgct 540
tcatgaggtc agggtacctt ccactgtgct tcatgaggtc agggtacctt ccactgtgct 600
tcatgaggtc agggtacctt ccactgtgct tcatgaggtc agggtacttn cactgtgctt 660
catgaggtca gggtaccttc cactgngctt catgaggnca gggtaccttc actg 714

<210> 993
<211> 793
<212> DNA
<213> Homo sapiens

<400> 993
atagaaattg gccgctacaa tgaagtctgg aagtggcatc ataagaacac aaagcaacat 60
taatggagac agggtcattg taggtagagt tctcactgct ttcaactaac tgctgtatgt 120
gctctccata aatcatgtcc tccatatcat tgataacctc taaattacat cagtcccgct 180
tcctggatct cctctcccga tctggaatta aactgccctg cttaggcctc atttttttctt 240
tattaggtgt taactgcctc cagtgtcctc tccttaaaac cattcaccaa cttggctggg 300
ggtggctcac gcctgtaatt atccgggggg ccctttttcag ctctaaaatt ctatctaaac 360
catctttgta gatgtttttt aagtaatgag ttggtttaaa agtgaacaag ggaagactga 420
taaatttttc tttttcactt ttctgctgtc atatccgatt ggctaaaagt ttttcttgac 480
ctgacttttt gatctttaaa atgcagcagg gtattgatgc caaggttttc actggacttt 540

0052450-0052550

gtaatttgag aagcagaaaa tatggttatg cctttcaaaa acatctgcaa aggtttttgn 600
ttttgtattt tttaaaatct tactcaagct tttcaaaaca ataactttct ggttcttagt 660
ggctatctca gacagtttta cggaaaatat ttcttacaga gacagaaagg attnccaccc 720
agttaaatgg ttcatcttct gngatttgcc ctgcaangga gctcatctgg tgttgaaaag 780
ggcatctaac ttt 793

<210> 994
<211> 839
<212> DNA
<213> Homo sapiens

<400> 994
tactggtttg gtcacagggc tgcaggacta caatgccagc atgcagcggg ttcatggaca 60
gtgtgtatca ctggaggaag acgtggagct gtgcgtgcct cgctgggctt gcagggagat 120
gcagtctcat aactacccca gtcgtttggt cgcagggctg cagcagtaca atttcagcat 180
atctctggct cagggagagt gcactagtca ctgaaggaag aggtaggtct gtgcgcacct 240
ctctgggctt gctgggagag gtagtctcat aaacactacc agcccttca tcacatcgct 300
gtaggactac aattccagca tgcacggggc gccggggccg tccgcctcac tggaggaaga 360
gaaaggcgtg tgagcgcctt gctgggcttt ctgggagatg ttgtctcttt atttctccca 420
gccctttggt cacagggctt caagactaca atcccagcat gcatcctgct cagggacaac 480
gcgcgtcact gtaggaagag gtggacctgt gctgttctcg ctatgctttt tgggatacgt 540
attctcgtaa acactcccag ccctttggtc actgggctgc atcactacaa tcccagcata 600
catcgggatc agggagagtg cgctaatcag tggagaaagg ggccaggctc tgcacacctc 660
gctggtcttg ctgggagatg cagtctcata aacacttcca gccctttggt cactgggctt 720
gcaacgctac aatcctacat ggacccggcc caagggaatg tgcccgtact ggangaaaag 780
canggttgtg caagcctntt tggcttggtg ggaattgcag cttataaaca cttccagac 839

<210> 995
<211> 760
<212> DNA
<213> Homo sapiens

<400> 995
caaatggaga aggagcagta gagtaaaaag agaggtaagg gaaggcattg agatggttta 60
cagggttaga tgttttgagt caatcccatt ataattacca atgctatcta cctatttagt 120
taacgtttta ttgccctgct gttttctcca ggataattgg aacagcatgt attggttggg 180
tggaaaagat agaacttgag cagggagatt gccaaagagt gaagatgtgg ctgagtgatt 240
gatgatggtc tgaactgggt attcagggaa gagaactaga agccaaccat gtagaatcta 300
tgcaggtgct cttaagacat tggtttgact ggaattatct tcttgttagg tcttaggaat 360
ctccttccag gtaacttttt ctatgattag acaattgatt tgttcagggt cacagagcaa 420
agtccacatt taattccaca tggccaataa aagtgagggg ctacaaggtg agatccaggg 480
gccagagtta tcaaagtgat acagcacttt taggaatagg acagggaatg gaggaattgg 540
aattccagta ttactttcaa aagcagaact ggccagagga attggaattc cagtattatt 600
ttcaaaagca gaactggcca gaggtgcttg tgattcctgg gtggaaacca tggcagtgga 660
cagaagcagc atggaggaaa agagcactgg aattcangct gaggaactgt gaagcccaag 720
gtgttggata ngttgnccat ttcaaattag ggttgcttgg 760

<210> 996

D0C-2007-0050

0050205.000200

<211> 842
<212> DNA
<213> Homo sapiens

<400> 996
atgatcaaag tacagtaggt aagaagtaaa ttttcaaaaa cgtgttgtgg tcccccttta 60
attaatgctt cacgcgcaga gcaaagccat aaaccatgta gcgggggcgc tgtctgtgcg 120
ccctgcagtc acctccctcc tgaaggtgcc ggagcgccct gatggcactc gcaggagagg 180
ctggtgcttc tgggcaattc tgaaacaggc ctttctaacc atgcagtcct ctgctccctt 240
tgtctcggaa tgtcaggttg agacttgtgg ctgctccagt ccctggagat ccctttggt 300
gaatggaatg caagtccatt cttgaattat tgtagtgttt gagctgtacc tgcagaggcc 360
aggtctcagc acgtctgact cacctcagtt ggaacacccc gattcagaga gggaacagat 420
tcaaagtgag agattgacca cgccgcctct aactctgtcg ccgttgtttc tttattaaaa 480
gtcagattga tggtaaatta ggatactacc cgactgaata ctatccttgc tgttaaaaat 540
gattatggag atcatgcggc tccatggaaa aatgctaatg attctgtgcc aagtgtaaaa 600
agccaaattc agcatggtac tcttgctgtg cttacagtta tataaaagtc atgcatctgg 660
actggaangg aatttggaaa aatcagattt atgggataaa gttgatttat ggcattgngg 720
gctaattttc agatttcctt ttttaaaaaa ccataatgtt cctgcagtaa gttttaaaat 780
tgngggtnaa agaatagtaa ccccacaagg agtgcaattg accttnattt ttacctcccc 840
tg 842

<210> 997
<211> 747
<212> DNA
<213> Homo sapiens

<400> 997
gctcatgaaa gtgtaggggc cccccatggg atccccagaa tattttctct ctcaagctag 60
tctacactca agtcttcagt agttagctag ttgtctttta agttgctggc ttcagtggca 120
ttttctgctc ccagtaggtt gtgattctct gttttcaact tgtctccaat ttccaaggta 180
ggtgtttgtt ctccttaaat agaggaagaa ctgttttatg agttaatgtg agattatttt 240
attgtgcata tattcacttt gagatggctg ttagactaga gctatctagt agtcaattat 300
tcacatgagt atgtgaacct gagaatttga gacaggtctc agttaattta gaaagtttat 360
tgtgccaagg ttcaggatgt gtacccgtga tacagcccca ggaagtactg gcaacatgtg 420
cctaaggtgg tcagggcatg tctttgtttt atacatttta gggaggcatg agacatcaat 480
caatatatgt aagaagtaca ttggttccat ccagaaaggc agggacaact tgaagcccca 540
tccatccgcc tgcagccggg agactcagag cctgggaggg gcctgaggcc cgggccgccg 600
cctccttctt ccaggtcaca ggtaggtgag agacaaatgg ttgcattctt ttgagtttct 660
gataagcctt tncaaaggaa gccatcagaa tatgcatcta tatcagtgag canagggatg 720
acatttaata gaatgggang caggttg 747

<210> 998
<211> 708
<212> DNA
<213> Homo sapiens

<400> 998
tccatgatcc agactcagca gttgtcgcac catgtctgac aaacgctgta ttccttgaca 60

gagctttgat aacgtaccat atgcagaagg agttattcct gataaggcta aggcttgtct 120
ctgttggcac cagctaatgc aatggcaggt cttctgcttg gtgttgggct cctgcctact 180
cctaacccac ttactcagac tggcgctgtt ccaccggctg ctttgggggc tcctactctt 240
gttcctgccc ttgctgcgct tgggcttcct ggagcaaact tgaactcaat ctgttgccac 300
agatagttgc tgaagcttat gagcactgtt ggtcccaagt tgaagcatgt agctgctggt 360
cttgtttcac caagtctgaa atcggatacc tctagtaaag aaatagagaa aggggcccca 420
catggtggct caggccagta atcccagagc tttgggaggc tgaggagggt ggatcacttg 480
aggtcaggag ttcgagacca acctgaccaa catggtgaaa ccttgtctct actaaaaatt 540
caaaattagc cgggcatggt ggcgcatgcc tgtaatccca aatacttagg aggctgangc 600
aggagaatcg cctgaaccct ggaggcggan gttgcagtga gccgaaattg tgccattgca 660
ctccancctg ggcaacgagc acaaaactct tggctcaaaa aaaaaatn 708

<210> 999
<211> 823
<212> DNA
<213> Homo sapiens

<400> 999
ccctaaactg gacctgggct tcaaggaggg ccagaccatc aagctcaaca tcgcaaacat 60
gaagaagaag gaaggagcag ctgggaatcc ccgagtccgg cctgccagca caggagggct 120
gagcctgctt ccccctcccc caggggggaa aacctccacc ctgatccctc cccctgggga 180
gcagttggct gtgggggggat ccctcgtcca gccagcagtt gctcccagtt caggaggtgc 240
tcctgtaccc tggccacagc ccaatcctgc cactgctgac atctggggag actttaccaa 300
atctacagga tcaacttcca gccagaccca gccaggcaca ggctgggtcc agttctgacc 360
tgagcacggt ttttcctcat gtgacttctg ggaaggcgct ccctcatctg ggccaaagga 420
aggaggacga agccctcctc agctggcctg tgtttggggc atgaatctct cctctcctcc 480
ttgtctggct ctgttgacaa accgggcatg tttggcagta aattggcacc gtgtcacact 540
gtttcctggg attcaagtat gcaaccagaa cacaggagaa gaaaagctcc aggatccctg 600
tccccatctg tcctcttgat gtgagagaga ctctgagact tcttccatcg caatgacctg 660
tattaaacac aagcccccca agcaaaagaa gaggntgagt ttgctgccag gattcagatc 720
agcccttcc agggtctgca gtgtacatga tcacagttta acgggaggct ttncgtacca 780
cactggctgt agcacttagt ccatntgnct tcaaaagagg gtt 823

<210> 1000
<211> 765
<212> DNA
<213> Homo sapiens

<400> 1000
gaaggaagcc cccagcccct tccaggccct gttctcagat atcccgccca ggtacccgtt 60
ccaagccctg ccaccgcact acgggaggcc ctacccttc ctgctgcagc ccacggccgc 120
cgccgacgcg gacggcttgg cccctgatgt gccgctcccg gctgatgggc ccgagcgcct 180
ggcactctca cccgaagaca agcccatccg cttgtccccc tccaagatca cagagccgct 240
gcgggagggc ccggaggaag aaccgctggc tgagcgggag gtgaaggcag aggtggagga 300
catggacgag ggccccacag agctgccgcc tctggagtcg ccgctgccac tgcccgccgc 360
ggaagccatg gctaccccca gccctgcagg gggttgtgga ggtggcctgt tggaggccca 420
ggcgctgagt gccaccgggc agagctgcgc agagccctct gagtgtccag actttgtgga 480
ggggcctgaa ccacgggtgg attccccggg ccggacagaa ccctgcaccg ccgccctgga 540

0080270-054650

cctgggggtg cagctgacac ccgagacact ggcggaggcc aaggaggagc cggtggaggt 600
gcctgtggcg gtgcccgtgg tggangcagt gcccgaggaa ggcctggcgc aagtggcacc 660
gaacgagttc cancccaccc ttagaaatgt cagacttgtg acgtgcccgc cggggangga 720
cagtggcccg agcctggaac cccaanaagg ccgtgccttg tactt 765

<210> 1001
<211> 739
<212> DNA
<213> Homo sapiens

<400> 1001
atcaccgcag gcgggcctcg cgggtccggg agcgcggcgg agacgatgcc tgagatcaga 60
gtcacgccct tgggggccgg ccaggacgtg ggccgaagct gcatcctggt ctccattgcg 120
ggcaagaatg tcatgctgga ctgtggaatg cacatgggct tcaatgacga cgtagatgat 180
gagctggaga tcaaggccta ctatgcaggc cacgtgctgg gggcagccat gttccagatt 240
aaagtgggct cagagtctgt ggtctacacg ggtgattata acatgacccc agaccgacac 300
ttaggagctg cctggattga caagtgccgc cccaacctgc tcatcacaga gtccacgtac 360
gccacgacca tccgtgactc caagcgctgc cgggagcgag acttcctgaa gaaagtccac 420
gagaccgtgg agcgtggtgg gaaggtgctg atacctgtgt tcgcgctggg ccgcgcccag 480
gagctctgca tcctcctgaa gaccttctgg gagcgcatga acctgaaggt gcccatctac 540
ttctccacgg ggctgaccga gaaggccaac cactactaca agctgttcat cccctggacc 600
aaccagaaga tccgcaagac tttcgtgcag aggaacatgt ttgagttcaa gcacatnaag 660
gccttcgacc gggcttttgc tgacaaccca aggaccgatg gntgtgtttg ccacgccagg 720
gaatgctgca cncttggca 739

<210> 1002
<211> 843
<212> DNA
<213> Homo sapiens

<400> 1002
gtaccaaaaa tattttgaga tcaccgtaat gcctttggtt taccgggatg agtaaccaac 60
cacaggcctc tgttcacaag agcacgacgt ggtccccgcc tgctgctagt ctgtctgcca 120
ctgggggcct cccaacatcc atagcacact tcagcggaag gaccccagaa actgttgtgt 180
ttgtgtgtgc tgatgaccta gtgtgtcatt tcacctcgtc acccagccct gcgtccggat 240
gaggggactt ctgcacaaat gacagaatct cggctggtgg acagatacta cagctttctc 300
ctcctccttg tgttcgtgtt cagtctctgt ggagactttc ttttccattc aaatgacagt 360
gcgcacttat ctggtttaca caatgatacc attttgaaag ttggaagcct caaactgaga 420
cgacagtgca gaacanaaca aaagtgagtt agggtcgtta aaattgaagt gttcttctta 480
gggcaaacat gttgactccg agtattgtgt atgaatgtgc tacgagaaac ttccaaagag 540
caccattcac aatttggcat tttcaaagaa tgttccagcc ctcaaagggg caactcttta 600
aagtccttgt tggcttttat ccaaaccttg tagaaattgg gaaagctgat agaggtaagg 660
aaggcnagtg aaaaggacaa gaaggccaaa caccatccaa aaagaaacta ngaaaaaaaa 720
gattttcttt gctaatatag atgtaaaaat aacatcagac atctttgaaa attagcctct 780
aaactcttaa tacatacgtt ctgtgtgtct ctacctggcg tctttaagaa tatcctctct 840
ggg 843

<210> 1003

0565459.0720800

0502045.0700

<211> 839
<212> DNA
<213> Homo sapiens

<400> 1003
ttntttactt aaaaattntg aattaatatc tcaacttata agagcagctt tgtcagtata 60
ttttaaatga ttcccacaat gctgatttag gcattttaca ttttgatatg cattttagc 120
tggttttcaa agtcacaagg ctctaaggaa aagaactaat ccttagttgg caggaaagtc 180
cctccccaaa tccttggatt aaaatagaat ctgccgccag ggctttcctt gtcttctgtg 240
attgagatct gtctcangtg ggaaggcatc cagtacctgt gcatggcaag ttcattcttt 300
agagatagaa tgtgcaactt taatatttat tgataggcac actaattctc ttgctgatgg 360
taattaatga ggtgcttata tcttattttg cggtagttta acgagcttcg ggctatagga 420
gagatccggt gcttgctgta aatgctgaga atcaaagatg ctggaggaaa atgcagaaaa 480
tggagcagaa aaaataaggt tttagcagat aaaatatctc agattaaaaa cactctcaaa 540
acaaaccttg gtaaggcaga agcatttaaa aatcagggag agcttgccag ggaggaaagt 600
cgcaggttcc ctattccttg ttccctaagc atgctgttaa ttttgaccac ccatttgtct 660
ttctacccct ttggcttcgt ctgtgttagc agtgtgaagt gaaaaatnga taggaaaatg 720
tatttttttc ttaangctta natagttaca gccaaaacat tttgtcatat tgggttttga 780
ataattgtgt caaatctaca cttaattttg ccttagacag ctagccttat gaccctagt 839

<210> 1004
<211> 550
<212> DNA
<213> Homo sapiens

<400> 1004
ggaaaagcca tagcaggagt tattaaccag ccatattaca actatgaggc aggaccagat 60
gctgtgttgg ggaggacaat ctggggagtt ttaggtttag gcgcctttgg gtttcagctg 120
aaagaagtcc ctgctgggaa acacattatc acaactactc gatcccatag caacaagttg 180
gttaccgact gtgttgctgc tatgaacccc gatgctgtgc tgcgagtagg aggagcagga 240
aataagatta ttcagctgat tgaaggcaaa gcctctgctt atgtatttgc aagtcctggt 300
tgtaagaagt gggatacttg tgctccagaa gttattttac atgctgtggg aggcaagtta 360
accgatatcc atgggaatgt tcttcagtac cacaaggatg tgaagcatat gaactctgca 420
ggagtcctgg ccacactgag gaattatgac tactatgcaa gccgagttcc agaatctatt 480
aaaaatgcac ttgttcctta aaggaaagtt tcatttggcc gggcncggtg gctcatgccn 540
gtaancactg 550

<210> 1005
<211> 776
<212> DNA
<213> Homo sapiens

<400> 1005
taatactgtg tgcttagcca acatgtgctc cccacggggt ttccaccgct gctctggaag 60
ttccttcctc agaaaagaga gtcagaccct ccttgtctcc attccacggc tctagagact 120
aagcctggac tggaaatcgc agccaagtgg agttgtgggg ctagtcagag acgatgctta 180
ggatcctggg actcgaccat tgcccaggaa catctcagac agggagacat gtagccaggt 240
ttgcacaact ctgcctgcgt gcgcaacccc agctgaaccc cttccattgc tacgtaaaga 300

actcaagtgg cttgaaggct tctaggacag gtttttaaat cccaactgta cgactcccta 360
gttgagtgac cttagccaag ggaagtggga aataaattat tggatggcta aatgtgccag 420
gcactgtgct tgcattggag cctgtctgac cccgaagcac aaatcctctc tctgtgagca 480
ctcgtcctac actcagagcc agaggcctta ggctggaggc acagttattt gactctggga 540
agtcacttcc atcctctctg gacctcaatc tctcttcagg caaataggac agtcctgctg 600
accccatggg gtgatggtga cattaaaatg gaacagcgtg gtgaaagctc tctcatactc 660
agcgtgtacg atctttggga ccaatcacaa ggaagttttt agaaatatag attgctagat 720
gatgggtgan ggtcttggac ccaatggccc tganaatcta tgtctaaaaa aaaaan 776

<210> 1006
<211> 837
<212> DNA
<213> Homo sapiens

<400> 1006
cactaaggat tggagaactc atagaacaag gtgaaagaca tgagtgccct cccaaagtct 60
gagtgcacga aaatttctct cttgccttga ggagcagaaa agcttctgat ggacatgggc 120
ttctgtgaga cttatcacac atagtgtatc gtggcatgaa gcccggcaca tagcaggccc 180
tgcatattga tggacaaatg gatggcctgc ctgccttccc tgtccgttca cctgtgcaaa 240
ggcttcctca gacatgccac tctgtggctc ccaatatagg gtgcagacaa gagcaatccc 300
tgacatgaca ttatagcctg ggaaagggct ggctcactga tgagaatgtg gaggcatcag 360
caaggatctc ggtgggttgc tcagagaggt gatgcactaa gccttaatcc tggacaccag 420
taccctgca gcatggcttg ctcaacaaca gtctttgagt ggcatagaat tccaaagaaa 480
atggtgctgg gtggagaatg gagagagcat gatggagcag agtcccagtc actgaccaac 540
taactggtcg tttgattagg aaacagtttg gccaaagtac cacctttgag acctaagttc 600
ttttgatacc tttgagaaga gccactgagc ctgagttgaa atatttttag cttagtcatc 660
tgtgtttgct ataggagaaa ttgtaacaca agaaataact ccttttttaca tgatcattta 720
tatctatata catatatata cttgcataca ctatcactgc attaaaaaaa tgagtttggg 780
ctgggcatgg tggcttacac ctataatncc aacactttcg gaggccaagg aggacca 837

<210> 1007
<211> 783
<212> DNA
<213> Homo sapiens

<400> 1007
ctcccctcga catgccctca ccagccccag ccttggaggc cagggccgac agaacctgtg 60
gtttgccaac cctggaggca gcaacagcat gcccagtcag agccgcagct ctgtgcagcg 120
cacccactcg ctcccggtcc actcgtcacc ccaggccatt ctcatgttcc ctccagactg 180
cccggttcct gggcctgacc tggagatcaa tcccactctg gagtctctgt gtctgagcat 240
gacagaacac gccttgggtg atgggacaga caaaacctcc accatctgac gggacccaca 300
gcccagcgca cccataggct ccctgggcgg cgggcggggg ccaaccccca acgggcttct 360
ccgcgacagc gagagggtgg gctggctcag ctatatattc taatattttt ctactctctt 420
accctcttaa cttttgttta acattggcac atgccttgct cactcccagg cccgtcgagg 480
gatctctgct gaggcccggg gagttggggg cagccaggat aaaggggca gggactggcc 540
agactgcctg cctctctcct ttccttcctc atccccacct ggtcccatcc cacccctgcc 600
gcctccagac cgctgaccac ctgcctctcc ccaagggagc agactcccca gagacaaact 660
gaccactacc ttgtggagcc tgctcagaaa catttgacat ttggggtgac gcgcanggca 720

0056945-040200

gagaacctgc cttcagaatg ttattgagag gagctgggga aaaanggaag gagcanggaa 780
gag 783

<210> 1008
<211> 792
<212> DNA
<213> Homo sapiens

<400> 1008
gaccaaatcc agttactaga gcccaagcaa atgagaacag gtaagattcc agtctccccc 60
tcttacaggc atctctgact atgagtgatt ctcttggagc ccaaccatga caagagacag 120
aactccccac cacaaagact gcactgcata tctcataaag gagagcacac tatggacagc 180
ctcctcctct ccttcccagc cccctcctta tgtgggctgc agatgagcat tgatagtagt 240
aggactggct ctgctacatc atcatagact ctgaagggag gtgtgtgata ttgattgctg 300
aaaggtccct agaggctctc ttcatactat tcaacattct gttacagtca ttaaaaaata 360
atgtgtacag agatgtcctg atacacatgt ccttcatttt ctgacagacc ttggttgaat 420
atggagcaaa tgtcaccatg cagaaccacg ctggggaaaa gccctcccag agcgccgagc 480
ggcaggggca caccctgtgc tccaggtacc tggtggtggt ggagacctgc atgtcgctgg 540
cctctcaagt ggtgaagtta accaagcagc taaaggaaca aacagtagaa cgtgtcacgc 600
tgcagaacca actccaacaa tttctagaag cccagaaatc agagggcaag tcactccctt 660
cttcacccag ttcaccatcc tcacctgcct tcagaaagtc ccagtggaaa tcttcagatg 720
cagatgatga ttctgtagcc aaaagcaagc caggagtnca agangggatt cangttcttg 780
gaagcctgtc aa 792

<210> 1009
<211> 746
<212> DNA
<213> Homo sapiens

<400> 1009
ttgttggctg gtgtgtgggt gtcaaactga gccagacgcg gcggtggcgg cggctccgcg 60
ggctacggtc gctcccgcct ctcgagcgct gccggtggcc gcagcggcgc acccacgccg 120
gcccggagga gcagagtgtt catttctgtg tcgggcacag tgctaagtgc tgggtgctca 180
ctggtgatga ggcagatgaa ggttaccaaa cttgtggaca ggagcctcat atcagagacg 240
tggacctcac tgtagcctgg tcatggcttc cagcttttcg aatctgaggc tccaaaggag 300
gaaatgacca ttcagggatc ttactccagc ttgattacgg ggactggacc ttcatagggt 360
gcgcacttac caaggacagg aaggtttctc tgtttgaagg gctttaaact tataacaaag 420
aaaataaaaa tgacgacttc gtctatcaga cggcagatga aaaaatcgtg aacaattact 480
cagaggcaga aatcaaagtc cgggaagcca cctccaatga cccgtggggc ccgtccagtt 540
ctctgatgac cgagattgcc gacctgacct acaacgtggt ggccttctcg gagatcatga 600
gcatggtgtg gaagcggctg aatgaccatg gcaagaactg gcggcatgtg tacaangcgc 660
tgaccctgct ggactacctc atcaagacag gcttccaacg tgtggcccan cagtgccngg 720
agaacatctt tgccattcag accctg 746

<210> 1010
<211> 871
<212> DNA
<213> Homo sapiens

0950450.04200

0960230.027000

<400> 1010
attccgggct cgaaggctgt gcggtctgcc aggagctgcg gccccgtccg gcccgggctg 60
gtatcacctg attttgatac agcagcagga agcttgttcc cagcctacca gaaacaccaa 120
aaccgggcga gacactcaag tcgaaaacct accacctcca agtttccaca tctaactttt 180
gagagtccgc aatcttccag ttcagagaca ttggggatcc ccttaatccg agagtgcccc 240
agtgaatcag aaaaggatgt ttccagaaga cccttagttc cagtgctcag tccccaaagc 300
tgtgggaaca tgtcagtgca ggcacttcag agcttacctt atgtgttcat tccacctgat 360
atccagaccc cagagtcatc gtctgtgaag gaagaactca ttccccaaga tcagaaggaa 420
aacagccttc taagctgcac tcttcacact ggcactccta atagcccaga gcctggacct 480
gttctggtta aagacacccc cgaggacaag tatggaataa aggtcacatg gaggagacga 540
cagcacctgc ttgcttacct cagggagaga gggaagctga gcagaagcca attccttgtg 600
aaaagctgac tgccatcagt aatctcaata gaaaagagat atgttttctg gagtcataaa 660
ggaattcaat tcctagggtt tttgnttttg gttttgagat gtaatattgc tctgttgccc 720
aggctggagt gcagtggtat gatctcacct tactgcaacc accacttnct gggttcaagc 780
gattcttctg gcttnagcct tcccagtagc tgggattaca ggcaccagcc accatgcctg 840
gctaattttt tggatttta gtagaaatgn g 871

<210> 1011
<211> 867
<212> DNA
<213> Homo sapiens

<400> 1011
gttcgcttta gtgccggcgc catggggtcg gagctgatcg ggcgcctagc cccgcgcctg 60
ggcctcgccg agcccgacat gctgaggaaa gcagaggagt acttgcgcct gtcccgggtg 120
aagtgtgtcg gcctctccgc acgcaccacg gagaccagca gtgcagtcat gtgcctggac 180
cttgcagctt cctggatgaa gtgccccttg gacagggctt atttaattaa actttctggt 240
ttgaacaagg agacatatca gagctgtctt aaatcttctg agtgtttact gggcctgaat 300
tcaaatattg gaataagaga cctagctgta cagtttagct gtatagaagc agtgaacatg 360
gcttcaaaga tactaaaaag ctatgagtcc agtcttcccc agacacagca agtggatctt 420
gacttatcca ggccactttt cacttctgct gcactgcttt cagcatgcaa gattctaaag 480
ctgaaagtgg ataaaaacaa aatggtagcc acatccggtg taaaaaaagc tatatttgat 540
cgactgtgta aacaactaga gaagattgga cagcaggtcg acagagaacc tggagatgta 600
gctactccac cacggaagag aaagaagata gtggttgaag ccccagcaaa ggaaatggag 660
aaggtagagg agatgccaca taaaccacag aaagatgaag atctgacaca ggattatgaa 720
gaatggaaaa gaaaaatttt ggaaaatgct tgccagtgct caaaaggcta cagcagagtg 780
atttcagctt ncaaactggg tatacattnc aaactgatag tacattggca tnttcaggaa 840
gaacttgacg gctttgggaa tttggtt 867

<210> 1012
<211> 744
<212> DNA
<213> Homo sapiens

<400> 1012
gtaggcgggg cgagccggct gggctcaggg tccaccagct cacccgggtc gaggggcaat 60
ctgaggcgac tggtgacgcg cttatccact tccctcctcc cgcctccccc cggggtggcg 120

ctcgctggtg acgtagtgag tgtgatggcc gccgcgaggc cgggaaggtg aagtcaggac 180
tggtggagtc aacacagtca atcaatagcc aacctcaacc tgagacagga cagaagagaa 240
ctcagaatct ttttgtcttt tggacttcag ccatgtccat gatgcctacc ctgtgaagat 300
ctctcaccat ccaaaaaacg caatgtccct gctcttctct cgatgcaact ctatcgtcac 360
agtcaagaaa aataagagac acatggctga ggtgaatgca tccccactta agcactttgt 420
cactgccaag aagaagatca atggcatttt tgagcagctg ggcgctctcg cagaaggctt 480
tcaagtgagg atgtttgagt ttcagaattt tgagaggaga tttgaggagt gcatctccca 540
gtctgcagtg aagaccaagt ttgagcagca cacggtccgg gccaagcaga ttgcagagcg 600
gttcgactca tcatggactc cctgcacatg gcggctcggg agcaacangt ttactgcgag 660
gaaatgcntg aagagcggca agacccgact gaaatttatt gacaaacaag ctggagctct 720
tggcttaaga ctnttaactg ggaa 744

<210> 1013
<211> 657
<212> DNA
<213> Homo sapiens

<400> 1013
ttattagctc taatggacta agagactaat gggccttgtg tgcccggcga aggtgctttg 60
acctaccctg tgggtgatgg ggagcctctg aaggatttga agcagggcag agacgtggac 120
aaatctgcca aaagaaaaca aacaaacaaa caaaaacatc aacagcatgt tatgttaatg 180
tgcgattcca tttaggcttt tggaattttg aaaatagctc aaagacgccg ttatgacctt 240
gacagaggcc aggttggaaa tttctgaatc caatgattct ttagctcccc tctaagtctg 300
acagtctaag attccataat aaggaaggta cagctattgc caaaacgtat aatgcatcac 360
agtgtcagac tttgggatta tctgctgctg ggggttttcc acaccactgc tccccttcat 420
tagtggggat aattgagagt tgactgcagt cgttactgct gntgtgatgg gtatttgaag 480
ctaaattcgg gcaagtagga gatgtgtgaa tatttatctc agctgcagaa acttaatgca 540
ntgtggcatt aattaccctg tctgagcctg ctgncttctt ctgtttttag gtgtcatttt 600
cagtnggata aattagtttc caaaattaga atagagcaaa ttgtanggtg agatcaa 657

<210> 1014
<211> 855
<212> DNA
<213> Homo sapiens

<400> 1014
gacttttatt tgaaatactt ggtgcttgaa aaactgaaga aggaagacgc tgaccgaatt 60
catatattca gttctttttt ctataaacgc cttaatcaga gagagaggag aaatcatgaa 120
acaactaatc tgtcaataca gcaaaaacgg catgggagag taaaaacatg gacccggcac 180
gtagatattt ttgagaagga ttttattttt gtaccctta atgaagctgc acactggttt 240
ttggctgttg tttgtttccc cggtttggaa aaaccaaagt atgaacctaa tcctcattac 300
catgaaaatg ctgtcataca gaaatgttca actgtagagg acagttgtat ttcttcttca 360
gccagtgaaa tggagagttg ttcacaaaac tcttctgcca agcctgtaat taagaagatg 420
ctaaacaaaa aacattgcat agctgtaatt gattccaatc ctgggcagga agaaagtgac 480
cctcgttata agagaaacat atgcagtgta aaatacagng tgaaaaaaat aaatcatact 540
gcgagtgaaa atgaagaatt caataaagga gaatctacat cccagaaagt tgctgatagg 600
actaaaagtg agaatggcct acagaatgaa agtttaagtt ccacacatca tacagatggc 660
ttaagcaaaa tcagactaaa ctatggcgat gaatcacctg aagctggtaa aatgcttgaa 720

0562450.0700

gatgaactcg tcgacttctc agaagatcag gatnccagga tgatgcagtg acgatggatt 780
ctcgctgtga cactgcagtt anaaataggc agtgcattta aggctctact gtaacaacct 840
tgttctctta tggcc 855

<210> 1015
<211> 783
<212> DNA
<213> Homo sapiens

<400> 1015
cttcccttcc cgcgttcccc gggagaaaca tggccgggag cagcgaggag gcgccagact 60
acgggcgagg cgtcgtgatt atggatgatt ggccagggta tgacttgaat ttattcacgt 120
acccacagca ctattatgga gacttggagt atgtcctcat ccctcatggt atcattgtgg 180
acagaattga gcggctggcc aaggatatta tgaaagacat aggatatagt gacatcatgg 240
tcctgtgtgt gcttaaagga ggttacaaat tctgtgctga tctcgtagaa caccttaaga 300
acatcagccg aaattcagat cgatttgtct caatgaaggt tgatttcatc agactaaaaa 360
gttacaggaa tgaccagtcc atgggtgaga tgcagataat cggaggcgat gatctttcaa 420
cgctggctgg aaagaatgtt ctcattgttg aggatgttgt cggaactggg aggaccatga 480
aagcactact cagcaatata gagaaataca agcccaacat gattaaggta gccagtttgt 540
tggtgaagag aacatccaga agtgacggct ttagacctga ctatgctgga tttgagattc 600
caaacttatt tgtggtggga tatgccttag attacaatga atacttcaga gatctgaatc 660
acatatgccg tcatcaatga gccccggtaa agaaaaatat cgagtctaaa agacatgaat 720
tcttacccct aaagtcccag atagcattca tatttaccnc ctggaccttt gggaaaggcc 780
nng 783

<210> 1016
<211> 867
<212> DNA
<213> Homo sapiens

<400> 1016
ggcagcggct tccggccgcg gcggacactt ccctgggcgg gactgtctcg tggcacccgg 60
tggaaccgag gagaacgtgg agcgccggga gcggcgaata tggacgacta cagcctggat 120
gagttccgtc ggcgctggca ggaggagctg gcgcaggccc aggcgccgaa gaagcggcga 180
cggcccgagg ctgccgagag gcgggctcgg cggccggaga atgaaatgaa tgatgtgcct 240
ttctttgata tccaactgcc ttacgaattg gcaatcaata tatttcagta tctggacagg 300
aaagaactag gaagatgggc acagatgaac aaacagactt tggattgggt gatgctcatc 360
agagtgatgg attaaacttg gaaagagaga tagtcagcca gaccacagca acacaggaaa 420
agtcacagga agaacttcca acaacaaata atagtgtttc taaagaaata tggttagatt 480
ttgaagattt ctgtgtatgc tttcaaaata tatatatttt ccacaagcca agttcatatt 540
gccttaactt tcaaaaatca gaatttaagt tctcagaaga acgagtgtcc tactatctat 600
ttgtggatag tctaaaacct attgaactac tggtttgctt ttctgcattg gtacgctggg 660
gggagtatgg agccttaaca aaagacagtc cttccataga gcctggactt ctcacagctg 720
aaacgntttc ttggaaatcc ctgaaaccag gcagtcttgg ttctgaagat tcacacatat 780
gctaccaagg ctacagtggg ttcgnctgnc tgttgggaga ccatgcttct ttttaacgca 840
tacttcccca ntgggaaact tcattcc 867

<210> 1017

0960945-070800

0950305.0420000

<211> 766
<212> DNA
<213> Homo sapiens

<400> 1017
atggaaaact gcacaagagc ttgtgtgtct tgacattccc acatgtcagg atgccttcat 60
ttgctaatga cagaataccc aactcagact ggattaaata aaaggggatt ttcttgctta 120
tttaactcta gattcagtgg taaatgggtt tctgggttga ttggtttggg gcctaacaat 180
gtcttcgaga acttggtttc ttttcaacag tcagcttttg ccttcctgtg agctagcatt 240
gtttcccatg ggattgcaag gcagctgcat acaactcctg cagttcttcc ttttccatat 300
ccagagaggg gacgtccttt cagacgctga ttattttagg tgtaaattcc atgtcccatc 360
ccaaaacaaa caaacaaaca aaaaaacatc tagggcatgt cttatttgag gcgcttaaca 420
aatgactgga tcatctccct tgtatataac ccagaaaaca ctgtgaagta gagcaaaatt 480
ggaaagccca agtcaaagac catttgcaaa tttcaagtag attccagtct gttgctcaaa 540
tcacaaaaca taaaacggag gggtctccct tggagaccat aaagtctgtg acatggtggc 600
cagttgggtc actggaaaac atggcaaaat attgaaaatg agggattagg tgagagtgta 660
ncaactgaca ctaaatgctt gatccangtg ccattccctg gatactgaca gggagacaca 720
ttggccaggt aatactggna aaatacttct ataggggaaa ccncaa 766

<210> 1018
<211> 871
<212> DNA
<213> Homo sapiens

<400> 1018
ctttatgagt acaagtattg tactgatgta gacttaatat ttcaagaaac ttgttttcct 60
gttcatcgtg ccattttggc agcaaggtgt ccatttttta aaacactgct ttcttcctca 120
ccagagtatg gggcagagat aataatggac atcaatacag ctggtattga tatgcccatg 180
ttttctgctt tgttacacta cctttataca ggagagtttg gaatggagga ctcaaggttt 240
caaaatgtcg atatccttgt tcagcttagt gaagaatttg gaacaccaaa ttcccttgat 300
gtagatatgc gtggactctt tgattacatg tgttattatg atgtcgtcct tagtttttct 360
tcagactctg aactggttga agcttttggt ggaaatcaga actgtttaga tgaagagctc 420
aaagcccaca aggctgttat ttctgcacgg tccccatttt ttcgaaattt attacaaagg 480
aggatacgaa ctggtgaaga aatcacagac cgaactttga ggactcccac aagagttata 540
ttagatgagt ccattatacc aaaaaaatat gcaacagtga tattacactg tatgtatacc 600
gacgtggtgg acctctctgn tttgcactgt agcccctctg tggggagtct cagtgaagtt 660
cangctctcg tcgcagggaa gccaaacatg accagggcag aagaagccat gggaacttta 720
cccatagcac tggtcttgga atttaacatg cttgcacaag gctgtgagga tatcattgct 780
gagagcatct cattagatac cttaattgcc atcctnagcg gagttctnat ccatatggct 840
ctaaatgggt gcnccgacag cttacatttc t 871

<210> 1019
<211> 691
<212> DNA
<213> Homo sapiens

<400> 1019
gaagttagaa aatggaagta tgacattcaa agtatttttt atggtaatat taatatagtt 60

ttcagatgct tcacataatt tagaactttg taagtttttt tcctgcctta cgttagttat 120
ttcttcagtg agttgtaaag tcggccctct gtatcaacag gttccacatc tttagattca 180
accaaccgtg gatcaaaagt attctgggga aaaaacaata aaatataaca gtggaaagga 240
aaatacagta taacaactat ttacaatgaa tttatattgt attaggtatt ataagtaatc 300
tagagataat ttaaagtatt ttggaggatg tgtgtaggct ttatgcaaat actatgccgt 360
tttatataag ggacttaggc atctgagggt tttggtatcc agaggactgg atgccaaggg 420
ataactgtaa aagctgattt gaaaagtctg ttaataccat ttttaaaaaa ttgtcaccgt 480
gtagtcttca ccttttgcaa agatttttt ttttaagtac tacctctcct ttttgatcaa 540
ggcagtatgc aatctttgta ttagtgtatt ttcagaaaca tcaattagat gtttaacttg 600
nttccttttt taaatgcttc acagataatt nactagatta tttttaacaa acaattcaaa 660
gcttgaatta ntgaaacttc aaaaccgatt g 691

<210> 1020
<211> 776
<212> DNA
<213> Homo sapiens

<400> 1020
aatgtttatt tttaatggag gcagggtttt gctctgttgc ctaagctgga gtgcagtaac 60
gtgatcatag ctcactgcag ccttgaactc ctggacctag gtgatgctcc cacctcagct 120
tcctgagtag ctaggactac aggcatttac taccacgccc agctaatttt taaattttgt 180
atttttgttt ttttagaagc agggtctcac tgtgttgcct agactggtct caaactccta 240
gaatcaagcg atccgcctgc cttggcctcc caaagtgctg ggattatagg cgagagccac 300
cacatccggc cttatttaat taattcacca aataaagtct agaaagagaa tattggaaaa 360
tataaaaatc tgcagcagta ttattcaata atactgctgt ttaacgaaaa aacagacttt 420
ggaacccagt ctgaagaata ctgcatttaa ggagatttag tgtgaatgta atcttcagca 480
cagaagcaaa tgtggtcact gaaatcatat tcctacacaa ttatgaagtg gatgttcaag 540
taactcagat tatgcttatg aaaataaaac tgctatctta aaatctcaga gaatctcaaa 600
cctctgaaaa gaagtcatta gatcccagtt tcagaaatgc agatttaaaa caagtagttc 660
aaaaatctct ttcactttgt gttgatgaga actacaaaan gaacttaagt aatacttttt 720
gctttagatt ttacaaaatn gaagccaaag tagtaagatg tggnaaaggg aaaagg 776

<210> 1021
<211> 834
<212> DNA
<213> Homo sapiens

<400> 1021
gtcnttttt ttgtactttg gtcactattt agaaagggtg atcagttaga cacaggccac 60
atgtttaagg tgatatttct gtgaaacatt ttcatcttaa taattatttc atatttatta 120
tgatgaaagg catttaaccc tagagcatgt acaaagctga gtcgcaagtc tcagaaatag 180
tgtcctaaag tgatgtattg gcctcagagg gaattcgtat gtacttatac acaaattcac 240
cataatgaat gcaccaaatc atacttttaa atgcccaaat aattcatatt cataaatttt 300
tcattttgag cccctagata ttttttaatc aaaacccata ccactatcca ttcatcttcc 360
attcaatcaa atggaaaaga gccatatttt tttcaaaaat agcaaaatta tctaatttcc 420
cttctacttc tcatgtccat aggataagca aaagaaaaaa aatctgaaac acctgagttg 480
gcactttaaa aatttttccc agaaacatga gatgggatgg tcagaggtca tgcagttggt 540
gtcatggggg caccctgcct gttttcttct gtagctcata ccggtcacgc cttgttggtg 600

0050250450

ctaatgactt cccaggtgcc tggtaccaat tcttcattag ttgctgttgt cctagaaatc 660
tgtgtaggtc atggaaccta ttttctggaa aaccacttaa tacttatttt aatttctgna 720
aatgttggct gtggaaaaag aacatttcca cattttgctt ggccattggt tctggaaatc 780
tgacctgggc agaataaccc cactttgggc attctnggna atngaaaatt tccc 834

<210> 1022
<211> 726
<212> DNA
<213> Homo sapiens

<400> 1022
aaaatacaat tcctaaggca atatctgctg gtaagtcaag ctgataaaca ctcagacatc 60
tagtaccagg gattattaat tggaggaaga tttatggtta tgggtctggc tgggaagaag 120
acaactataa atacatattc ttgggtgtca taatcaagaa agaggtgact tctgttgtaa 180
aataatccag aacacttcaa aattattcct aaatcattaa gattttcagg tattcaccaa 240
tttccccatg taaggtactg tgttgtacct ttatttctgt atttctaaaa gaagaaagtt 300
ctttcctagc agggtttgaa gtctgtggct tatcagcctg tgacacagag tacccagtga 360
aagtggctgg tacgtagatt gtcaagagac ataagaccga ccagccaccc tggctgttct 420
tgtggtgttt gtttccatcc ccaaggcaaa caaggaaagg aaaggaaaga agaaaaggtg 480
ccttagtcct ttgttgcact tccatttcca tgccccacaa ttgtctgaac ataaggtata 540
gcatttggtt tttaagaaaa caaaacatta agacgcactc attttatatc aacacgcttg 600
gaggaaaggg actcagggaa gggagcaggg agtgtggggt ggggatggat tatgatgaaa 660
tcnttttcaa tcttaaaatt taatncacca atcttgcaaa attatggggg cngttcccaa 720
gctcta 726

<210> 1023
<211> 782
<212> DNA
<213> Homo sapiens

<400> 1023
tgacctggac cacaggggct tcagtaacag ctacctgcag aagttcgacc accctctggc 60
cgctctctac tccacttcca ccatggagca gcaccacttc tcccagactg tgtccatcct 120
ccagttggaa gggcacaata tcttctccac tctgagctcc agtgaatatg agcaggtgct 180
tgagatcatc cgcaaagcca tcattgccac agaccttgct ttatactttg gaaacaggaa 240
gcagttggaa gagatgtacc agaccggatc actaaacctt aataatcaat cacatagaga 300
ccgtgtaatt ggtttgatga tgactgcctg tgacctttgt tctgtgacaa aactgtggcc 360
cgttacaaaa ttgacggcaa atgatatata tgcagaattc tgggctgagg gtgatgaaat 420
gaagaaattg ggaatacagc ctattcctat gatggacaga gacaagaagg atgaagtccc 480
ccaaggccag cttgggttct acaatgccgt ggccattccc tgctatacaa cccttaccca 540
gatcctccct cccacggagc ctcttctgaa agcatgcagg gataatctca gtcagtggga 600
gaaggtgatt tgaggggagg agactgcaac ctggatttca tccccatccg tggctcanaa 660
ggcagctgca tctgaagatt gagcactggt caccctgaca cgctgtccca cctacagatc 720
ctcatcttgc ttctttgaca ttctttttnct ttttttgggg ggggntgggg aacctgncct 780
gg 782

<210> 1024
<211> 736

0 9 0 5 4 5 0 . 0 4 2 0 0 0

<212> DNA
<213> Homo sapiens

<400> 1024
aaaatggata catcccagta gcaacatagg caagtactta gccatgtgac ccctcctctg 60
ggggctctgc cagttgtgag ctctgcccag aaggtttcct tccatctcgg ttggaggaat 120
ccctttctg ctcacccacc ctgacttcat gctcacctgg ggctcggcag gtcacaagat 180
gcagggtcca tctacagaac caaggaatgg gctcatcccc cagatacata catcacctcc 240
atcccacgct gcctgcaggt acctactggg tggatccaaa ccttggctgc tcctctgaca 300
ccatcgaggt ctcctgcaac ttcactcatg gtggacagac gtgtctcaag cccatcacgg 360
cctccaaggt cgagtttgcc atcagccggg tccagatgaa tttcctgcac ctgctaagct 420
ccgaggtgac ccagcacatc accatccact gccttaacat gaccgtgtgg caggagggca 480
ctgggcagac cccagccaag caggccgtac gcttccgggc ctggaatgga cagatttttg 540
aagctggggg tcagttccgg cccgaggtgt ccatggatgg ctgcaaggtc caagatggcc 600
gctggcatca gacactcttc accttccgga cccaagaccc ccaacagctg cccatcatca 660
gtgtggacaa ccttccttct gcctcatcan ggaagcagta ccgnctggaa gttggacctg 720
cgtgcttnct ctgact 736

<210> 1025
<211> 859
<212> DNA
<213> Homo sapiens

<400> 1025
ataatagtga tggaaagaca gctgttgtgg gttctaactt aagttccaga ccagctagtc 60
caaattcttc ctcaggacag gcttctgtag gaaaccagac taatactgct tgtagtcctg 120
aagagtcatg tgttttaaaa aaacctatca aacgagtata taaaaaattt gatccagttg 180
gagagatttt aaaaatgcag gatgagctct taaagccaat ttccagaaaa gtaccagaat 240
tgcccttaat gaatttagaa aattctaaac agccttctgt ttctgagcaa ttgtctggtc 300
cttcagactc ctctagttgg ccgaaatctg gatggccttc tgcatttcag aagccaaaag 360
gacgattgcc atatgaactt caggattatg ttgaagatac atcggaatac ctagctcctc 420
aggaaggaaa ttttgtttat aagttattta gcctgcaaga cctgttgtta ctcgtacgct 480
gcagtgtcca gaggatagag acaagaccac gttctaaaaa acggaagaaa atcagaagac 540
aatttccagt ttatgtacta ccaaaagtag agtatcaagc ttgttacgga gttgaagctc 600
tgactgaaag tgaactttgt cgcttatgga ctgaaagttt attgcattcc aacagctcat 660
tttatgttgg gcatatcgat gcatttactt caaaactttt tctactggaa gaaattacct 720
cagaagaatt aaaagaaaag ctttcagcac tcaagaattc caatttattt aacatccttc 780
aacacattct aaagaaacta agtagcttgc agganggttc ctacttggta tctcatgcng 840
cagaagatct tcacttctg 859

<210> 1026
<211> 819
<212> DNA
<213> Homo sapiens

<400> 1026
aaaaatacat gattaggaag tgcatttggt gcattcgagc cactgggctg cttctaaagt 60
ggttgctctg gggaccagag agacttgtta tgcctcattt gggtatcaca tgaatcagca 120

0950350 :0N 2000

cacctcaaaa attattccac agtttggatg ttagtattag gtattatata agaatttccc 180
ataatcaaat aatattgaga aatgctgatt tttgggaagg cacaactttt cccaaacttc 240
tactgtgctc ctgtgcactg tgaatctgca gaattggccc ttcccaaacc ctttcaacca 300
cagcatcctc ctctggaggc cagcatcttg caagactact tattccttga aatacactgt 360
ggaaaaaaca ctgatgtcag gggatattga aataaactca ctgcatgcgg catacccttc 420
aaagacattt ttcctccctt tggaacagtt gaaattcaaa tgacatatcc tagcatgatt 480
tgccacatgg gttgtgtttt gaaacccaaa tctaacacaa caaatttcag atagagcttt 540
gtttagcccc caggccagtt tttggtcccg tggataaggg ttggtatcca gacctcttag 600
agcttttctg catcagcttt ccagggctta ttcaaaccct tcatgtgctg gaagtccctc 660
acccttttatg aggcacagga ggcgatacgc ttgcatctcg atctctcagc ctcggctcat 720
gctggtctct ccttctcatc ctgngttcca gccataggaa ttctggtcat tggggtggna 780
aggttacgca ccccccacat ncccaacctt ttggacatg 819

<210> 1027
<211> 857
<212> DNA
<213> Homo sapiens

<400> 1027
cttttgcagg aattagtact gaaattaata ttaatcaatg gcaaggaaga ccagagcaga 60
ggatagtcct gtgacaaatg gtcacaagct tctcccagct gtgaaatgtc tttccttcat 120
aagtgactat ttccattccc tttcatgtat ttgccttgtc tggaagactt tgattatgtg 180
cttcttagga cacatataaa gtccttactt tgtatttggg gcccagagaa gtttagcaat 240
ttgcttaagc tcacatagct agttagcagc agagctgggc ctaaaatctt ggaccatttc 300
caaatccagt gtttgcttta ctgtatcaca ctgtgcaacg cttgtgttga tcactgtgag 360
tacttaatat actagatttc taacagcagc ctatttgctt ctgattgccg actagttcac 420
ttcaattcat atttatctta actgaaaacc actccttctg acggctcgtc tgttgtctat 480
agaaaatgag ttggtgggct cattctagcc ctgttggaca gccgaaccca tcacaacaaa 540
tcaatgccaa aaatggcatt tcaagaggaa aacatagcat ttatttagta cccccaacag 600
agtagctcaa agtgatttga aaatgtctca ttaatcctca taacacccct gtgggataat 660
aataatatta ttataacgtt taggcgtaga actgtggcaa agccaacagc ttctctgaca 720
tgtgcaggat ttcctcatat ttcagtctgc aatactagag cctgactaaa accggcaggt 780
ttgcaaacag caagggtaaa taaatcntgg gggtttggcc ttctggggtg ctctaggcat 840
agnttggggt tncctac 857

<210> 1028
<211> 836
<212> DNA
<213> Homo sapiens

<400> 1028
gaagttanat aaacataatt actaggtcct taaggaatga attttatttt tgtgtttcca 60
gttcctgtaa ctatgtgcct agtacatagc atgtgctcag tgtttgttga aaggaaaagg 120
tctgaagttg attctatcgt caaagaaaat atttcagtat aaagcatgta gtttatacca 180
agaagccttt ttaaacttaa ggtctctttt ttcataacat gtacatataa attttaaaag 240
aaaacttaaa aatacagtag ctgcttctaa atgcagatat tgtaacttag ctattatttc 300
agaattccac aaggcatatg cccagttggt cgatcttggc actcactaac accagtttct 360
tcagatcatc tttttctctt tggaggattt accactgata aacagccact aagtaagtcc 420

US 2005/0048500

ttgaaaaata tgataatgaa atcatcatat atcatccata tctaatagct gaaaatgagt 480
ctattagaga ctgatgagac ggcttatagg gttggttgga aggtttgaaa ttaattttga 540
tcctgtaaca tagctgtaat tgtactatat ggcatacttc tgttcaataa agaacctgga 600
gcacttaaga gccctgctga agggctacaa catgcaaagg gcttacttgg ctaattgcag 660
gtgggggaaa aanangaaaa tatactctct gtatctgctc atgatctatt acctttcttg 720
ccaaagctgt gccctttaaa tggcaatgtc atatttgcca ggactaacat acttcatttc 780
tttgctttga atcaggngat gcctggactt actggattna ntaaaaatga atggat 836

<210> 1029
<211> 854
<212> DNA
<213> Homo sapiens

<400> 1029
ggttagatta tgttgaaaca catctgtgtt tcagatgtgt tcagagctga ggtctcagct 60
gaggctccac tgaagcagga ttcacttcca aaataacaga gttgttgcca atattcagtt 120
cgtagcaaac tactggaaca agaatctgtt ttcttgctga gtgaatttct tgccatgtgg 180
ccctctccaa atgctggaca taaaaaagta ggctgagcac agtggcgcac acctgtagtc 240
ccagcggttt gggaagccaa agtaggagga tcgcttgagg ccaggagttc aaaactagcc 300
tgggcaatat agggagaccc ccatctctac aataaataaa aataaaagct ttcatttaca 360
atgatggtag accaagaaat ttgtcctaga tcttcactga gaacatctag aaaagctggc 420
agctgaacaa aattttaaaa acatctgggc tgggcacggt ggctcacacc tttagtccca 480
gcactttggg aggcaaggct aggggatcac ttgagctcag gagtttgaga acagcctcag 540
caacataggg agaccccatc tcttaaaaaa aaaaagataa actaaaaata aattaattaa 600
aaacacctgg ttgaagacat cagcgagctg gcaacaatga agaattccta aggaaacaga 660
aactttgtta ggggagctgn tttcccttgn gttggccaat tctgcgagtg gtaagtgatt 720
gctgactgtt gaatggccat tttgacacct tatgggacaa ggaanaaagg gcctgcactg 780
gtaacccttt cccttacttg gaatgaggat cccaaaggct actcattagg agtacagtgg 840
tccaaaagta ancn 854

<210> 1030
<211> 853
<212> DNA
<213> Homo sapiens

<400> 1030
caaaatcatg tggatatatt ttaaaagatc cagcttactt ctgtttctgt ccatgaaaga 60
ttaactacca caagaattgc cctctaacag caggtgatta gagaactgga caaaaatcta 120
ggaaacagct gttttcagac ttcaggtaac agtagaagac tgtaattctt aactgaaagg 180
aaacagatga agtgagccct gggattgcac tgtttgcagt atgaggagaa ggacccaaac 240
atagtctagt ggtgtgcatg agttgatgag acagaagaga aaagttcatt ggcggagaag 300
tggctaggat atataggaaa taccagagag aagggagcta cagagataga agagagcaag 360
agcaggcaag tgccagtcta gagatttcta gtagggtctc ctcaaatctt tgactgaata 420
ctgattgagt agccatggta cacaatacca tgaggctgga gaaagaaagt gatagggcag 480
ttctcagagc tcacataggg ctgggaatag tttgtgtttc catcagccag catagagaca 540
tagaaccttg aacagaaaca tcagaagggt aatgccatag tagtgggacc aaattagtct 600
gaggctagtg ctgcattgga cttcttctaa caaaaattga aagcaaacat tgaaaggatc 660
aaattgattt aaaataattt atttgtgtgc tagaacaaag tccaggatcc tttaagataa 720

0962946.0472800

tacagtaaaa tncagcacca agaatgtaaa attcacaatg gncagtatct agtcagaatt 780
tttcatgngt attggggatg aaagtatgtg gaagggcaaa agaaggcttt cccaganggc 840
ttagggaacc ttt 853

<210> 1031
<211> 851
<212> DNA
<213> Homo sapiens

<400> 1031
ttttttactg ggcccatgaa gcaactttga cataattatt caggacatat cctaaacgcc 60
gtcatatcct ggattttcca ggtaaccaat tgctaaactc acaggcatct ttgccaatgt 120
atttttaaga atgatatttg ctaccctaga gttcagagtg tttattgtgt attatttcat 180
acaatacttg tagaagccca gtagaaggat tatatcccca tgcttacaga tgaggacatt 240
gaggagacgg gtgttggcgt ccctgctttc cttcagggag cacaggtcag gttgctccct 300
gaagtcagtg atgggtccag cacgttccac acggcaaggg gacaggccct ctcccagggc 360
ggcccttctg ccgcctttgc tccttctttg agacttaggg gcggggcatg ggcaggaggg 420
agagtgctgg attgtagctg accctctcgg gacttgtaaa tactgtcaag tgattgggag 480
tcctagacaa acacgagtgg ccgcctcggg gccggcggcg tggccctgtg acagcaagaa 540
cttcaggaac aaatgctctc tacacccact ggccctccag ggtcagaccc ttctagttcc 600
tgcctgcccc ttcagtagcg aagagagaag ccgttgctct tanggcaggg ctgggtttgg 660
aaatgacagc atgtgttcaa caacctgaaa accaagctga atgtcnnctg agatggttct 720
ttcttccctg aaaaggaagc ggtgtccatc acaaaagagc ctnttctggt gagttctgag 780
ccatgctgga tcttgcttga acagntctta ttttcacagn tcacgttttt gggccttcaa 840
aaagagactt g 851

<210> 1032
<211> 706
<212> DNA
<213> Homo sapiens

<400> 1032
aaaaaataga agataaagag aacaaaacaa caaaaaatta tagaaactaa atccttatat 60
aattccacta cttggggata caattgtcaa tactttatgg atgtccttcc agatatattc 120
tttgtatata cacacaaata taaataaaca cacttgtaag atatataaag acatcaaatt 180
ttaaatgttc ttctatagtt tttatttcac tcaacatgtt actaaacttt tgagttcagt 240
agacatacat cataccgcca tattaatgcc ttcgattttc tcattatatg aatgcatcaa 300
aatttttga ctaatctgaa ggctattttt aaaatttatt tatttttaat ttttttttctg 360
aagaaaaaat gatttttttc tatacaatga tgctagaaga aactgattta aaagttacag 420
ctttgaatgt taaatgatga agggttttgg agtcattcct tttgacctac taattttaca 480
attctcttga acatcaagtg ttttttagtg gtcatcatgt gatatttatg tgcatatttt 540
gggcatcact gttctaattc ccattgactg acgtgttggg gacctcattc atttctttca 600
gttcttaaac ctatagattg atactaatct attaatgtac ttaaaaaaaa aattnggggg 660
tttaaaaaaa aaaaaggggg gggggaaaaa aaaaaccccc ccccnn 706

<210> 1033
<211> 656
<212> DNA

0305205.00200

<213> Homo sapiens

<400> 1033
gatgatagga gttaagagag gactatagaa aactgggtct ctaagctgat gtgtcaagtc 60
acactgtcct ctgcttatcc taagcttacc ttgctcaaat ttctttttt tttctttttc 120
tttgtttttg gtttttattt tttcttaaat ttcaaggata ttccttcttt tgtaaatgtc 180
acagagtatc atggctctgt cgccgaggct ggagtgcaat ggtgcagtct caggtcactg 240
caacccctgc cttccaggtt caagcgattc tcctccctca gcctcccaag tagctgggat 300
tacaggcaca tgccatcatg cccggctaat ttttgtattt ttggtagaga tggggtttca 360
ccatgttggc caggctggtc tggaactcct gacctcaggt gatttgccca cctcagcctc 420
ccaaagtgct gggattacag gtgtgagcca ccgtgcccgt cccaaccagg cttcttaaat 480
gaattctaag atagaaacaa caggagctgc caggactctc ttaagggctg aacctaggac 540
tgncacagtg acatttctgc catattctgc tggtcacaag gcaagcccaa attcaaaagg 600
agagaaatag acctcttana gtttcctaat aaaaggtaat ttccaatttt tnaana 656

<210> 1034
<211> 717
<212> DNA
<213> Homo sapiens

<400> 1034
tagtgcgtgt gctggggcga gcgggagcgg gcgaggatgg gcacaggata gaggcagagc 60
cacccacgcc gccgcggccc cacgctgggc gacagagcct ccagttcccc ttcaatggtg 120
gcgggtcgcc ggagctctga tcgccgggaa cccttgccgc tgctgtcctg cgaccccaag 180
caggtataga cacgtgtggc cgtttacgct gtaggatcct cattcccact ggctttgaac 240
attttgggga cttacaatgc cgccacccgc ggacatcgtc aaggtggcca tagaatggcc 300
gggcgcctac cccaaactca tggaaattga tcagaaaaaa ccactgtctg caataataaa 360
ggaagtctgt gatgggtggt ctcttgccaa ccatgaatat tttgcactcc agcatgccga 420
tagttcaaac ttctatatca cagaaaagaa ccgcaatgag ataaaaaatg gcactatcct 480
tcgattaacc acatctccag taagttgatc ttagcttctg acttccagca aactctttgc 540
tctgcgtttc tgctatatgt gattgtggga tattaatttt tgaggttgac tttagtgcaa 600
agcaaaaggc ttccagaatg tcctgacatg cagattctgg atttaaggcc caaaanggggg 660
ggaaaaaaaa tttggggccc ccccccccccc ccccnttttt ncccccccgg ggttttt 717

<210> 1035
<211> 520
<212> DNA
<213> Homo sapiens

<400> 1035
gctttaatga tttatggcaa actcatacta gccttgatca gagaggtgac cctggcagtt 60
attgagcatt aactctggag gactgacgcc actgagtctt tctacacact gtaatttagt 120
gttcctatcc aagatggcca ctaaattgca cttcttctat tttcaccctc tggagaatgg 180
taaaaagcat gatttgcaaa tattgtcaag tccaaagtgt gtttctaaac tactaagcta 240
gccaaatgca tctctatatg ttacaatgtt ctgcagatgt gaaaaaatcc ttcccgggtt 300
tatgaaagtg agaatgatat gcatctttag ctgcctctgg catccggcac gtcacacagt 360
gtggtcagtc cagtcaggct gcccgagcca cagattccca gcggcttcat ttgtcagaca 420
agctgacagg tgttggtcag gaaaatactg atcaagttgt ttttgttgtt gttgttttga 480

0956456.0002800

gacagggtct cactctgtca cccaggctgg antgcanngg 520

<210> 1036
<211> 675
<212> DNA
<213> Homo sapiens

<400> 1036
agatagcatg tgtaattaat ttttaatgca gtgctggatg cagcgctttc aagcagttag 60
tggatgtgaa gaagcagcac tggccaagga catcagagac ctcagagcaa ggcagccccg 120
ttctccttta aagggactcg gaaagtggca gaggaggctt gcattgccct ctgtgtggag 180
cggactggcc cagaaatggg ttcttctcgg gtgacctgag gtcaagtcag tctataacaa 240
tctaagacca gggatcccaa gagatcatct cctccaacct cttcattata taaatgggga 300
aaccaaggca gagagtgggg atgaagccat gacacatggg tggcagagct gactcatacc 360
tgggtctgcc cactaggcca tactacctct cttgagtttt tattgaaaac cagaaaagga 420
agttcgtcgc ccagtggaag ccacttaaag attgatttct gcctgaccat gaggcttggt 480
gtgaaccctg caatgagatt ggtagcaggt agagctctga tgttgaggag ccccacgttg 540
ggtgccttgg acttcagctc tgctatctgc agtgggagcc caccagacac atcctgggtt 600
tgagactctg gggttgtgct ttgacagctg gctgccctgt cccttggtng gggggggggg 660
ggnccccttt tnccc 675

<210> 1037
<211> 660
<212> DNA
<213> Homo sapiens

<400> 1037
aaacacagag agaaattgtt aagtggaagt gagagctcat ccaaaaaaag acagagaaag 60
aaaaaagaaa agaagaaatc tggtaggtat tcatcttctt cttcatcaag ctctgattct 120
tccagcagtt cttctgattc tgaagatgag gataagaaac aaggaaaaca gagaaagaaa 180
aagaagaacc gttactgaat cagacagtaa ggatagttta aaaaagaaaa agaagtcaaa 240
agatggaact gagaaagaaa aggatattaa aggactcagc aaaaagagaa agatgtattc 300
tgaagataaa cctttatcat ctgagtcctt gtcagaatca gagtatattg aggaggtgca 360
agcaaaaaaa aaaaaaaaaa aaaaaacccc acaaagtcaa aagacaagtt tgaaaaatgt 420
ttacagctcc acaaagatag acaaatttcc ttgatgtatg aaaaatgtca acaaaccaat 480
aaaaagacta acaattcagt agaaaaatgg acaaagaaca aatatggaga ttcatagaaa 540
tgagagataa atgtcatgat gagaaggtga ggtgctcact tgatttataa gagaaatgaa 600
aattaaaact acaccagatg ccatttttta aaaacctatt acattgngaa aaaattttnn 660

<210> 1038
<211> 642
<212> DNA
<213> Homo sapiens

<400> 1038
agtgttccgc gtccgggggt ttgtgggagt tgccttgacc tgcagctccg ccaccgcgga 60
cccgccttct gccctcagca gcagacgctc tgtcccgccc gggcagctct gcgaggcagc 120
ggctggagag ggaaccatgg ggactgtgca cgcccggagt ttggagcctc ttccatcaag 180

0088750 5a5a2a0

tggacctgat tttggaggat taggagaaga agctgaattt gttgaagttg agcctgaagc 240
taaacaggaa attcttgaaa acaaagatgt ggttgttcaa catgttcatt ttgatggact 300
tggaaggact aaagatgata tcatcatttg tgaaattgga gatgttttca aggccaaaaa 360
cctaattgag gtaatgcgga aatctcatga agcccgtgaa aaattgctcc gtcttggaat 420
ttttagacaa gtggatgttt tgattgacac atgtcaaggt gatggcgcac ttccaaatgg 480
gttagacgtt acctttgaag taactgaatt gaggagatta acgggcagtt ataacaccat 540
ggttgggaac aatgaaggca gtatggtact tggcctcaag cttcctaatc ttcttggtcg 600
tgcagaaaag gtgacctttc agttttccta tggaacaaan nn 642

<210> 1039
<211> 681
<212> DNA
<213> Homo sapiens

<400> 1039
gctaatgttt tggccgcttc aagatggcgg tgcaggagtc ggcggctcag ttgtccatga 60
ccctgaaggt ccaggagtac ccgaccctca aggtgcccta cgagacgctg aacaaacgct 120
ttcgcgccgc tcagaagaac attgaccggg agaccagcca cgtcaccatg gtggtggccg 180
agctggagaa gacgttgagc ggctgccccg ccgtggactc cgtggtcagc ctgctggacg 240
gcgtggtgga gaagctcagc gtcctcaaga ggaaggcggt ggaatccatc caggccgagg 300
acgagagcgc caagctgtgc aagcgccgga tcgagcacct caaagagcat agcagcgacc 360
agcccgcggc ggccagcgtg tggaagagga ggcgcatgga tcgcatgatg gtggagcacc 420
tgctgcgttg cggctactac aacacggctg tcaagctggc gcgccagagc ggcatcgagg 480
acctagtgaa tattgagatg ttcctgacgg ccaaagaggt ggaggagtcc ctggagaggc 540
gtgagacggc cacctgcctg gcctggtgcc atgacaacaa gtcccggctc cggaagatga 600
agagctgcct ggagttcacc tcagaatcca ggagttcatt ggaaaaaccc ttttncnaaa 660
tttttncccc cccgggggggg g 681

<210> 1040
<211> 655
<212> DNA
<213> Homo sapiens

<400> 1040
cattccttaa tgggtttaca tattaattaa tctgttgatg tattcatgca tgcatttgca 60
aatataattt gaagccctac cattttctag gaattctgcg agaacctagg gaatagatag 120
gactacattg attttgtcat catgggattc tggaaacatt caggaggagc atctcatctc 180
tagcctaggg tgtcagaaag aacttgagta atcaaggatt gggtcttaaa ggacaagtga 240
acatgtgcag gtgagaacat tctaaaatga agggacttga acaaaagcaa agccatgtta 300
aacagcttgt acttcatctg taggtagatc agtaaccact caggggtttt aatcagggaa 360
atgatcttct cagatttggc ttcatatgaa tctctctatt tgccttatgt cacagcatat 420
attaggagat catcagagta gtccagacaa gcaggaatga agataagcat ttggaatcta 480
gaaatgatta cattaaaaca ggcctagaca caaaccacca catttttgc cagaaaggca 540
tagaaacaaa ttgtattagt gcttgccagg ttctgggagg agttggagat ggagaatgac 600
tgctaatggg tataagattt ctgtatagtc tgntctcatg ccttggncnt ttaaa 655

<210> 1041
<211> 665

0056-5695-0200

0960450-020800

<212> DNA
<213> Homo sapiens

<400> 1041
aaataaaaat aaatcactat gccaatgtgg gagttatgat catctctgtt tttaaaaatt 60
atctatgcaa gcatggggca taacctttgt tatagctctt tcactgcatt ttttggctct 120
atttcccaaa taaaatagag aaacaatatt ttaaggaatg tattgtcccc ttagctttct 180
tattttgcct tttcaggaac tatttgcgtt tgcggtattg cttaactatg aaatgctaga 240
attcataacc cactatcttc atttcctcca ggctagtagc ttaataacat gaagaaaaat 300
tgattcttgt agtacctaaa atgacatttt ctgcctacat aacctgttaa tccagttttg 360
agttcccatt acattttcat cgtcagtggc aagccagatt aatttatagt ataatcattc 420
aaaaagttta gtttacagat tttaaagttg cttttcatat caattttatt tatgctgntt 480
ttatatttaa attgctttct atgtgagtca tccatgtaat tttcatccaa actgaaatta 540
acctttgcgt aatttctgct ttcttgaaac tacttttttct tttgatgatt aaatattgta 600
tgattactgg agttggtgat tgctaactac tganagtcag tgggnncccc ttttaaaaaa 660
aaaaa 665

<210> 1042
<211> 711
<212> DNA
<213> Homo sapiens

<400> 1042
cagagatcat gtgacttgca tgtggcctag agataaaatt caaatctggt tctgtagact 60
ccagggacat attcaccatg ccatgggtgg tggctattaa accttgataa atttgtgttt 120
atggttaaca aatgtgaaag ctattaaaca ttgctggttt gaatttttta cagtgcagaa 180
atgtaaaatg aaaaaggata tttcctttca cagtgttacc gagaagtcat gataatttcg 240
tttgttcttc cagatttagg catatactta tttaatcaat aatgtgttaa cagctgacac 300
ctgtggttgc tgtgacaggc actatttgaa gtgctttatc atggattaac tcttaatcct 360
cagctaccgt ataaagtagg acataacccc atttcacatg cactacactg agacttgcct 420
cctctccccc cacattgaag atgttctttt tttcataact atatactatt ccattgcatg 480
aatattctgt aatttattta atcccctatg gattgataat taggttcatt atagatagaa 540
gtgtaattaa cattcctgta catgtatttt gctacttgtg tgggtatttc tgtaggatga 600
ataactagaa atttattgga tcaggtttca catttgcagt tttttttgg ggaaaaaaaa 660
aaaaaaaacc ccttttnaaa ncccnttttt aaaaccccccc cccaaaaaaa a 711

<210> 1043
<211> 690
<212> DNA
<213> Homo sapiens

<400> 1043
attcaaaact gtggattcca ttccagcaga tgtagctaaa atgggggggc aggagaaaac 60
tgtggaatag ggaaggtttt ttctaaggct tcattattgt gccagtctca agttgaaaag 120
aggctacatg attgtacatt caagtcttat gttttcctat atttgaaaaa taaaaacatt 180
tataaaatat atgcaatgtt tactgggtgc ttttcctcgt attagtgttt taaagcaatt 240
gaagaaaata aatatttcag tataaaaagg agcaaatgta tatgaataag tacttaagag 300
aaaaaaattt tagtgacagc tttaatggtt gataattcgg taccttcag ttcacccatt 360

taaagtatac aattcattga tttttattat agtcacaaat gtgtacaact gttaccaaag 420
tgaatttgat aatttttttt ttatcacctc ataaagaacc ctgtaccctt ggccaggcac 480
atttgctcat gcctgtaatc ccagcacttt gggaggccca ggtgggcgga tcacttgagg 540
tcaggagttc gagaccagcc tggccaacat ggtgaacctt gtctctacta aaaataaaaa 600
aatgagccga gtgtggtggt gggcgcctgt aatcccagct tacccttttt tgggggggag 660
gnaaaaaggg ggggncccnt ttttaaaaaa 690

<210> 1044
<211> 710
<212> DNA
<213> Homo sapiens

<400> 1044
attttgcccg ttagttgatg cagattcttc ataatgtcaa tggcctttac aatttggtat 60
gtttttgcag tggctggtac tgctttttcc tttttgtatt tagtgcttcc ttcagaagat 120
cttgtaaggc aggactggtg gtgacaaaat ctttcagcat ttgcttttct gtgaaggatt 180
ttatttctcc ttcacttatg aagcttagtt tggctggctc tgaaattctg ggttgaaaat 240
tcttttcttt aagaatgttg tgccaggcac cgtggctcat gtgtgtaatc ccagcacttt 300
gggaggctga ggctggcaga tcacctgagg tcaggagttc aagaccagcc tgaccaacat 360
gggaaaactc catctctact aaaaatacaa aattagccag ctgtggtggc acatgcctgt 420
aatcccaact acttgggagg ctgaggcagg agaatcgctt gaacccagga ggtcaggttg 480
cggtgagccg agatcttgcc atcatactcc agcctgggca acaagagtga aactccatct 540
cacacaaaaa aaagaatgtt gaatattggc ccgcactctc ttctggcttg tagtgtttcc 600
gcagagaaat ccactgttag tctgatgggc ttccctttgt gggggaaatt ttaaaaaaac 660
ccccccccc cnggggaaaa acccccccc ctttttttt ttttnnnccc 710

<210> 1045
<211> 645
<212> DNA
<213> Homo sapiens

<400> 1045
ccatgcacac aatttaaggg ggaatcaaaa agctaagtaa tccagataaa tgttatttat 60
tgtaatgcaa taaaaatatt caaaataagg ctaaaatcta tgctgaagaa aataccacaa 120
ttttaaaaga agattaatag ggaacgtgga ggtatttttt ctcttgacat gagtggtgca 180
ttgtatgcac atttgttttt cactgggctg cgtatttaca tttagtgaat ttttctatac 240
atatattcta tttcaaaaaa ttgcaaaagg aagtaaaaat ggacacaggc aggctcttaa 300
tttcttgtga tctttgctta agtcttatgt ttctgtcctg tactgaaaat ttcttctagt 360
ttcttttaaa ttctaacatt tgttttatag aacaacaatt atattgccaa ataaaatctc 420
cagtgatttt gatagtaggt ttagattgtt catcagaaag ttggctctgt gtttctctat 480
atcttggcac ccaaatgttc aatttaactc caggtaccca cttgtcttat ggctctggtt 540
catacgcagg caattaacct tcattataat ggttggttca caatagaaca attatctagt 600
tgattgctct agtgtaaatg tagtcataaa tatgccatgg ttnnn 645

<210> 1046
<211> 664
<212> DNA
<213> Homo sapiens

0962946.07280D

0507945 0070800

<400> 1046
gggggggcccg ggcacaagca gttgagggaa ggagactgtg cccctcctgg ctcccaagtc 60
ttcaaggaga agattctccc aggaaatctg acctcagaag acacctcctt ggggcctctc 120
tgctgtcaca gccatgccac cttagagctt tgtaaagcct gcaaagggct ctttaaaaac 180
ttcaagccag gcgcagtggc tcacacctgt aatcccagca ctttgggagg ctgaggcagg 240
cggacacttg agcccagggg ttcacagctg cagtgagctg cggtcatgcc actgcactcc 300
agcctgggtg acagagtaag accctgtctc acagaaataa gtctaacttt aattgaaatg 360
ctgtagcang ctgagcgcag tggctcttgc ctgtaatccc agcactttgg ggaggacaaa 420
gtgggcggat cacctgaggt caggagttcg agaccagcct ggccaacatg gtgaaacccg 480
tctctactaa aaatacaaaa attagccagg tgtggtggtg tgcacctata gccccagcta 540
ttcaggagac tgaggcagga gaatcgcttg aacctgggag gcggaggttg cggtgagctg 600
agatcatgcc actgcactcc agcctgggca acagagcgag actttccccg ggnnnccccc 660
tttt 664

<210> 1047
<211> 855
<212> DNA
<213> Homo sapiens

<400> 1047
aaaatgctct ggctccggtg gtgacaggtt gtccagcttc ttacagccat cttcactgaa 60
actaaggtta actcctcact ctctatggac ggctactctc tatttccaag ggcgtgaaga 120
atttccctct tctcctgtgc tttcatctaa aagttctccc tggataatta tcattgcagt 180
ggagtgcctg gattggacat cctcatctgg gtcaactaaa aaaagaaagc atgcaagacg 240
acagcataga agcttctact tccatatctc agcttctaag agagagctat ttagctgaaa 300
ccagacatcg gggaaacaat gagaggagtc gagcggagcc ctcctccaac ccttgccatt 360
tcggcagtcc ttctggggcc gctgaaggag gcggaggcca agatgacctt ccagatcttt 420
cagcctttct gagccaagaa gaattagacg aaagtgtcaa tttggcaaga ctggccatca 480
attacgaccc tttggagaag gcagatgaaa ctcaagctag aaaacgactt tctcctgatc 540
agatgaaaca ctcacctaat ttaagttttg agcctaactt ctgccaggat aaccctcgaa 600
gtcccaccag ctctaaagaa agcccccagg aggcaaaaag gccacagtat tggtctgaaa 660
cccagtccaa aaaagtattt ttaaataagg ctgccgactt cattgaagag ctatcctcct 720
tttcaaatcc acagcttcca aaggattaga cctcgtgcct gcaaaaaccn caagagtnaa 780
ctggaatctc aaaacaaagt atgcaggaaa cagctcagtt ctaaactgta gaagacnaga 840
agactttgtc catcc 855

<210> 1048
<211> 817
<212> DNA
<213> Homo sapiens

<400> 1048
cactgagaat atggggtaaa tacttggaga caagagagag acaaatgtcc tagtttccaa 60
aaaggaataa agtatattgc aaaaacccaa gaccaattcc ctactttaaa ctgtggtaaa 120
atttgaagag attgtaaaaa aatgaaatat tgtgtttaga agagaatggg atgatcacca 180
tgaatcaata tgaatttata agaataagac atgccaaaat gacctcattt ttttttgct 240
ttatttttag ttgtataatt gctattggat tagagaatag taaagacatg ttgtatcttg 300

actttcgcca agtggttgac agtgtttcct taactatcct tgtggaaaca tgatgaaatt 360
agattgtaat tagattgatt tacagctgct tgcctggcca ttgccatgcc cgcatgccca 420
gcgtttagtt aaataatagt tactttatat actggttcct cacagagaac tggtggtgaa 480
cattaatttg catatattca gaaagtatgg atttgtagtt aacgagtttt tttaaggatt 540
tgtatgttga aacttgagtt cctggattta ttcatgattg aggtttctgt tagggacttt 600
tttgcaacca agctgtattt gtaagatata taaatctgnt tttaatttac atatgtaacc 660
ttgacttata aattacttag aagccaaggc gtaatattag catttagagc aaagtctggc 720
tatgttaana atgctaacgt tatgaagaat cttttctttg gtcagtaacc actatngtaa 780
gctccttgga tgttttcatc ccttgaaagn cattctg 817

<210> 1049
<211> 667
<212> DNA
<213> Homo sapiens

<400> 1049
aattgatggc atcttaatct tggtgtcagc caagcagtag ttgtaacaca gtcttcattg 60
cttgtgctgt gcatcatatg tcttgcagtt aacccatagg gattaagtgg tagtgtttag 120
ggggtgtggc aggaggtgag tttaacataa acctccaagc aggagtcaaa agtagacaag 180
ctctatataa ttacacccct gacttaagaa tctagcatca agtagctttt gtttctttta 240
tggatagttt taagaaacgc tgcatcacca actcccttga tggcactgaa ccttttgtgg 300
gaaaaccaga caatgacact gaaattaaaa gtgattcacc agagtcagac tctgaaagtg 360
aagaactatc agaactaact actttatttc acttatattt tccttttttg aatgctcaag 420
tgttgtatga tctcatttaa agtgcttcta ataaatatat aaaatttata agtgaccaag 480
cgttatgtta gttaaacaga agtatttttc ttagtatggg gaaaaaatgg ctatacaatc 540
tggccagacg tggtggctca gtctataatc ccagcacttt gggaggccga ngcgggcgga 600
tcacgaggtc aggagatcga gaccatnctg gctaacaccg ggaaaccctg tctctactaa 660
aaaatnc 667

<210> 1050
<211> 698
<212> DNA
<213> Homo sapiens

<400> 1050
tcaagatgag atttgtatgg tgacaaagag ccagaccata tcaagtacct aactcattac 60
tatcctataa ctatgagtat tactggtatt cttattggcc acttgacacc aacacaagtg 120
gggggcctta tatcacttaa gaagaggaaa tatatagaaa aaagtggcct ggagagaaac 180
ttgctccctg aatttccaat atatgtccaa actgatgact ggggtgagaa agatctattc 240
tggcttttgc atactgactc agataaaaaa caaagctcat attattacaa agtcaaaaac 300
aaaagatact ggtagggctg cagagaaaag ggaatgctta tacactgttg gtgggaatat 360
aaattagttc agccactatg aaaagcagtt tggagatttc tcaaaggact taaaacggaa 420
tcgctgttca acccagtaat ctaattagtg ggtatatatg caaaagaaaa caaatcgttc 480
taccaaatag acacatgcac tcacatgttt actgcaacac tattcacaac agcaaagaga 540
tggaatctac ctaggtgccc atccatggtg gattggataa gtaaaatgtg gtacatatat 600
actatggaat attacacagn cacaaaaagg aatgaagtca tgtcctttgt agcaacatgc 660
atggtgctgg angtcactat cctaagtgaa ttaacnca 698

0960204-0960800

<210> 1051
<211> 667
<212> DNA
<213> Homo sapiens

<400> 1051
gtaaatttaa acagaaaatt atttagcagt ttccattttc aaatgtcctg cttagaaaaa 60
aaagataatt gagtccagga ttattaaaca tacaggacat cattttgca aaccagatgg 120
gatggtcatg ataaataaat gcttactgct gtatttcact gcttgtctgt gcttctttgg 180
ctataggcta aaaacatgga atgctctctc ttgcctaagg acacaaaatt gtgcagtaaa 240
caagggttca aataaacctt tggtctgaac aatttgagca gatgcttatg tttggatttc 300
caaacacctg ccaattactt tgaagtcaaa tagacctcat aacttccagt agggttaaat 360
gtagtcaagg tagcattaaa aattaatgag taagcctgga taatatggtg aaactctgta 420
tctacaaaga gtacaaaact tagttgggca tggtggcatg cacccacagt accagctacc 480
tgggatgctg aggtgggagg gtcgcttggg cctgggaggt cgaggctgca gtaaaccacg 540
gtcacgctac tgcactccag cctggcatga cagagtggga ccacgtctca agcaaaacan 600
aacaaaacan aacaaactaa tgagttaata aatgaggtan agagaaacag attttggaaa 660
tgccgat 667

<210> 1052
<211> 654
<212> DNA
<213> Homo sapiens

<400> 1052
aagtgcggac gcccggctcc cggcgtggac gccatggtgc tgtgcccggt gattgggaag 60
ctgctgcaca agcgcgtggt gctggccagc gcctccccac gccgtcagga gatcctcagc 120
aacgcgggtc tcaggtttga ggtggtcccc tccaagttta aagagaagct ggacaaagcc 180
tccttcgcta ctccgtatgg gtacgccatg gagaccgcca agcagaaggc cctggaggtg 240
gccaaccggc tgtaccagaa agacctgcgg gcccccgacg tggtcattgg agcggacacg 300
atcgtgacag tcgggggggct gattctggag aagccggtgg acaagcagga cgcctacagg 360
atgctgtccc ggttgagtgg gagagaacac agcgtgttca caggtgtcgc gatcgtccac 420
tgctccagca aagaccatca gctggacacc agggtctcgg aattctacgg ggaaacgaag 480
gtgaagttct cggagctgtc cgaggagctg ctctgggaat acgtccacag cggggagccc 540
atggacaaag ctggcggcta cgggatccag gccctgggcg gnatgctggt ggagtccgta 600
cacggggact ttctgaacgt ggtgggattn ccgctgaacc acttttgna agca 654

<210> 1053
<211> 903
<212> DNA
<213> Homo sapiens

<400> 1053
gggaaggcgg aaggcttcgg cagagctgcg ccgccgaggc tgagcggtcc cttctcgctg 60
cggccgccca ggtgcccgcg cccgtggcgc tatggaggcg gcgctgctgg ggctgtgtaa 120
ctggagcacg ctgggcgtgt gcgccgcgct gaagctgccg cagatctccg ctgtgctagc 180
ggcgcgcagc gcgcggggcc tcagccttcc gagtttactt ctggagctgg caggattcct 240
ggtgtttctg cggtaccagt gttactatgg gtatccgccg ctgacctacc tggagtaccc 300

0952945.0720

catcctcatc gcgcaagatg tcatcctcct gctctgtatc tttcatttta acgggaacgt 360
gaagcaggcc actccttaca tcgctgtatt ggtgtcttct tggttcatcc ttgccctgca 420
gaagtggatc atagacctgg ccatgaatct atgtactttc atcagcgcgg ccagtaagtt 480
tgcacagctc cagtgtctgt ggaagacgag agactcagga actgtgagtg cgctgacttg 540
gagcctctct tcctatacct gtgcaacaag aataatcaca accttaatga ccaccaatga 600
ttttacaatt cttctacgtt ttgtgatcat gctggcttta aatatatggg taacaagtga 660
cagtacttcg ctaccggaag accgctataa angctgaatg atggatacat tattccttcc 720
acagtggatt ttgagtaact gaaccaaagg aaaaagaanc tctttgctaa attaaggnct 780
tttataaatt aagtaaaatc aagtttataa tctttaaagc caaaggtttt tttaaaactt 840
tgaaagaaag aaccccttta aattcttggt tnaaaaatac caatttggct tcttcnttct 900
tna 903

<210> 1054
<211> 686
<212> DNA
<213> Homo sapiens

<400> 1054
gtgtgtgtgt gtgtgtgtgt aaatgggatc ttgctgtgct gcccaggttg gctggtcttg 60
agttcaggtg atccacccac ctcggcctct caaagtgctg ggattacagg tgtgagccac 120
cattccgggc cctaaaacag ttttttttagc tcgtcagcta tcgttaatgt taatgtattt 180
tatgtgtggc ccaagacaag acaattcttc ttccaatgtg gcccagggaa gcccaaaggt 240
tggacacccc tgaaaattac atatcttctc caacagagtg ttttgttaca acagccagaa 300
gcctgatgaa agatttatac tgcttgggac aagttttaat gattgttaat ttttactttg 360
aacaaatagt gaatgaaata atagatttga catttttaa gataacaagt gctaggaaat 420
atgaagtgtg agtaaataaa aaggttcata tgttattaga actaatcatt ttgatgttat 480
gcatagtgat tactagaata attcccagag tttctttgac agagacgtca cattagttta 540
acttaccaaa acagacagaa gaaatagaaa acttgagtag tcctattaag gaaataaaat 600
aattgaatct tttctacaaa gaatattcca gacctagatg gcttcaatgg taaattctgt 660
gaaacattta agaaaaacan annaca 686

<210> 1055
<211> 680
<212> DNA
<213> Homo sapiens

<400> 1055
gttctgtgct ttgaaagctt ttatctattt cagatcataa ttttttaatg gcagcccttt 60
ctaggatgct ttcggcagaa aaatgtactg gcaaaatcgt ctcctgaaaa gatttacgat 120
gagacacata aagtacattg agtagtatag ttattcttaa actagtcata agagtattaa 180
ctagcaataa ataataaaaa ataaaccaga ggtaggagaa ggtatggtga tttcaatgtg 240
agttgctttt ggatttatga tttcttggtt tctgtgccta aggaggcatg gatggtatta 300
ttttcttttc ttttttttttt gagacggagt ctcgctgtgt cgcccaggct ggagtgcagt 360
ggcgccatct tggctcactg caacctctgc ctcccggatt caagccgatt tcttctgcct 420
cagcctcccg agtagctggg actacaggtg cctgccacca cacccggcta attttttgta 480
tttttagtag agacggggtt tcaccgtgtt agccaggatg gtctcaatct ccttacctcg 540
tgatccgccc gcctcggcct cccaaagtgc tgggattaca ggcatgagcc actatgcccg 600
gcctggatgg nattattctt tttcttcagt tgctgctgaa atctaaaaaa acccggtttt 660

0952945.0720800

tcaagtcctt atgngntccg 680

<210> 1056
<211> 805
<212> DNA
<213> Homo sapiens

<400> 1056
ggccttttt ttttttttt ttgtttttga gatggactct ccctctgtcg tccaggctgg 60
agtgcagtgg cgtgatctca gctcactgca acctctgctt cctgggatca agcgattctg 120
ccttagcctc cccagtagct gggactacag gcatgcgcca ccacactcgg ctaatttttg 180
tatttttagt agagatggag tttcgccatg ttgaccaggc tggtctcaaa ctcctggcct 240
caagtgatct gcccacctca gcctcacaaa gtggtaggat tacaggcatg agcccaggag 300
tttgacacca gcttgggcaa cacggcaaaa ccctgtctct acaaaaaata caaaaattag 360
tcgggtgtgg tggtgtatgc ctgtggtcag cgactcagga gactgaggta ggaggatcac 420
ttaagcccag gaggttgagg ctacagtgag ctatgattgc accactgcac tccagcctgg 480
gtgacataac aagaccctgt atgagaaaaa aaaaaaaaaa gaatagaaaa aagntggcat 540
gagacccccc cacatggctt ctcgtgcttt acagcagtga gctgcatggc ctgcatggct 600
ggtggcactg gntcccactt aaggnagcat cactggatca tgaggacagt gtgaacaccc 660
ccacaaaggn cttaagcctg ccattcacct tctttccatc tcttttctca acctgcttcg 720
cagnacctgn ttggcttggt tcccattgaa aatcaagcag gtagtcacat agatttcatt 780
aattaacccc aaaataagna tgact 805

<210> 1057
<211> 756
<212> DNA
<213> Homo sapiens

<400> 1057
tatgcataag aagcagcctc aaaactaaca aaaaagattc gcacattcct cagttagagg 60
aggagcagag atgaagaaaa ggagaagaaa agcgctggaa agagaagaaa aggaacctcc 120
ttctgtgcag caggctcctg gcccagggag tgcggtgtgc ggcagagtgc gtgcagggaa 180
gcagcctctg aaatcgtgca gggaagcacc ctgtgaaatc gtgcagggaa gcaccctgtg 240
aaatcgtgca gggaagcacc ctgtgaagtc gtgcagggaa gcaccctctg aaatcgtgca 300
gggaagcacc ctctgaaatc gtgcagggaa gcaccctgtg aaatcgtgca gggaagcacc 360
ctgtgaagtc gtgcagggaa gcaccttctg aaatcgtgca gggaagcacc ctctgaaatt 420
gtgcagggaa gcaccctctg aaatgcctag aaatagctgc cgggctttca cttggttccc 480
aaatttcttc aaaggtcaaa accatcacag tgggcaactt tacaccccag tgttcactgt 540
cctcaggcca ctgcagagcc atcctagtgg ggcagtgggc gcggggcggg ggcttctgac 600
ttcggtgagg tcaccctgga ngggagtccc aggaatcagc ctgatgttca gaatgccttt 660
ctggcatctc agaatgtact gggggagact gaggaccttt agcccagtgt cancgtctta 720
ttgcaggaga cattaaagcc caanccagaa cttnta 756

<210> 1058
<211> 834
<212> DNA
<213> Homo sapiens

0956456-0702800

0302045.0720000

<400> 1058
aaaaaatgat gaatatataa ccagaaggag cccaggtact ataaaagcta agtaacgagg 60
aaacaaaaaa atgatgagta tataaccaga aggaacactc agtttgattc ccatatcagg 120
aagttcttgg gttcagtgca agacttgaaa cctgacatgg tttcattaga ttgtagaaaa 180
cgctttttt ttttttctg gacaacagat ggaaccatgt tgtcggttgt tcaaagatgg 240
acaggagaca gaaatctatc aacctgaagt cagctccaac tgcagctgtc tgttctcctg 300
aggactgtgc tagtggtcca cagaggtcac cttgcttatc acatgatatt ttcttgatgt 360
tagttgaagc acatcacctt aggtgacaca tgagggccaa aggcctcttt ctcagggatg 420
tatgtgaaag tgtggtgggt tggggaccag ctaaggaaaa aaagacatga aggagaatgc 480
aagcatctta cagtcatcat tcagtaagaa atctttatga ctggacaaag gaaaacataa 540
acgcccttta acctagaatg caaatttcta gtgattttta ctttttagt gtatcagaag 600
tcactgagca aggtaagtac cagcacttac agagacggag tcataaaggc tgctctctaa 660
aagtaganga tgtgcaaaac ctgtagtacc atttaacaga tttttgacct tggtaattat 720
gtcattttga aactggaata aatatgtaat ccgaaggttg atttttctga ccaaaagtaa 780
gtcaaggtca aagtttttt aaagnntact ggttggattc ttggngggtt ttca 834

<210> 1059
<211> 754
<212> DNA
<213> Homo sapiens

<400> 1059
acatattcat gaaaagattg gaggagggaa ttaatttaat cttatttggg tttgggagag 60
atgactggat ttgagggtag gcaaatggga ggcagaggag ctaaagacca gtggggtggc 120
aagtgcaagc tgaaccgagg gtactgtggt gggagcagag agggctggat aagaaagaca 180
tgacagggcc gggcgcggtg gctcacgcct gtaatcccag cacttgggga ggccgagtgg 240
ggtggatcac aaggtcagga gttcaagacc agcctggcca agatggtgaa accccacctt 300
tttcaaatga tgtatctcag gggagaaaaa agagactcca tgttttcaaa gtttttgctt 360
tttattattt atttatttat ttttgctttt taaaagcctc tcaacaaact ctccttattc 420
ccatgtgact gaggatgaaa cagtctcaga ttaaacagac ttctcaaggt cacgcattgt 480
cagtgccaac attcaaaaga aggctaggtc aggttcttga acatccttgt gaaattattc 540
ttcccttaag tctgggttaa attataaatt atgatctgca tttaaattcc caaatttaaa 600
acaaaccaaa caaaacaacg cacttcagac tcttttggaa acctttgaaa ggaacttgat 660
ttctgtgtgc tttgaaagta tatattgcaa tcaaggtatt ggtgggtaag tgtgtttttg 720
angnttgtca caaattaacc aaaattatat gnct 754

<210> 1060
<211> 760
<212> DNA
<213> Homo sapiens

<400> 1060
agaagcactc cgggcgtgct gccggcggcg gtaggtggcg cgcgggtccg gcgggcggtt 60
ggcttgagcg ggaccggagc tgaggcagga agagccggcg ccatggtgga gaaggaggag 120
gctggcggcg gcattagcga ggaggaggcg gcacagtatg accggcagat ccgcctgtgg 180
ggactggagg cccagaaacg gctgcgggcc tctcgggtgc ttcttgtcgg cttgaaagga 240
cttggggctg aaattgccaa gaatctcatc ttggcaggag tgaaaggact gaccatgctg 300
gatcacgaac aggtaactcc agaagatccc ggagctcagt tcttgattcg tactgggtct 360

gttggccgaa atagggctga agcctctttg gagcgagctc agaatctcaa ccccatggtg 420
gatgtgaagg tggacactga ggatatggag aagaaaccag agtcattttt cactcaattc 480
gatgctgtgt gtctgacttg ctgctccagg gatgtcatag ttaaagttga ccagatctgt 540
cacaaaaata gcatcaagtt ctttacagga gatgtttttg gctaccatgg atacacattt 600
gccaatctag ganagcatga gtttgtagag gagaaaacta aagttgccaa agttagccaa 660
ggagtagaag atgggcccga caccnagaga gccaaacttg attcttctga gacaacgatg 720
gtcaaaaaag aaagtggtcn ttctgncctt gtttaaagaa 760

<210> 1061
<211> 786
<212> DNA
<213> Homo sapiens

<400> 1061
ctaagacccc taccacacac ctcaaagtaa cttgaaatac attatgctcc cagtgtggtt 60
gtaatattat catcttatta tcaccaattc ccttgcatgg tggctttgct gagcagctgt 120
ttcacagaca agccaatttc ttttaagtat tgctctatca gactctgaaa ccagttctac 180
cagaagggtt cttggtaatg aatgttaatg agcagacaag tatcctttct ctgacagagg 240
ctcactaatc ctttgagtaa gtatgggtga attacaggag aaattttatt taagttaaat 300
tgatctgcta ctaagtagag aaaacttatt ttcttatttt aatgaaaatc aagaaaaaat 360
atttaatggg gatgtaaatt acagctccct ggaaacattt ttgtcttctg actggagaac 420
acagtagctc agtagactgg ttcaactgca tagtgtgctt aacactagca aactcatgat 480
ctccagtgag gcctgatctt cagtgggaca gtgggaaatg gagtagaaac cactcactct 540
ctctgggatt tggtaccagc agattcttta tgttccttag tgataagtaa tagggataaa 600
aaattattct ttcttcttcc actgagccag tgtaagagtt cctttttttt tccaaaacaa 660
ataagatagt aaagccataa gaacagcact tgnatgcttt ttgnattcta agaatatgag 720
aaaaataatt caggggaacc tttatctgaa anggatataa ccatgtcctg gatggaatac 780
tgcgaa 786

<210> 1062
<211> 702
<212> DNA
<213> Homo sapiens

<400> 1062
tgtcgacgcc gctgccaccg cctgcctgag agaagtcgtc gcggccgacc ccgtcgcctc 60
cgccggctac catgtccgcc caggcgcaga tgcgggccct gctggaccag ctcatgggca 120
cggctcggga cggagacgaa accagacaaa gggtcaagtt tacagatgac cgtgtctgca 180
agagtcacct tctggactgc tgcccccatg acatcctggc tgggacgcgc atggatttag 240
gagaatgtac caaaatccac gacttggccc tccgagcaga ttatgagatt gcaagtaaag 300
aaagagacct gtttttttgaa ttagatgcaa tggatcactt ggagtccttt attgctgaat 360
gtgatcggag aactgagctc gccaagaagc ggctggcaga aacacaggag gaaatcagtg 420
cggaagtttc tgcaaaggca gaaaaagtac atgagttaaa tgaagaaata ggaaaactcc 480
ttgctaaagc cgaacagcta ggggctgaag gtaatgtgga tgaatcccag aagattctta 540
tggaagtgga aaaagttcgt gcgaagaaaa aagaagctga ggaagaatac agaaattcca 600
tgcctgcatc cagttttcag cagcaaaagc tgcgtgtctg cgangtctgt cagcctacct 660
tggtctncat gacaatgacc gtcgcctgca gaccactttn gg 702

0050356-0202000

<210> 1063
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1063
taaaataaat agggctttag ttcttaagta attctatagg attttaccct gaaatccagg 60
gtgttcagat ttcaaaaagg ataatttatc agtattttct catccagtca aacttcagct 120
gacattgata caggtcaaaa tgcgtagatg ctttttggtg ttggaaataa gtgtctgtct 180
tatggtcatc attgtcttct tagatttttg gataggggggg ccaggtaggg ggagactcag 240
aaataaaagc gttccccaga taacttcaat ctggaaagaa ttttttgtat agagtccatc 300
tctccctcaa gactgaccac aggtttcatg agaaggtccc tgaaaacatc acatttctct 360
gaagaaccat caacttgtct tttcttgaac cacaggaatg gttctacaga ccctactata 420
attcttcaca tttcagaacc catgtttaat ggagggaaga gagaaatgca tgggaaaaga 480
acacctcctt ttctcctttc tcttaaattc aaagacgttt gctttggaat gccctcactt 540
ctccctattc acaggcttct aaaatcatta atttactcaa ggcacatgtg ccttctttgc 600
cccaaatgca tcactttcct tttagttatg gctgattttg ggtgtgtgtg tgtaagacat 660
gcagtcaaca acgagatgaa ggccattgca tagatctcat gcngatagtg atggattcag 720
aaagtagggt ccagtggcgn cactancttc ttgtaagcca gtatacactg gctatttggg 780
g 781

<210> 1064
<211> 767
<212> DNA
<213> Homo sapiens

<400> 1064
ggccttttt ttttttttt tttcggagat ggggttttgc tatgttgccc aggctggtct 60
tgaactcccg ggctcaagca gtcctccagt cccagtctct tgagtagctg agattacagg 120
tacgcaccac catgcccagc ttgtgtgggg tttcccttga agatcagtct caaggttgct 180
gcttgaccgg tgagcagcag gattcagacc tagatgtgtc tgactctggg atcctttcac 240
ctaaccctga cgctttccca gcaagcctgg atgacctggc ttccctccac cctgtgccca 300
tgccctgccc cttttccatc ttggagtttc tgaagcccca gtgggctgtc cactctgtgc 360
ttctttgggt cacttatgat gccagcctcc ctcccggccc acccgccaat cccaggccac 420
tgctaatagg ggtgtctttg gcaggggaac aaagagcgtt ttggggctgc caggtggctg 480
ctctgagtgc tccagtgttg gccagagtgg cttggcttcc agaaacttct tgctgcctcc 540
ttgcaggagg aggtcctggc catgctagga ctgtgagctg ctccccctga acccctggca 600
ggagccagac gctgctgtgc tgccacgctg gctcttcagc ccctggacgg acgccttggc 660
tggccccagg gcaggctcct cccaagcggc tggattctct tctcttcggg gaagcacaag 720
gcanaaggtt gccaatttaa aatggnttcc ttattaaaac tctcgnt 767

<210> 1065
<211> 735
<212> DNA
<213> Homo sapiens

<400> 1065
cattgttgag tattcttcac tggagctgga ccaccttagt cttaggagtt gaagaactta 60

0960456.02800

gaggattaaa aggattccag ttcacagcta cactcctaga tttagagaga ctgcgctttg 120
tgggtacctg ttgtctgagg ttattgcgtg tctatacctg tgaaatttac ccagtgtcag 180
ctacaggaaa agcagttgta gaagaaacta gcaaattagc agagtgtgtt ggaaaaacca 240
gaactttgtt aagaaaaatt ttatcagaag gagttgatca ctgcatggtg aaattggata 300
atgatcctca aggatatctc agtcaaccct tgagtcttct agaagctgtc cttcaggaat 360
gtcataatac tttcactgcc tgctttcatt ctttctaccc aactcctgcc ttacagtggg 420
cttgcctttg tgatctgctg aattgtttgg atcaggatat ccaagaagca aacttcaaga 480
catcaagtag ccgactcctt gcagctgtta tgtcagctct gtgtcacacg tctgttaagc 540
tgacttccat cttcccgatt gcgtatgacg ggagaagtat tactacgatc aattgttaaa 600
caagttagta cagagaacga ctcaacacta gttcatcgnt ttccccttt ggtggcacat 660
atggaaaaac tcagccagag tgaanagaat atctcangga tgacaagctt ccgtgaagtc 720
tggagaaaat gctgg 735

<210> 1066
<211> 722
<212> DNA
<213> Homo sapiens

<400> 1066
agaaaaaaag aaataaattc gagtcctttc attgtgtttc tctcctaaag agtcatttca 60
ataaatttgt attgaatatc ttttgtatgc cagacacttg tgggtgcttt gtgtaataca 120
aacatgatca ctttaaatga gtgtgaagta ctgttctggg caggtgaagg gtaaaaggag 180
agcatccctc tcaaaatgat ggaaatagga tgataggttt gggggagagc agggatctcc 240
agagggagag aatgatgaat aggtaggttg gattcatgtt gtggatgccc ttaaatacca 300
actgagcaag gttactatat atatatacaa ttaaaggata cctaagaaga agcctgaaga 360
cttgagatat agactgggct ttatcataat tagctgtgtt acccttaggt aagtgatttt 420
acctctcttg acctcagctg cactactcaa acacacacat aaacacaaat gagacgggaa 480
atgagctggg tgtctgtttc cttacagctc taaattctgt tattcccctt aattcagttt 540
taatagaagt gggaaatcat tcattgaagg tttctgagca tgggagttct cttcaacaga 600
attactgctg nttcactacc tggttgctct atttattaat gctctttctt ccccccttatg 660
tgattgctct gggagggact gnctctttat ttggnttttt ggtttttga natggagtct 720
gc 722

<210> 1067
<211> 782
<212> DNA
<213> Homo sapiens

<400> 1067
ctgtagtcgg acacactccc agctggccca gtttgtgcat gaggtgaaga agagcccctt 60
tggcaaggat gttcggctgg tctcccttgg ctcccggcag gtaaacagta gccagtattt 120
ccaccagggg ccatcctgct cctttcgcca caactttgtc ctgctcgtcc aggccttggg 180
agacgctggg tctgtgacag gctgaaccgt gtgaggagca gccccctccc tgacctggcc 240
ggcccagcac tggaaggcaa aggagaggtg gcggggcagg tccacatgtg ttggtaggat 300
gtcatttagc tggcaccatc tttttgcctc tttctttctc ctttgctgca gaacctttgt 360
gtaaatgaag acgtgaaaag cctaggttct gtgcagctta tcaacgaccg ctgcgtggac 420
atgcagagaa gcaggcacgg tagccactgg gaccgtggtg tagccgcagg tggtctggag 480
agagtgaggc aggggtggca gtgactgaag accattaagt gtctttcata gaaagaatgg 540

0962454.0792800

cagaggagac cccagttcct ttctgagtcc cctctccttg ggaaaaagtg ttcctactct 600
ctgggtcagt gnctggtccg aatcttggct tggagatgat tttacgggct ctttctggag 660
aacagaagtn aaaccttaca gtggtccgat gagaccacag taggcaagta ctttgggaag 720
ggcttataga ccccacccca cggaatgggg ctnaacattt cacaaacccc nttttgggcc 780
cn 782

<210> 1068
<211> 800
<212> DNA
<213> Homo sapiens

<400> 1068
atggagcgct ctgggcccag cgaagtgaca ggctcagacg cgtcgggacc ggacccgcag 60
cttgcggtca ccatgggctt cacggggttc ggtaaaaaag ctcgcacatt tgacttggaa 120
gcaatgtttg aacaaactcg aaggacagct gtggaaagaa gtcgcaaaac actggaagca 180
agagaaaaag aggaagaaat gaacagagag aaagaattaa gaagacaaaa tgaagatatt 240
gagccaacat cctcaagatc aaatgtggtc agagattgct ccaaatcatc ttccagggat 300
acgagcagca gtgaaagtga acagagttct gactcttctg atgatgagtt aattggccct 360
cctttacccc ctaaaatggt aggaaaacca gttaatttta tggaggaaga tatcctcggt 420
cctttacctc cacctcttaa tgaagaagaa gaagaagcag aggaagaaga agaggaagag 480
gaggaagagg aaaatcctgt tcacaagatt cctgactcgc atgagataac gctgaagcat 540
ggcactaaaa cagtgtctgc tttgggtctg gatccctcag gtgcccgttt ggtgacagga 600
ggatatgact atgatgttaa gttttgggat tttgctggaa tggatgcttc ttttaaggca 660
tttcgatccc ttcagccctt gtgagtgcca tcagatcaag tcattacagt atagtaacac 720
aggagacatg attcttggtg natctggaac tntcaaggcc aaggtgattg gccagagatg 780
gntttgaagt aatggaatgt 800

<210> 1069
<211> 826
<212> DNA
<213> Homo sapiens

<400> 1069
tcaaatgaga aaattgcaag tagtgtgaca gagctgattg attttgttgc tttcttgatt 60
tttttttca aaatgggttt actaaaatgt agatgactta actgcctcct ccttcgtctg 120
aaaaatgcca atattcaatc atcatgcagc attataacaa gccttataag tcctaaagca 180
ttaagttgca ctttttgag gaggggtagt gcagtatttc tctggccagt atgaatgaag 240
tttatactta ccatatttga tagaaacata gatcaagcta tggcacagcg actcatcaga 300
tagctagctt tgacgtctgg gcacaattga accaacttcc atcgtgaatc tttataatga 360
ttgactttgg tgtatagtgc agtaaacaaa tagtgctcct agttaagtat ttgtcagcat 420
cctttgtct ctaacttgtt tctattttta cagccacaca attcttggca tgtattaaga 480
aaaaaaaaa tccctgttca agtagttttt ccacctatca gcactgagta aatgccataa 540
atccattgaa atggtctaaa tgttccatct gttctcctgt tttgccagtt atatagtaat 600
gaaatacatt tgtaaatttt atgcaacaaa tggcaaacgt atcattattt tgaaattgng 660
tatgtaaaag ttatattttt acatgtagac tcttggtatt atgnggttta atacattgga 720
tcagttttgg tttttttaa aaactgnggg ttaaaaagaa gtctcattta aatgaaatac 780
ctccagaatc agaatttatg gtcattctga aaatgtanga accant 826

09529459.072800

<210> 1070
<211> 749
<212> DNA
<213> Homo sapiens

<400> 1070
tttttgtgg atttggttgt aagttgttaa aagttctcta cgttttggat ggattgcctt 60
aattgtattt atacaaatga gtttggttta tattacgcta cttatttaga aggacactct 120
gctcacaaat tatactagtt tggtagtttc ataaactagc ttgaatcaaa ataaaatggt 180
gctaaaatgg atgttatttt caactgtgca ctcagtaatt gcaaatagtt gtactatata 240
cctgggggtg aacacaaagg aagtagttgc atcatctctg tataaaacac agatttatct 300
ttcgtgtagt tgtgcattac gtagaatatg gtaaggcaac atctgagttg tagaagtgct 360
actggagtaa cagaggtgag gaatcggttc tgctcaaggg agaggactgg agaagagacc 420
tagaggggag agtggacctt gaagaactga ttggatttct cctgttgggg aatgtgaatc 480
ataaagctga ggtaggggga acaagtatga ggctggcaag tagtcggttt ggcaggagca 540
cagagtgcct gcagggaggg ccatgggaga tcaagctggg aatgtagaaa ggaattttaa 600
cttgataaat tttgactagg taacaggttc ttttatcaag gagtgacatt ttatgtcaca 660
aaaattttta aacccatttc tgnctcttgg aaaacccaaa gggagcagtg gcatgtgaaa 720
aattcttggt ttaaaagatt cnaaccatn 749

<210> 1071
<211> 777
<212> DNA
<213> Homo sapiens

<400> 1071
gtttttgcca ctgaaagtaa tggcaagacc gcaattactt ttgcaccaac ataaatattt 60
ttgatctagt aaggcagaac cttctaacag ccttgtttat agatggggtg gcctcttaag 120
taaggtggtg agtgctgtat tagttcagca gaggttacct atgtactttt gggggacaga 180
tatcatatag ggaattcatg tcagtgacca aacgaagtga ccattacagc ccttttgaaa 240
cctgaggtgt aatttttaaa aatgaactca tgactttaat agtcatagac tcaaacctga 300
gttgattatt atgaattagt ttatgggagt ctcaatatgt gaatatgatg gagacaagtt 360
ttggaataca gataaatcaa gtcactgtat tcactctctc tctctttgaa tagccttatc 420
tttgcctata cacacaaaca gtgcagccat caaaattttc aatttacaaa atgttcacag 480
tcatgcttct tccttgacta aacactgggg ttgctgccag tggtaattgg cttgaaacca 540
gctaattttt atatatctat ttagtctgga tattctagat gagtggcact atagttgcgg 600
gctctagtca ctgtgccaga gcaccaggga ggagagtgct tgctaccact gacagctgtg 660
tgtcatttag caaattatta acatctcttt ggtaacatgt gacctcaaag aagtcaccta 720
atttctctga gcccagcttc tcatctgggt aaaaatgnct cttnctattt tttangg 777

<210> 1072
<211> 696
<212> DNA
<213> Homo sapiens

<400> 1072
ctttttgatt tgaggatgtg ccgtgaacgg aagccaaata ctaatagaca ggacatcctg 60
tgattccctt agtttacgat ggccgaggat gtatgggttt ttttgtttgt ttgtttcttt 120

0050204850

ttttgataa gatgattact tggtttttt cctgttaaca agggagccta gatgatgatg 180
tccatttggc ttttaggact cttaactagc aaacaactaa gcccctgcaa aatcacatga 240
agacattgga aaatcttttt atgtaaggca gagatgattt ggtcatagtt cgcaatgaag 300
tgaccgtcag ttctattggc ttgaaataat aatgaaccaa agaggggaaa tgaccgaagt 360
cgaagttctt gaaattaagg atgttaaaat aaaattctga aatctagtat actgtggtat 420
acctatacgg ttaagtatta tacaaatatt acatgtgaag aaaatatgaa aaaagttcac 480
aaatgtacca atgttaacag angcaagatg attattacaa acgtttatat ggattatatt 540
agttttccag ggctcccata acaaattacc acaaaccggg cggcttcaaa ttgatcctct 600
cacagttgtg atgccggang ctagaagtct aaaaccaagg tgttagtaag gccatgctcc 660
cttcaacagc tntggggaga cccttccttg gctntt 696

<210> 1073
<211> 777
<212> DNA
<213> Homo sapiens

<400> 1073
cctctgggct gccatttgca gggaatttca tgtacatatt cagacatgca gacttgcaca 60
actgcttatt atagaaatat tctttgttac taagtgtcta acagacttaa acatacaggg 120
tttccgtata tggagaaaag tgattccacc cactccatgc cctggcacgt catgatgcca 180
gcccttagat ttatttggct tccagaattt aaatagacag tgatgtaaat cagaagttag 240
tgtttcacct actggcacta agtaactaaa tcatcacatt ggtgatgagg aaggtaaatc 300
cttttcagtt tggctacaga atggaaataa catttattac aatatgatct aagttatatt 360
gacaacagaa tgatttattt ctatgttata aaagatgaag aaggagagga gaatacagag 420
aagttaaatg gtttggcagt gatcacacaa caagccgaaa gtagaatcca agtctctctg 480
gagtcccttc tctgatcaaa gtttcatctt attgaatgtc acagcattat aaagtgagat 540
aaatgtatct caccacacat gtgcttagtg aattattctc agtagatagc ttcttctatt 600
tttaaacatt ttgntctgag attttaaaat ttcaattcta ttctcttatg gtttaaaacc 660
gggtcacaga tttgagctaa aatgggaatc gaagaagtga ctttggcatt tttncatgac 720
tattcttgga ttgacnttaa ctgggnttac actgttccag gaaggcactt ggtttgc 777

<210> 1074
<211> 709
<212> DNA
<213> Homo sapiens

<400> 1074
aatgcgaagg gagtgatgtc cagagtgatt tttgcaacag tgacccttgc ccaacccatg 60
gtaactggag tccttggagt ggctggagaa catgcagccg gacgtgtaac ggagggcaga 120
tgcggcggta ccgcacatgt gataaccctc ctccctccaa tgggggaaga gcttgtgggg 180
gaccagactc ccagatccag aggtgcaaca ctgacatgtg tcctgtggat ggaagttggg 240
gaagctggca tagttggagc cagtgctctg cctcctgtgg aggaggtgaa aagactcgga 300
agcggctgtg cgaccatcct gtgccagtta aaggtggccg tccctgtccc ggagacacta 360
ctcaggtgac caggtgcaat gtacaagcat gtccaggtgg gccccagcga gccagaggaa 420
gtgttattgg aaatattaat gatgttgaat ttggaattgc tttccttaat gccacaataa 480
ctgatagccc taactctgat actagaataa tacgtgccaa aattaccaat gtacctcgta 540
gtcttggttc agcaatgaga aagatagttt ctattctaaa tcccatttat tggacaacag 600
caaaggaaat aggagaacag tcaatggctt taccctncca atgcagtctt caaaagagaa 660

0956456-0720800

actcaagtgg aatttgcaac tggagaaatc ttgcnnatga atcatattg 709

<210> 1075
<211> 838
<212> DNA
<213> Homo sapiens

<400> 1075
ggccttttt ttttttttt tgacatatgt tggttcaact tgtatatact attttgtaaa 60
ctgtttttcc caattaacaa tatacacaga tgtcttcatt ttacacaccc ctctcctaca 120
caccctcaga caaaaggcaa acctattcaa gtttttgatt tttgaaaatg tttcaatcag 180
ggaagctctg ggtacatttc atgaagagaa gtgatgaaga tatccctctg acataacaga 240
aagtggctgt ttagctagga aaatcatcaa ataagtaagt agaaatgcat gcagaaacag 300
aatgagtcaa tcccaattaa tgtttctgtg tttcctaaaa gaaaataaac accgcacatt 360
tgtctttaga cagcttagtg tgcaccatgg ttccagtgtt tttgctggaa gtgtaaagtt 420
gttagcacag gcatatttct cagttagcag aaaacagctg ctactggaat tagtacccag 480
aaatgaagtt atttcctccc atcatcttac tgaattgctc tgctttacaa acaagaagtg 540
aacattaatt acttggaaaa taggcctgac ccagccagga tgaggctgac gcgtggaaag 600
aggtaaaaat aaaatgacaa agctctcttc acttcctatg ctagtgtctg aaaacagagc 660
tgctcagacc attatggnca tttcaaagtt ttcattcaat aaatagtttt ttagacacct 720
actgngccct acagggacat atatttttgg catacaatca ataactacaa ccgnggtaag 780
aaantaagga cctgctgaac cttacccctg caaaaggact tatcgnccga atttaaca 838

<210> 1076
<211> 798
<212> DNA
<213> Homo sapiens

<400> 1076
acaaggcagg atgtgtgcgt gggaggaaga ttgacagtga ctgagcctgg acgggggaga 60
ccaggtatga ggtctgaagc acctggaaca gaaaggacag gacagatgtg ggcacactgc 120
acgtgtagaa tcaaaggact gacagcaggt cgaatgtgag gaatgaggga gggaaagaat 180
caggactcaa gtgccatcct ggctgcctca aaaaatgata ctgtcttcca gagggaaagg 240
aaagataaca atagttactg ctttgtggcg tacatgtgat gaatttcatt ttggacattc 300
cagtaggata tccaagtgga aatgcccagt aagccttaga cataaggatc tggatctcaa 360
gagaaaaatt gaggttgaac cataatatgt ctttcccctc gaatcatgta ggtttctctt 420
ttgccttctt tcattggcct aagtggtcct aaatgctact gctgatgctg tcttagtttg 480
cgactgttgt ttgcacccca ccttttccca aaggtaatct gtagacttgc atggattggg 540
ttaaggtggt taacctgcag ctttgctgtt caaagcttgg cttnccacta ccagtttgcc 600
aacttaatga gtacttcaac ttgagtcaaa ttagtattgg tccaaatatc ctaatagtat 660
cctctatgtg tgactctagg tcttacaaaa tcaaggtgtc ctttctcatt gagacttncn 720
tattaataaa atatttcttc tattaaattc aacctggcac caagcattat aggtaattag 780
gccccccccn atgactgg 798

<210> 1077
<211> 776
<212> DNA
<213> Homo sapiens

0050459-0702800

0302345.0002000

<400> 1077
agtttcccgt gggtgtgttc acagaacact gggccccttt ccatagttca cagacgtgga 60
caatgagcag atgaggcttt ctccctctgg tcctgaagta gcatcatttc atctgaaatg 120
gccacaagca attttggttt atttttcata acagaatcaa agacatcacc aaaaactcca 180
tcccacttct tgcaggggag gaatttgtta ttttcccttg gatcctgttg aacacatgtg 240
gcatcctgcc tgaacccctc ccgcagctgc catgcgatcc agagctccat ccacttgccc 300
acctaagtgg aaagggcctt cgagggccat cagtttgcag acgacactgt gcattccttt 360
ttctctttcg gacgctggct ccacaatccg ggctccagga ggtggaatcg ctgttcactt 420
actgcccccc agtggtccgc atttctgaaa gttctttatc cctgtttcct ttgagatttt 480
tctccgtaga tttataggtg tttaggatgg ggttagtaat gtggccaagg aggtggttgn 540
tttctcaagg gtgagacctc gtctncgatc tccgtctctt ggagctagca ttcccctcta 600
tccacagaca ccacgtctgt cgcatttta ttttctgcaa tcatttcttc tcttggtagc 660
ttggagaaga gtcatccttg gtgatgagac aatcagtatn aaccagangg tctcatttan 720
gggcaatttt gctcccctc ccaaggacat tggacaatgt ctgggtctgg agacat 776

<210> 1078
<211> 740
<212> DNA
<213> Homo sapiens

<400> 1078
cttttcccgg agccgcaccc aggtccccca ccatcatgca ccccttaccc aggcctctga 60
ggggccaggc acccccacc actcccctac agcaggagag cttagggagg ctgagagctt 120
ggacagccgg gagaggggc cggatctctg gatctcccca gcctccagat ctcagtgtgg 180
ctctctctgg agacaaaagc taagactcaa cccacaggca acactcaaca cagagatcca 240
gctcagaaaa aaaggagctg accagggagg aatggagagg ccaagacaca taatgaagac 300
taagaaaagg aagaaagatg atgctggggc tggagccaaa gggagaggaa gaggaaagga 360
aggaaagcca ggggcagaga cctggcaggg cagcgtgagc ccaacaacca cggggtgggg 420
gtggggcgcg catcaagatt tctaacaagc gcagctgaaa acacccaggg ccgttctctg 480
aggccttctc tctgcctacc agccctcacc agtgcttcga agagccctga ggaacgtctc 540
tctatttgaa gtcagagccg agtgcctgct ctcggcacct ggggctccat gcttaccagg 600
atggtgggta cttgaccttc atttgctgtg ggactgtcag ggattccagg gacccactgg 660
tccccgaact ggctcanaga tgcaagccac ttttacctnc tacacatcta taatccccac 720
cccatggntt gacaaatatt 740

<210> 1079
<211> 807
<212> DNA
<213> Homo sapiens

<400> 1079
agtcagatgg taagcaaaga tgcaaataaa aatatcagct tctgataagt gcagtggaga 60
aaaataaaca agaaaaaaaa tgctactgtg ttcatttctt agtatgtgcc aaaaaatgat 120
ctcattgaat ccccaagata atcctaggaa ttatgtccta ttcctatcat ccccatttac 180
agatgaagaa agtgaggcac agagaggcta gggtggttgc tgaaggtcac acagccagga 240
agttacagag tcagggctgg aactcaggac agcctgaaac cacagccctc gttcatattc 300
agtaaaaccc ggcagtgaac ccccagcagt gttcacatcc ctggcacata ctgggcacat 360

atcaatttgg aacccagtgg aatgactgaa ttgtgtctct gcccacaata cgagtgccat 420
aattttcctc atgcgaaatg gcaggtgtgt taacctcttg caacatcatc agggctggag 480
gaggacttca gactgagctg ggacatgggg agagcctctg tccccaggtt gttttctgct 540
gggcaactcc cctccagagt tcagttctgc tggcacatgc ctaagtgatt agctggctct 600
gagcctgagc atggcatagc tcaccagggt gggctctcac agcttccagg aaccagcaaa 660
tagcccggtg gaggaaagca ctgattccct attcgccttt ttctggcatt atcagcacca 720
gtgggctttt caaaagatga gttgatataa gcatcctgtc agaaanggtt ccggcctaat 780
aaatggaatg ncccttccc ttttnta 807

<210> 1080
<211> 716
<212> DNA
<213> Homo sapiens

<400> 1080
ggcctttttt ttttttttt ttgagatggg ggttcccact ctgttgccct ggctggagtg 60
cagtggcgct gatcacggct cactgcagcc tcgtctgccc aagctctaga gattctccta 120
cctcagtctc ctgagtagct gggaccacag gcatgcacca ccatgtccag ctaattggtt 180
aacttttct ttgcagaaat ggggtcttac tgtgttgcct aagctgatct caaactccta 240
acctcaagtg atcctcccac cttggccctg caaaattctg ggattacaaa catgagccat 300
tgtgcccagc tgagggctgg tttctagaaa tggtggtatg ccaggcttca tactggggtc 360
atgcatgtgg actgggctca ttggcctgat tgctctagca atatgtgggg tagggagaat 420
catgcccccc ctctcctcct cttcgaaaaa tgtccacatc ccaatccctg gaagctgtga 480
atatgttcag ttatatggca gttgggaatt aaggttgcga gtcagctgtc cttgagatgg 540
ggagattatc ctggactatc caggtgggac ttttgtaatc gcaaaggtcc tcggaagtga 600
agaaggaagt caggagagtc agtgtcagag tgatgccgtg ggacacagtc tttanggctg 660
ntgctgcctt gaagatcagg aaggggccgt gagccaagga atgcaggtgg nctcta 716

<210> 1081
<211> 734
<212> DNA
<213> Homo sapiens

<400> 1081
catgatctta atttaaaatg aactgttgga tctctctttc ataaattaag tgcaaaactc 60
tactttctgc ctttcttctt gtgaccagag taccagttga ctcatctcag ttataatttg 120
tttaacaggt ttcatttgct tttccccctt aatacatgaa tccttttatg tgtttaacag 180
ttatttgttt cagagggtct gcattgcata atgccatgag cagccaaggt tttcacgtaa 240
tgatttttta tgaaccatgc aaagacagct caagttatgt aaatctcagt gaactctcta 300
gcgacaagag tcccaatcct taggcttcat catggagctg cttctctctc aatgtatttg 360
aattattggt ctagccaacc tcttcttttc cccttgctgc agtattttag gaggaaggaa 420
caggctaaat cctagctaga cgtgcgcatg cattctggta tttaagagcc aataaaatat 480
agccaggaat caccttgtct cctgtaccat acttggattt gtagttcaga tcttcaatgt 540
agtgcttaaa agaaacacac actggggttt tcatggtgaa gtccagggca agggcataga 600
aagaccactt gaccctggat ggaacaacat gtggaaaccc ttcttgccct nctttttatc 660
ttctttactt tttttactat ggccagggtt ggaaatgtgg gtggatgatg ggntttactt 720
ctttgaaang gtaa 734

0095-0045-0600

<210> 1082
<211> 767
<212> DNA
<213> Homo sapiens

<400> 1082
ccagtcaggg acagccagac ttgtaaactg cacctgcttc cacagtctta gtgccccgtc 60
taaaaggaac aggcgctgaa gcactcatct tgccgatttt atttcaaacg tccaggagat 120
ggcagcaaac tctccttccc tctcagtgct tcacaggcag ccattctaat gctcgttgca 180
ttacaatttg ctttgaatat tctttttta aaaaagacaa aagactaaag ggggtcttga 240
gacgtgattt ttatctgacc ccctgcttct aatcaagaat gagtataaat atttctaggg 300
atagaataga atgatacaat tttattatct agaaaagaga ttggatttcc ttggctattt 360
tttcttatct ctggggaaaa agattgtatg acttcccttg gctgttgggc cctagactct 420
gttatctcca aatccaaaat attcttacta ataactagct taaatctatc tggcagtaat 480
ctaaacattc ttattttggg atctaggcta atggaaaatt ttgaagcact ttgaatgctt 540
attagctttt taaaatgaaa ataaatacga ttataaaatt ttcaaaagaa aaaggaagtt 600
catgcacttt gtgcatcata gggaaagagc ccaatatttt tgnttaactt taacattaat 660
cttggcaaat agagtagtat gtcaacaaaa tgcaaaatca gtcagangct gcttatatgt 720
tacaagagtg tccngacaaa gaaacaggca gacccacttg gtgacng 767

<210> 1083
<211> 693
<212> DNA
<213> Homo sapiens

<400> 1083
ggccttttt ttttttttt taaggcatgg acaagctgaa tctaaaatgt ttatgacaaa 60
taatctataa cagccaaata actttgaaag aacaaagttg aaagatttaa atcatatgac 120
ttcaacattt attataaagt tatagtaatc aagacatgta gtaatgccaa ctaagataga 180
caaatcagag agtccagaaa tagaaccaca catctatgat aaatggtcaa ctgatttttc 240
ataaagtgaa aatgcagctc aggagaaaaa gaatagtttt ttaaacagtg ctggaccact 300
ggatacccat aaacaaaacc aaaaatttta aaaactcatt ttggctgagt gcaatgcctt 360
atgccctgta atcccagcac tctggggagg cagaggtggg aggactgctt gaggccagga 420
gtttgagacc tgcctggtca acatagtgaa accccatctc tacaaaagaa aaaaattagt 480
caggcacggt tgcatgtgcc tgtagtccca gctacttggg agcctgaggc caaccatcac 540
ttaagcccag cagtttgggg ctgcagtgag ctatgatccc atcactgcac tccagccttg 600
gtgacagagt gagaccccgt gtcaaaaaaa aaaaaaaaaa ttttgagcat tctccaagnc 660
ttcgcctttt ctgggtttaa tttaaaaccn ncc 693

<210> 1084
<211> 746
<212> DNA
<213> Homo sapiens

<400> 1084
cagtcaggta accaattatc cgagtaggaa ggttgcctta gttgaagtaa ctggaggtga 60
atggggattt gtcaggcagg ctcttccaga taaaggtgaa ccttccctgt tgttttgata 120
ggaggaggaa atggaatgac catcaagaga aaggtagttg ctggcttgag aggatcatct 180

0050250-0050800

gtgcaacagg cagctaagca gaagaagact ttatatatat ttttaatacc acccacactg 240
ttgctagtat tccccaccac tccattggcc tggtgaactc ttattcatcc ttcaaaaccc 300
agcttaacca tggccttcag gaaatcttga gctggcttcc caggacagag tgggtcagtc 360
ctctgcatgc tcctgctgct gtgctgtact caccatactg tactgtaatt tactggtttg 420
taagtcattt ccactgctgg gttgtgagct cctccaaggc aggggctttg ccttatctgc 480
ctatgttccc aggacttaca cagtgcctga tgtgtagtag gtaccccatg aatgttttac 540
ataattagca ggagcgtatc aggtaaatta gcaaagcaaa ctgtgggatg tgggatgtca 600
gacaatagga gtaggtgggc ttatgggagc tgaagaacac atgctcctca nctctgattg 660
attgctctgt gcnatagggg cccagtggtg gtggatctaa cacttttaa gaaaatctga 720
caattcanac tttactggtg aatatt 746

<210> 1085
<211> 853
<212> DNA
<213> Homo sapiens

<400> 1085
ctgtctctgg atttgccttc tctgaacatt ttttttttaa ctttttttc tgggggcagg 60
gcaggttggg ttaggatggc tgccctctgg acctgcccct gaacatttat aaatgaaata 120
atatagtatg tgttgccttt cgtggtggcc tctctcactt ggcataatat ttttaatgtc 180
catccatgtg gtaacatgta tcagtacttc attctgcttt atggctaaat aatattccat 240
tttgtgggta caaatttaat ctatttttt ttttttgaga tggagtctca ctctgttgcc 300
caggctggag tgcggtggca tgatctcggc ttactgcaag ctccgcctcc tgggttcatg 360
ccattctcct ggctcagcct cctgagtagc tgggactaca ggcgcccgcc accatgcttg 420
gctaattttt tgtattttta gtagagacgg ggtttcacca tgttagccag gatggtcttg 480
atctcttgac cttgtgatcc gcctgcctct gcctcccaaa gtgctgggat tacaggtgtg 540
agccaccgtg cccggcccaa atttaatcta tttatcaatt gatggacatt tgggtttcca 600
ctcttttggc tattatagat aatgctgcaa tgaactgntg tatgaaaatt tttgngtggt 660
cacatgtttt ccttttttctt tggtatattg ctgagttata aactgatttc catttatatt 720
ccaaccacag tcctgaagat caaattctcc catctttgca agattggcat ggctttttc 780
tattaaagcn cctattaatt atggaatttg tacatgacta caccacagnt ataatctgct 840
gangaactac caa 853

<210> 1086
<211> 701
<212> DNA
<213> Homo sapiens

<400> 1086
caactcagtt ttattagtgt tttaggtctt tccaatctaa ttggtgaaag tgatacttta 60
atctacattt ttgaatactg atgatgtact tcatttcata aacgtttggc tgtaaaattt 120
cctctatatt cattccagag attaagatat tttcaaatca ttaaactggg gctgttatct 180
taggttgttc tggagatact aattacatgt caggtagtat cagttgcatt ggttatttta 240
tttagaaatt attttttttt taactttaag ttccgggata catgtgcaga atgtgcaggt 300
ttgttacata ggtatacatg tgccatggtg gtttgctgca ccaaccaacc tgtcatctag 360
gttttaagcc ccatgtgcat taggtatttg tcctaatgct cttcttcccc ttgtctccca 420
ccccctgaca gctcccagtt tgtgatgttc cccttcctgt gtccatgtgt tctcattgnt 480
caactcctac ttatgagaga gaacatgcgg tgcttggttt tctgttcctg tgttagtttg 540

0962945.0042000

ctgaggatga tggcttccag cttagaaagg aagttttgtt gaagagcaaa tgtttccgta 600
agtgctggca atcctgaagg actctttcaa gaatcatttg gacagaattt tcctgaatat 660
gaaagcngna tttaatggca ttgacagcta aaggcttcan g 701

<210> 1087
<211> 596
<212> DNA
<213> Homo sapiens

<400> 1087
gcaataaggt aacanggtgt gcccacctct cagggctgct atgaggacaa ctgaggccac 60
acacctggct ctcaataagt gagtggtgct ctgtgagctt ctggcgagta aggggcaccc 120
tactcattgc ggccgggggc ctcccccagc aaacgggtgg aaagaggcct gagccccatc 180
cccagtttct gcccctgcta tctccaccca ggatccacca gaagatatga agcaggaccg 240
ggacattcag gcagtggcga cctccctcct gccactgaca gaagccaacc tacgcatgtt 300
tcaacgtgcc caggacgacc ttatccctgc tgtggaccgg cagtttgcct gctcctcctg 360
cgaccacgtc tggtggcgcc gcgtgcccca gcggaaggag atgtgaccga ctgcagaggc 420
cgcgccgcct cccccgtccg aggtctgcgc gctccgccgc agggtgcaga cccggggcgc 480
ccgcctgggt ttggggcgca agagcagagg cggagccagg gcggagccag cgcgccgggt 540
ccccccctgaa tcgaaagcga aacaggggcc ggngaggaaa ggcgganccc ggnccc 596

<210> 1088
<211> 762
<212> DNA
<213> Homo sapiens

<400> 1088
ttctagagtg tagtggcgtc tctactatta ctgccacatc attaggtgtg aataactcaa 60
gtcatagaag aaaaaatggg ccttctacat tagaaagcag cagatttcca gcgagaaaaa 120
gaggaaatct atcttcctta gaacagattt atggtttaga aaattcaaaa gaatatctgt 180
ctgaaaatga accatgggtg gataaatata aaccagaaac tcagcatgaa cttgctgtgc 240
ataaaaagaa aattgaagaa gtcgaaacct ggttaaaagc tcaagtttta gaaaggcaac 300
caaaacaggg tggatctatt ttattaataa caggtcctcc tggatgtgga aagacaacga 360
ccttaaaaat actatcaaag gagcatggta ttcaagtaca agagtggatt aatccagttt 420
taccagactt ccaaaaagat gatttcaagg ggatgtttaa tactgaatca agcttccata 480
tgtttcccta tcagtctcag atagcagttt tcaaagagtt tctactaaga gcgacaaagt 540
ataacaagtt acaaatgctt ggagatgatc tgagaactga taagaagata attctggttg 600
aagatttacc taaccagttt tatcgggatt ctcatacttt acatgaagtt ctaaggaagt 660
atgtgaggat tggncgatgt cctcttatat ttataatctc ggacagtctt cantggagat 720
aataatcaaa gggtattggt tncccaagaa attcaggaaa ag 762

<210> 1089
<211> 752
<212> DNA
<213> Homo sapiens

<400> 1089
caagaagatg tgaaaatagt attgtccaaa ctcaagaaaa aaaaagacaa aattatctca 60

0952345 2007200

gtggaagact gaattccaag gtgaacaaca ggacaataga ctcaactgaa aatgtaataa 120
gggacattaa ggagggaaat aaaaagccaa gagaataaaa ataaatatta gaaaaggtta 180
aaaagtatct caaaggaact gttagatata gaagataatg aacaaaaatc caatatgtat 240
atgtacacga tatgtatatg tatgtataac tgaaaaccca aaagaagata aacaaaacaa 300
tggaacagaa ttaacactta aataagaaaa ctttccaaaa attaaagcag acctttacct 360
ttgtatttat aggacctact tttgattcag attggtcaac tctaagacat attttagtaa 420
aactattgta ttctaagaaa atttcttcta aacttctggc aaaaaaaaag ccaagtcttt 480
tacaaggtaa agaaagtcaa gtttgcagct gtttttcagg tattgaggtt atactgaaat 540
cgttttcagc atgcagaact cagggaatat tataacccca agcccattct gaggaattaa 600
ttagagaaag ctcttcatca aagcaagaga tgatcaattt aagacaaaaa caaagcaagg 660
gacaagggta gaatagtgna tgtgtgtatc angctcagtc caatgaaaga gaggaaccac 720
cccagtaatt tggaaccttn gaaaggttaa at 752

<210> 1090
<211> 671
<212> DNA
<213> Homo sapiens

<400> 1090
catgtgtcac atggcaagag agagggaaca agagatggag aagtaggagt gccacacttt 60
taaataacca gattttggtg aattcagaac aaaaactcat tcattacttt gaagagagcc 120
ccaatccatt catgagggat ctgcctccat gacccaaaca cctcctacca ggccccatct 180
ccaccatggg ggaatcacat ttcaatatga ggtttggagg gacaagcatc caaagtatgt 240
tatcacccat catcttgttt ttcataattt ttttttccca taagtaacac tggtactttt 300
ttcatatagg atttccggga aaaaaataca gatcatatgc gcccagacat tgtagctctt 360
ctgagaagca gcaagaatgc atttatctct gggatgattg gaattgatcc tgtagctgtt 420
ttccgatggg caattctccg agctttttc agagccatgg ttgctttcag ggaagctggg 480
aaaagaaaca ttcacagaaa aactggacat gatgatacag cgccatgtgc aattttgaaa 540
agtatggata gttttagctt tctccaacac ccagtccacc agaggagctt agagattctg 600
cagagatgca aggaagagaa ntacagtaag gntnccaatc tggtaaactg gtattaccat 660
tttccttttg g 671

<210> 1091
<211> 769
<212> DNA
<213> Homo sapiens

<400> 1091
ggccttttt ttttttttt tcacttttcg ctaaagtcac attccggcag caattttatg 60
ctgtcaaaat gttctcaaca aggggagatt tgactggctt ctctgagaac cagtcatagg 120
aagcttgggc tctgcttctt attgagttct tttttaaaat tttgctgggg gtccggggaa 180
agaaggaaaa aaagcaacaa caataacgag aaacaagtca cccaggcatc ttgtggaggg 240
tggctgctct tttcaggccg gcggccagtc cccgggcgta cagcgtgcgg tgcaacctgc 300
agctgcggga cgggtgcatt cacgaggggg gtgtgtgcgc ctgggggtca cccctgctgt 360
ctctctgggt aggggtgcag gtgaagctca catgtgccac tctgtgagtg tcaccgcgag 420
ggaaaccctc ccaggggccc gggcccaggg tggccacggt gaggaggagg aggaccacat 480
gcgcagggaa gggcatgggg cacagcatgt gtgtggccca cacaagggcg gtctgctctc 540
actcccctcg ctgctctgta attaagctcg gctgcgccca ctcaggcttc cagacctttc 600

0602045.0007200

cctgagccct ccgcccccg ggcccactcc ccgttctccc agccttgctg gctacttcca 660
ctccccaaag agccttcagg ggccttcttg gcgtgatcaa aacaacaggg ccaccagntt 720
ctcaagagtc caagctntag tttggcccaa atgtcccggn cccgggggg 769

<210> 1092
<211> 721
<212> DNA
<213> Homo sapiens

<400> 1092
tgtttcacgg cagcctgacc aacatggtga aacttcgtct ctactaaaaa atacaaaaaa 60
acgaccaggc gcagtggctc atgcctgtaa tcccagcact ttgggaggcc gaggtgagcg 120
gatcacgagg tcaggagatg gagaccatcc tggctaatat ggtgaaaccc catctctact 180
aaaaatacaa aaaattacct ggcgtggtgg cgggcgcctg tagtcccagc tactcaggag 240
gctgaggcag gagaattgtt gaacccggga ggcggaggtt gcagtgagcc gagatcgtgc 300
cactgcactc cagcctggtg acagagcgag actacgtctc aaacaacaac aaaaacaaca 360
acaaaataca aaaaaattag ccggacgtgg tggcggatgc ctgtaatccc agctactcag 420
gaggctgaga caggaaaatc acttgagtct gggaggcgga ggttgaagtg agccaagatc 480
atgccattgc actatagcct cggtgacaag agcaaaactc tgtctcagaa aaaaaaaaaa 540
agaaaagcaa agaaaaaaaa ggcacaatat gtaatgctat ttgctaaagt cagcctcttt 600
atgggtcttt tgttgacttc ttctttagtg gctccacttc ttagaagtta atgagcaatt 660
cctgctatag cagcagagcc tntaccaaag canggggact tcanggaacc actggttgtc 720
a 721

<210> 1093
<211> 753
<212> DNA
<213> Homo sapiens

<400> 1093
tttaaagatg tggctaacta gctagtgatg catgaacaat tgttttagaa acctaccatt 60
gtggtcctgt tggtatctag gaagtttttt catttgttgg tggcaactga gtgatctgtt 120
atgtctactt ttcctctctc cctgtcccct cccccatctt cttctctctc ttttctttct 180
cccttttttt cagtcaaggt agacttgaga taggggactt gcatggctat agtagatcat 240
aatacatgag gccccccaaa taagagagtg aaacattgtc tgggatgtat tttctgctcg 300
aactcatcgt catttttctg tgtatttctt acattagccc ccagaaaagc atttttcaaa 360
gactttgaga accaaaggtt ctctctgtaa ggaaatgtgt taacctgatt tccttgttct 420
catgtaattt tctctcttaa agccataata atagtgtcag aggcagcttt ctagttagtg 480
tgagtaatgt ggttactgta ttttctattt ttattttaat gtgcttttcc tgctgtggat 540
tttttttttc tttcttgatt ttaaaaacag cagttgagta aatgtggtta tttgaagact 600
ggcgtatatt gcatcttctc tgagatgcaa ttttgaagga aggctctgtg cacaataggc 660
atttttttc agattcctta ntaggataaa tagggagaat gttttggaac acagatcaag 720
tggncaatat tgggttaatg ggncatggga agg 753

<210> 1094
<211> 694
<212> DNA
<213> Homo sapiens

09829469.072800

<400> 1094
ggccttttt ttttttttt tttttagctg agagcagtag ctcacacctg taatcagccc 60
tttaggaggc tgaggcaggt ggattgcttg atcccaggag tttgagacta gcctgggcta 120
catggcaaaa ccccatctcc actaaaaata caaaaattag ccaagcttga tggtggtcta 180
tagtcccatc ctctttggag gctgcagtgg gaggattgct tgagcccagg aggtgaaggc 240
tgcagtgagc tgagatcaca ccactgcact ccagcctggg tgacagagcg agaatctgtc 300
tcaaaaaaaa aaaaaaaaag taatttttta atattaggaa ttagagtgtg gtggtcatca 360
gttcatggct gacagaaaca gcacttcctg ctctttgcaa tttagttctt ataatggaca 420
antcttgttt caaatgctgc ctccttggta ttctgtgtac aatggaaatg ggggttggat 480
tagatgctct ctaaagatgg tctgagctct aaaagttttc ttcctggaca gcagcagttt 540
ccctggataa aggacctttt tcctgagcat gtggctctgt ctcagaagca gcccctctcc 600
ctggttcccc agtagagctt ccaggctcan atgaataggg ccactggctt tgctctacat 660
agaggnccta aataatttaa gnggcttaaa agcc 694

<210> 1095
<211> 854
<212> DNA
<213> Homo sapiens

<400> 1095
catgtctgga gaccattttc aacctgaatt tatctctgat gccagtcccc aagatgagcc 60
attggttgct tattctttgg ggtcacccaa gatggcagca ctgaaggcca catggctggg 120
gttttctata ccttgggatt acatgttata caaaacagct gactgacaat gcagaatgag 180
ggaagggaca cctccaaatt ccttcagcct cccaaagtgc tgggattaca ggcatgaccc 240
accgctcccg gccttgtttt ccgtttaaag tcgtcttctt ttaatgtaat cattttgaac 300
atgtgtgaaa gttgatcata cgaattggat caatcttgaa atactcaacc aaaagacagt 360
cgagaagcca gggggagaaa gaactcaggg cacaaaatat tggtccgaga atggaattct 420
ctgtaagcct agttgctgaa atttcctgct gtaaccagaa gccagtttta tctaacggct 480
actgaaacac ccactgtgtt ttgctcactc cctcactcac cgatcaaaac ctgctacctc 540
cccaagactt tactagtgcc gataaacttt ctcaaagagc aaccagtatc acttccctgt 600
ttataaaacc tctaaccatc tctttgntct ttgaacatgc tgaaaaccac ctggtctgca 660
tgtatgcccg aatttgtaat tcttttctct caaatgaaaa tttaatttta gggattcatt 720
tctatatttt cacatatgta gtattattat ttccttatat gtgtaaggtg aatttatggn 780
atttgantgg tccagaaaat atnttttaa agctttcatt ttttccccag tggatgatta 840
aaatttttat gtaa 854

<210> 1096
<211> 791
<212> DNA
<213> Homo sapiens

<400> 1096
atgatgtgat taatcttact tgtgttacca tagacatttt cctgacaaat gctccagcgg 60
aagaagcaca taaccaatca gcagttgaaa cttccccct tttgatgtag aggtcccttt 120
acaacacata atctcagtgt ttctatgtgt agaacaaact tcttaatttc tatataagca 180
gttagatagg ccccagaggt ccatgtgtgc tccttttttt tccctaaggc taaaagtgtg 240
aggcagccat ttgttgcata ctattccttc aatattttag tgaaagcaca cttcataccc 300

0052-0359-0200

aatctttatt atcactatca gcctgtcagt aatcaaatat atagctacta aatgaagagt 360
tgtaactact tagtattaac accataagaa aggaaaacaa tattgatgtc tgacatgttt 420
aaggatgctt aacagggaaa attaaggaga ctggcccatt aattatggga taaaataata 480
ataatcaaac atcttaacta gtttatcaag tcacacttac aagcctctta ctaatttact 540
cctgtactga aatgaacata cggtaaaatt caagagaaac tgaggttcaa aataaatttt 600
acttctgagc ttggaataca agagagtaac agactgctgt cctaattata atacctttt 660
gacacattgg tatagtcctt gccacctctg aataaactgc catttctacg taattggtgg 720
tcattcttat caatcctttt tgaagtagat gagaaatttt taaaaattgg gaananangg 780
aagtgtggct g 791

<210> 1097
<211> 747
<212> DNA
<213> Homo sapiens

<400> 1097
cggatttctc ctcttagacc actcattcaa actctgatgt ccctcctggt ttagggaaga 60
ttacttggta ccaaaagttg gctttggatc acatgtcttg gtaaatagtg ataagaaatg 120
aatttgattt tccttttctt ggaaaccact acttttaaaa gggctcggcc tttccctttg 180
aagaatttcg ggcaccctca gcacttcctg tgcacctgag cgggaggaat ggagtgaggt 240
gactctgttt gaaggatgac agagttaagg aaaagcagaa gccacagttg attgaagtga 300
ttttccagaa tttcatctgc aaagtcacca ttcctggatg tgcttggaag atggatcttc 360
cgtgtgaatt taggctgagc ttggaggagt ataaatcaag ggcttaaggt tttattatat 420
tctcaaagca caggatttct gcatgggtgt gcagtgaagt tcatccttcc cagtgagcac 480
cctcgttcac cttttgtcct ctgggcccca cttgtgttta cagtacatgt ttgtaaaaca 540
gagagtgacc tctaacacca agtctagtaa gaggcagtgc cactgtgtat gttacacagt 600
gtgaggcaaa aggaggagta gcgcgcgcac agaaacgccg tattcaagcc ttggcagcac 660
accacggcag taaagctagc ggacccgtcc ctggggtgcc tttaaacccg nctgcattca 720
cacttgcgnc tttattggct tgnggca 747

<210> 1098
<211> 825
<212> DNA
<213> Homo sapiens

<400> 1098
gaaagtttgt caatttgttt tcactataag gcatcaatgg cagaaactac atatgagtaa 60
ttttcaaaat agaccattgc ttaaatgttt aaatgaagct aaaacaagta tgaacccatt 120
ggttagagtg cagtggcttc tttcaggcag acagcagatg ctctcagatt tggtggtgag 180
ttttggcctt ggcatggttg gcatggagtc agcacaggaa gccgggaggt atgaaggggc 240
atccacctgg gtgaaactgt cttgccaagc caaagccccg aggcctgccc tgaagcagct 300
gtagtggagg agaggcctgg gattccttag agtcaccttt ttacgaatgt accgccactc 360
tgttagctca caaggaaaat aaggaaaagc caggcctccc acctcttgac tcttgtgaga 420
gtgaagacaa catggggcat ttagaaaata tatttttagt gtatgataat gtgggctggc 480
ccacacagca atgagcccaa agacccccctc gctttgggaa ttattcatgg ccctgctcat 540
cacagcctct gatatgcatg actgtaacct aggctgagcc aagaatggag ctcatgccag 600
aaatggtcct aagcatgcac atggcccct ggaatatcaa aatcctgggg agaaagaaat 660
catctttgcc ttggcagtga agctggaatg gcacatatct atctggtgcc acatcttctg 720

09/29/2006 09:45:03 PM

cctagtggag aaccctggaa ggcaacagac acttgagcaa gcacnaggaa ggaaaatgtc 780
ctggaaaggc agggactntt acccaagncc ctacattccc agact 825

<210> 1099
<211> 758
<212> DNA
<213> Homo sapiens

<400> 1099
atgatcttta tttcaagctt ttatagccct ttcaagttgc tctaggggac ttagcaaaac 60
aggtagacag taagtatgga tcaactgagc acaggaaaga atgggatttg ggaagatcac 120
attgtttgga ttttctgctg atactaaagc tggattttta ctacacaggc agggagaaat 180
tactgtcctg tggtggacct ggtgagagag gtggcatatg actaagcaag tcagctgacc 240
tcaattaaag ggctgtgacc aactgtacaa tgggaccagt acctcctcca actgttggtc 300
tcagctgagt gagattccca tgtctgagga ggtgatcagg ggtgatgatg acttttgatg 360
gaactgacct cacacaggtt tctgggggaa aaaacccacc aaactttatt ttaagaattc 420
taaaacaatt ttacaattct gatttgagta gaagtttgat ttgaaaaggg acttcatctg 480
caccttctct cttgcctttg tttatagatg tcagtaatgc ccgtatttta aaaagttgaa 540
atgagttata aattatatct taaggatttt agtttgtttt gaagaattgn ttaattggct 600
aggatttctn ccccccttcag tagcttcaga tcccaatggc taggcaatat ggagataata 660
gtaaacagga ttttgtaaga natggtattt atttatttat ttttaaatan agataaggct 720
ttgctatgtt gcccagccgg cttgactcct gggttcan 758

<210> 1100
<211> 551
<212> DNA
<213> Homo sapiens

<400> 1100
ggcctttttt ttttttttt tttgacagtt acagcaaata tttattgagc atttgccata 60
ttccaggaac atggtatttt gcatataata atgtatttaa tcttcacacc tatcctatga 120
ggtaggtacc attattattc ccattttgca ggtgaggaaa ctgagacaca gaacggtcaa 180
gtaacttgcc caaagtcaca agcttgcaag tggcagaact gggatttgaa ccctacactc 240
ttaaccaatg ctaccctccc ttccaagaaa aataggaaaa ggacatgaac agatgaggaa 300
atgcaaatgc attttaaact cacagtaaga tacccaatct cacaaaacat attgtatttc 360
agtgatttga agctatacgt ttttactttt tttttgtttt ttttttgaga cagagtctcg 420
ctgtgtcgcc caggctggag ttcagtggcg cgatctcagt tcactgcaac ctccgcctnc 480
tgggttcaag caattctccc gcctcancct cccaagtagc tgggattaca ggcacccgnc 540
accacaccca g 551

<210> 1101
<211> 833
<212> DNA
<213> Homo sapiens

<400> 1101
aaaaaaaaaa aaagtgatca ggcaaagaac tgaaaggaga gagaatgagg aaaacaaaaa 60
ctattataag tttcaaggta tgaaaagact ttataatcaa ggtcttctaa ccagatattc 120

0950204050 - 070200

ctaattagat ttttttaatt ttccatatct ttaagaaata tttttcagtt tgtgacagga 180
aatagaccct ttagcttgga ccaaggctac taggcactgg ccaagcataa aaggcatagc 240
tctactctgc tccatttagc ttgtttcttt atccttggct ctgtcattta tcacaatttg 300
gaattgtcaa catgagcctg aacactaaaa aaaattctgc taacaaaggc actgtgtttt 360
ccatgcctga gtcaacccac tgcccttcc taaatgccaa agatggggaa atgggatgga 420
atttcctgga ttactacttg tacttaaacc tgagtaagtt ttgaatttgg aagacacatt 480
ccagccagag agggtggatt ttggacccat gttcgagtgt atcagccacc cagattggtt 540
ttatttaaga aacagataaa caaaatatct taaagtatct gttatttcta gccagaagta 600
acttccgtat ggtttaatta atagacctgc cttggctcat cttgacttac agagctgggg 660
ttctatattc tagccctgtt ctccccagtt aacagtcctc agaggaagaa acgagtccat 720
aaggcagaat ttaaaagctg tgtacaaatt taacattttt acccatggca agacatctag 780
agtaactgga attaattgac tggctttgct tttggccaag gcangacacn ntt 833

<210> 1102
<211> 771
<212> DNA
<213> Homo sapiens

<400> 1102
taaaaaaaaa aaccttgtgg caaatcactt tgcaaagcag acttacttta taaatatgtt 60
gccctttgt tttaaagcca gattttaaag tacggcttga aaataggtta tatttcagaa 120
gttagtttag atgaggtatt tggaacttgg aaagaatttt acaggtaagt atcagtaatt 180
cgtcttatgg gtaaactgtg catccatcta gaattagtat gttttaaaag aagaatcatg 240
aaaataaaaa ttaaagtttt cagtgaagta gaaaaggtaa ttcagacgat tagaattatc 300
cttaagattt caagtaatat ataggtaatg agaaatgaaa ctgtttgaaa aataaataga 360
aatgatagga attttgaatt atcagaagtt gggagtactt ttacatttcc tgcttaataa 420
aatgggcctg agttacacaa aatatttcag cttagtcaaa tttttgctag gttgggaatt 480
ataatctctg taaatggggc ctttgtgtca gcaagagctt aagacgtaaa agctcctctg 540
ttccttgtaa taaccgagcg gggcaggttc tggccttacc tccattttac acctgaggaa 600
actgaggcac agaggtccag accttggcaa ggtcatgctg ntcctgagct cgggtttgaa 660
gccagctgtt ggagtcccag gtgtgtgctc ccacgctctt actggcacct tcactcttaa 720
tgggtgangg atggaaaata nggctccagt gctggatgan taagcctgat a 771

<210> 1103
<211> 768
<212> DNA
<213> Homo sapiens

<400> 1103
taagtatatg aaaagatgct catatgtcat cagggaatta caaatttaaa acaatgacat 60
accactacac acctattaga tgggcccaaa cccaaaagat tgacaacatt aaatactggc 120
ataaatatgg agcaacagga actctcattc attgatggtg ggaatgcaaa atagtatagc 180
cactttggaa gacagtttgg cagtttccta ccaaagcaaa catactttta ccatgtgatc 240
cagccatcat gctccttggc atttacgtaa atgaaatgaa atcttatgtc tacacaaaaa 300
cctgtacata gatatttaca gcagatttat tcataactgc caaaatttgg aagcaaccaa 360
gatgctcttc agtaggtgaa tggataaact gtgggtcatc cagacaatgg atattattca 420
tcactaaaaa gaaatgagct atcaaggcat aaaaagacct accagaaact taaattgcat 480
attattaagt gcaagaagcc tatatgaaaa gataacatac tatatgattt caactagata 540

0962040.02800

acattttaga aaaggcaaaa ctatggagac agtaaaaaga tcactggttg ccaggggtca 600
gtgtggaggg aaggatgaat aggtagagca caggggatat tttgggcagt gaaactattc 660
cttatgatac tacaatcata gatgcatgtc attatcattt gcccaaaccc acagaatgcc 720
caacaccaag gaatgaaccc ntaatgggga acctatngga aattnggg 768

<210> 1104
<211> 333
<212> DNA
<213> Homo sapiens

<400> 1104
cgctttaaac attttatctt ctttacgtaa ggaccaacct tctggttgag ttagttgcaa 60
gacaaaacaa acaaaaacaa aaacaaaaaa aacacaaaac attgtccaga agtataaaag 120
agtgaaagac aagagaaaga gaggagtaac aaaacctggt tatttaatat aatagccagg 180
gtattctaaa tggtatagtt tgtcatacca actgatattc caagccaatt gggtgatgcc 240
agtggtgggg ggcggtgggg ggagggcgtg tggaggggga agcgagaggt gggcatactg 300
agtgcttaag aaacgtacag aanaanaata agn 333

<210> 1105
<211> 745
<212> DNA
<213> Homo sapiens

<400> 1105
tgcttccata gcccagttag tgtattattc aaagtccaca tttatataag actagccctg 60
gtttatttgt cattttgtg aattttaaga tagcataggc ccaaagtaga acctgtatac 120
atacagtaat cccaactata tattttatgt acctcatcca tgctctatgt agagaatgaa 180
taaatgcata atatatcagt aactcatttt cttctcatcc agcttagttg tcgctgaata 240
ttggagacac ttttggttac agtttaagtg aaacttgcca gcttcatcct aaaatgcatg 300
tactgaatgg atttaacatt tattagcttt ttccatgttt atttttctgc ctaacagaat 360
ataataggga tggagggaag ccataagtaa agtgttgccc ttgctgtgta cttgccagga 420
ggttggaagt aaatttcaga ttatcagcag ttaaagtggg gtctcctccc ctgaagaatg 480
aaatatcctg ttgtagttct ttgaaagtgc catagtagct ggtgtttatt ttatgaggga 540
aaaagaaaat tttgaaaaaa attttttttc ttaacagggc agatcaagca taagctgccc 600
tgctgagcaa tcattttatg attaggagtc cctaaaaggt ccatagagcc aactataagt 660
catttggttg aaactggagt aacaggtttc cataggagct gattgtagcc aaaccatttg 720
atgatatttg gntgnagatn gagaa 745

<210> 1106
<211> 800
<212> DNA
<213> Homo sapiens

<400> 1106
acaatagaca ctaggggcta ctagtagggg gagaatagaa ggaggctgaa ggttgaaaaa 60
ctgcctattg ggaactatgc tcactacctg ggggacagaa tcatttgtac accacctctc 120
agtgacatgc cgtttaccca tgtaacaaac ctacacaatg taccctctga atctaaaata 180
aaatttttaa aaaagaaaag atgtatttaa ttcgtcttca aatttggtat gtaacttgta 240

US 2005/0009004 A1

tgaaagaaat tttaatccaa gcagattttg taatgagata atgaagaaat taaaactaca 300
ggtgacactg tgctgttgct ctctgaccca gtggaagtct acatatgtgt gaaaatgaat 360
acaccttctc tctccaggtt gcaatggttc agttcactga tgatcccaga acagaattta 420
aactaaatgc ttacaaaacc aaagagactc ttcttgatgc aattaaacac atttcataca 480
aaggaggaaa tacaaaaaca ggtatgacca aaagaagccc agctaaggct caaagtaatt 540
cattatttgt aactactgaa atgacctttt attttaaggc atagtaattt tttaaagatt 600
tttttttca ttaatttaag aactttgttc ccacccttc ttctccagaa aaacaaaaat 660
gggagggagt gaaatcaaac tggtgccttt ctttggttca ggaaaagcaa ttaaagtatg 720
ttcgagatcc ttggtcactg cagaagtcag gtacaagaan gggcatncca anggtatcgg 780
gggtatactg atggaagatc 800

<210> 1107
<211> 749
<212> DNA
<213> Homo sapiens

<400> 1107
tcactgacat gagcagagtg ctgaaatatt tgagtgtctg gcacacatgt acgttctcag 60
ctgagttcca acaaggtggt gctctgcctt cttgcttctg ctctcatact gaaaacgtgt 120
ccttttgtg gctaatagta ccatgttttt cacactttta tgtttttat tggtgatttt 180
gctatttaaa atgcccctca agcattgtgc tgatctgctg tctatgtttc tcaatgctag 240
gcagttgtgt tgtgctttac aggaaaaata catgtgttaa ataagttttg ttcaggcctg 300
ggctgtagtg ctgttggctg tgacttcaat gttagtgaat caacaatatt tattaaataa 360
ggagtcttga aacagaaaca cacataaaac aagcttatgt attgattggt tgacaaaaat 420
gttgtagcca gaggttcaca ggaacctaat cctgtatttc ccctaggagc aatagttcag 480
tatttgctac ttcactgtgt gtggcaactt tatggaacat aatcactaca aataatgaga 540
atggactgta tcctgaatgg tatttattat atttggttat ataactttgt agttatataa 600
ttgngaatag tatctggttt tatgctatat tttctaattt gggtttaact gatgtgcana 660
gtattggttt ggtatgctga tgtatgncca ctctgcattt actactgggg accatgacaa 720
gttgtagttn ctaaattgca tacaaatgc 749

<210> 1108
<211> 432
<212> DNA
<213> Homo sapiens

<400> 1108
agctgcagat gggacacagg gcatcaagtc cctagactgc acacagtgtg ggaggccctg 60
ggcctggcca acaaaaccat tgttttctcc tgacccttg ggcctgtaat ggttggggct 120
gctgtgaaga tctctcacat gcccttgaga cattttctgg ggagaaattc aagctagctg 180
cagaaattag cataagtaat gaggagctga atgttaatcc ccaaaacaat ggggaaaatg 240
tctccagggc atgtcagagg tcttgacagc agcccttccc atcacaggcc cagaggccta 300
ggaggaaaag atgatttcat gggccaggcc ctgggctctc ctgctctgtg cagactgcag 360
acttggtatc ctgcattcca gaagctccag ccatgcctaa aagaanccaa ggtncagctt 420
gggntttggc tt 432

<210> 1109
<211> 667

0050204809 - 07-28-2006

<212> DNA
<213> Homo sapiens

<400> 1109
ccacctctcc agccactcat ctctgcccag ctgctgccct ccccaggagg cctccatggc 60
ttcacctacc tccaccaacc cagcgcatgc ccactttgag agcttcctgc aggcccagct 120
gtgccaggac gtgctgagca gcttccagga gctgtgtggg gccctggggc tggaacccgg 180
tgggggggctg ccccagtacc acaagatcaa ggaccagctc aactactgga gcgccaagtc 240
actgtggacc aagctggaca agcgagcagg ccagcctgtc taccagcagg gccgggcctg 300
caccagcacc aagtgcctgg tggtgggtgc tggaccttgc gggctgcggg tcgctgtgga 360
gctggcgctg ctgggggccc gagtggtgct ggtggaaaag cgcaccaagt tctctcgcca 420
caacgtgctc cacctctggc ccttcaccat ccacgacctg cgggcactcg gtgctaagaa 480
gttctacggg cgcttctgca ccggcaccct ggaccacatc agcatcaggc agctccagct 540
gcttctgctg aaggtagcat tgctgctggg ggtggaaatt cactggggtg tcactttcac 600
tggcttcagc cccttctagg aangggaatg gctggcgtgc ccagnttcaa cccaaccccc 660
tggccan 667

<210> 1110
<211> 778
<212> DNA
<213> Homo sapiens

<400> 1110
tatatgacct cggatcaaat gtgttagact ttttgccttt gagcactggt ttaagtttct 60
ctgccttgtg ggtttgtgag gaagcacata aaggatgtaa gggaatagag gatcccatct 120
ctacagataa tcatctggcc tcatgcaacc agcatgccac ttgttggaga agtgtgttca 180
aaactcattt ctggttcgtg cacctgtggc ccttggcggc aggtcccgta acacacagcc 240
tgaccactga tacagaggag gcccctggga ctgctttcct tataagggtc ctgcgccttg 300
gtagaattta gatttggagt tgcagagact caactcagga aagcaagtct ttaacctctt 360
tgaccttggt tttctcacgt gttaagctca ggacgtggaa ccggtgattt ctcatgcctt 420
tgatttttaa gagtatgtgg aatagaattg tgcataactg tgaatcacag tcactgtaga 480
accacagggc tggctggtag ctttcggaat ctgttagtgg ctttatcttt gctctttgaa 540
agattggtgc tgtccatttc atgatgccag aaagtcatgt tgggaattgg tgttaatttt 600
tctgggctca aaaaatctgg ttctttgact atttttccta cttctttnca taatgggagc 660
tattctgcaa accaaacact ttagtaaaac tctctacttc tagaaatggg ttaacattat 720
tggnggggtt tcacaatccc cttaaacttt ganagccctc ttgggaagtg aaaatnct 778

<210> 1111
<211> 735
<212> DNA
<213> Homo sapiens

<400> 1111
agatgatgct gtttttagga gattgtttaa aagttcatgc ttgttagtgt ttggtactta 60
aagatacttt tgaaaatggt ttatttgcca tctttttttg tgtgtgtgtt gtttttgtt 120
ttttggtttt ttgagatgga gtctcgctct gttgcccagg ctggatggag tgcagtggcg 180
cgatctcggc tcactacagc ctctgcctcc ctggttcaag cagttctcct gcctcagcct 240
ccaaagtagc tgggattaca gtcatgtgcc actgcacctg cctaattggg aaaacaagtt 300

0050250.0002000

ttaaatgaca tctctttttt ccaccagatg ttgctgtagc attacattta tctgctgtgt 360
taaattgtta ctaatatgca attatgtaaa ataacttttt aactgaaaat cttaagtgta 420
gagatagctt actagctaat ggttcaattg taaattcaga tgagccactg cgcctggcct 480
atttgccatc tttgagctaa gctaaccgta cttaagagtt tgttttcctt tccaaagaaa 540
ggaatgtana gagtaatatg ttggtaatat gatttatatt aagtgaagag tattatgaat 600
ggagtttcta tttacttggt attaaacaag ttcaaatgat ttttttttt cttttaatga 660
ttanctttt cttactgntt caaatttggt aaaagtgttc tatgagatat tattttatta 720
atttttttgg aaccn 735

<210> 1112
<211> 767
<212> DNA
<213> Homo sapiens

<400> 1112
ggccttttt ttttttttt ttgagttgga gtctctgtcg cccaggctgg agtgtagcgg 60
caagatctcc gctcactgca acctctggct ccccagggtc cgccaacacg cctggctaat 120
ttttgcattt ttagtaaaca cgaggtttcg ccatgtggcc caggctggta tcgaactcct 180
aacctcaggt tatccacccg cctaggcctc ccaaagtact gggattacaa ggtcaggaga 240
tcgagaccac cctggccgac atggtgaaac cctgtcttta ctaaaataca aaaaattagc 300
tgggcgtggt ggcacatgtc tgtaatcccg gctacttggg aggctgaagc aggggaatct 360
cattaacccg ggaggcggtg gttgtagtga gctgagattg cgccactgca ctccaccctg 420
gagacagagc cagactccgt ctcaaaacaa aacgaaacaa aacaaaaatg aattgttatg 480
aagttcaaat gtccaaaatt cgatgaagcg gagggaaatt ggttaagcta gaattttata 540
atattcacct tttagaagtc acagtagttg gctgggcgca gctcacggca ccaacacttg 600
naatcccagc actttgggag gctgangtgg gcagatcaca aagtcaggag tttgagacca 660
gcctggccaa tatggtgaaa ccccatctct agtaaaaata ccaaaattag cacttcaacc 720
tggatgacca gancgaggat tncatnttaa aaaaaaaaaa aaaaggg 767

<210> 1113
<211> 679
<212> DNA
<213> Homo sapiens

<400> 1113
ctgttgttct ttttccaaat atcctagagt actttgatat agttgagtat attcatctat 60
gcaatgtcct tgtgatgttg gtagggagaa cttctaacct tttgtgcaat gacgagaagg 120
ttatataatg gcccagccag gtttcatcct tgatatcctg gcaactgtag tttatattaa 180
tgacatctcc attgataaag ggtctctgag gtttccagaa gaaagttttt tagatattca 240
tgagtgtact aatatcatca atttacctgt aactttgatt aagcaaagaa agcaaaccca 300
tacacacaca caaacaaaca aaaaaaacca cttttctcag gactttccat ttgttcccag 360
cttagtttga ggtcctgctt cattggctta gatctggcca ggtctgtttg tcatctggca 420
tctgtctctt ctttctcatg ctccagatcc agagccagag agcagccact gctttgctct 480
gaggttggct ctattttctc cctttggcat atgggatggc agtagccctg tgccctttg 540
gtactgcaga agagatggat tccacttggc ccatcccacc cccatctctg gtcacctggg 600
catgaaggtt tccttggctt ctgcctgcag ccatatttgg gctgcttnca ngagaagaga 660
agaatgtant gacactgca 679

0950450.0002

<210> 1114
<211> 735
<212> DNA
<213> Homo sapiens

<400> 1114
aacaataaat gatgacagtg atgatgatat gatccatgtg atttcttggt catggcttta 60
tgtcaagatt tcctttagaa agtgaaataa gtttaggtaa cacacagaac aaacacagca 120
agaattgatg acttagacaa taccgatttc ttttttttatt gttattatac tttaagttct 180
ggggtacatg tgcagacctt gcagatttgt tacacaggta tacacgtgcc atggtggttt 240
gctgccccca tgaacctgtt atctacatta ggtatttctc ctaatgctat ccctcctcta 300
gccgtgcaac ctccaacagg ccccagtatg tgatgttccc ctccctgtgt ccatgtgttc 360
tcattgttca actcccactt acaagtgaga acatgcagtg tttggtttag gtttcctgtg 420
ttagtttgct gagaatgatg gcttcaaaaa aaaaggttag gtttcttttg ttttgttttg 480
tttgagacgg aattttgctc ttgttgccca ggctggagtg caacagtgtg atcttggctc 540
actgcaacct ccacctccca ggttcaagcg attctcctgc ctcagcctcc tgagtagctg 600
ggattacagt catgtgccac cacgcccagc taattttgta ttttttagtag agtcggggtt 660
tctccatgtt ggacaggctg gcctgaactc ccaacctcan gtgatctggc cgcctnggnc 720
ttccaaagtg caaaa 735

<210> 1115
<211> 871
<212> DNA
<213> Homo sapiens

<400> 1115
agctttgatg aagagtgaat actgatggag aaatatgata ggacaaaaag ggtgtgatct 60
agtgtagata aactggggaa tttagcaagg cctgtttgtt caggttcctc tctgtgaccc 120
ttcatcttca gagatgagca tgttcctttc ttccagggat cgggaggccc tcacatgagt 180
gtcttctgac ctgcttcttg ggaatgttgg aaaagctttc ctaagctgta tgccctgcat 240
cggggagaag catatgtgtg ggtgaggagg ggaggtcaga gagactttcc tgcttctgtt 300
tttttaatat gccaaggtgc cgtattttga gtagtgtgtc ctgaatccca tcatcctttt 360
caatgtaact tttcattaaa tgcagtgttc taggataagg gttagcaaat gacttctaaa 420
aaaacaccag atagtaacca tctttgtctt tgcagcccat aaagtatctg ttgcaactac 480
tcaactctgt tgctgcagca caaaagcaat agtagaaaat acatagacca agaagagtgg 540
ctatgttcca ataaaacatt ttttgtagat agtaaaattt caatttcctg taatttttac 600
attataatat tttacttatt ttttttccaa ccattgaaaa tgaaagaacc attcttagct 660
tactggttct acaaaaacag atggcaacct ggatttggcc tgctgctgta gtttgtcaac 720
ccctcttcta tgacattaca ttcacacaga caaaactaaa cccaaacaaa acaataaaaa 780
tgcattcttc tgacaatcca aagacctatc ttaaaatatt taaggccaac caaaatggcc 840
aggttttgac ttacttatna acattgttgt a 871

<210> 1116
<211> 838
<212> DNA
<213> Homo sapiens

<400> 1116

09525800 - 07-12-00

gaaatggaaa agaaaaaaaa agacaaaaaa aaaaaaaaag aaaagaaaaa aatctcatca 60
cttgaagcca ccgggagcct gcggcccggg ccagcccggg ctttctccgg agcagagcag 120
cgctgctggc ctggcagcca ggacttctcc gtgtacgtgc atccccagtc cccgccgggg 180
cgggcgggcc gccagagcag ctgtttacaa tccagagaca gaaaacaaaa tctagatgca 240
acagcgaaac aaagaaccca tttccttcct ggcacccgtt tctgtccccc cctttcctgc 300
tccgcctgcc cggcatcatc agcccttctg gggcgtgtac ctctcactgc ctgccccagg 360
accagaggcc tgtctccccc ttccctcccc accggcccgg gggagacctc ttcacaccca 420
aagatgcttt gtcaagatgg ctgcgctgtc cctttgagtt cctgcttctt gtatattgct 480
ctggggactc tcgccgggga agatggggct gatttcccac ctagagaggt tgatggcaga 540
aggaaaatgg ggaggcactg gggttgtgga gggcatgggt atggctgagg agggtgctgg 600
gaacggcaag gcggtctggg ggatggggag gggcaaaggt gagagatcac cttcctatcc 660
tncacctttc cgcaaggaag acgaaccagg tgccagggct ggggtcggga cacccatgtt 720
ctgggccggn ttgacccaaa tccaaacccc ggaagcttca ggcttcggat gngtcctgaa 780
cacctgtccg ggcccttctt tcagctgtna ggcaagcttc ccagcccctt ccttaant 838

<210> 1117
<211> 802
<212> DNA
<213> Homo sapiens

<400> 1117
aggaggtggg gcctggtggg cggggcctca gcgtaggcct taggtctcag gggagcagca 60
cgcctgagca ccccaggacc tgcgctcagg gctcccacaa acggtttatc ggtttatcgc 120
tgggggacag cctgcaggct tcaggagggg acacaagcat ggagcggctt tggggtctat 180
tccagagagc gcaacaactg tccccaagat cctctcagac cgtctaccag cgtgtggaag 240
gcccccggaa agggcacctg gaggaggaag aggaagacgg ggaggagggg gcggagacat 300
tggcccactt ctgccccatg gagctgaggg gccctgagcc cctgggctct agacccaggc 360
agccaaacct cattccctgg gcggcagcag gacggagggc tgccccctac ctggtcctga 420
cggccctgct gatcttcact ggggccttcc tactgggcta cgtcgccttc cgagggtcct 480
gccaggcgtg cggagactct gtgttggtgg tcagtgagga tgtcaactat gagcctgacc 540
tggatttcca ccagggcaga ctctactgga gcgacctcca ggccatgttc ctgcagttcc 600
tgggggaggg gcgcctggag gacaccatca ggtanggatg gccctgccca tcctgttctc 660
gagtgtccct tccctcatcc gctcagactg ggcctccctt gcttctggcc cagcctctgg 720
tgtctgggtc ccctctgagt cctccatctg cttctggccc cctgttcacg gtcctgggan 780
gatggnaggc nttcgagctg ag 802

<210> 1118
<211> 839
<212> DNA
<213> Homo sapiens

<400> 1118
caaaagagtg ttggtgagga tatggaggaa ttggaaccct tgtatgctgg gtgggaatgc 60
aaaattgtgc agccactatc tatgccaaaa cagtatggag gtttctcaaa atataaaaaa 120
aataattaaa aaaagagcta ccatatgatc tagcaatttt gcttttgggt atttatacaa 180
aataattgaa atcaagataa aagtgatagt tgccctccca tgtttattgc agcattattc 240
aacttaaatg tccatcaaca gataaatggt taaagaaaat gtggtataga catacaacgg 300
actattattc agccttaaaa aaaggaaacc atgccatatg taacaacaga tgaaccttga 360

US 2005/0260200 A1

aggcattatg ttaagtgaag taagccagtc acatgaagga caactactac attccactta 420
tgtgaggtac ctaaaataga ctaactctaa atcagtgagt agaatggtga ttgccagaga 480
atgggggggag ggaaaatagg gagttgctat tcaacaggta tgaagtttta attatgcagg 540
atgaacaagt tctagagatc tgttctacaa cattgtgcct gcagctgaca atactgtatt 600
gtacacttaa atgtttaaca gtagatctca tgttagtgtt cctaccacaa tgaaaaatca 660
aaatcctaac aatacaggaa aaaagaggga ttcaataaat gaaatcaacc aatcaataaa 720
aataatatga tagatttaaa aaaacttcaa tcactacaac atctcaaaat ttttttggtg 780
aaccttagag aaatntatat ttaatcccaa aatgtggnca cnttttgggt ggtttttgg 839

<210> 1119
<211> 777
<212> DNA
<213> Homo sapiens

<400> 1119
agcaagatgg cggctccctg ggcgtccctg cgcctggtcg cccccatgtg gaatgggcgt 60
atcaggggca tccatcgcct gggtgcggca gtggccccag agggcagtca gaagaagaaa 120
aggacaatac tccagttcct gaccaactat ttctacgatg tggaggctct gagggattac 180
ttgctccaaa gggagatgta caaggtgcat gagaaaaatc gatcttacac ctggctggag 240
aagcaacatg gtccatacgg cgcaggtgcc tttttcatcc tgaagcaggg aggcgcagtc 300
aagtttcgag acaaggagtg gatcaggcca gataagtatg gccatttctc tcaggagttc 360
tggaatttct gtgaagtgcc tgtcgaagct gtggatgccg gtgactgtga catcaactac 420
gagggcctgg ataacctcct ccgcctgaag gagctccagt ccttgtcgct gcagcgctgc 480
tcccacgtgg acgactggtg tctcagccgc ctctacccac tggccgactc gttgcaggag 540
ctctcgctgg ccggttgccc ccgcatctcc gaacggggcc tcgcctgcct ccaccacctn 600
cagaacctcc gcaggctgga catctcggac cttcctgccg tgtccaaccc tggcctactc 660
agatattggt ggaggagatg ctgcccaatt gcgaagntgt gggagtcgac tgggctgaag 720
gcctgaagtc anggcccgga ngaacagcct cgggacacaa gccagccctt gtccttg 777

<210> 1120
<211> 881
<212> DNA
<213> Homo sapiens

<400> 1120
tgagtgatgc tatggaggag atcgacatgc aacaaggcac ctcgtcagta aaaccacagg 60
ctaatggtgt tttggatgaa aaatctcaaa ttcaggagcc atgttgttca gacctcttcc 120
tgtttcctga cgagagtggg aatgtatccc aggagtccgg ccccacctat gcctcattct 180
ctcaccattt catcagtgat gcaatgacag gtgtgcccac tgagaatgat gacttttgca 240
ttcttttttgc accaaaagca gccatgcagg agaaggaaga agaaccagtt ataaaaatca 300
tggttgatga tgcaattgtg ataagagaca attatttcag tctgcccgtt aataagaccg 360
atacgagcaa agccccctta cactttccca ttcctgtgat tcgctatgtg gtgaaggagg 420
tctctcttgt ctggcatctt tatggaggaa aggattttgg aacagtccct cccacttctc 480
cggctaaaag ttatattagt ccccacagtt cgccttctca cacacccacg agacatggac 540
gtaatacagt atgtggggga aaaggaagga accatgactt tttaatggaa atacagctaa 600
gcaaggtgaa gtttcagcat gaagtctacc cgccatgcaa acctgattgt gattccagcc 660
tctcagaaca cccagtcttc cggcaggtgt tcattggtca ngatcttgag attcgagatc 720
gtttggcaac atccaaatga ataaatttta tacctgnatt gcagtaaaga aatgcccttg 780

0356350.0002

aaaagctcac ttccnacatg ttgacagggg aaagccctta cacgggggtc ccagaatctg 840
gcaggtcccc cacaggaatg cttgctttga aaangncctt a 881

<210> 1121
<211> 741
<212> DNA
<213> Homo sapiens

<400> 1121
ttttttttt cccggctggg ctcgggctca gctcgactgg gctcggcggg cggcggcggc 60
ggcgccggcg gctggcggag gagggagggc gagggcgggc gcgggccggc gggcgggcgg 120
aagagggagg agaggcgcgg ggagccaggc ctcggggcct cggagcaacc acccgagcag 180
acggagtaca cggagcagcg gccccggccc cgccaacgct gccgccgggt acgtggctac 240
accactggct gccctcttga acataaagga gaaaactcgg ctgcgggcac ctcccaacgc 300
caccttggaa catttctacc tgaccagtgg caagcagccc aagcaggtgg aagtagagct 360
tttgtcccgg cagagcgggc tctctggccg ccaggtagag cgttggttcc gtcgccgccg 420
caaccaggac cggcccagtc tcctcaagaa gttccgagaa gccagctgga gattcacatt 480
ttacctgatt gccttcattg ccggcatggc cgtcattgtg gataaaccct ggttctatga 540
catgaagaaa gtttgggagg gatatcccat acagagcact atcccttccc agtattggta 600
ctacatgatt gaactttcct tctactggtc cctgctcttc agcattgcct ctgatgtcaa 660
gcgaaaggat ttcaaggaac agatcatnca ccatgtggcc accatcattc tcatcagctt 720
ttcctggntt gncaattaca t 741

<210> 1122
<211> 830
<212> DNA
<213> Homo sapiens

<400> 1122
actctcctcc cccgagcggc agcggcagcg gcggcggcgg cggctgctgc gggcgctgaa 60
tgagagacgg tgactgttcg ggtcgacgag tgctactcta ggcggcggcg gccgtggcgg 120
tgaagcgtgg ggccggcatc gtctttccgt cctctgagac gacggccgcg gctgcacagg 180
aataatgtat ttgtggcctt ggacatgagg cagtcagtcc tctgttgctg ttaacataag 240
gtcagggact gatgaggaaa gcatggacct aatgaacggg caggcaagca gtgtcaatat 300
tgcagctact gcttctgaga aaagtagcag ctctgaatcc ttaagtgaca aaggctctga 360
attgaagaaa agctttgatg ctgtggtatt cgatgttctt aaggttacac cagaagaata 420
tgcgggtcag ataacattaa tggatgttcc agtatttaaa gctattcaac cagatgagct 480
ttcaagttgt ggatggaata aaaaagaaaa atatagttct gcaccaaatg cagttgcctt 540
cacaagaaga ttcaatcatg taagcttttg ggttgttaga gagattcttc atgctcaaac 600
attaaaaatt agagcagaag ttttgagcca ctatattaaa actgctaaga aactgtatga 660
gctgaataac cttcatgcac ttatggcagt ggtttctggc ctacagagtg ccccaatttt 720
cangttgact aaaacattgg gcgttattaa gtcgaaaaga caaaactacc tttgaaaaat 780
tagaatatgt aatgagtnaa gaagataact nccaaagact cagagactnt 830

<210> 1123
<211> 652
<212> DNA
<213> Homo sapiens

US 2005/0059005 A1 Mar. 17, 2005

<400> 1123
catctttcaa catttttttt ttttttgaga cagagttttg ctcttgccgt ccaggctgga 60
gtgcaatggc gcgatctcgg ctcgctgcaa cctccacctc ctgggttcaa gcaattctcc 120
tacctcagcc tccagagtag ctgggattac aggcacctga catcacgccc agctaatttt 180
tgtattttta gtagagatgg ggtttcacca tgttggcaag gctggtctca aactcctgac 240
ctcaggtgat ccaactgcct cggccttccg aagtgctggg attacaggcc tgagccaccg 300
tgcctggcct tttatttttgt gtgtgtgttt gatttctgac ttggcctttt taaaaaaatc 360
acaaaatata taatacggcc gggtgctgtg gctcacgcct gtaatcccag cactttggga 420
agccgaggtg ggcagatcac gagatcagga gatcgagacc atcctggcta acacagtgaa 480
accctgtctc tacttaaaaa aaanaaaaaa aanaaagata gctgggcatg gtggctcgca 540
tctgnagtcc cagctactca ggaggctgag gcaggagaat cgcttgaacc ggggaggcag 600
aggttgcagt gagctgagan cacgccattg cactccanac tgcangctga gc 652

<210> 1124
<211> 736
<212> DNA
<213> Homo sapiens

<400> 1124
atgtaaagaa gtatgtattt ggtgaggaga atttttgag cactgtgctt acgatttgtg 60
tatttttctg tgtattaatt ttcaataaaa acatttttaa gtggatgtaa tcaaacaaaa 120
gtagttgagt caactgggta atgaacatta catatttttc tatactattc tctgttgtgt 180
atatttgaaa atctccataa taaaaaccct tttaaaaagt caatccagaa agtggaaagc 240
aatatactgt acttgcagga agtagaaacc aatatactgt acttgcagga agtagaaagc 300
gatgcactgt acctgcagga agtagaaagc gatgcactgt acctgcagga agtagaaagc 360
gatacactgt acctgcagga ggtagaaagc gatgcactgt acctgcagga ggtagaaagc 420
catgcactgt acctgcagga agtagaaagc ggtgcactgt acctgcagga agtagaaagc 480
ggtgcactgt acctgcagga agtagaaagc ggtgcactgt acctgcagga ggtagaaagc 540
cgtgcactgt acctgcagga ggtagaaagc ggtgcactgt acctgcagga agtagaaagc 600
ggtgcactgt acctgcagga ggtagaaagc cgtgcactgt acctgcagga ggtagaaagc 660
gatgcactgt cctgcaggag gtagaaagcg atgcactgac ctgcaggang tagaaagcga 720
tncctgacct gcanga 736

<210> 1125
<211> 836
<212> DNA
<213> Homo sapiens

<400> 1125
atttatatct acagatcata tctttatatc ctttctagtg tgaattattt tgtctttgtg 60
gatgaatttg tttttatgac attcataatt ttcttcaagg ttatattcta taatgtatct 120
atttattatt attatttttt aagacgagtc tcactttgtc acctaggcta gagtgcagtg 180
gcacgatctc agctcactgc aacctctgcc tcctgggttt aagtgattct cctgcttcag 240
cctctcaagt agctggaaat acaggcgcgt gccaccatgc tcggctaatt tttttatttt 300
taatagagac agggtttacc cctgttggcc agattggtct caaactcctg acctcatatg 360
atctggctgc ctgctcctcc caaaatactg ggattacagg cataagccac cacgcccagc 420
gtatatttaa aatttttaat tggatgaaat tatcacccca tttacagatt atataagtta 480

0050050-0050800

caaactcagt catcattgaa gcatttttg tattaaatct gcaaactgta tatatttaac 540
atattattta ttacccttac atctgtgaca aaaagagact ttccactgct gctttctcaa 600
gatgcatgta aagctgtccc attagaactc taaatgttaa aaatttcctg tgcaattttg 660
gacttgtatg tgtgaagcag tatttcagct caaatatgtg ctttcatact gnctataata 720
taacccaaat caacattggg agctcgtagt aaataaattg cttatgtata ttagcaccat 780
tttatgnatc ccttaaaatt tggaaatgat ncaaagctnt gccccgagca atcatg 836

<210> 1126
<211> 829
<212> DNA
<213> Homo sapiens

<400> 1126
ggccttttt ttttttttt ttttttttga gacggagtct tgctctgtcg cccaggctgg 60
agtgcagtgg cacgatctcg gctcactgca tgctccgcct cccgggttca caacattctc 120
ctgcctcagc ctcctgagta gttcggacta cgactacagg cgcctgccac cacgtccggc 180
caacttttg tatttttagt agagacgggg tttcactgtg ttggccagga tggtctccat 240
ctcctgacct cgtgatccgc ccgcctcggc ctcccaaagt gctgggatta caggcatggg 300
tcaccacgcc tggccagtga aaatatattt ataatgactt ccctacctat tccctatctt 360
cttccaccat tcttagacac agtgatagtt taataatcga ttaggatgta actgtaattt 420
ccttatgaag aaaactaaag ctatgatgta ctataaaaca tatagcattt caaggcagcc 480
aattatccaa aacatattaa ctggtaaatt aaatatacct gttggttatc ttgtttggaa 540
caggagggag gctattatta ggtagagagt aagcaccatg tcactttaca tagtccattt 600
atatccacat gatggcagac tgctctttga caatgaagaa gcatagaatt tatttgnttt 660
actttggtaa actgactttg gctatcaaca gacttaatgt ccaagtctta taacattttt 720
caaatatgtt taaaatttaa gtttttncaa aaaatcaaag cactgnacac taaaaatnga 780
atataaggca gtgaaatcaa atcctggtta cttgaagaaa taacagctg 829

<210> 1127
<211> 861
<212> DNA
<213> Homo sapiens

<400> 1127
ggccttttt ttttttttt ttgagatgga gtttcactct tgttgcccag gctggagtgc 60
aatggcacaa tctcggctca ccacaacctc cgcctcccag gttcaagcga ttctcctgcc 120
tcagcctccc gagtagctgg gattacaggc aggcgccact acgcccggct cattttgtat 180
ttttagtaga gacggggttt ctccatgttg gtcagggtgg tctcgaactc ccgacctcag 240
gtgatccggc cacctcgatc tcccaaagtg ttgggattat aggcgtaagc caccgcaccc 300
ggtccaagaa ccagtgttaa taaacgtaca gtagaagtgg ggtgggggca gggggaagct 360
actgatcaca aacgagaaac taccacacac aaattaattt tacagctttg atttagtctc 420
tcgggacccc acatctgaag aggggttagg cagcgaagtg tttcggtatg gggcttgagg 480
atagtgattt tgggattctg agctactgag ctcctctgag actctggggc actgctcact 540
tgtaagcaca agggggcttt gcttgacggt aatttaggtc aagcttcctt gaatttcgat 600
gaggcagctg gagtttcttg aaaatattct cagctagatt cagaataatt ctttctcctc 660
ttcgcttttg tggggacttt atctcaagtg tctgnttctg ctcactggaa gacttaattt 720
taggtccttn aacccctaaa ttcagttgag gaaatgactt ctgctgcaaa tagaaacctc 780
tgctttattt gcatggagaa caaggaactc aaatgagaga tccaggnatc cttggtttca 840

0950204.0009.0000

tgccaatggg tctatcantc a 861

<210> 1128
<211> 815
<212> DNA
<213> Homo sapiens

<400> 1128
tttgctacca tcttgctttc tagagaactg atggcctgtc tttatgagca ccatctcttt 60
gaagacacac ttggctgtct tcgaatagag ttctgttggg actgggacat ttctaactcc 120
tcccccttaga aagactggtt aaggtcatca gctacctgtt ttgcatgttt tgtttcagga 180
ctctttcttt cattttttggg ttctcctagg tgaaatccag gctcatttgg tgagtaatat 240
catctggcca gagaccgttt tgttatgaca tactttctgc tgacaccaaa ctgatttggc 300
ttccttggca tattatgttc cttactatcg gggtaacttt ttcaagtttt agaaatgcct 360
gtgtaagtgt gaatgggaac tatatagggt atttttaaac tataatgttt acctgtattc 420
aaagacaaat tatttgtacc taattcactc agcatgtatt tgaagtaact catgttttgt 480
tagagtgata gtgttaaaag ggatttaaat tgagttttat agaaaaagag gttatttaga 540
aaagaaattt taacagaggg ttaaaaaaag tgaaacagaa tttaggtgaa aggaatacct 600
ttgtgaagga agacttattt tcaagatgga aagaaagtaa cggacagtag gcgcagaagc 660
agaacaaaaa ggagagaaaa tgggcaggtt anggaattca aacattggct aataaaacaa 720
taataaccag cattactata tctgggcttt aatactatgn gcatgcaccc attatgtatt 780
tgnctaaatt aggatcttcc aatccttaca aaant 815

<210> 1129
<211> 866
<212> DNA
<213> Homo sapiens

<400> 1129
agcaaggtct aatgggatgc tgtcttcaag agacccatct ctcatcccat gagacccata 60
atgacaccca taagctcaaa ataaagacat ggagaaaaat ctaccaagca aatggaaaac 120
agaaaaaagc aagggttgta atctcatttc agacaaaaca gactttaaac caacaaagac 180
caaaaaagac aaagaagggc actacataat ggtaaagggt tcatttcaac aagaagactt 240
atcctaaata atatatgcac acaatacagg agcacccaga ctcataaagc aagttcttag 300
agaccttcag agaggcttac actcccacac aataaaaaaa gaaaaaggcc tgggtatagt 360
ggctcatgcc tgtaatccca acactgtggg aggccaagac aggaggattg cttgagccta 420
ggccttcaag agcagcctgg gtaacacagc aggacctcac ctcatctctt aaaactccca 480
cacaatacgg ggagacttta atacccaact gacggtacta gacagaccat cagagcagaa 540
aattaacaat gatattccgg acctgaacac aacactgggc caaatgtacc tgatagacat 600
ctagagaact ctccacccaa agatcaacag aatatgcatt cttctcatta ccacatggga 660
catactctaa tatcaaccac acaattggac ataaaacaat cctcagaaaa tgcaaaagaa 720
ggaaaattat accaaccact ctcttagacc acagcacaat aaaaatagaa atcaagacaa 780
aatcacttca aaaccatacc attattttgg aaattaacca anctacttct ggatgacttt 840
tgggtaaata atggaaanta anggag 866

<210> 1130
<211> 798
<212> DNA

DOCKET NO. 0506-0350-0

<213> Homo sapiens

<400> 1130
attttcatg tcacataatt ttggagtatg tcatggacat ttgaatattt tgttacaaaa 60
ctggatgctg ttaaaatcct ctggaaaata tttttggttt tttggtttca ctttagcggg 120
cagttaacct ggttaggttc agactgcctc tgtgggctgt ggatccagtt tgaacttact 180
tttcaaaacc ttcgtattgc tgttcaggtc ccaggtgtgc catccatgcc attgtgcagt 240
tctcagcgcc tttcctctgc cgccttgggt cagttcacac atgggcatgt tggtggtaaa 300
cttgagattg tatacacaaa tttagaggac gtttcttctc tccgtgactt cccttgtaca 360
caagctccca agagtttctt ttcgtggttc tttggtgaga aaactggaat tttagcttct 420
ttgtgctttt catacgtttt ctgtagaggg gctcatttcc tgaacaaaat ggagagagag 480
aaaagttaga gaaaaaaata aaatgaattc cctcttccat actcttccga tcatcgtctt 540
tttcctagtt cttttgtcag aagaactctc ttttagagtt taggagacag ctaccagcca 600
caggtgtgca gactcaggat tggggcttgc tttgaggcag agctgagaga gaagaaaaat 660
taccagatat ccaccccttc ccattggccc tctcccattc atcatcttnt ctagttctct 720
accanaagga gttctcttgg aacttttctc tggcttcact cactgnacag ttaatgagaa 780
ttgggctggc ctcaagct 798

<210> 1131
<211> 644
<212> DNA
<213> Homo sapiens

<400> 1131
atttaacatt caaggaaata caccaccagg agcaaaagat caacagtcag aaaagtcaga 60
cccataaaga cttcagaata catgatattg catgtttaat atatttaatc caataaaaga 120
agtgggtgat aagatgaggg ccttcaaaaa ataggtgtat ttgagagctt ttttggaggt 180
tctagcaggg gagtgcagct actcatatac cctggaccaa agaccgctcc tcctctattg 240
gaggtggtcg tcctcttcga ccaagcgcac agcttcagga gggacgcaca tggagcggtg 300
agggaagaag gggacaccac ctagccatcc agatcagcta accaaccctg gtgattgatg 360
gagtgacaga tggtgcagcc acatcaccct cacatccaaa aaaataggtg tatttgaaaa 420
agaaccaaaa agaggccggg tgcagtggct cacacctata atcccagcac tttgggaggc 480
caaggcaggc ggattatttg aggtcaggag ttcaagccca gcttggccaa catggtgaaa 540
ccctgtcttt actaaaaata caaaagtcaa ttgggtgtgg tggcacatgc ctgtaatccc 600
agctactcag gaggctgagg cataagaatc gncttggagc tgnn 644

<210> 1132
<211> 604
<212> DNA
<213> Homo sapiens

<400> 1132
agactcgaga tgcgcccgag gaggttgggc cggtgctgcg cggggagccg gctcggaccc 60
ggggacccag cagcactcac ctgtgcacct tcgccctcag ccagtcccgc tccggagccc 120
tctgcgcagc cgcaggcacg gggcactgga cagagagtag gatcccgagc cacctctgga 180
acccagttcc tctcggaagc ccgcaccgga gctcgcccgg cctcggaggc tggagccaag 240
gcaggagccc ggcgcccgtc cgcattctcg gccatccaag gggatgtccg gtctatgccc 300
gacaattcgg acgcgccgtg gacccgcttc gtattccaag ggccgtttgg ttcccgggcc 360

09629469.0702800

actggccggg ggactggaaa ggcancgggc atctggaaga cgccagccgc ctacgttggc 420
cggcgacccg gngtgtccgg ccctgagcgc gccgctttat tcgggagctg gaggaagcac 480
tgtgtcctaa cctacctncg cagtcaaaaa gatcacccag gaagacgtca aagtgatgtt 540
atatttgctg gaggaggtgt gtactgnctt cctgatccag atttttccac ctgtctgnga 600
nagc 604

<210> 1133
<211> 868
<212> DNA
<213> Homo sapiens

<400> 1133
tactatagat ggtgaagctt tattcaagta tcaatatatg tggtcaggca agaaatatta 60
ataataaatg ttgaaaacac tattcccatt aagaaataag tggatcaaag tgttaccctt 120
aatgatcata tagacactga taaataatag tcaactttat tactgtggtt caaaccaagt 180
ggaggttgta tgttttgtct agaaaatata taaactacaa aaagttaata aacacctaag 240
tgaatgagta aattaaatgt ggggagtaag attcaattaa gataaagtcc taattttctt 300
ttaatcaaat gctctgcttt gtactcctta gaatggatgc actggagctg atttaaacat 360
tctttggtgg tcacaagatg tatagctgcc tctgtatgtt tggcgcatgg aaaaaaatat 420
gagtttttgt ggacatacac tctttatttg aaaagtatga aatataatcc aagaaagcca 480
gccatggctc agtgataaat atggaattga tatgaaacat tatattgatt aatcaccttt 540
gaggatgatt aataaaagag agaaagtgat tctatataga gatgcaggac tatttcaggc 600
tcattcatga tctaggtttt tgtgcttcat ggntatttta ttatcatcaa taaaaagaaa 660
aaagaaaaaa atcttatact gnccaaaaaa ttagggagac cagcgcccag tggtcatgtg 720
aaggggact agtggccatt tcaccaagca gcctggaaat gctcatcctc canggcattg 780
gagangttct caagaagcga gtgcctccat ggggggaaat aattacccca gattaanctg 840
ttcagaccta atggatggta aaacagac 868

<210> 1134
<211> 766
<212> DNA
<213> Homo sapiens

<400> 1134
ccctgatgac ttgtagatgg aggggtacat atgaaaaggg cttcagagtg gcctccagga 60
gttaggagca accaccagtc aacagccagc cagaaacaga ggtcttggtc atctaagcac 120
aagaaattgt attctgccaa caagaagatt tggctgacca tgagaatgat ttttttccta 180
gagcttccag atgaggactc agtcatcaga cacccagatt atagccctgt ggtaccctag 240
ttaaagaact aagctattcc atgtcagagt tttgaccaac agtactgtag gctaataaat 300
aggtgtgact gtaggctgtt aagtttgtgt ccatttgcta tgaagcaata gaaaacaggc 360
aacatgctct gttttttcta ctcttgcatc accttggtct ttctgttctc ctccattcat 420
taataaattg cttctggttc ctctaggtac taggctgtgg gtaggggaag gtaggaaagt 480
tgagaagaaa gttggggtgt ttttaaaatg acttaagttc agctgtcttc cgagttcatg 540
ggaaaataag ccattctttt tctgccaaac ggtggtatta aggcttgcag gatgaaatat 600
tttgcttctg acttctccag ctgagaagca ggcataattt tctgtgatta ttaatattgc 660
aaactctaga aaatgcaagc tagccttncc agaagttttc tcactggtct acactccaat 720
tgccctaagg gaaatagaag ggtgaagact gnctttcctt ntcaga 766

0962945 0962945

<210> 1135
<211> 727
<212> DNA
<213> Homo sapiens

<400> 1135
ttaagctcct ttgacttggg ccctaagtct gttttacctg atgttcctga aagatgttcc 60
tgatgtcctt cactgttctt tcatgctgga tgttcttgcc tatgctgcct cctcagctat 120
caccctctct tcccctttt aatgtagaac tcattcttaa tgatttgtca aaggcaccct 180
atttcactga aatgccttct atattcccta ccctccaagt ggattgtaga ccttctaagg 240
tcttttgaca tctgcatatc tctagcacag cacttatcac ggtgattatt tatctgntca 300
tctttccaag tagacactct cattttaact ccctacccta gtcgccagca tccccagcat 360
agtgcctgtc ataaaatggt gccacaatga aaatttgaaa aatgaatgaa cgtgataaac 420
atagatgaga atcctatatt ctacaatttt ttaaatgtac tgaaattatt ctttttgaat 480
cctcctattt atttctgtga cttctttgat gacaaagtta gaaaaaagtg gaggtcagta 540
gggagatatg aagggatgca ggtggaagca gtgagcctgg gcgggtgatg gagtgggaga 600
tacgtggcac aggggtcaag tgagttaatc tgggctcatt cagagaatgg aangtgtgtg 660
ccaagaaaac tggttggata nggataggtc anggattccc tcttgcattc tcacacttgg 720
gggcatg 727

<210> 1136
<211> 866
<212> DNA
<213> Homo sapiens

<400> 1136
agagggccgg agcgagaaga tggccgaaga cgtacgatta tctcttcaag ctcctgctga 60
tcggcgactc gggggtaggc aagacctgcc tcctgttccg cttctcagag gacgccttca 120
acaccacctt catctccacc atcggaattg attttaaaat tagaacgata gaactagatg 180
gaaagaaaat taagcttcag atatgggaca cagcgggtca ggaaagattc cgaacaatca 240
cgacagcgta ctacagagga gccatgggca ttatgctggt ctatgacatc acaaatgaaa 300
aatcctttga caatattaaa aattggatca gaaacattga agagcatgcc tcttccgatg 360
tcgaaagaat gatcctgggt aacaaatgtg atatgaatga caaaagacaa gtgtcaaaag 420
aaagagggga gaagctagca attgactatg ggattaaatt cttggagaca agcgcaaaat 480
ccagtgcaaa tgtagaagag gcatttttta cacttgcacg agatataatg acaaaactca 540
acagaaaaat gaatgacagc aattcagcag gagcaggtgg accagtgaaa ataacagaaa 600
accgatcaaa gaagaccagt ttctttcgtt gctcgctact ttgatgaact ctttctgaga 660
gactgcagca cacctagagg gccctttcct gcttctctga aagcacaggt cacccagctc 720
agaatcacac cttccggctg ctgctganag cccctgactt agacctttaa cacagtatgc 780
cagtggattc cagcctcatg ggctagcaaa gaacagactc cttttcaaca tggaancatg 840
aatggaganc ttcagaccta ctcgtt 866

<210> 1137
<211> 886
<212> DNA
<213> Homo sapiens

<400> 1137

0960304.0002000

tataaataaa taaatagata aataaaaggt aatcattagc atttttcag ttctgttggt 60
atttgatttc tatctcaaag atgatatgag gaatcttatt aaagggttat tataaatgta 120
tggttttatg tattttgaat tattctgtaa ccaggtattt gtagatgcat agtgtatgtc 180
tttttccatt ggtaaaaatt gatctatact gtggaaagat gaaactttat tacttttcta 240
caagcttttt ttcccttctt ctcattgcct tcccacattt taaagtcata gatctttagc 300
atagaaaaga tatagcagta gatgagtttg ttttttaaaa aaagttatag tctgcttggt 360
ttaaccaaaa gtaatttaaa aattaatacc acattaaaaa gctatttcaa aagcaatatg 420
aaaaggagga ttatttttta ttttaacata ttatttgggc tgggtgtggt ggctcatgcc 480
tgtaatccca gctgaggcgg gcagatcact tgaggccagt agttcgagac cagcctggcc 540
aacatggcaa aaacctttct ctactaaaaa tacaaaaatt agccaggcat ggtggtgtac 600
gccagtattc ccagctactt gggaggctga ggcatgagaa ttggttgagc ctgggaggcg 660
gaggttgcag tgagcccaga tcgtgccact gcactccagc ctgggtgaca gagtgagatt 720
ctgtctcaac acaaccacaa aaaaagtatt ggttggtaaa aangggacct taattcacta 780
actactggac ccattagtaa ggttcctctt ccaaaagctt ncctggagtt tttctggagt 840
attcagaatt tacttggaag tattcaaant gggccctggc ntttaa 886

<210> 1138
<211> 865
<212> DNA
<213> Homo sapiens

<400> 1138
attacatgga attttgattt gcttatgtat ttttttctta ctttaccact tgcattaata 60
aaagtcatac aaaatgaaaa aaaatttatt gggggttgaa aaatggtgat attctaatat 120
gtcattttgt tttcatttat tagctgggat aattttatag agcaatactt cccatatcta 180
tcatttggtt acctagtatg atagttcaaa agcaggaaaa aaacattatt ttttcctttt 240
atttaccagt gtttaatata agttactggt ttcttgacat cccttaaaga tgatcaattg 300
actataaaaa tcattatgaa ctcacaaatc ccattgtaat tcttatttta ttgaagctcc 360
aatttcccat cattggccaa tgaaaaactc ttcaagttgg ctcctgaatc ttttggaaat 420
taccccagta gtatttgata gcttccttgc cacctggtat gtcaagatgt tttaggttca 480
tcctgtttct ttcctgtccc atacagggag taagcaaaat ctataagaac ctctgatttc 540
tttcagtggg aaataatatt tcaatattac aatttgaatc tagctatgtt tactgctaca 600
actgggttgg ccattatttc tggacttttt tagtttatag aactagggaa aatatatctt 660
tttaatatta tatttatcat atccttttcc acactgagaa tcatgggtct caaangcact 720
angcaatgat agaattaaat atacncaaat tctcatttgc tttatcatcc aaatcccccc 780
acaagctcag aataatattc caatactggc atcatcaatt atgaatatgg gaagctgtga 840
acaactggtt ttaaaacnga gacca 865

<210> 1139
<211> 493
<212> DNA
<213> Homo sapiens

<400> 1139
attttttttt ttcctctgtg ctcttagtgc tattattgta agttcttagc tggttccctc 60
tcaaccatta tccttaaatt gaatgtgtta ttgtcactat gttgtgtcct ggtagggcat 120
ttttgacagt gaatgttgag aaagcatatg catgtgacag ggcggatttg ttagaagcag 180
tggaaaggtg agtactaaac tgggtgttta aaatgcaagc ttcagctggg cacagtggct 240

0050204-0050350

cacacctgta atcccagcac tttgggaggc agaggcgggt agatcacctg aggtcaggag 300
ttcaagacca gcctggccaa catggtgaaa ccccctctct actaaaatac aaaaaaagta 360
gctgggcatg gtggtgcatg cctataatcc cagctacttg agaggctgag gcaggagaat 420
cgcttgaacc cgggaggctg aagttgcagt gagccaagat cgtgccacta cactccagcc 480
tgggggcana nna 493

<210> 1140
<211> 732
<212> DNA
<213> Homo sapiens

<400> 1140
atttggccag tggtgggcgg ttgccacagc tggtttaggg ccccgaccac tggggccccc 60
tgtcaggagg agacagcctc ccggcccggg gaggacaagt cgctgccacc tttggctgcc 120
gacgtgattc cctgggacgg tccgtttcct gccgtcagct gccggccgag ttgggtctcc 180
gtggttcagg ccggctcccc cttcctggtc tcccttctcc cgctgggccg gtttatcggg 240
aggagattgt cttccagggc tagcaattgg acttttgatg atgtttgacc cagcggcagg 300
aatagcaggc aacgtgattt caaagctggg ctcagcctct gtttcttctc tcgtgtaatc 360
gcaaaaccca ttttggagca ggaattccaa tcatgtctgt gatggtggtg agaaagaagg 420
tgacacggaa atgggagaaa ctcccaggca ggaacacctt ttgctgtgat ggccgcgtca 480
tgatggcccg gcaaaagggc attttctacc tgacccttt cctcatcctg gggacatgta 540
cactcttctt cgcctttgan tgccgctacc tgctgttcag ctgtctcctg ccatccctgt 600
atttgctgcc acgctcttct tttctccatg gctacactgt tgangaccag cttcagtgac 660
cctggagtaa ttcctcgggc gctaccagat gaacancttt catanaaatg gagatagaag 720
ctccaatggt gc 732

<210> 1141
<211> 863
<212> DNA
<213> Homo sapiens

<400> 1141
gtatattctg cagagataac caagtaaatg acatacagat agtcaatggc tctgagtggc 60
tctactagct acatcttttt atgttaatag gtttttttact tttttcagag aaaattatat 120
ccagcatttt taatctttag actaataaca ccaggtagac acaaagctat tcctggaaca 180
ttgctttatt atagatagga attccataac caattacctc ctatttgcta gaacacacta 240
acacaaatac ataaaaaata cagactaaac tataatagaa ggcagttttc tctggtgttt 300
gtagcacctc tcttctacta atttaaaata tcttcatcac tgaggatgcc tcctattaaa 360
atgttatatc tgagttatac taataactat gaaattacca ggtgtctctg cttgagtagt 420
tggaattaat ttttttgcct cataactctg gagacttctc agaaagtgta gctaaaggtt 480
tattcatcaa aatccccttc taatgaatcg actctgatga ttctgctgtt gtcagaatgg 540
atgttctagg aagttgtcat cacacttgac cgtaatgaaa atgctgccct ggaccatctc 600
cccaaactat gtgtcctcag tattgtggga agaacccact tcatgatttc taaccagggt 660
agcctctgga agtcaaatga ttgctgtaaa attatgaaca gagcagcatc aggctttgct 720
ctgatgtatc ttatgaagcc tttctacttn caaatgaaga ctatgaagag aaccttggaa 780
caatgccctt ctggggagct cattcagcaa ggcatatctg anggcatatc tgggtccctc 840
ttacgcatgg aggaatcntg ngg 863

0956456 - 070800

<210> 1142
<211> 788
<212> DNA
<213> Homo sapiens

<400> 1142
aagggactga tggcctggtt ggcgctgctg agaactgtcg ggagcttctt gagaccgagg 60
accgaaatcc cggctccagg cctcggggac tgcggactgt ggggaggctg gccggagaga 120
gagggaagga cggggcctgg cccccgggac tccctgtgcc ttgcttggag ctgacgccga 180
cggtttattg cagggaactg acaagatcac attttgagaa gaagttggaa agaatcccaa 240
gtggatgaac tgaatatctg gatgaggaca agatctgtgg ggagagactg taagatagaa 300
tgagtccatt taagtcccag gacggtggaa actagctagt agattgcagc catgttgtgg 360
aagctgctgc tgagatccca gtcctgcagg ctgtgttctt tcagaaagat gcgatcacct 420
ccaaaatata gacctttctt agcatgcttc acctatacaa ctgataaaca gtcgagcaaa 480
gaaaatacaa gaacagtgga aaagctctat aaatgttcag ttgacattag gaaaattcgt 540
agattaaaag gatgggtact tttagaggat gaaacctatg ttgaagaaat tgcgaatatt 600
ttacaagaac taggtgccga tgagactgct gtagccagta ttttggaacg ctgccggaag 660
caattgtctg tagtccaacc gctgttaaca cccagagaaa actctggcag ttggtctgca 720
aaaatgagga agagttaatc aaagttaata ngagcanttt ncagaatctt tctttactat 780
taaagacc 788

<210> 1143
<211> 811
<212> DNA
<213> Homo sapiens

<400> 1143
cagtaatatg attgtccata gagatatcaa aggcgcaaat atcctgcgag attcaacagg 60
caacgtcaaa ctaggagatt ttggggccag caaacggctt cagaccatct gtctctcagg 120
gacaggaatg aagtctgtca cgggcacacc atactggatg agccctgaag tcatcagtgg 180
agaaggctat ggaagaaaag cagacatctg gagtgttgca tgtactgtgg tagaaatgct 240
aactgaaaag ccgccttggg ctgaatttga agcaatggct gccatcttta aaatcgccac 300
tcagccaaca aacccaaagc tgccacctca tgtctcagac tatactcgag atttcctcaa 360
acggattttt gtagaggcca aactgagacc ttcagctgat gaactcttaa ggcacatgtt 420
tgtgcattat cactagcagc cagtaacctc tcctgtgcct ctacctagct cccatctatt 480
cattcacctt ctctctgact gcacttttct tttttataaa aaaagagaga tgggggagaa 540
aaaagacaag agggaaagta tttctcttga ttcttggtta aatttgttta ataataataa 600
tatcctaaat tttttatatt taatcttttt ttcccttaca agaacttgaa gttttttttt 660
taatttttat aatgtactga tgtggttcag agagataaag cactttagta catagtcact 720
ctttttagta caaacaaatc atttgggaat acctaaagat tgtagagnca ttncctttat 780
cactgacaca ttagtgacca tngggaagac c 811

<210> 1144
<211> 762
<212> DNA
<213> Homo sapiens

<400> 1144

0050450 - 07/28/08

caccgattta tggtgctgac atcagtggct ccttgtttga tgaaaacact aaacaatgga 60
atcttgggca cctgggaaca attcaggacc tgctggaaaa ggaatgtggg gttgtcatag 120
aaggcgtcaa tacaccctac ttgtactttg gcatgtggaa aaccacgttt gcttggcata 180
cagaggacat ggacctttac agcatcaact acctgcacct tggggagccc aaaacttggt 240
atgtggtgcc cccagaacat ggccagcgcc tggaacgcct ggccagggag ctcttcccag 300
gcagttcccg gggttgtggg gccttcctgc ggcacaaggt ggccctcatc tcgcctacag 360
ttctcaagga aaatgggatt cccttcaatc gcataactca ggaggctgga gagttcatgg 420
tgacctttcc ctatggctac catgctggct tcaaccatgg tttcaactgc gcagaggcca 480
tcaattttgc cactccgcga tggattgatt atggcaaaat ggcctcccag tgtagctgtg 540
gggaggcaag ggtgaccttt tccatggatg ccttcgtgcg catcctgcaa cctgaacgct 600
atgacctgtg gaaacgtggg caagaccggg cagttgtgga ccacatggag cccagggtac 660
cagccagcca agaactgagc acccagaagg aagtccagtt acccaggana gcaacgctgg 720
gcctgagaca actnccttcc actgggcccg gnattccctt gg 762

<210> 1145
<211> 763
<212> DNA
<213> Homo sapiens

<400> 1145
ggccttttt ttttttttt ttaggagatg gagtgtccct ctgtcgccca ggctggagtg 60
cagttgagcg atctcagctc actgcaagct ctgcctcctg ggttcaagtg attctcctcc 120
ctcagcctcc cgagtagctg ggactacagg tgcatgccgc cacgcccagc taatttttgt 180
atttttagt agagtcaggg tttcactgtg ttgcccaggc tggtctcgaa ctcccgagct 240
cagacaatcc gcccgccttg gcctcccaaa gtgctaggat tacaggcgtg agccaccatg 300
cccggctgag agtcctcatt tctaataagt tcccaggtga tagcaatgct cctggtctgg 360
ggaccacatt ttgagtagca atgagataca tctgtgctgt ccaataggca gccactagcc 420
acatgaggca atttaaattc tcaattaatt aaaatagaaa attcagctct tcagtcacac 480
aagacacatt tcaagtactc cacaactaac tgtggctagt ggccaatata gaacacgtat 540
agatgtttat agacacctat agacatttac agaatataga acattttcat tatcacagaa 600
agttctgctg gacaccacca cttttatcat tccatcatta aagagtatgt aaatcttgta 660
agagggtcaa gttcaaagca gggatatcag cgattgcctn ttaaccttat aaggagntta 720
cttgggactc ttaagtgatg gctgangact gatctaaaag tga 763

<210> 1146
<211> 878
<212> DNA
<213> Homo sapiens

<400> 1146
aagatgctaa gatcatagaa gcaagaagat gctagttaag tattattaag taaataagga 60
ttccagccac tagtatttct agctgggtga gactgataat actacttaaa aagaaaacaa 120
atatgtcaca ttcgtagtaa ctgtcgtgtt tagaccttga tgcaacagag tagtaaataa 180
tgtcatttat ttgtggtgtt ccaggaagag cttgtgaatt tattttactg acattttgtt 240
accatcagtt gagtttcatg tatctggttt tcaatttgag tatagtgaaa ctttattaat 300
tcaatatcat gaatttaaat ttattgtgaa aaaacaccag tgtttgttgg ctgaagttta 360
catcagcatt ggatgtgaag aaaggggtcc gataaccaaa aagtataaac aacatagttc 420
cagcattgtt aatataccaa gagaacaaat tcttttcaat acttagtgaa cagtatgcaa 480

05529450.0252000

attcatcctg ttcgttacga gttaggttgg tctatttatt aacatttcct tttgggacta 540
ttataaagtg aatataacac aagtgcattg ttgtaaaaac attcagtaaa tttaatgatt 600
aatgcaacaa ttgagactgg gattcagggg aattccagtg attctaaaat gccatcaatt 660
agaataatca acattttgaa gataatagtt tttctgagaa gtgtgggata gaacccttat 720
tttaaatgga cggttatctt aagacatcca gttaaaatag gaaaaaatta acatctagaa 780
tctaattaat gagggttact ctaagattgg ttaaaaatat gcccttaaa atctattggc 840
tctttggttt atttggaatt ttaaccgaga tgaaatnn 878

<210> 1147
<211> 817
<212> DNA
<213> Homo sapiens

<400> 1147
aaaaaatgct gaactgctct ttggaagtcg ccggtgctgt tgtagttgga gtctgttcac 60
gggcctgagc ttcgaggcca ggctcccggg tgtcgttaat gttcggggcc gccgggcgcc 120
aaccgatcgg agctccagca gccgggaaca gctggcattt cagtagaacc atggaggagc 180
tggttcatga ccttgtctca gcattggaag agagctcaga gcaagctcga ggtggatttg 240
ctgaaacagg agaccattct cgaagtatat cttgccctct gaaacgccag gcaaggaaaa 300
ggagagggag aaaacggagg tcgtataatg tgcatcaccc gtgggagact ggtcactgct 360
taagtgaagg ctctgattct agtttagaag aaccaagcaa ggactataga gagaatcaca 420
ataataataa aaaagatcac agtgactctg atgaccaaat gttagtagca aagcgcaggc 480
cgtcatcaaa cttaaataat aatgttcgag ggaaaagacc tctatggcat gagtctgatt 540
ttgctgtgga caatgttggg aatagaactc tgcgcaggag gagaaaggta aaacgcatgg 600
cagtagatct ccacaggaca tctctaacaa acggacaatg acccagccac ctganggttg 660
tagagatcag gacatggaca gtgatagagc ctaccagtat caagaattta ccaagaacca 720
agtcnaaaaa agaaagttga aaataatcag accagggacc aaaaatncca gatgaaggag 780
tagttttaga aagtgaggaa accaacccga nccatta 817

<210> 1148
<211> 651
<212> DNA
<213> Homo sapiens

<400> 1148
tcagattatg attaaattag atattaaaca cttcaaccac ataagaatat tgaggactgt 60
tgaatgagtc ctgtgctctg gtggtcctgg aacttaattt tatttatgaa ttttcagtca 120
ttagagaaga gtatggtgtg gatatgggag gttggattag ccgactaaac tttgaagttt 180
gcaactttag cagatgttgg gatagaagtt aacacagtag ttcaaattga tttcgcactt 240
catggtttat agaaatgctt tcacattcat atctgaatat ttgaaacaac ctantgggta 300
ggtaggtaag caattttatc tgtgtttccc atggaagaaa ctgaggctgg gagatgttca 360
ttgtttgtta tccaaggtca tatagctagt aagtagaaga gtccagatgc aaacccaggc 420
cacctgaaca atgttcacat cattttacca tggagaagag attagtgctt ttatttgtct 480
aacactctgg tcagngaaat taaagtatct ccgtgtgaaa cagcatgcaa aaggctttgg 540
ttctaatatt tttaacaaat ccctttagat cgttgggaat taaacaaata cctanggcan 600
tgtggactta cctgaagtct tttgacattt tatgaanttc tggtaaacct a 651

<210> 1149

0356200.0003

0020070059850

<211> 699
<212> DNA
<213> Homo sapiens

<400> 1149
atgatagtga gtggccctgt aagatcctag tgggcctctg gaatcataaa ggaagattca 60
gttatgtaca agatggcttt ggtgttaggt caactgattg tgttctgatt atttagaaat 120
tagtaatcac tgtactataa ggcaatttgg cagaaatggg aaaggttgag ttagccagat 180
cttcccattc cgcattcaca atccaaacaa tatgaactcc aatcaaattc tgattttata 240
attttggtaa caaaatttca ttcaaatata tgccttcttg tgctgtgaac agagttttcc 300
tttaactttg catcctttat ccccctttaa agatgcatcc cttccgattg ctgtggtgtg 360
attttatagc tccttgagtt gtgctggtat ctctgtgctt ccctttggag agtactaggc 420
cttcaggtta ggatgaatcc taacacttgg ccaaggttag gaagggcttt gagcactgaa 480
agaaaaccaa ggtaaaattt aaggaattgt tagaagattc atctgagaaa tgtagaattg 540
taatccacaa actttatgtc cgtagaatag gaagtattta gtaagcagct agctgctaga 600
agggattttg nttgtttaaa aaaaaaagaa aaagtctgtc tttgacattg gttatatcta 660
ggntttatca tnccgtgtaa agggttctta agttccttg 699

<210> 1150
<211> 794
<212> DNA
<213> Homo sapiens

<400> 1150
ctttacttct ctgagcctct gttagctcat ctgtaaatgg ggactttctt ctgccccaga 60
ttatggtgag gattagatgg cacaatctat gtgaaattgt gagagcacgt agtacagtgc 120
ctggcacaca acagattctc agtctatatg ccatgtcatt cctgcctatc attgttcttg 180
gcaagtgtag agtgaaagcc tgtggccata catcttcatg agccatcagc atccccatag 240
ccaccgtctc tgcttatctc aggccccaaa gactctggct ttttccctaa gagaaacctc 300
tttacctatt tctcaacctc agtgtaaaat ataagaatgc aaaaaaggtt agctattaga 360
tgatagaact caaacgatgg taatactaaa ctgttaaggg ttcacacaga ggtttaaatg 420
cacataccat tgggtacagc tgtttcgctt cagagaactt atcctgtagg tatagttaga 480
catgcatgca aagacccaca taaaaggatg ttcattgaaa cataattata atagcaaaaa 540
gttaggggag agaaacagta actgcctatc agtaggagac tagttaactc aattatggtc 600
tatccacata gaggaatatt acgcaacttg ggaaaacttg agatagatcc aagctatatt 660
ggtcagttaa aactcagaga gcaaaattat gtgtgtaata tgccaagatt ttcaacaaat 720
tcctggttgg gggagaaaan ctgtantagg agacaagaaa aacccgggtt tanggtatat 780
ggccacttgg attc 794

<210> 1151
<211> 712
<212> DNA
<213> Homo sapiens

<400> 1151
gaagaatgtg ataaaggaca tgatgattag agaaaaatgt tgtttcaatg ttaaatgtgc 60
tgaagctgat aatactgtgg ttttataaga gaataaccat attcttagga aataatctaa 120
gaagtgttta agaataaagg accatgattc tactgtgtat tggttcaaaa aaagattgtg 180

tgtgtgtgtg tgtgtgtgtg tgtagaaaga ggtaataaaa gcaaacagta aaatggtatc 240
agtaggtgaa taggtaaatc tgggtaaaag tatatggtgt attctttgta ctattcttgt 300
gactgttgtg taaggtttaa attatttcca aataaaaatt ttaaacaatt tttaaagttt 360
aaaaagttaa aatatagcac atctcaagaa ttttcttagt caaccaatta taacagacca 420
tactctagga tcatcagttt tggattattt cctttgattt gttgatgaag cactaaactg 480
aaagcaatag gaaattttct ttatagctgt agtttctacc tattgaaggc cattagcttc 540
tattaggaga ttgtattgaa ttggatacat ttatttttca caaacaaaac aaagtctcta 600
attttcactt gtacttctag ctagatgaaa gagagaaagt ggccatgtgc cgtggctcac 660
acctgtaatc ccagcacttt gggangccaa ngtgggtgga tcaccctgan gg 712

<210> 1152
<211> 807
<212> DNA
<213> Homo sapiens

<400> 1152
ctttaccact ctaatttttt tttgtttgag taaatgagag caggccttct cagaggcagc 60
tgacatcaga cagagacttc ctttgcggcc tctctggttc tgttcctctc ttccccgtag 120
ctggtatttg tagtgacacc tgggagccac agatttgctt agcaaccttt ctccagggtg 180
aacagggtat tcacaactcc tgaaccaagg cgtgtggctg gtatcatttt gtggggccag 240
aacgcattgc gtggagaaat tcagtgatga cctggtcccc acgcctgctg ctcagggccc 300
catcaccctc gtgactgtca gtggtgctgc ttcccacgtc tcctaagagg gcttcaggag 360
aacgtagaac gaggtatctg tctcttcctt tcggacctgg cctttccatt tggccatatg 420
tcagaatttc cagctgccct aggggcccag gaatctgtat tttagttgct ttccaaataa 480
ttctgctgcc cagctgtatt tggagactat agccttaaat cagtgattcc ccgtcagtgg 540
tgactcatga agagcttaga tgtgggcctg gtgtgtggtt ggtggcaagg ggagtctttc 600
agatcccttc tgcttggtgc tgntggtggc aggaaccgtg catgttatgg tggctcangc 660
ctaatcccat ctggttgggc atctcgcctg tctggaaaac aggtcccgga gccatgcaca 720
ccaagcttct aaggaaggca naaaagcact tcccgacttt aacaaagaca tgttggaagg 780
tggacntctg gccctttaan cacctca 807

<210> 1153
<211> 820
<212> DNA
<213> Homo sapiens

<400> 1153
gaaaaacaaa aagaatcttt gttttacccc gaaagagagg cagaggcaga aagtcttctt 60
ctgctttttg catctctaag aggctgaaaa agagaatgga agtgctgggg cattttggcc 120
agggcagtaa tggatatttg gagttggcac ttccctcagc tagaggagtc tcagtgtgtc 180
tgagaaaatg gcagtcagcc atccaggatt ttaggagcaa cgccactgct ctgtgccaca 240
tcagaaatca ggcatggccc caacctgaag gaacttgtag cttaatgggg aagcacacca 300
agaataaaag agcctccaga acatgtggtg cctgtggtcc tgagacagca ggaaatggct 360
ctcaggccag agttgctgga agaacccatg tggcaggatc ggtgggaggc agttacagag 420
ggaaacgccc atcccagcaa ctaggggagg ccgccactcc tctcgtggat ggatgatatt 480
cttgcttggg gatgttgaga cagctgcact ctgcatagtt cctgatttgc ctctctactg 540
ctgatgaaaa acctctcttt ctctatagct gctgcttata ttggaaggct tttggttatt 600
cagcacactc actcctgagc ttatttcagt gatattcctt ggttatttcg aaacatggat 660

0956469.0027800

gcttgtggca gatggagagc ctgggtgtca cagatctgnc tgggtttgaa atgcatacca 720
tgttgnccgt tggttgattg attgacttgg accacgaaag aaaantttac tgacagcttt 780
caaggtaggg ggcaattgta gctttnttgc aaatgttgcc 820

<210> 1154
<211> 760
<212> DNA
<213> Homo sapiens

<400> 1154
atagactaaa agcaaagaca tggaaacaga tatttaatgt aaatggaaaa caaaagagag 60
caggagtggc aatatttata acagacaaaa tagatcttaa gtaaaaaaac tgtaaaaatg 120
gataaaaatt gtcattatat agtgataaag gggtcaagta atcaaaagga tatgacaact 180
ttatttcaga catttagaga gaaggatgta acaactgtaa atatatacac ccccaacact 240
ggagctccta aatatatgaa gcaaatatta acagatctga agagaaagac agattgcaat 300
atgataatag caggagaatt tcaaacccta ttttcaataa tgaacagatc atccagacaa 360
aaaatcaata aggaaacatt ggacttgaac tacacattag accatgggtg tccaatcttt 420
tggcttcctt gggcaacatt ggaagaagaa gaattgtctt gagccacata taaaatacac 480
taacaatagc tgataagcta aaagaaaaaa aaatctcata atgttttgag aaagtttacg 540
aatttgtgtt gggtcacatt caaagccatc ctgggccgca tgtagcccat gggccatggg 600
ttggacaagc ttgttttaga ccaaatggac ctgaatgaca tatataggac aatatatcca 660
accccactaa aatacacatt cctctcaagt atacacacag aacatattcc agaatagata 720
tgttaggcca caaaacaagt ctttaaaaat gtagtccnnn 760

<210> 1155
<211> 871
<212> DNA
<213> Homo sapiens

<400> 1155
tgattgtaag ccataggatc cccatttcag aatggatcct tccccatacc cagaaggaag 60
aaatgcttca gagagagtcc ccaagaggaa tctaaataga taggccttgc tgggatttcc 120
cctccatcta taaacattgg ctcatatcct ttgtgtccaa ttatatttct acacagctgt 180
tcatacttgg ctgaacctat gcagaaaaat gaacagcttc tcctgtgtct tgggccttca 240
ttctgaaggc ttttctgtcg cataaaatta tggttaaata aatttgtaag cattttatcc 300
tattaatttg tgtcttgtca gttgattttc agcaaacctt cagagggtga aagggaagtt 360
ttccattgcc ccaacaggaa taaatagccc tagtagtgct ttgaacctat ctaataagtt 420
ataaaagaaa accagaaggg accaaactgt aaccaagtaa ctgaactttt cagatgactc 480
agaataacta cagaggtaaa ccctactggg ccataaaaca aatctcaata aatttaaaat 540
gatccaaatt catacaaata tattctcaga ccacaatgga aataatgtaa aattagtaac 600
agaaagatat ttgaaaaaat tccttaaata tttgaaaacc aactataaca cacttctaaa 660
taacccatgg gtcaaataag gaatcaaaaa tggaaaataa aaagtagttt gaactaaatc 720
aaatggatat acaacataat cagactttgt gagatgctgc taaagcagta ctttggggga 780
aattttagca ctaaagctta tattggaaat gaattaagat ctctaattag ganctagctt 840
tcactntaag caaccngaag ataagtccaa t 871

<210> 1156
<211> 872

09/25/2006 09:56:56 PM

<212> DNA
<213> Homo sapiens

<400> 1156
agaaggaaag ttcctcaaca taacagaagc catttatgaa aaatctacag ctgatggagg 60
aatattttcc aagcaaatgg aaagcaaaaa aaaaaccagg gattgcaatc ttagtctctg 120
ataaaacaga ctttaaacca acaaagatca aaagagacaa gggcattaca taatggtaaa 180
aggatcaaag caacaaaaag agctaactat cctaaatata tgtgcatcca atacaggagc 240
acccagtttc ataaaaaaag ttcttagaga cctacaaaga gacttagact cccacacaat 300
aatagtggga gactttaaca accccgtgtc aatattagac agatcaataa gacagaaaat 360
tgacaaggat atccaggact tgaactcagc tctggaccaa gcagacctaa tagacatcta 420
cagaaccctc caccccaaat caacaaaaca tacacttttc tcagcaccac aatgcactta 480
ttctaaaact gaccacttaa ttggaagtaa agcactcctt agcaaatgca gaataaggga 540
aatcataaca aatagtctct cagaccacag tgcaatcaaa ttagaactca ggattaagaa 600
actcactcaa aaccacacaa ctacatggaa actgaacaac ctgctcctga atgactactg 660
ggtaaataac gaaatgaagg cagagataaa gatgttcttt gaaaccaatg agaacaaaga 720
cagagcatat cagacctntg ggacacattt aaagcactgt gtagaaggaa atttatagcc 780
taaatgccca caagagaagg ccgagaagat ctaaaatcga ccacttacat ccaatttaaa 840
gactngagaa gccaggagcg accaattcca aa 872

<210> 1157
<211> 854
<212> DNA
<213> Homo sapiens

<400> 1157
aaacaactat gatgctaatt aggaggagga agaatgtttt caaagtcttt caccaggtat 60
cgatattcat ctcaaagagt ttgaacaaca gattcaattc tgtgtaggga ccatttcttc 120
atttattctt tattcctact aaatcagaaa taccaaattc ataagtcatt tggaagggta 180
acaaatgttc gatggtttgt caactagtct tgacaaacgg attctacaat gtacagaaat 240
tatggagaca gttttcactg atagatgttc agtgcctcaa aggaaactca ttaagatgag 300
ggaatggcct ctcaaatgga acaggattgc tgaatatatc aacacaaaag atcactagca 360
aatggattcc taatgaattc ctggttgaat ttgcctccga taattatgta ttcatattca 420
gtttgagcat tcagatgtgt taaatatggc caataatagc actgatttat ttcctccttt 480
aatttagaat atctttaagt agttagaagg aaacccttgt taactaatcc attgacatca 540
aaatttaact ttttaaggaa cttttgctgt ctctcactaa atattagaaa tgatgatatg 600
ttgttcgtga agtcataaag tcaggcttct ccactctctg nttgattttt atgtgtatgt 660
gctgctcata aaaatcatca cactggtaga gattcttggt ctcacaatgc agattcacag 720
tgnattttct cctgaaactt gtattttctt tggaccttta tgccaatgat atataanttg 780
cagactattt catgnctttc tacttttaca tctccgatgg ataatggtgc ancattaatt 840
catttggggg aagt 854

<210> 1158
<211> 858
<212> DNA
<213> Homo sapiens

<400> 1158

09529490.090200

ctgatgcatg acctctttga cagttgcctt tgttcatgat tcctagtttc ctggtttatt 60
ttattggggt acagggtgag gtctggaaga cctggaaagg aaactcactt ttttggtttg 120
acagtattaa tgcaatcatc tagttcatac cttgtaagcc cacttattat ttcctctgcg 180
tgtgtttttt ctggtttagc ggattagctg cactgtctct tcaaaggctg tccaatcaag 240
gaggggttat taaaaccagg gcgatttatg actgagaatt aattagagaa gcattttcat 300
gcacaacatc caatttttg attagcaatg gagcagggcc gcaattaaca ctcgaggaag 360
cttaaatttc cagcttttg attctcagga aatgagatta tcaaaccagg gtcagacact 420
tgacagcaaa gtgggagtgg gggagtgtga aattatatgt aaaaaaaaaa aaaaaaaaaa 480
aaaattccag agtctagaaa ttcggtcatt tttctcttta tgtaatggta agaattaaga 540
atcctcacat ctgcaaccaa aaatacaagc ctggtgtgta acactaaagg gtaaaacagg 600
gatagatata agctgttatg ctattcttca ggcaacactg tggataagtg acattcanat 660
gtttactgta aagaaaaatt tgaatcattt gnattgaang gcttttagaa aagagcatta 720
ctacccagaa ctgagaagtt gaaaatttga aggtgtgaag attaagagac gcgttacttt 780
aaaagataat ttaaaaggta tctttccagg cttgacccgg nggnccactt cttntagcct 840
taacactttg gggaggct 858

<210> 1159
<211> 841
<212> DNA
<213> Homo sapiens

<400> 1159
gcaaaagtaa ttttatcaga aacagtttat tttgggggct ggataacttg ggtgagagtg 60
tggggaaaga agtaccttac caaaaaggag aagcaactga ccctgtggcc tgagccacat 120
tgtcttccat ttcaacttca atgggctggc agtataccac ttctgacctc aaagaatgaa 180
tggttccaat tctggcttgt cattggtcct tgttatctaa attaaatatt tttaggaaat 240
atatcaaaag tatcctagag ccccatggca aagtgtcaga ggaaatagtt ttcattatat 300
tttaggaagc tgtaaaaaca taagcccaag tattttgtgt catctgcata tgtcaggatg 360
aagaccaggc atgtaagaaa tatcctaaag tagccaagtg ataatctcat gaaaaaatat 420
gagaatcgtt tttacagagt gagttctctt ttgaatggtt ttgactatgc ttttaaaaac 480
atttttaaaa tgtacttaca tctttttcga tagcccacgt atttcagaat atcctcttga 540
tagaataata tcactcagtg tgatctttag aaaaagaaaa actcggtggt ctcatatctt 600
ttgacagttg tttgtgaata ataccctccc caacaacctt cccagtactc aactgctatg 660
taagaatgct ttcttatgtg gtaaatgtct cagtattttg ctgcctggta tttggtcagt 720
ttccttggat atctcaaggt cagaaggaat cangctttct ccactctgaa acattcagac 780
ttactttctt ttttgggcag ccntttaaca agcaaggaca ntaactcctt ttgtcagaat 840
c 841

<210> 1160
<211> 725
<212> DNA
<213> Homo sapiens

<400> 1160
cagttgctaa catatctggt tgtttcccca ttaataatgc taagattgac acctggattt 60
agggggccat catatttatt taaaattcct tcaataattc aagcttattc aagctgcgag 120
acttgcttaa agataagtga aatatctaat cacaagggaa gtctgttttc aaactatata 180
aacaataaca ggagtcataa cagttgtttt cttagaactg aatacctaac aattctgcag 240

0500500.0420000

ctctttcctc ggtattttat tataagcaga ttatatctta attgttcccc tttgttttca 300
aaggtttttc tcttctttgc gtgaatcagt ttatataaaa acatatatat tcttattttc 360
agaggtattc tgctctgaag aacggtttta ctttataagg catcagttcc ctctaatatt 420
agaaccttac aaagccacag cactttatat gttgcaaagc accctctcca tgaaaattgg 480
ttctagttga tgcaacagac aaaacccgca aatcacagtg gcttaacact acagagagtt 540
atttcttgct catgctagat ttgatgtagc tctcctgttg gcatcactct tttctgagta 600
gtgactcctg gtcatgggct gtttctatta tgtagctaca ctgattgcta cacggggctt 660
ncatgccatg gatgaagtga gaaaagagag cctcaggatt cattagggtg ntttcangct 720
tacat 725

<210> 1161
<211> 804
<212> DNA
<213> Homo sapiens

<400> 1161
gttttataaa tggggtaggg accaactgaa agacaggaaa ataaggccct tgatgccatt 60
aatcttttat cctcttgccc tcattggtat cttcatccca ccttgggtcc cagtcccctc 120
tcctgttccc acaccacctg tcacatgcaa gggatgatgg ctgtctgctc ctgggtctat 180
gctttgtgga agaaggatgc tgtggaggga gcatatccaa gctctaaagt ggcattctct 240
cccacccttt gcagttctgc ctcctggggg cattgctggc ccccatccga gtgcttctgg 300
cctttatcgt cctctttctc ctctggccct ttgcctggct tcaagtggcc ggtcttagtg 360
aggagcagct tcaggagcca attacaggat ggaggaagta agtgagggat cagcccccag 420
agaccctact tctcttccct gctgtctatt cggctccctc tttgagaaga agaaaagaga 480
gcattctgaa actattctgt ctagcttggg tagatgagat gagtcagcca agctcagacg 540
tggttcccag acctcacctc taagtaatgt gccctgatag gtcccaaagt ggccagagac 600
cttggcccct tggtcacatc ctatttaagg gtaaaagagg ggtgccctac tttcccggtg 660
tctgaacctg ggggcgggtg aaggttagaa ccactgcttc cgctgatacc caaccttgcc 720
tgcaaggatg tgtgccacaa cggggtgcta ggcctgancc cgcctgctgg ttttnctgct 780
gggctttcnt ccggaatccg ttcc 804

<210> 1162
<211> 861
<212> DNA
<213> Homo sapiens

<400> 1162
tcacttttgg cctaaatcag ctcttgcacc ttaggctgtt taaaaaatat gatgtcaatt 60
ggaaagcatc ccatttggtg ctgtttctac ttttttttatt tgaagtatcc tgacgcagtt 120
gttttctggt gagtagacca tctgtcctaa atatatccaa taccagtttg caaagtcttt 180
gtcaggtgca tcctgcatag aagctaaata aatacttttt taaataataa atagaggcga 240
gagatatttt gaaggtacat cagtgggatt tgctgactga ttgagtaaga gagttttcat 300
agaggaaaag gagatagtag tcatcactgg agctaagatt tctgacccgt gtgcttcaac 360
atatatttta gatttgaaat atgtaatttt tgcagtagta aagataaaag ggaaaaattc 420
ccagtgccgc tcatatttgg ctcgtgggtc tctcgtgctc tttgctgtgg caccatcagg 480
tgtctccgga ttctcaagct atcttcctgc ctttgatgta tttcaggaac cttttattat 540
tagcatgggg acgcttttca gggctctcct gagttgctgt gggtccaccc aatttcttgt 600
ttatcccagc agcaccggcc tttgacctcg ccatcccccc ggcctggctt tgggaggccc 660

0005-0205-0205-0205-0205

tgtcagccca tacctctgac tatgacgggg ttgcatgggg ctgccgcttg ctgtaaatct 720
gaagagcaag gcctagatgg ccctgttccc aagctttctg caaatctaca ttctantctg 780
gttgctaaaa ttctttatca tcagcccagg agtgctattc aggaggctgc ctaatnatat 840
attanccata aacctaacag c 861

<210> 1163
<211> 855
<212> DNA
<213> Homo sapiens

<400> 1163
ttaatagatt gaagatatta ttaaatacat tctgcattaa tattatatgt cctctttgaa 60
tccaagtggc aatacaatag aatttcattt tataaataac acctttcaag cgaacaccac 120
agggcacagt acataagaat caaaatagaa cacaaatgct gtaatcaaat gcagacccca 180
ggaaggctga ttaaaaaggc atgttgctac taagaacagc cgacaggtta agtatagtgg 240
gtcatagcag aaaagccagc agaacagaag ggcaaactaa aataaaatgg acttgcctgc 300
ctgaatcaca cggacttatg acattccttt gtcttcatct ctttttgaac tcaggaattg 360
caggggagag gggggtgtgc atgtgtgttg gaggagagaa ctaaacatag ggtcattaaa 420
tttatcctca gtactcacgc atagcacaaa caaaaggaaa tcataaggat aaccacctgc 480
agctggcaga gatgcctaca gtgtgattgt gagacaaccc aacatggctt gctttgctgg 540
ataccactgg ctttaagaaa acacaactgt gaggtaacaa gtagacccct tccataatag 600
tgagaacaga tagtgctgat ggccagacat aggtaaaaac ggatgaatgg tgagaaagat 660
gttctgtggt cctgacctca gtatagtcta ctctctacag gactctcctc acccaattag 720
cttttctgct ctcagcctct cacaaccacg ctccttgcta atggcaggtg tttgngggtt 780
ttaaactctc ctgtaattat tccgcaaaag cacctggtcc cttcttaagg gaattaaggc 840
aaaagttngg ggang 855

<210> 1164
<211> 876
<212> DNA
<213> Homo sapiens

<400> 1164
ttcagattgc aaagttatat aagaaatttc acaaagggga aaacacaaaa ctggtacaac 60
taagtgactg ggaaagatat aaaatcatgt agactcactt cacccacaaa atggtaactc 120
ctgaattaaa cttcatgtgt tttatttagg ctttgtcaag ttagctatgg ttgtattaaa 180
gcagattgtt tgattttgat aaatagtttt ccttaataca tgggaaaatc gagttgtgtg 240
aataaagaaa tataaaatag cttttactca gttgtcccat ttgtcagcat tgatgggtaa 300
taaagattag tgttactttt tcttctctag tgtagatatt ttctcaaaat tgtgtgtttg 360
ctattgtttt atttttgaag gggaaaaagg tatacatttt atagctacta ggagttcaaa 420
tacagtaatt agaaaggaca cacgaatttt gaaatagtat tttatgcctc ttgatctcag 480
gtacaataca cgagatgaag cagttaaata gcaaagcaag acagaagggt cagagaatta 540
aagtaagtgt tttctatata ttgcatctgt gttcccatta atctctgttt tgttatgtaa 600
ctgctccttc tgaatgttct gaatgtgaag aaaactatga gtaagaaaaa gggtgtgttt 660
taaagttagg tttaaataaa gccagaagag taaaatgttt ttactcttaa gttctgtttg 720
aaacagcacc tgcctataaa ttataaccct aaatggtttt nggataagaa aaaattgggt 780
tgtgatgatg taaagcacct ttaaatctct tgctagcaga tatttaaagg tgaaagaaag 840
cccattncgg atcagaattg gccatggttc ctttta 876

0307303.0072000

0050050 .07/2000

<210> 1165
<211> 743
<212> DNA
<213> Homo sapiens

<400> 1165
tgcttttgtg acttgactta gaagctgaaa ttgggaattt ccttagatga gacagtacat 60
agttcatctg tgatatcaga tcagttcacc aatacatgct acatacttgt gcccctgaag 120
ctttgtaaag gcctaggaca ttccagttct cctcactcag tttggtgaac aaggacatgc 180
ccatgtcaag tacagtaccc catgagacac tggctgagtg gggttatgtg tcatttccca 240
tgtcctcagt cagcagatcc tctttggcca gtctgcatct ttcatgcaag gagagagctt 300
catacccact tcttggtaag cagggtcttc aaatgtcaaa cgttctttgg acagatggct 360
tccagtccac agaagcactt cttctagtgc ttccccttca ctccccaaga ggctgcttct 420
tgactaatga ctgtgggacc taacttggtc gttcaggtga caaagaatgt tccccaagtc 480
tgtagctgac aattgatggt tctctctgaa cagcgcttta gggtgggctt ttccccccac 540
tcttttaga gacaaggtct tgctctgtca cccaggctag agtgcagtgg caccatcagt 600
gactcactgc agccttgaat actgggctca agccatccta tcccctctna cctcagcctt 660
ccaagtagct gggactacag gtgcacacca ctgnactcag ctaatttta aatttttgt 720
anagataggg tctcactttg gtg 743

<210> 1166
<211> 861
<212> DNA
<213> Homo sapiens

<400> 1166
tgtgggggat aatgagatgt tagtctgaag aaaggcagat tgaagctgga ttttagaagg 60
ttggtaataa tgaattgaga aattttacct ttgtccgata aagattctag agagccattt 120
tcatggtagt gggtaaaaat ggtttcgaag gagagacaaa gtagagcagt gaattagcaa 180
aactgtcctg ataatccagg cttgagcttt gaataaggcc ctgagataga atagtaaaaa 240
taggaaagca gcaacaggct tgccaaagag aggttatgag ttaggttcag atatattgag 300
ttcagatatt ttgggaaatt caagcaacag tagtttagac agagaagtca gagttagaga 360
tgtcaatttg cttatttcta aaaatttgtc attctcataa attatgatag tgagtaagta 420
cagggttatt tttttcatct tttatatttg ccattgtctt aggatagtac ttaccccaaa 480
tgttacattg aattttgtag agttcattaa tgtgataaac taggtcatgc atctgaggga 540
gaaagtgtan agagtgaaaa gggctgaaag tggaagttga ggatctgcct acatttgaag 600
atcaggagag aagccggaag agtaattcaa gctttgtctt tccttctcat ggccatgtta 660
tgctagattt agcagtagcc tcaaagatgg agaattaagt cagtcgagag cagccagatc 720
ctcagtcctc ttctctttct cattccagtc tagacttttg acttactctt tgaggactta 780
caacactggc attttattca cattattgga catntggcca tctattccac gcttgaccag 840
tgctttaaaa ggnttttttan g 861

<210> 1167
<211> 817
<212> DNA
<213> Homo sapiens

0525945.0420000

<400> 1167
tcggactctg tgtcctcaaa cagcccttc cactttgtac cttgttgtgc cagatcatac 60
ctctagggaa ttgttgagaa agcctgattg ctgtttaaag gtacaatgga agtcttgagt 120
ttgagaagta atgttgactt tgcccttcct tctccctagt gctgtgatgg gctgtttcct 180
gatttggttt catatgctcc tcacaacaac cctgtgaggt ggtccgttgg cagaagctgg 240
tatgactggc agttgtctcg ctagaggaac cttctacttc ataccataat taaacggctt 300
ctaaaataat atgatgtctt taaattttaa gtctggcatt atttgtatta gctgtttttt 360
taactttatt attaaagaat ttctaaccat aatatttaga gaaagagtgg tagagttaac 420
ctcgttaccc aatactttct tccctttcct tttataaaaa cactgcatac ggtttttgt 480
ttttttgttt ttttgttttt tttttaagag acagggttgc cctgtcaccc aggctggcct 540
caaggaatct tcctgcctca gcctcctgag ctgggactgt aggtacaagc caccatgcct 600
ggctcacaat acagtttttt tatctgaagc actcagttta ctttttgct cttttatgtc 660
aaatgaatat aaagttgata tcatcctctg accaattaaa acattctttt cagatattgg 720
taacccgtgg cctggcaaga ccccgtcctg gctatccaaa ngcactttaa cagcagcttt 780
ttctctagcg gtaccgngag taagaacccn tagctga 817

<210> 1168
<211> 872
<212> DNA
<213> Homo sapiens

<400> 1168
cattattgca gccctagcag cactccacct cctattcttg cacgaaacgg gatcaaacaa 60
ccccctagga atcacctccc attccgataa aatcaccttc caccettact acacaatcaa 120
agacgccctc ggcttacttc tcttccttct ctccttaatg acattaacag ccatcacagc 180
acgcctatcg gatgtgagag gagaagtccc gctgctcggg cactgtctat atacgcctaa 240
cacctacata tattttaaaa acattaaata taattaacaa tcaaaagaaa gaggagaaag 300
gaagggaagc attactgggt tactatgcac ttgcgactga tttcttggct ttttatcatt 360
ttgaacttta tggaatacat cggcagccaa aacgcctccc ggggaaggcg ccagcgaaga 420
atgcatccta acgttagtca aggccgccaa ggaggctgtg caacatgctc agattacaat 480
ggatgtttgt catgtaagcc cagactattt tttgctctgg aaagaattgg catgaagcag 540
attggagtat gtctctcttc atgtccaagt ggatattatg gaactcgata tccagatata 600
aataagtgta caaaatgcaa agctgactgt gatacctgtt tcaacaaaaa tttctgccaa 660
aatgtaaaag tggattttac ttacaccttg gaaaggcctt tgacaattgc ccagaagggt 720
tggaagccaa caaccatact atggagtgtg cantattgng cctgtgaagt cagtgaatgg 780
aatccttgga gtccatgccc caagaaggga aaaacatgtg gcttcaaaat agggactgaa 840
acacnggtcc cagaaataat ccacatncnt ta 872

<210> 1169
<211> 679
<212> DNA
<213> Homo sapiens

<400> 1169
ggccttttt ttttttttt ttggagacag tctcactctg ttgcacagga tagactgtag 60
tggcacgatc tcggtttact gcaaccttca tcgcctccct ggttcaagcg attctcttgt 120
cttagtctcc tgagtagctg gaccacaccc agctaatttt ttgtgtattt ttagtaggga 180
tgaggtttcg ctgtgttgat caggctggtc ttcttgaact cttggtcaca agtgatccgc 240

ctgccttggc ctcccaaagt gctggcatta cagctgtgag ccactgcgcc cagcaccttt 300
ttttgtcttg tttactgcga aatccccaac aactatagca tttccaggca catagtagat 360
gcttaagaat tacttactta caagagcaca aacatcggcg aataaaaaga attacctatt 420
gaatgaatga gagttagctg gtgcaaaaaa aaaaaaaaaa aagccagtgc agattgagag 480
acctggccat agaaaattac aacgctcagg gataaggtat ggcaaggaac gttttttgtt 540
ttttgntttt ttttcgctt tattgccgag gctggagttc agtggtatga tctcggntca 600
ctgcaatctc cacctcccag gttcaagcna ttctcctgcg tcagcctccg agtagctggg 660
actataggng cacaccacc 679

<210> 1170
<211> 763
<212> DNA
<213> Homo sapiens

<400> 1170
aaaccatgaa ccgatgcccc cgcaggtgcc ggagcccgct ggggcaggca gcgcgatccc 60
tctaccagct ggtgactggg tcgctgtccc cagaccgcgt ggacgatgaa tttgaattgt 120
ccaccgtgtg tcaccggcct gagggtctgg agcagctgca ggagcaaacc aaattcacgc 180
gcaaggagtt gcaggtcctg taccggggct tcaagaacga atgtcccagc ggaattgtca 240
atgaggagaa cttcaagcag atttactccc agttctttcc tcaaggagac tccagcacct 300
atgccacttt tctcttcaat gcctttgaca ccaaccatga tggctcggtc agttttgagg 360
actttgtggc tggtttgtcc gtgattcttc ggggaactgt agatgacagg cttaattggg 420
ccttcaacct gtatgacctt aacaaggacg gctgcatcac caaggaggaa atgcttgaca 480
tcatgaagtc catctatgac atgatgggca agtacacgta ccctgcactc cgggaggagg 540
ccccaaggga acacgtggag agcttcttcc agaagatgga cagaaacaag gatggtgtgg 600
tgaccattga ggaattcatt gagtcttgtc aaaaggatga gaacatcatg aggtccatgc 660
agctctttga caatgtcatc taacccccan gaaaaggggt caatgtttcc tgggggggacc 720
atgcttttaa ccctaatcca agcggacctt aaccttnttn ttt 763

<210> 1171
<211> 897
<212> DNA
<213> Homo sapiens

<400> 1171
ggattttcta tgtttgcaca tgccccccctg accaatattc cactgtgtaa agtaattaga 60
ttcaacatag actacacgat tcatttcatt gaagagatga tgccggagaa tttttgtgtg 120
aaagggcttg aactcttttc actgttccta ttcagagata ttttggaatt atatgactgg 180
aatcttaaag gtcctttgtt tgaagacagc cctccctgct gcccaagatt tcatttcatg 240
ccacgttttg taagatttct tccagatgga ggaaaggaag tgctgtccat gcaccagatt 300
ctcctgtact tgttaaggtg cagcaaagcc ctggtgcctg aggaggagat tgccaatatg 360
cttcagtggg aggagctgga gtggcagaaa tatgcagaag aatgcaaagg catgattgtt 420
accaaccctg ggacgaaacc aagctctgtc cgtatcgatc aactggatcg tgaacagttc 480
aaccccgatg tgattacttt tccgattatc gtccactttg ggatacgccc tgcacagttg 540
agttatgcag gagacccaca gtaccaaaaa ctgtggaaga gttatgtgaa acttcgccac 600
ctcctagcaa atagtcccaa agtcaaacaa actgacaaac agaagctggc acagagggag 660
gaagccctcc aaaaaatacg gcagaagaat caatgagacg agaagtaacg gtggagctaa 720
gtagccaagg attctggaaa actggcatcc gttctgatgc tgtcancatg caatgatgct 780

0095945 - 0072000

cctgtctgac ccatcatatc cgttccacca atgcctaatg catttgggac aagttgatag 840
gatatacttt tcaagaaccg ttgctggtgc aactggccat gactcatcca agtcatn 897

<210> 1172
<211> 728
<212> DNA
<213> Homo sapiens

<400> 1172
aagatattta taagagtatt gataacagcc ttatttgtaa tggcccctga atggaagcag 60
ctcaaatgtc cattcatagt ataaattgtg gtgtcctcat ttaatgaaat accaccagca 120
attacgatga ataaaactat acaatgtgaa caaatttaca aacattattt tgagcacaga 180
aattcagcaa gaaagaatat atactgtgtg atgatatata aatgatccca cttacgtaag 240
gtcaaaaaca agcaaaactg gccaggcaca gtggctcacg cctgtaatcc caacactttg 300
ggaaacaggt gggcagatca cttgacatca ggagttcaag accagcctgg ccaacatggt 360
aaaatctctt ctctactaaa aatacaaaaa ttagccaggc atggtggcac acgcctgtag 420
tcacagctac ttgggaggct gaggcaggag aactgcttga acccgggagg cagagtttgc 480
agtgagctga tatcacacca ctgcattcca gcctgggcaa cagagggaga ctccatctca 540
aaaaaaaaaa annnaaaaaa aaaaggcaag cgaaactaaa ccatagtttt agaagactgt 600
atagtaaata aattgggagt agttttgggg aaggaacctg agcttggctt ttgggatgat 660
gataatgncc tatgcatgat ggtgatgtat tatatggagc tatgtgttaa tgatgnatac 720
attatgng 728

<210> 1173
<211> 757
<212> DNA
<213> Homo sapiens

<400> 1173
attgatcgct ttctgcaacc attcagactg atctcgggct cctatttcat ttacattgtg 60
tgcacaccaa gtaaccagtg ggaaaacttt agagggtact taaaccccag aaaattctga 120
aaccgggctc ttgagccgct atcctcgggc ctgctcccac cctgtggagt gcactttcgt 180
tttcaataaa tctctgcttt tgttgcttca ttctttcctt gctttgtttg tgtgtttgtc 240
cagttctttg ttcaacacgc caagaacctg gacactcttc actggtaaca tattttggca 300
agccaaccag gagaaaagaa tttctgcttg gacactgcat agctgctggg aaaatgaaca 360
tcagtgttga tttggaaacg aattatgccg agttggttct agatgtggga agagtcactc 420
ttggagagaa cagtaggaaa aaaatgaagg attgtaaact gagaaaaaag cagaatgaaa 480
gtgtctcacg agctatgtgt gctctgctca attctggagg gggagtgatc aaggctgaaa 540
ttgagaatga agactatagt tatacaaaag atggaatagg actagatttg gaaaattctt 600
ttagtaacat tctggtattt ggtcctgagt acttagactt catgcagaat ggtaactact 660
ttctgatttt tgngaagtca tggagcttga acacctctgg gctgcggatt accaccttga 720
gcttcaattt gnccaaagag atntacatct gcaaaag 757

<210> 1174
<211> 797
<212> DNA
<213> Homo sapiens

09/02/2005 - 09:20:00

<400> 1174
ggatgaaaac atccccagca tggagatgtg tgaccagaga cacaatatca ccatgtgccc 60
gctttgcgac aagacctgca gctactggaa gatgagctca gcctgcgcca cggcccgcgc 120
cagccacctc ttcgacaacc ccgccacggt cttcttctct gtcttcatgg ccctctgggc 180
tgccaccttc atggagcact ggaagcggaa acagatgcga ctcaactacc gctgggacct 240
cacgggcttt gaagaggaag aggaggctgt caaggatcat cctagagctg aatacgaagc 300
cagagtcttg gagaagtctc tgaagaaaga gtccagaaac aaagagactg acaaagtgaa 360
gctgacatgg agagatcggt tcccagccta cctcactaac ttggtctcca tcatcttcat 420
gattgcagtg acgtttgcca tcgtcctcgg cgtcatcatc tacaggatct ccatggccgc 480
cgccttggcc atgaactcct ccccctccgt gcggtccaac atccgggtca cagtcacagc 540
caccgcggtc atcatcaacc tagtggtcat catcctcctg gacgaggtgt atggctgcat 600
agcccgatgg ctcaccaaga tcgaggtccc aaagacggag aaaagctttg aggagaggct 660
gatcttcaag gctttcctgc tgaagtttgn gaattcctac acccccatct tttacgtggc 720
gttcttcaaa ggccggnttg ntggaccccc gggcgactac gtgacatttt ccgtccttcc 780
gatggaaaat gtccnca 797

<210> 1175
<211> 694
<212> DNA
<213> Homo sapiens

<400> 1175
gggggagcta atttctgctt cttggccagt attcacaaaa gcagcaatcc tggtgtaatt 60
aatggtgctt acagtttgtt taaaggctgt ttatcataca tcctgatgtg ctgcgaatag 120
tcactacttg cctcaagagg agcttgtcct atgctaataa agattctata acattggcca 180
aagggtccgt ttatacattc tttgagcctg gtggagcacg tttgctgagg tgatgtggtc 240
tcctcagtgt cactgtgaag agctcagtca ggaaaagcca gcagcatcta ccctgccacc 300
ctccaaacct tctgactttg gggagactcc agtcccccag gtctttaccc agcctgcaga 360
tctcattcta gcttaacaag ggcatgcgtg tgcatgaagt tgaactaaga gtggaggaag 420
gccagaggta gggatgggtg tggtactagg tagcagatat tacagacttc tgaatgcatt 480
cagatttcca aagggtttcc tgagacctct caaccaatct ttctaggaca atagctagtg 540
taggggtctc ctgactcaat aggggaccca ggccttcaga taccagccac tcactggctg 600
ctctgtgacg tgctatctta agaccgtgaa tggaagacaa gccctatgta aacacaaatc 660
ttaaagccct gntggctact cganggcctn cttg 694

<210> 1176
<211> 749
<212> DNA
<213> Homo sapiens

<400> 1176
ggatatctgt atgcagttgg tgggcgaaat gcagcaggtg aactgcccac agtagaatgt 60
tacaatccaa gaacaaatga atggacctat gttgccaaaa tgagtgagcc ccactatggc 120
catgctggaa ctgtgtatgg aggagtgatg tatatttcag gaggaattac tcatgatact 180
ttccaaaagg agctcatgtg ctttgaccct gatactgaca aatggatcca gaaggcgcca 240
atgaccactg tcagaggtct gcattgcatg tgtacagtgg gagaaaggct ctatgtcatt 300
ggtggcaatc acttcagagg aacaagtgat tatgatgatg tcctaagctg tgaatactat 360
tcacctatcc ttgaccagtg gaccccaatt gctgccatgt taagagggca gagtgatgtt 420

0962946-070800

ggggtcgctg tcttcgaaaa taaaatctat gtggttgggg ggtattcttg gaataatcgt 480
tgtatggtag agatagtgca gaaatatgat ccagataaag atgaatggca tagggttttt 540
gatctgccag aatcccttgg tggcattcgt gcttgcacac tcacagtttt tccaccagaa 600
gaaaccacac catcaccttc tanagagtcc ctctttctgc accttaagat catctctaca 660
actaagatgc tgtagttcta tctttgcaat gngtcataaa ttctcttctt tttcccttaa 720
gtagtatata tgntaggatt accctntgg 749

<210> 1177
<211> 706
<212> DNA
<213> Homo sapiens

<400> 1177
tgacttccta ttggtttggt gaaccaagtc acaatctttg ttgggtttag gtgataggtt 60
gtaatgactg agtcactcag tactgggctg tcttgtgtgt cactgccatt ctgtgtgctc 120
atggtggttg gctggtgagg cccagctgag ggcagggttg gtcggccagg actggaaaca 180
aagagagaat ggtggtgttg gggtgtacat ggcttgcctc ggtagtggtc cacttttgaa 240
ttaggccagg atactttcta tttgtttgtt cacttggttt gagggaaatt aagatttact 300
gtgtttttag atattcttct tagtctagtg ccatgaaatc aaacagatct gggttcaaac 360
tgtggccctg ccatgtacta gtttatgtga tcttggacag gttattcaca ctcgcagatt 420
gtttttcgt aatcaaatgg ccacaggaat ggcaaaatat cagagaatat gtcgaaatgg 480
aaggaaatcc tgggattatc tgatctgtag actcttccta ttaaattaaa cattaaatgc 540
ctgaaatgtt ataagacgtt attaaatatc tgaaacgaaa tctcagtatg aaaagcanat 600
atgttaggtg gatgcctcan ttgaattcag tcttcttatt gggtaagant aagctttgtt 660
cacagaacta ctttaccacc tttactgagt cccatggntc actgca 706

<210> 1178
<211> 611
<212> DNA
<213> Homo sapiens

<400> 1178
aaatatttgc atacagacat ttgaggctgc tctgtatatt acaggcaaga actggaaact 60
gttcggctgc agggtgacag ctaactagat tgtggtttat taggggaatg agcctttctt 120
tgtgtatgac aactatgaaa actattgaga agaaatagtt acgtgataca gtcataatcc 180
tcaaaaacgg agaatcagga attatgatca aatagtgata gtaacaagga aaacatctgt 240
ctaaataatt actgagtaga aataggttcg gaatttgtaa atagtcatta atttgggaga 300
ttggggtttt tttgttttgt tttttgtttg tttttcatta ttttgtgcta ttattcatac 360
gtgtacattt ctacttcagt ttttattatc cattacataa catacatgct tgattatttg 420
cttcaaggaa atacaccttt ataagtaata ctcaataact actgggtttg agaatgaagg 480
tgtcagaacg aatgagattg tcctatgaaa gaagaggcag gagccaggga ggaggatccc 540
acccgnccgg ggctcaacca ggaggcangg ccattggggc anggtggcag tccaaggaac 600
cgctctggga a 611

<210> 1179
<211> 590
<212> DNA
<213> Homo sapiens

US 2005/0059020 A1

<400> 1179
atcgagacct ttaatttttc ggggagagca gctgaggccg tgtggaaaat tagtggagag 60
ctgacaagtg tctgggctcc tggcccaggg gtccgtggtc cagcacgttg tgcgttcagt 120
gggaagcaaa gggcttgccc gggattacct gccccagccc ctaggtgggt tgtgctccct 180
gcagctgcca tcggcccgct ttgcttcgtc ctggcagatg cccagtgatt gtccccgagc 240
aagtgccagg gttgggctga gctgctatga cagggaggcc cagggagttc tgctcaggga 300
gccaaaggga acagccagat cctgaatgtt ctatgttcac ctgccccagc cccacccacc 360
ctggcccact ccacaggccc ctgaccatgg tcactcacgg agagggatgg agganaaggt 420
ggttgaactg agtactgaga acccagagga cagagcccac agcttccaag caggaaaagg 480
gacctctctg aaaaatctgg ataaccagaa ttatcacagc accctctcat tcccagcgcg 540
tcttntganc tcggaccttg agcatttact gggtttcttt ttgaggaana 590

<210> 1180
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1180
gtgttaggtg cttttgccca actttagact aatttaagtg ttctgatcac atttaaggta 60
ggctaggcta agctatgacg tttagtagta gatattttca actcatgatg ggtttgtcag 120
gatgtaaccc catcataagt caaagagcat ctgtaaagac aaagtacttt agaaaaaaat 180
acagtgatag gatgacaaga tcagaaaaga gattaagcat aggtaggttt gctgtagtgc 240
tgttgaaatc taaccttcta aaaacggtct gccaaacctg catctgctcc tccttgtaaa 300
agaagtgaaa ggtaatataa tattatcaag aatataaaat taaacagacg ggaactcttg 360
taactcagta cacaaaattt ctaaaacatg gccttaaagg ctaagcatgt ctgtattttt 420
cctttctgtc ttgacagaaa aaatctaacc tttctatagg tcagactaag caagttctat 480
taattagccc aaacttcaat aggacagatt atctgagaat gttcttactt gtagggcact 540
ttaattgaaa taagactaat tctgactcct gattttacgg gtgagaaagt tgagatccac 600
aaaattaatt accataaaga acaaaaatct gattgccatt tttggtcctt tttcaatatc 660
ttaagtagcc ctttctcaaa gaaagnttta ncacaaaatg nattctctta cttggaatta 720
cttctgctgt tggttctgga tg 742

<210> 1181
<211> 671
<212> DNA
<213> Homo sapiens

<400> 1181
aacaacttcc gctcgggaag tttgtaaaag tctggtctac cggcgcggcg tagtggatgc 60
agcatcctag tggaggacgc ccctgtgatc tgccctcctt ggcactgtgc ttccccagag 120
gggtggcctc gctgttccca tggacatggc ccaggagcca gtgaccttca gggacgtggc 180
catctacttc tcaagggagg agtgggcgtg tctggaaccc agccagaggg ccctctaccg 240
ggacgtgatg ctggacaact tcagcagtgt ggctgctctg ggtgagcacg ggctgagcgc 300
agcgtgagca cagggatttt gcagccccag accagacctc gtctctcgcc tggaacagtg 360
ggaggagccg tgggttgaag accgggagag acctgagttc caggcagtgc agaggggacc 420
ccggccaggg gcaaggaagt ctgcagaccc caagagacct tgtgatcatc cagcttgggc 480
tcacaagaaa acccacgtgc ggcgagaaag agccagggaa ggaagcagct ttaggaaggg 540

0060504.0020

cttcaggctg gacacggatg acgggcagct tccagagctg ctccagaaag gacagacgcc 600
aagcccacgg ctttcccgtg tcangtgctc acgcagcgtt gtgggccggc ggccgggccg 660
cananagcgc c 671

<210> 1182
<211> 647
<212> DNA
<213> Homo sapiens

<400> 1182
ataaagaatg gggggccggg gggtattgga aaggctgatc aataaggctg ggcttcatgt 60
caaacatgtc aatgtatgct taggccagtt tcaaatgttt ggtggcattt tgttcacaaa 120
aggatagagt gtgtgcatca tatttgtttt ttttgttttt tcacaaaatt gagttaaatc 180
cagtgctttt gttattggct attcttcatg tagctttctt tagggtggtt gtttacaaag 240
acttcggcat ggtttcacag agactcattc cagtggaatc cagttagatg gtcctaatgc 300
tttcgttcca gctatgacat gtgttttgat tcacagtatg cttggatgga ctgtgtggat 360
gcttcattcc tatggaagac ataattcaga acagaaaact tgtaacagca gcatcttgcc 420
tgcaaaatta tttaagaaaa aaaaaaaaag actttctggt taataccaaa atctttaact 480
gcctttagat aggtactgtt tcaagtaatt aacccctgtg attctcaaca atgggtccat 540
aatagcctta cctgaacatt aactcctcct atttgccccc attactccca gagattccgg 600
tatttttta gtggggcttt ggtggtggtg tnccnngatg tatgatg 647

<210> 1183
<211> 756
<212> DNA
<213> Homo sapiens

<400> 1183
tccggatgct gagacaggag aatctcttga acctggaggg tggaagttgt agtgagccga 60
gatcatgcca ctgcactcca gcctgggtga cagaacaaga ctctgtctca agaaaaaaaa 120
aaagaaaaaa aaaagccagg tttggtggtg cacacctgta gtcccagcta ctctggaggc 180
tgaaatggga ggatcacttg agcccaggag tttgaggctg cagtgagcta ttattgcact 240
actgcattcc agcctgggtg acatatcaag acctgtttgg gagaaaaaaa aaaaaagaaa 300
atgcagacag aatgtgggac tgggcaccaa caacatctct acaagaggtg aacaagacgg 360
tcctggtctt tgccctcacg cagnacacgg accagggtgg tagaccagag tgtgccctca 420
gtgttatttc cactaataac gacgtttcct cctctgtcct tcgcagaacc aaatctgttt 480
cttccatgtc tgagtttgaa agcttgctcg actgttcccc ttaccttgct ggcggagatg 540
cccggggcaa gaagctgcct aacaaccctg cctttggctt tgtgagctcc gagccagggg 600
atccagagaa agacaccaag gagaaacctg ggctctcgtc gagggactgc aaccacctgg 660
gtgccctgcc tgccaggacc cccaaggagc agatgcangc aattcacggt tctgcaagac 720
ggcatccant ctactatatc ccgggggccc gngcct 756

<210> 1184
<211> 735
<212> DNA
<213> Homo sapiens

<400> 1184

0050-4500-0200

tgaaaatgcc tttcccttag aattctcatt ctctccttca gttactcaca tccaaaaatt 60
atttaaggcc taaaccaagt ccaatcatct tcaagcagct ttcttccact cccacccacc 120
atagagatag atctctcttt cccttacctt cctgtagcac tttgttatct atacctctca 180
tgtgcactta ccccagctcc aattctggat gtcttgttct cctagtgaga ttgtgagctc 240
ttcaaggtaa ggatcatgtc tttgtgcttc cttcttttgt gactctgaag tgcataacat 300
ggtgatgtgc cttgggaatt ttcaataaat attcatggga aaaatgaaca tatcaatgta 360
ttaagctcaa taaagtccgt tttcctaaaa acagtccttc attgctgaag tgtgaaagca 420
tgtaaactat aatctactgg atttggtatt tttattattc ttttttacta atatatacat 480
tctaacactt tttgaccact gcttagagaa aatagaaggc atgcttatca aatttcagat 540
ggcacgaatt agaagtaata agtaatgcac gagataacag aatcaaaaac tagacaaatt 600
agaaataagt aaataacatt taacagggat aactacaaaa ttaagatttt aaaagaacag 660
gtacccaatt tcagtatgga aagacatggc taacatcang gtttaattgg ctgctanact 720
gacatgagcc canag 735

<210> 1185
<211> 752
<212> DNA
<213> Homo sapiens

<400> 1185
agcactttat gtttggagag ggctgttatt aaatatttgt cttaagtatt cagcctgaga 60
gtcgcctctg tggattgaaa ataacaagcc tttgccttc tctctgactc ttccatgtgg 120
cagctgtgtg accctgagca aatttttact tgacttttct gagcctgttt tctcttctgt 180
taaatgagct gtaataacta actcatggag ctgctctgaa gaagaaatga gcaaatgcac 240
gcacaaagca ctttgcacag tgcccagcct gtgcacgacg ggacctcagt agataatcat 300
tctctcctct ttttatgcct gacttgagct ctgtcctggg tagtacccag aacttggctg 360
tgttgtcgct gggtttgggg atggccctga gccaggtgtg gccaagccct gctggcagta 420
gatagctctg aggttacccc agccttggaa gccagttctg agagatggca gccactggcc 480
actacacagt cctcctaaac ccgctggggg cggagtaatg aaaccacttg ctcagttgtg 540
ctgaaagaag gaaaaggctg ttcctcatct cacaccccag tgatagccat gaatccccaa 600
gcacacagtg taaaataagg tagggaataa tcagatgcaa aaccctggga tgtccagaga 660
tgccagggcg aagtaagtga aaccagatcc tggctttaaa atcctgnaat gcattcccca 720
gagatgctgt cgggttncct tncattccca ga 752

<210> 1186
<211> 862
<212> DNA
<213> Homo sapiens

<400> 1186
ctggagagag tgtagatgga ggagaaaaga gtggtctcga aaccaagctc tgggagtggt 60
tggaggagaa tggaccagtg aagaaggctg ggtgagaaga aatcaaggag cctgtgctat 120
cgtggaaatc aagaaaggaa agtgtgtcaa ggaggagtat tcacttttgt taaatacttc 180
cgagacattc aataagaaat gctaacactg ttttgttata aacaactgaa attaatttta 240
gctgtgaaaa aattaggtcc taaagtaaat aaaaagatag taatggggac ataaaatagg 300
ctgtgaaatg aatttaaaat gccaaaagtt acaaatccca aagacataac ccttgctctg 360
gatgtgctac agatcttggc tgtggacatt ctaaaagcca ttagaaagcc ttcagtcact 420
tccagtattc acaatgacca taaagtaaaa ggggtcccca agaccacccc aggctagatg 480

0050150:0050200

atttgctggg aggactcaca ggactcaata tgttagtcat actcacaagt aagatttact 540
agagtgagag gaactagagc aaagtcagca aaaggaaaag acatgtgggg tgaagtctgc 600
aggaaaccag gcacaagctt ccaagacctc tcctgtgtgt gtctgccaca ggacagtcca 660
ttcctgtggc agtgagttat gacagcatgt gtgaaatgtg ttctgccagg gaagctcgta 720
agagactccg tggcaggttt ttactggggc tggtcatgga gcccctntgc cgctgtccaa 780
atccagctnc agaaggaaag cggttcacat aactgcctgg ggcataacag ttaactgnga 840
gctgttttat tagctgaaat gg 862

<210> 1187
<211> 801
<212> DNA
<213> Homo sapiens

<400> 1187
aatcatggac tggctgtgct tcaggcactt tggcggctca ctataattta ttattcatag 60
agttatcttt ctgagactgt cagttttaag ctattttaaa acagcattac ctttacttta 120
gcaatacttc atttcttctt gtattcccta gcttataaag aatttaattt catttttaaa 180
ataagttatt ccgtaggatg atgttgaaat acatctgcat tagcaacacc ggcatactgc 240
acaatagagt ttaatttata tcatgatgac tacatatttg aatcagactc gagaaacata 300
gctaatgacc ataaatctaa tggaatatgt atcaatgtgt tttcttcctt aggtagatac 360
aatcagttta aatgctgcaa gcacactgtt agtttccggc accaaagaag gcacagtgaa 420
tatttgggac ctcacaacgg ccaccttaat gcaccagatt ccatgccatt cagggattgt 480
atgtgacact gcttttagcc caggtagata ttatcctttt taaaacagat aatactaggt 540
aaattggaat tttgaaataa acaatattgn taattttgaa ataaacaata aaacttacaa 600
agaaaaacac tatttgctga taaaagaggt tttgccaatg gctaacactg ctttatgcca 660
gggtacagta tacttgtggc atttgtatca ngtagaaaag ccggactggg tatttntaat 720
tcctcattag agaaattaat ttaagataaa aatgaactca taatcaaang gtcatctcat 780
ccttacatct tggaaanggc t 801

<210> 1188
<211> 796
<212> DNA
<213> Homo sapiens

<400> 1188
aaaggcgcgc gggaacatgg ggctgtatgc tgcagctgca ggcgtgttgg ccggcgtgga 60
gagccgccag ggctctatca aggggttggt gtactccagc aacttccaga acgtgaagca 120
gctgtacgcg ctggtgtgcg aaacgcagcg ctactccgcc gtgctggatg ctgtgatcgc 180
cagcgccggc ctcctccgtg cggagaagaa gctgcggccg cacctggcca aggtgctagt 240
gtatgagttg ttgttgggaa agggctttcg agggggtggg ggccgatgga aggctctgtt 300
gggccggcac caggcgaggc tcaaggctga gttggctcgg ctcaaggttc atcggggtgt 360
gagccggaat gaggacctgt tggaagtggg atccaggcct ggtccagcct cccagctgcc 420
tcgatttgtg cgtgtgaaca ctctcaagac ctgctccgat gatgtagttg attatttcaa 480
gagacaaggt ttctcctatc agggtcgggc ttccagcctc gatgacttac gagccctcaa 540
ggggaagcat tttctcctgg acccccttgat gccggagctg ctggtgtttc ccgcccagac 600
agatctgcat gaacacccac tgtacccggg cccggacacc tcattctgca ggacaagggc 660
cagcttgtct tccagccatg cttgctggac cccccggcag gcttccatgt catcgatgcc 720
ttgtgcccgn cccangcaat aagaccagtc acttggctgg cttcttcttg aagaaccaag 780

0362346.0720

gggaagaact tttgnc 796

<210> 1189
<211> 847
<212> DNA
<213> Homo sapiens

<400> 1189
ggccttttt ttttttttt ttgagatgga gtctctgtca ctcaggctgg agtgcaatgg 60
cgcgatctca gctcaccaca atctccgcct cctgggttca agcaattctc cggcctcagc 120
ctcccgagta gctgggatta caggcgcatg ccaccacacc cagctaattt ttgtttttcg 180
agtagagatg gggtttcacc atgttggcca ggctggtctt gaactcctga tgtaatccac 240
ccacctcggc ctcccaaagt gcagggatta taggcgtgag ccactgcgtc cggctcaagt 300
gaatgttctt aatgggatca tgggatctag aatggtgaat ccttttcaga aggtggactt 360
tgcccagatc catcaaagga atcactattt atggcagtgt tgccttatga aatgtgtttc 420
ttaggtaata acacttgaaa gtctgaatta ctcctggata catggactgc agaatggatg 480
ttgtggtagc aggcatgaaa acaacattaa tcttgtacat ctccatcaga gcttttggat 540
gactaggtgc cttgtcaatg agcagtaata ttttgagaag aatctttttt ttgcaagcag 600
taggtctcaa tggtgggctt aaaaatattc agtaaactat gctgtaaaca gatgtgctgt 660
catccaagct ttgtccattt atagagcaca ggtagaatac agntagcatg attcctaang 720
cctgtaggat tttcagaata gtaaataagc cttgggcttc aatttaaaaa ggtactagct 780
gcatttggct ctaacaaggg tcaacctgtc ctggggagct ttgaaccngn catggcttct 840
ctntact 847

<210> 1190
<211> 814
<212> DNA
<213> Homo sapiens

<400> 1190
agcaataaaa caagtcatat gaatgttttg gtttcccagt gcatataaag ttttgtttac 60
actatactgt agtctatttg ggtgcaatgg cattatgtct aaaaacaatg taaatacctt 120
aattaaaaaa tactatattg ctaaaagatg ctaccaatca tcgctgagcc ttcagtgagt 180
agtaatcttt atgctggcag agggccttgc cttgatgttg atagctgctg actgatcaga 240
atgtgtttgg tgaagcttgg gctggctgca gcaattttgt aagacaacaa tgaagtttgc 300
ctccttgatg gattcttcct ttcacgaaag atttctccat agcatgccat gctgtttgat 360
agggttttac ccacagtaaa tcttctttca aaattggagt tgatcctctc gaatcctgct 420
gctgccttat caacaaagtt tatagaattt tctaaaccct ttgttgtcat ttcaacaaat 480
tttcacaaca tcttcgccag gagtagattc caggtcaaga aaccactttc tttatttaac 540
cataagaagc aactgctcat tcattgaagt tttatcatga gactgcagca agtcaggcac 600
atcttgaggc tccacttatt ctaattctct tgctggtgct accatatctg cagttacttc 660
ttcctctgaa gtcttgaacc cctcaaagtt attcatgagg gttaaaatca acttcttnca 720
aacttctggt aatggtgcta tttttacttc ctccatgaat catctattat taataataat 780
nntctttttt ttgagacaga agcttgctct ggtt 814

<210> 1191
<211> 857
<212> DNA

0952463.02800

<213> Homo sapiens

<400> 1191
ttttttcctt ctgtttggca acctcaatgg ctctacctgt ttctggctgt catacttcgg 60
cttgtgaaca gccttcctcc ctaattttca ggaaactaac aaattaaagg tgcaaatgtc 120
aggtggttac tacatatcta ctggctcaca taattcaaaa cagagtcatg cagctcctat 180
ctaaagctag ttccttgccc cttctcagtc actaccacat caagcacaaa tgtagatgaa 240
agggtagtgt gtcaaggtga gagctgccca ctgggtagtg ttactcggtc acttgctata 300
ggggacagat tagctgccaa tcagtatctc atcactgtca ttggcgttta taatccaggt 360
tcctagcccc actggtgatc tatttctgtg cctccgcagt gacgccagtt gtcctagcaa 420
cgtgctggct ggcacttcgt taaaggcaag taagggagtg gtggtggaag agggtggcct 480
cgagagggtc agaagggagt tggcagtcac cttgctcaaa gaggattttc catttccctc 540
atctgggcag gcctccagga ggaaaacgtc acttactaag tgtatcatgg gagtgtcact 600
tactaaggat catggaccac atggtctttc tggtcagata gaatcccacg gagaataaca 660
natgaattaa tgggtangtc caggcagaat gtggggactg ccggccaaga tgttaggcga 720
tctcaaagca tcttgatggt atcagttttt cttgggaaat aaggttaang gtttgcttgg 780
ttaatcanca ctggcattgc aaaagttgga gaccttgata aaatgtttgg gaaggaatca 840
nagggtcaag ggaaggc 857

<210> 1192
<211> 763
<212> DNA
<213> Homo sapiens

<400> 1192
agttggtcgg tgggccagtg gcccgtcgct cgcttctggg ctctcatgtt tgaaggtggg 60
agggacacgg gagcggcccg cacaccttat tgacagccac ccctcaggac atggaaaagg 120
agctaggaat taagcaccca ctccacagga agaagcttgt tttagcagtg aaagccatca 180
acaccaaaca ggaggagaag tctgcactgc tagaccacat ttgggtgaca aggaggcttg 240
atgatattgg ctaccccagt acaaagacca gtttcatgaa tctagagttg acggacgaat 300
gctgcaatac ctaactgtga acgatttact cttcttaaaa gtcaccagcc aactacatca 360
tctcagcatc aaatgtgcca ttcacgtgct gcatgtcaac aagttcaacc cccactgcct 420
gcaccggcgg ccagctgatg agagtaacct ttctccttca gaagttgtac agtggtccaa 480
ccacagggtg atggagtggt tacgatctgt ggacctggca gagtatgcac ccaatcttcg 540
agggagtgga gtccatggag gcctcattat cctggagcca cgcttcactg gggacaccct 600
ggctatgctt ctcaacatcc ccccacaaaa gacgctcctc aggcgccacc tgaccaccaa 660
gttcaatgcc ttgattggtc cggangctga acaggaaaag cgagagaaaa tggcctnacc 720
agcttacaca ccactgacca ccacagccaa agtccggnca agg 763

<210> 1193
<211> 694
<212> DNA
<213> Homo sapiens

<400> 1193
ngangatgat tgtcttaaca tgtntttcta atcactttaa aacctcactg tgatagattt 60
gcttgttctt tgtacttttg tggtacaatc taatagattt ttttctttga ggtttactct 120
atttttagat attaaaagta ttttaaactg aaatgatgac tcatacgtgg atataagaaa 180

0552045.0042000

ataaaaagca gctctgtttc ctacattttt tactgctttt tactctccca atttttatgt 240
cttttcatca attctgcaat agacagagat taatagtagc acttgcagtt ttcgctgaga 300
catatccagt tcactgaaga cccactttag tgttttggga ggaaaaaaca agtcttttct 360
gaaataatga gttcaagatt gatttgaggt ttaggaagac ttttagcaaa ctcaatcgct 420
caggagctga ttctcagctt atcagtaatc acatcctttc ctattccctt ctgcagacaa 480
tatctgacta ttttcaggct tgttagaagg gagagtaaga ggaagtttag ttctagatca 540
tctatttttt tttccctgta agtaagttgc tttgatataa gatttggtgg tggtaatcag 600
ttgcttaaat gatatcctaa aataatctcc agctcattta ataactgcct tcactaaatt 660
nttattaatg gttntgnttt aagttttaag ctct 694

<210> 1194
<211> 820
<212> DNA
<213> Homo sapiens

<400> 1194
acatagtcaa ggctacacaa tatggaatat atgaacgctg tcgagaattg gtggaagcag 60
gttatgatgt acggcaaccg gacaaagaaa atgttaccct cctccattgg gctgccatca 120
ataacagaat agatttagtc aaatactata tttcgaaagg tgctattgtg gatcaacttg 180
gaggggacct gaattcaact ccattgcact gggccacaag acaaggccat ctatccatgg 240
ctgtgcaact aatgaaatat ggtgcagatc cttcattaat tgatggagaa ggatgtagct 300
gtattcatct ggctgctcag ttcggacata cctcaattgt tgcttatctc atagcaaaag 360
gacaggatta ttttaaaaaa tgtacttgca tattggaaat gttgagtgag gttgcagaag 420
atattcctga caacactatt aaagtaaatc cagaaatgga tttgtaatgg ataaggcata 480
acattctatg acagtatgca tggatgtaga tatgatggat cagaatggaa tgacgccttt 540
aatgtgggca gcatatagaa cacatagtgt ggatccaact agattgcttt taacattcaa 600
tgtttcagtt aaccttggtg acaagtatca caaaaacact gctctgcatt gggcagtgct 660
agcagggaat accacagtca ttagccttct tctggaagct ggagctaatg gtgatgccca 720
gaatatcaan gggcgaatca acgcttgatt ttggcaaaac agagaaaaaa tgtgtnggat 780
gatcaaccac tttccaagan gcaaggcaag ccaaaaggtt 820

<210> 1195
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1195
tattagatgg ggataagtaa agattatgat aacttcatgt catttcaggt cagattttgc 60
ttccaaatga tttgcacaca cttaggaaaa aaatttctgt tttcagaacg ttttggattt 120
cagaattgca gataaaggat tgtggaccca taattttctc ctgttttgca ctggcggtag 180
tttaacttgt ggaccatcaa aaaaatatgt ttgagagagg acccttatca cctcttttgt 240
ttaaaaagca aaataaactt tgtttccacc aaaatgcctg cctccccgac atttaggggc 300
tgctgtggca ccattcctgt gtgtgtcccc ttggtagctt agttccaagc ttgacagttc 360
tcaggggtgg ggagttctct ctgctctccc ttaccctcac ccccaccagt ctcttcagct 420
gcatcccgtt tctcctcttc taagggatct ggagagttgc tggcttccat catcttccgt 480
gtgaggaccg tcacagcttg cactgctcag caggcagctt ttctggacac cacactctcc 540
ccaagccttt gnttcttgat tttgggagca ttcgccatgg aaaccatttt ggctcatctt 600
atcccattcc caggtggtct ccaaggcttt gcccacacag tgccacaatg aaaaatgcag 660

0560945.0020

cctggctcac cggtttgctt ttcacgtttt catcgcttat ttggctcatg gcacaatccc 720
acggaatcct ctgcaaangg tggtgttgcg ccattccctt ntganccaag tgttggctct 780
t 781

<210> 1196
<211> 902
<212> DNA
<213> Homo sapiens

<400> 1196
tgctggtttg attgtgctgc tgttagatga gctgctacag aagggttacg gcttggggtc 60
tgggatttcc ctctttattg ccaccaacat ctgtgagacc attgtctgga aggcctttag 120
tcccactacc attaacactg gcagaggtac tgagtttgag ggtgcagtca tagctctgtt 180
ccatttgttg gccaccagga cggacaaagt ccgagcttta cgggaggctt tttatcggca 240
gaacttaccc aatctcatga acctcattgc tacagttttt gtgtttgctg ttgttatata 300
tttccaagga tttcgcgttg atctgcccat taagtcggcc cgttaccgag gacagtacag 360
cagctacccc atcaaactct tctacacctc caacatcccc atcatcctcc agtcggccct 420
ggtgtccaac ctgtatgtta tttcccagat gctgtctgtt cgatttagtg gcaacttttt 480
agtaaattta ctaggacagt gggccgatgt cagtggggga ggacccgcac gttcttaccc 540
agttggaggc ctttgntact atctttctcc tcctgagtcc atgggcgcca tctttgagga 600
tcctgtccat gtcgttgntt atatcatctt catgttgggg tcatgtgcat tcttctctaa 660
gacatggatt gaagtgtctg gttcctcagc caaagatgta gctaaacagc tgaaagaaca 720
gcagatggta atgaaggggc caccgagata cctctatggt catgagctta ataggacatc 780
ccaccgcaac tgcgtttgcg gnttgtgcat tggcgccctg tcaatgctgg cttgatttct 840
gggggccatt ggatctggcc tggaatttgn taccagccta ttattaccag attttgaaaa 900
tt 902

<210> 1197
<211> 820
<212> DNA
<213> Homo sapiens

<400> 1197
acttaagagg agctccataa atcatctaat tccaccattc atgttaccaa gaagcccaag 60
aaaaggaggc agtttaccag aagacgtata ggaagtgaat aacccagtgg tcttttatct 120
ttgtctgtac tttctcttta ggtgactgtc ttcctttcct tggctttagc tacagatgaa 180
attttatctc tatcctagaa ctctttcctg agttccttac atatattgcc aactgactac 240
ctgacatttc cacttagatt tgtagtagac atctcaaacc caacatatgt gaatcagaat 300
tattgctatc ccactgccac tctcattctg cttctttagt ctttcgcttc taagtaaaag 360
acacctgctt cccttaccaa ccccctttg tgtggctctc cccagatcac tgggacccag 420
ctccactggc tgaattttcc acccttttg ctcctgtgat ctggaatggt cttcaattgg 480
ctagctcatt cattcttttg atcttagctt aaatgttact tccaaaaaag gaatgcttat 540
tacctatttt aaagtaggtt ccccctctct ttattttcac atggtaccct gatttttcct 600
tcatagcatt taccataatt tttatgtttg ccatttgttt aaaacatgcc tctctcttcc 660
gctagaccgt aagcttcaag aatgcaggca ccatgccagt ttggtcacga ctattaagcc 720
aggacctaca catagtaggn actcagtaat ttcttggtga atgaaaaaca gggtaatgcc 780
agggnctaca cattagcagg gactctgnaa tttggtgctg 820

0050350 -0070000

<210> 1198
<211> 824
<212> DNA
<213> Homo sapiens

<400> 1198
ttaatatgtt ttattcattt gtggacacta aaatagctca ggaaagtgaa aatgtcttag 60
acatacgcaa gtcacatgac catttaaatg tgcaaatgta agaagattca atgtgtttac 120
atcaaatgac atattttatt gatttattgc agattcagtg catatgagcc aaattgttga 180
gtgtgtaaga gctatattgt gtattttatt aaattaatat atagttgtgt tgcaaaaata 240
tttgggctta tattgtaaat ggcaagtgtt gccttggtag ctgtcgaact ctatgagttt 300
tgtttttcc tgcttccttt tccccatgga gtgtgggaag cagtgcctca gagcaaagtc 360
tcttgtttaa tgtatagtct accaagtact acagtacata atctgttcaa aatgtgtttg 420
agtgagctga tggagctaac tgaaaggtca aaaattacat ccatcagcca tggttatgtg 480
caagtccttg tagaagcttt tattaaagtc atgctaaatc acaagaattg acatttgtac 540
caatatctga aacttcttca tgtttttca ataacataca gcttctgctt gtgtagatat 600
tatgccatca gtcggttctc aaaagtattt taagtgcttc anatgtgtgt tcccattata 660
ttttgaaaac atgaaaaatg ctttaatgca tgtatgtcca gcagtggnta cttgcattgg 720
gtaatgggtt ttcaagaagt ctgggtctta acaaaatggt ttcctttatc tcaanggctc 780
ttctggctct ttttggtggg ggnccttgn gaaccattcc ccct 824

<210> 1199
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1199
atgctatata aaattttctt gaaatataat tggtgatgac actggcattt tcctttgttg 60
tcataatcag gaacaagggg acaagaaatt acagtgcgtg gatcagaaac cagtcactgc 120
ttcactggcc tttcaccaga cactgattat ggcgtcactg tttttgtgca gacaccaaat 180
ctcgagggac caggagtctc tgttaaagaa cataccagta agtttttgag gaatctggaa 240
agctttcata aggctttaga atagaatgct ctaggtaagg aagacttaag tgaatcctgt 300
gcaggtacct ctccgtaggg gtagcaataa tgatgggatg atggcagatt cctgaatgtg 360
gagtctaaag ctggttcagg acctttttct gtagcaattt gcaagttgtc cctgttattg 420
agttggtgct actttgagga agggctaaag gagggagaga tggctctcgc tgagaaggtg 480
aattcatatt agtgactttt actcatttga ccctatctga aggccttaca ttttcccttt 540
agatctttat tttctgtagc tgtagtggat gttgaatgac taccagtgac atcaatttgg 600
atggaataaa atccccagca tgtcagtacc gatgacaatg ggtctcattt tgnacaactt 660
gatttggtat ccaggattta aattgctctt aaaatttact ttctgggata tcaaatgtgc 720
ccatggngng gttttataat ta 742

<210> 1200
<211> 746
<212> DNA
<213> Homo sapiens

<400> 1200
accgagaaga agatatttac cagtttgctt actgctaccc atatacatac actcgcttcc 60

0050-0050-0050

aacattacct tgacagcctg caaaagagaa acatggatta cttctttcgg gagcagctgg 120
gccagagtgt gcaacaacga aagcttgacc tcctgacgat aaccagccct gacaatctcc 180
gggaaggggc agagcagaag gtggtattca tcacaggacg agtccaccca ggggaaacac 240
cctcatcatt tgtgtgccaa gggatcattg acttccttgt aagccagcac cctattgcct 300
gtgtcctccg ggaatacctg gtcttcaaga tcgcaccaat gctcaatcct gatggagtct 360
acctgggcaa ttacaggtgt tctctgatgg gatttgatct gaatcgtcac tggctggatc 420
cctctccatg ggtccatcct accctgcatg gagtgaaaca actcatcgtc cagatgtaca 480
acgacccaaa aacaagcctg gagttttata ttgacatcca tgcccactcc accatgatga 540
atggcttcat gtatggcaac atctttgagg atgaggaacg gttccagagg caggccattt 600
ttcccaagct cctctgccag aatgctgagg acttctncta ttccagcaca ccctttaacc 660
gggacgctgt gaaagcagga actggccgcg cttcctcggt ggacttctgg accacacttt 720
ctattgnttc accctaaagn ctnctt 746

<210> 1201
<211> 740
<212> DNA
<213> Homo sapiens

<400> 1201
aattaactga ttactctttc agaaaatagc aggtgtctca atgctttttt tccataatta 60
taaagaccat tgtcaaaatc tttggtttac taaatatttc actgagcata tatagagata 120
cgttgcttgt ggcataaaaa gtcttgtaga taacttactc acatttggct ttttttttaat 180
tggtgcattt tttaatttgc ttttttgaaa attatgaagt taaaatttaa ttctaaggta 240
gtatttttca tgtataaaac taataatgta gttaagcata ctgtttgaat aaaattataa 300
taaatggcac aattccttaa accctgaaaa taccaagtta tattggaaaa tagtggaaag 360
aaaaaactag tggagaacat cttagaaaat tctattgtgg aaattacgat gattattttc 420
agtgagaatg aatttatata tacaacaaaa atatacaaaa gctaaccttc tcatcctaaa 480
aagatttttc cctttgcttc tgttttattt agccctgcca tgcaccacat taattttatg 540
aacataaatg atatttaact tttctttttt ttttttgag acagagtctc actccgtcac 600
caggctggag tgcggtggcg cgatctcagc tcactgcaac ctccatttnc caggttcaag 660
caattcttct gcctcagcct ccaagtagct gggattacag gcacgcgcca ncacgccccc 720
taantttttgg atttttagta 740

<210> 1202
<211> 737
<212> DNA
<213> Homo sapiens

<400> 1202
agtggtgtgg taccgggtac ccggagacgt gtatcggacg gtgggccgca gccatggccg 60
agagaaaacc taacggtggc agcggcggcg cctccacttc ctcatcgggc actaacttac 120
ttttctcctc ctcggccacg gagttcagct tcaatgtgcc cttcatccca gtcacccagg 180
cctccgcttc tccggcctcc ctgctcttac cgggagagga ttccacagat gttggtgagg 240
aggacagctt ccttggtcag acttctattc acacatctgc cccacagaca tttagttact 300
tctctcaggt atcaagcagc agtgatcctt ttgggaatat tggacagtca ccattaacaa 360
ctgcagcaac ctcagttgga caatcaggat tccccaagcc cctgactgct ctccctttta 420
caactggatc ccaagatgtc tcgaatgcat tttcaccatc catttcgaag gctcaacctg 480
gtgctccacc ttcctcactg atgggaataa attcttatct gccttctcag ccaagtagtc 540

0960346.02200

tccctccttc atattttggg aaccaacccc aaggaattcc ccaaccagga tacaatccat 600
atcgncatac ccctggcagc agcagggcta atccttacat tgcaccaccc cagctgcagc 660
aatgcccaac accangccct nctgctcatc cttcaacctt ctggaccccc ctggttcaaa 720
atgtaccana tggccct 737

<210> 1203
<211> 834
<212> DNA
<213> Homo sapiens

<400> 1203
aacaattcat ttaaaaaaat acacatacac acacacacac acacacacac acacacacac 60
acgtcatcta atttagcaat gtatgagaat agtggatgcc attttaaaat tatattaatg 120
cctagatttg tttctagggg gaaaatatgg ccgtgtttgc ttctgatgta tataaaatct 180
cagacattta tagtgctcta agccatagta agagaaatat gagtgctatc aatacatgaa 240
tatttccaaa ctcagttctc ccaactgcct caaaactaaa cactaattca ggaaatgcaa 300
gcaataacat ttaaaatgtg ttcaaatgct tttagctttt aattctttta tgtttttgct 360
tcactaaaga cactctcatt tgttttgtca tccattgatg taatttacac tttggtaaaa 420
catatctcaa aggactttgc agatattgat aaatactctt aacctatagt ctctaagata 480
ggcatatgtt ttagataaat gcaatataag taataactaa ccattgctgt aaataattca 540
gctaatgtgt ttttttctga gagttatcct ttttttaaga ttttttaaaa aaattttaaa 600
aattcaaagc aaactgtcaa gaattgcacc ctgaaactac atccatttga caccactttt 660
tttaaaaaag caagaaagac ggccgggcac ggcggatcat gcctgtaatc ccagcacttt 720
gggangccga agcgggcgga tcacgaaggt caggagatcg agaccattct gggctaacat 780
ggngaaaccc cggctttact taaaaattcc caaaaaatta ncccgaaccg ttnt 834

<210> 1204
<211> 844
<212> DNA
<213> Homo sapiens

<400> 1204
gatcgcccgc cgccatgggc tcctcgcaaa gcgtcgagat cccgggcggg ggcaccgagg 60
gctaccacgt tctgcgggta caagaaaatt ccccaggaca cagagctggt ttggagcctt 120
tctttgattt tattgtttct attaatggtt caagattaaa taaagacaat gacactctta 180
aggatctgct gaaagcaaac gttgaaaagc ctgtaaagat gcttatctat agcagcaaaa 240
cattggaact gcgagagacc tcagtcacac caagtaacct gtggggcggc cagggcttat 300
tgggagtgag cattcgtttc tgcagctttg atggggcaaa tgaaaatgtt tggcacgtgc 360
tggaggtgga atcaaattct cctgcagcac tggcaggtct tagaccacac agtgattata 420
taattggagc agatacagtc atgaatgagt ctgaagatct attcagcctt atcgaaacac 480
atgaagcaaa accattgaaa ctgtatgtgt acaacacaga cactgataac tgtcgagaag 540
tgattattac accaaattct gcatggggtg gagaaggcag cctaggatgt ggcattggat 600
atggntattt gcatcgaata cctacacgcc catttgagga aggaaagaaa atttctcttn 660
caggacaaat gggctggtac acctattaca cctcttaaag atgggtttac agangtccag 720
ctgtcctcag ttaatccccc gctttgcacc accaggaact acnggaattt gaacagaagt 780
cttgactgga ctttctatta ncttaacttc cccaactgtc aataantggt tttaagacag 840
gtgt 844

0960345.0720

0050460.0002000

<210> 1205
<211> 568
<212> DNA
<213> Homo sapiens

<400> 1205
tgcagctttg ccttctctcc aagagaaggg tccacccaat cagaactcct cttccttttc 60
attcctggat taaagcactt gtaatcagta accagaaagt tccagagcgg gagagaccgg 120
aaggcactgg agtgctatcg gacgggtgtc tggggcagag ccaggagggc gagcctcttc 180
tctccccgcc tgcccttgct cacttccccc tccatgccag gtgctgtggg agcagctggg 240
cctggccggg gtcggcgggt gaagctatcc gcatggngtc tggagcaccg gttctttgct 300
tcctggatgg gctggatggg ctcccgtgtt cttcaccaat ggcagcgtta ccagcaccaa 360
tggcagcgtt accagcaaga aggcnaaggc aggagcacat cgagggtggg agccagggct 420
gtggggtcag gagtcccgct ccttgccgcg ggaagcctgg ctcagccacc tccagcacac 480
ttcggctttg nccagcataa aaggcagagc gacgntttca ctgcaggctg cttccaccag 540
ggcaagtgng acaggtcgaa gtgctgac 568

<210> 1206
<211> 806
<212> DNA
<213> Homo sapiens

<400> 1206
ttaatggtca gaaacaatat ttaaaaaaaa aatagccaac aacttcccaa atttgatttt 60
tttaaaaatt gtgtatctaa gaacctcaat gaactccaag taggacaaaa tttttaaaaa 120
cccacactta gacatatcag tcaaaccgtt aaaagacaca gaatctttaa aggagcaaag 180
aaaattggta catcacatgt aaggagtctc aataagatta gcaactgact tcttatcaga 240
aaccatgaag gccagagggc aatgggatga catattcaaa gtgatgaaag aaagaactgt 300
aaaccaagat ttctatatcc agcaaaactg ttattcaata atgaaaaaat gagataccac 360
ttcatttgta ctatgatgag tataattttt taaatcaaga cagaaaagtg ttggtgagga 420
tgaaaagaaa ctggaacctt cgtacatggc tgatgggaat gtaaaacgga gaagtcacta 480
tggaaaacag tttggtagtt cctcaaaatc acagaagtac tatatgatcc aaggctgggc 540
acagtggctc acacctgtaa tcctaacact ttaagggcca aggtgggaag atcacttgag 600
ctcaggagtt caagaccagc ttggacaaca tggcaaaacc ccatcttcac aaaaaataca 660
aaaattatcc aggtatggtg gtatgcacct atagtcccag ctactttgtg ggagctaatg 720
caggaggatt gcttgagccc aggangtcaa ngctgcantg agccatgttc acaccacaag 780
tgcttcagcc taaggggatg accaaa 806

<210> 1207
<211> 843
<212> DNA
<213> Homo sapiens

<400> 1207
gtctagcggg atcgcttgct tggtaacccg gagggagaga ttggaaaccg cggagtttcc 60
tttgggaggc tgcggccagc cggggctgac ttgttatgtt gggctccgga ggccgttaag 120
agccgagaga gacatgaggt gtctctgaag cccggtcgcc tgggccatga agaagatttt 180
tagtaagaag ggcgagtcgc ccttgggctc cttcgcgcgg cggcggagga gcagcgcggg 240

aggcgggggc gagccggggg agggcgccta ctcgcagccc ggctaccacg tccgagaccg 300
agatctcggc aagatccaca aagctgccag cgcgggtaat gtggcgaaag tgcagcagat 360
ccttttgctc aggaagaatg gcttgaacga tagagacaag atgaacagga cggctctaca 420
tttggcctgt gccaatggtc atccagaagt agtaactctc ctggtggaca gaaaatgcca 480
gctcaatgtc tgtgacaacg aaaacaggac agctctgatg aaggctgtac aatgccagga 540
agagaaatgt gcaactattc tgctagaaca tggtgctgat ccaaatcttg cggatgtcca 600
tggcaacact gctcttcact atgctgtcta taatgaggac atatcagtag caacaaagct 660
gcttttgtat gatgcaaata ttgaagcaaa aaacaaggat gacctnacac cacttttact 720
tgcagtaagt ggaaaaaagc agcaaatggt ggaatttta ataaagaaaa aagcaaatgt 780
aaatgccnta nataagttgg aaagcagtca ccactaattt cagaatttta angaagaaag 840
gat 843

<210> 1208
<211> 794
<212> DNA
<213> Homo sapiens

<400> 1208
cattattagt gcatcctctg atggcactgt aaagatctgg aatatgaaga ccacagaatg 60
ttcaaatacc tttaaatccc tgggcagcac cgcagggaca gatattaccg tcaacagtgt 120
gattctactt cctaaaaacc ctgagcactt tgtggtgtgc aacagatcaa acacggtggt 180
cgtcatgaac atgcagaggc agattgtcag aagcttcagt tctggtaaaa gagaaggtgg 240
ggactttgtt tgctgtgccc tctctccccg tggtgaatgg atctactgtg taggggagga 300
ctttgtgctc tactgtttca gtacagtcac tggcaaactg gagagaactt tgacagtgca 360
cgagaaggat gtgattggta ttgcacatca ccctcatcag aacctgattg ctacctacag 420
tgaagatgga ctcctaaagc tctggaaacc ataattcaac ttttcttttt aaatcagctc 480
gaaagcatgt acttaaatga agcatattca tgtaatgtgc ttttttttt ttttgccagc 540
ttttctaagc aaatagattg tctgaattag tcacagaata attttgtgaa aattcatgtt 600
taagtagcaa ctacccttc ttttttata tatttttaag gnattagttt atcttcttct 660
aactggtgca gtcacttaat ggtttcatta atcttcgacc tgganaggga aatactgata 720
tttctagaaa aaaattctac tcctctgatt atttgaaatg ctganggaaa atgncccttc 780
catagtaaaa cttg 794

<210> 1209
<211> 740
<212> DNA
<213> Homo sapiens

<400> 1209
gatgtcatgc aggcaagatg gcggaagggg aggacgtggg atggtggcgg agctggctgc 60
agcagagcta ccaagcagtc aaagagaagt cctctgaagc cttggagttt atgaagcggg 120
acctgacgga gtttacccag gtggtgcagc atgacacggc ctgtaccatc gcagccacgg 180
ccagcgtggt caaggagaag ctggctacgg aaggctcctc aggagcaaca gagaagatga 240
agaaagggtt atctgacttc ctaggggtga tctcagacac ctttgcccct tcgccagaca 300
aaaccatcga ctgcgatgtc atcaccctga tgggcacacc gtctggcaca gctgagccct 360
atgatggcac caaggctcgc ctctatagcc tgcagtcgga cccagcaacc tactgtaatg 420
aaccagatgg gcccccggaa ttgtttgacg cctggctttc ccagttctgc ttggaggaga 480
agaaggggga gatctcagag ctccttgtag gcagcccctc catccgggcc ctctacacca 540

0022/0-5945950

agatggttcc agcagctgtt tcccattcag aattctggca tcggtatttc tataaagtcc 600
atcagttaga gcaggagcag gcccggaggg acgccctgaa gcagcgggcg gaacagagca 660
tctctgaaga gcccggctgg gaggaggagg aagaggagct catgggcatt tcacccatat 720
cttcaaaaga ngcaaangnt 740

<210> 1210
<211> 591
<212> DNA
<213> Homo sapiens

<400> 1210
tgtacattat gtatgataat gtatgcacat tttcttattt ttaacttcag ggccatatgt 60
ggtgctgttg tcggagcagg tgaaaagtct gagtgtgttt aatttgcttg acaaacatta 120
ggctggggct tgtcaagtgg agtatagtga atgccaatct ttatttactc cttattgatt 180
accccaaact ctaaacatct gcataccttg tataaatttc cacttatgaa gctgaaattg 240
atgaatgaaa gcccatgcca tttcccgggg attggtacat ttcaggagtg aatcacaatc 300
aattattgtc ataggactat tgaaatataa agggagagct gggagggagg gcccagcgcc 360
ctgctctcac gattgattca ggcaggagcc tgttccgaac cgtgtgtgcc agattagccc 420
gtgacttcat gacgagcatg ggaagtatgc taattaacgg ctggctgccg gcgccctccc 480
ctaaaatggg aaaatacata tttgggggtt atgatttgat ggcgacgttc aantgcgttg 540
tcacagattg ggaaagcgtt ttcatcaagc tggcttgnta tgcctcgntt c 591

<210> 1211
<211> 721
<212> DNA
<213> Homo sapiens

<400> 1211
aatatttatg tatatttatg tgtgtgtggg ataagtgtgg atatgtttat acatactcat 60
atgtatgttt gtgtgtgtat ctgtctgtgc ctgcctccat tttcttttgc tttagagagg 120
ctatacttga ggctgccatc aagagtgaga agtttgaagc tggaagagcc tgcatgggcc 180
cttcttgaac tggtgcagca tgtgcagcat gacatcactc aagagttctt gtcagagtga 240
taatgaatgt ctggctattg taaacgggaa caagaaaact atttccagct gtgtgacaac 300
caagacgaca aaaagcattg cagagaatat tattgccaca aggaccctgc ttcatctggg 360
tctcagacga cgggaggagg ggcattttgg agcacgtgtt tggcatctgt gaacctttg 420
ttaggtagaa aacaaggcct gaatgaaagg cctttcaacc acttctggag cagagaagat 480
aggtagagtt actcattata ggcaggtttc attgtaggag tattcagtga ggaccccgc 540
cttggaagtc tgtaatcagc atatgataag gatggtgtgt tcttactaag agaataacac 600
aactgaaaca gaattgcctt ttgttaaggg gatgctttgc cttcttggac tacnattgtg 660
gggagaagga ttattgncaa ctaagtgagg cattcattct gtcccactat ttaatgnagt 720
t 721

<210> 1212
<211> 714
<212> DNA
<213> Homo sapiens

<400> 1212

0962946.0725

aataaatttg aaacagttaa tcaacaagtc ttgaattctg aggatttggt ggcctttaag 60
gataatatct gaattcattt ttcagtgatg tagaaaaata tgaaaactta caaatgtcct 120
taaaaggtgg agggttaggg ggtggaagac aagcaggggg ttaggagata agtaagcagg 180
ttctgagaaa attgagaata gagttgctga cctgagagtc atggtgtttg ggatacagtt 240
tgggctggat cagggaggtg tatcaataag ggcaggccaa aaagaaggca gacatttggc 300
tcactagtgg caaagggatg gattgggaga aggctgaaat tgagtagcta gagtagtatc 360
cagaagcaag agaatttaat agcttaattg agggctgttt atgtacccag gccctgtcct 420
aggcttccta cacatgatct catttaatcc ccataacata ttggagatag aaatgataat 480
acccactgta ggtggggaaa acagacctgg agaagttaaa atttcacctg atgccacaaa 540
gctagaatgt ggcagagcca gagaccatgt ttttctgaat tctcttaatt actaccttct 600
gtactgcttt tcttaattct gaaagtgaat ctactgntga cattaaactt gnatttgctt 660
attggtggtg taattttgta acctgacacc atnaccaatt tttttgggaa gtaa 714

<210> 1213
<211> 837
<212> DNA
<213> Homo sapiens

<400> 1213
attcagaatg aatagaattt acactaacat gctatataaa atgttaaagt ctgatgctgt 60
gaaagcaatc tagtgctata tttctacctc ctcatttgtc ttaattattt ggtaagtggg 120
attatgatga gtaactggag gggcttagaa acaaaaactg gatgaaagag tatgcatgaa 180
gaaaagcttc tttgataaat gtggagttct tcattataaa tatatattca tgaattcaca 240
gataagtact taaagaacag acagtttact tggcctaaaa atattttgat gtttactcaa 300
aaagtacctc ttcaggtctt gagaacatgg aaaagaattg agtgctttta aatacttttt 360
agaaagtaat cataaaagta aattgaattt caaacctatt tggcttctgt tttgtgaacc 420
tttgaactat atgtatgtgt ataagggtat acacatacat atatggcata taacaagtgt 480
acacatatac acataacaag tgtagaagta tatattacat acatacactc actctgtctg 540
gtataggcta attttgaaga actcccataa gtttctgctg cttctcccat aactgctgcc 600
accaccatca gaattcataa tcaaacctaa ccttttttgtt tggggcacca aatctgaaga 660
caaaattaat ttgcaccagt aaacttcaag ctgctttctt tcttgaaaac taacgtttaa 720
cgtataatgc tggttggatc tggtnccaat ggtgatgctg tgggtaatgt gcttanagcc 780
ctttgcaatt gcataattca ntaaggtttg gagcttgctt tggagttatt ggtgaca 837

<210> 1214
<211> 849
<212> DNA
<213> Homo sapiens

<400> 1214
cacagctgcc tgaccatcac ctgatggtca tctgacattc ctagtgcagg ggggatgccc 60
tctcctgccc tgctcatgtc tgactagcta cctactgtag cagcaccaca tctggccaat 120
ttttgtattt tttgtagaga cagagtttca tcatgttgcc caggctggtc ttgaactcct 180
ggactcaagt gatctgcctg ccttagcctc ccaaagtgct gggattacag gcatgagcca 240
cctcacctgg cctgagatgt ttgtgggggt tttgcttttg tttttgtaaa ttagaaacag 300
ggtctctcta tgttggcaag gctggtcttg aacttctggg ctcaatcaat cctcccacct 360
cagcctcccg aagtgttggg attacaggca tgagccattg cagccagcct gaattctaat 420
tctaattggt aaaaattagg actgtgccct tgccattccc ttcttttaaa cttgtaattc 480

0022470.6950

aattacttgg catgactggt ccttatatta taaaatatac taaatcaaaa atcatcataa 540
taaaagcagc tccttgagca actggacaaa aaaagcagct gggcataaac actagtaaag 600
tttaaacaat tgtatttggc aagtattccc caacgtataa acaattacca ctaaaaaaaa 660
tctgtcagtt cattttgagt agttatatta atccattcag ctattactgg nacatttgca 720
actcaacctg gctaaatcat tcagaataga atcctactaa aaattatacc atcatgagat 780
agtatcctgt antggaaaga cccaggcttt agactanggt taagtatcaa gtnccaaatt 840
attagggat 849

<210> 1215
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1215
aactgattca ggtagtttat aatggtaata tactctcaga tatcccaata tccaacactg 60
attgcatgca cattatgata aacaattatt tattcattag gcaaataaat attaatataa 120
tttctaatct tgaaaagcat tattttaaaa ataaaactat tcataaacat aagttgcatg 180
tgaattatga ataaattata atttattttt gtaacccaca ccttattttc caggaacata 240
aatgtgtaag acaaaagcac agtatcagtg gaatttcttt ccttttttaa aaattgatgc 300
ttaactttgt aaaactatat cccacattct gaatcctgga gtaacttcag ctctttagtt 360
ggagaggcta ttaaaacatt aagaaaagta atgttgaaag gattctttaa tgaaaccctt 420
agtgaatatg acagtgagta gtgaaaaata agtttattaa gctacttcgc atcctagagt 480
ttcatgaaac cctatgaagt tttaaataaa acatttattt actattaagt gtagttagtt 540
tttaaaatgt taatgaataa agaacttact ctctcagttt atcttttaca atctttgacc 600
agttaaaggg gaaacaattt ttacttaata aaatatttag aagtctgtag agtaggaatc 660
tttgaattgg atgaaattta gtatttatct aattcatata ctcaaacagc catcagatat 720
aagattcagg tcttactttc taaattatat taatggatgn atatatgaaa nttcaaaaac 780
aatttgggct ctttncactt gagaataggc atgaagaaaa taggaattca a 831

<210> 1216
<211> 814
<212> DNA
<213> Homo sapiens

<400> 1216
gacacactcc tctacaacac cagagactcc caaacacaag gccttatatt gactcatttc 60
agctcacatc ctggcgactc tcaagagaga aacctcagag tgactaaaat ctccataatg 120
agaagacatg tacattcagt atctattttg gcattttccc caatacatct ctgctcatct 180
gactcttatc ttggcatctg cttcctggtg gatctgaact gacccataag ccacgcttac 240
tggtgatttt ccagaagatg aatccggcct cggcgccccc tccgctcccg ccgcctgggc 300
agcaagtgat ccacgtcacg caggacctag acacagacct cgaagccctc ttcaactctg 360
tcatgaatcc gaagcctagc tcgtggcgga agaagatcct gccggagtct ttctttaagg 420
agcctgattc gggctcgcac tcgcgccagt ccagcaccga ctcgtcgggc ggccacccgg 480
ggcctcgact ggctgggggt gcccagcatg tccgctcgca ctcgtcgccc gcgtccctgc 540
agctgggcac cggcgcgggt gctgcgggta gccccgcgca gcagcacgcg cacctccgcc 600
agcagtccta cgacgtgacc gacgagctgc cactgccccc gggctgggag atgaccttca 660
cggccactgg ccagaggtac ttcctcaatc acatagaaaa aatcaccaca tggcaagacc 720
ctaggaaggc gatgaatcag cctctgaatc atatgaacct tcaccctggc gtcagntnca 780

0950450.0950800

caccagtgcc ttnaaaggtc catggcagta tcca 814

<210> 1217
<211> 846
<212> DNA
<213> Homo sapiens

<400> 1217
gacatcgacc tagtggtgtt tgggaagtgg gagaacctac ccctctggac tctggaagaa 60
gctcttcgga aacacaaagt cgcagatgag gattcggtga aagttttaga caaagcaact 120
gtacctatta ttaaattaac agattctttt actgaagtga aagttgatat cagctttaat 180
gtacagaatg gcgtgagagc agctgacctc atcaaagatt ttaccaagaa atatcctgta 240
ttgccatact tggttttagt attgaaacaa ttcctattgc agagggacct taatgaagta 300
tttacaggtg gaattggttc ttatagtctc tttttaatgg cagtcagttt ccttcagtta 360
catcccaggg aagatgcttg catccccaat acaaactatg gtgttctctt aatagaattt 420
tttgaattat atggacgaca cttcaattat ttaaagactg gcatccggat aaaggatggt 480
ggttcatatg tggccaaaga tgaagtacag aaaaatatgc tagatggcta caggccatca 540
atgctttata tcgaagatcc tttacaacca ggtaacgatg ttggaaggag ttcatatggg 600
gccatgcaag tgaagcaggc ctttgattat gcctacgttg ttttgagtca tgctgtatca 660
ccaatagcaa agtactatcc caacaatgaa acagaaagca tactaggtag gaataattag 720
agtaacagat gaagttgnca catatagaga ttggatatca aagcagtggg gcttggaaga 780
atagaccctg agcccttcat gccatggaaa tggaaacctc tttcatcaag gtccagnggc 840
nnccct 846

<210> 1218
<211> 858
<212> DNA
<213> Homo sapiens

<400> 1218
agataaaaag ggtacaactt gtttccatgt gggaggtagg aagaacattg cttttggagt 60
cagttctagg cctggtgact ctttgacttg ccagttgtgt gccatgatca ctccaagcat 120
ccattttctc atgtgtaaaa agcatgttaa aaattttaaa tgaggagttt aaaaattaca 180
ctcccagtag gcttactatg aggactaaaa taaataaaag tgtgaaatgc agtgccaagc 240
acataatagc tgctcaataa atggaagcta aattattttc cacagttatc tttcaaattt 300
cactttgatc agttttcaca gactatcttc taagcaaatt ctgtaggtgt ttgccttcgg 360
aaaagtgcgt ttgttgtcag tgaatggtta cagggaaaag gagatacttg tcatgcagct 420
ggaaacatga aaacttggcc ctgtgttctt aaaaatgaaa actccctgca ggatgggtca 480
agttgctacc ataggctgga gcctatgatt ctcagagcag catcactctt aatggcactg 540
ttctgcatgc ccttaccttg ctcattttgc tgggctcagt actaattttc atcccctagg 600
caggcaaact aagtgtcatt gtggcagttc cttccatact aagaggaagc attgatcact 660
aagagtcagc atggtttact atgagtaaat taaaccagac ctatcttgac ctctgacaan 720
gttgtcgtga tgaccatgtc agtttgggtn cttgctgtat gcccagtgtc tgacctgatc 780
ctagcatata gtagacactc tatatattaa ataaatgagc cacaatgtcc ttgtgagcct 840
atgaaaaaat actggccg 858

<210> 1219
<211> 820

09/20/2006 09:45:50

<212> DNA
<213> Homo sapiens

<400> 1219
ggccttttt ttttttttt ttttttttg cttatgaagc ttggaaatct agtgtatatt 60
ttacactaac agcatatctc aattgagatg gccacatctc aagtgcccag tagccacgtg 120
tggcctgagg ccatgactct gggcaataca gctttaagtg agtctagggc agggcagagg 180
gcagcacctg ggatcaggtg tggagcctgg ggccttgttt agcaccctct ggtgagggca 240
ctttctttcc ataaaaccca ggtcaagcat gcctcacaaa ggggacagtg gaagtgcctc 300
agtttacttg ggagcttggc ctctccagct tgccttccta ctgcctggaa gaagattggt 360
gtcctcttgc cttctctagc ccctttcaca agaaccctcc cagaatttag tcctatgaag 420
ggccaggggt gcaaggagcc acccacacaa tgacaggacc caccagcaat accggaagtt 480
ggccagccct actcatccaa attcccttct gccagctgaa catcacaagg atttcagact 540
gccatgctgt ggcaactcca ttttagggtc tgggcatgta aggattactg nattaatcca 600
ttctcactct gctaataaag acatacctga ggctgggtaa tttataaaga aaaagaggtt 660
tcatggactc acagatccat ntgacagggg aggcctcatg attatggcan aaggtggaga 720
agaagcaaaa tccatcttac atggcagcag gcaagaaagt tgtgcaaggg agctcccctt 780
tataaaaccn ttagatcagg cagggnacag tgactnacat 820

<210> 1220
<211> 737
<212> DNA
<213> Homo sapiens

<400> 1220
tactaaaaat acaaaagtta gccaggcatg gtggtgcatt cctgtagtcc cagcttactc 60
gggaggcaga ggcacaagaa ttgcttgaac ctgccaggag gcagaggttg tagtgagccg 120
agatcgcacc actatactcc cgcctgggtg acaaggcgag actctgtttc aaaaatagaa 180
ttttttctaa ggtaaaagga ggatgtacct taatcaggtt tgtcatcaaa catccaagcc 240
tttagcattg gctttgccct ttgcttttac acagctctga tcttgtgtcc tccttctgtt 300
atgtgtaaat ttgccttgtc tccattcttg ctttccagct attttagaat tgattctcat 360
atcctggcct gtcttttaaa tgtctctctt ctattttgaa acaatatact tctttcattc 420
aatcgaaaac ctttgctgaa tgcctctatg tgttatgccc agggctacat gctaagaata 480
gacagataag atgcagttcc gtagtttctg ttcccttgaa agagcagaga aataagtcac 540
agcactgtgt agtaagcata acactgtatt gtagaaaagt gtagactgaa gtgtggacaa 600
atgccagaga agcctagaat cctaagcagc tactttatcc tgggaaggat gggaaagaca 660
tcagcaaaaa aggtgaaacc tcagccctct tctttgncat aatgctctgg tttctctttc 720
ctanaagact gncttca 737

<210> 1221
<211> 698
<212> DNA
<213> Homo sapiens

<400> 1221
ggccttttt ttttttttt tgacggagtc tcactctgtc acccaggcat gagctctttt 60
gggcctgcat ctatcttttt taaaaaacaa aaaacaaaaa tacaaaactg taaatgaaaa 120
cagtagtaga actgttgata ggatttgaat tcctatagct atctatgcct tgataaactt 180

0052045-0072800

acagcatgtt taaactttct gggtctaagt ttccttcttc atctgtaaac aggggtaata 240
gtaccagcct taactattta acaaggngtc aatgcagatc aaataaacaa gagtatcaaa 300
ctaggtaact aaacaaatga taaaaatggc cattaacttt ctaagtgctg taagatcaaa 360
tggagtgaaa atagatcatt ttttaaaata aggcatatct ggaatatatg gaaataggga 420
aggaaatata agtagaattg aaagataatt tttggttcac agaaaaataa aggncgggtg 480
tggtggctca cgcctgtaat cctagcacgt tgggaggccg acggaggcgg atcacttaac 540
gtcaggagtt tgagactaac ctggcaattg tggtgaaacc cccgtctcta ctaaaaatac 600
aaaaattagc tgagagtggt ggcgcatgcc tttaatccca actgctcggg angctgaagc 660
acgagaatcg cttgaaccca aggggcanga ngtttgca 698

<210> 1222
<211> 778
<212> DNA
<213> Homo sapiens

<400> 1222
ggcctttttt ttttttttt ttaaataagc tactggagaa agtgtgcctt cgaaatgagg 60
acagtaagga gagataacga catgggaacc agggatatac cacaggaaag gagccaggga 120
gaacaattta ttaacaattt cttgcaacta tccagggaaa atataaatta tacaaaaaga 180
aatccaaaca aatcagaaaa aaaatgaaat gactcaatag aaaaatggac aaagccattc 240
agtcaattta aaggaaagaa gttaaacagc cacgaaatgt atccaaaaaa tgtccaaatc 300
tacctataat taaagaaact acatcaggtg cttgaaaaga tttagtatag ttaatgttag 360
ccaaatgtgt acaagaaaca agtcctttta cacactgtta atgtgagtgc actgtccgaa 420
gtttatagag ggcagactga cagcatttta ggtacataca cttgaaaggt agcatgattt 480
ctaacagttt ctacatgata cactcccttt tataaggtat gacagaagac tatgctgcaa 540
gtagaattag ttagatatct atgcaatagc agtgaaagat ctatcagagg tgttaggtag 600
aaaaagcaga aaataagtct tatttatgta gaacgttcta ttgnattcat atttatgngt 660
tttcatacac aataagtctg gaaaaataca aactatagca ggttagcaat aaagggagaa 720
cattcagacc canacgtggg gggcttacac ctggnaatca caacactttt gggangct 778

<210> 1223
<211> 873
<212> DNA
<213> Homo sapiens

<400> 1223
aatcatttat tttggaccaa gaagatctgg ataacccagt gcttaaaaca acatcagaga 60
tattcttatc aagtactgca gaaggagcag acttacgcac tgtggatcca gagacacagg 120
cacgactaga agcattgcta gaagcagcag gaattggcaa attgtcaact gctgatggta 180
aagcttttgc agatcctgag gtactccgga gactgacatc ctcagttagt tgtgcactgg 240
atgaagctgc tgctgcactg acacggatga aagcagaaaa cagccacaat gcaggacaag 300
tggacactcg cagtctagca gaagcttgtt cagatgggga tgttaatgct gttcgtaaat 360
tgctagatga aggcagaagt gtaaatgaac atacagaaga aggagaaagc ctgctgtgtt 420
tggcttgttc agcagggtat tatgaattag cacaagtatt gcttgctatg catgctaatg 480
ttgaagatcg agggaataaa ggagacataa ctcccctgat ggcagcttcc agtggaggtt 540
acttagatat tgtgaaatta ttacttcttc atgatgctga tgtcaactcc cagtctgcaa 600
caggaaacac tgcgctaact tatgcatgtg ctggaggatt tgttgacatt ggtaaagtgc 660
tccttaatga aggtgcaaat atagaagatc ataatgaaaa tggacatact cccttaatgg 720

0962046.0072000

aacaccagtg caggtcatgt ggaagttgca agagtctttt anatcatggg cagcatnaac 780
actcattcta atgaattcaa agaaagtgct ntaacacttg gctgctacaa aaggccattt 840
ggatatgggt ccgcttttac ttgaaactgn gcc 873

<210> 1224
<211> 833
<212> DNA
<213> Homo sapiens

<400> 1224
gctggtgcgc gccggagccc aaattccaag tggaaactgc aggcgcacga gggaggaacg 60
cgtggagcat gaaaaggcag ggggcctcct ctgagcgaaa acgagcgcgg ataccgtccg 120
ggaaggccgg agcagcaaat ggatttctca tggaagtttg tgttgattca gtggaatcag 180
ctgtgaatgc agaaagagga ggtgctgatc ggattgaatt atgttctggt ttatcagagg 240
ggggaactac acccagcatg ggtgtccttc aagtagtgaa gcagagtgtt cagatcccag 300
tttttgtgat gattcggcca cggggaggtg atttttttgta ttcagatcgt gaaattgagg 360
tgatgaaggc tgacattcgt cttgccaagc tttatggtgc tgatggtttg gtttttgggg 420
cattgactga agatggacac attgacaaag agctgtgtat gtcccttatg gctatttgcc 480
gccctctgcc agtcactttc caccgagcct ttgacatggt tcatgatcca atggcagctc 540
tggagaccct cttaaccttg ggatttgaac gcgtgttgac cagtggatgt gacagttcag 600
cattagaagg gctaccccta ataaagcgac tcattgagca ggangtggta taacagacag 660
aaatctacaa aggatccttg agggttcang tgctacagaa ttccactgtt ctgctcggtc 720
tactagagac tcgggaatga agtttcgaaa tcatctggtg ncatgggaac ctnactttct 780
tgctcagaaa atttcctaaa ggtaaccaga tgtganccaa ggtaagggac ttt 833

<210> 1225
<211> 856
<212> DNA
<213> Homo sapiens

<400> 1225
cagaaaagtt accaaacagt ggtaaccata acaagtacca acaatgaact atggggaggg 60
aggagaatct gatttccaga gttaccacat tataatacta ttcaaaatgt cacatttta 120
gcaaagatta catgacaagg aaaaaccaga aaagtatggc ccatacacag gtaaaaaaag 180
aaattaatag aaactacccc tgaagaagca cagacttcgg atgtacaaaa caaagacttt 240
tcatcaactc ttttagatat gctagaagag ctaaaggaaa ccatggacag agaacaaaaa 300
aattaggaaa gcaatgtctc atccaataca gaatatcaat aaagagattg aaattgtaga 360
aaagaaccaa atagaaattc tggagttgaa aagtattata actaaaactg aaaattcact 420
agaggtattc agcagcagac tggagaagtc agaagaaaga atcaacaggc ttcaagatag 480
gtcaattaag attatacagt ctgaggagca gaaaggaaaa agaatgaaga aaaatgaaca 540
gagcataaaa gacctctggg actctatcaa gcataccagt atatgcatga ggggagtccc 600
agaaggagaa gaaagagaga aagggacata atatttgaag aaataatggt agaaaatgtc 660
ccagctttga tgaaatacat gaatctagat attcaagang ctcaaagaac cctaaatagg 720
gtaaactcag aagacccaac cggatgcaaa gtgactggtg tggtggcagt gccggggtcc 780
agttctcaga ngttangcng aaatcgcttg acccggagca aaattgcggg agccggattg 840
cccaggcctc actggc 856

<210> 1226

0050503450-030200

0356750:20200220

<211> 842
<212> DNA
<213> Homo sapiens

<400> 1226
ataagggaaa aaaactccat taaaaagccc agctttcctc catgttagat gtgacttgga 60
aaatgagaaa gatttagcaa aattccaccg tgtcttttgc caggctagag acagggagag 120
cagagtaaaa ccctcaggct gctgaaattt ctaggctgtt aggaagcccc tcgaattctg 180
tgaaaatgag ggtttcttaa ctcacactga gagcggaaag gggcagaccc ttttcataac 240
tccctcaagt gtgtgttacc tttctttacc agcatggtaa gcaacaggac atatcccagc 300
ctcggacatg tctgtatgat ccaaggtacc caaagtcaga cagagtaaac tcaagcctgg 360
cactggcttt ctgccgcttc atgtgctttg gaaaaagcag gagaagcaat agcagcagga 420
gtccccagca gctggagccg caagaatgaa ctgcaaagag ggaactgaca gcagctgcgg 480
ctgcaggggc aacgacgaga agaagatgtt gaagtgtgtg gtggtggggg acggtgccgt 540
ggggaaaacc tgcctgctga tgagctacgc caacgacgcc ttcccagagg aatacgtgcc 600
cactgtgttt gaccactatg cagttactgt gactgtggga ggcaagcaac acttgctcgg 660
actgtatgac acccgcggga caggaggact acaaccagct gaggccactc tnctacccca 720
acacggatgt gttttttgat ctgcttctct ggcgtaaacc ctggctntta ccacaatgtc 780
caggangaat gggtccccga acttcaagga ctgnatgcct taagtgccct tatgtcctca 840
ta 842

<210> 1227
<211> 825
<212> DNA
<213> Homo sapiens

<400> 1227
tctacagtct gtggagacag gtgagcgacg aacttctgag acaggtgtgg gtgcgagggt 60
cgggagggtc atgggattgg gaccgaggtg tgaggaggga atctgcaatt ccttgctaca 120
cagagcgctg gcaacttctg acaggctgtt tctggggtat gggctgcctc gggttgttgc 180
tgttacaagg aaagaaaaga gttcccctgc ccaccgcctc ccagccactg ggctacctcc 240
tggcaggaaa tttgcaaact gagtttaaca agttaggatc agcagagggt agaggagggc 300
cctggcagat gtggggtcta gaagaggaca ggagttatca gggcctccgg ccattgtgct 360
gggcctttgc ctgtacaatt gtttctcaag cagttgtgtc cctgtggctt tggtgcgcct 420
gtgtgcactt tctccctcca cctggagcat gggctaacac cggaggaaag gaaaagacag 480
agtcagacag ggtaagtggg gctccctccc ctcttctctc taacggggct ggattgaggg 540
cctctggctg gggaggtggg ggtggagatc cagtaggagc aataacagag gaagggcagg 600
gcctgcccca tcacctgaat tccagagatg ccagtgtgca ctgaacccca ggcagggcgt 660
gcccaggacc ggatcctgga tggtggtaan ggacaaagct ggaagggaga cttcagggaa 720
ggagaaagga aagaagcana gccatgaccc agtcaactta canaatgctg ggagtcaaaa 780
cttctgggct gggtttcctg gctttttcac acacttccaa gacnt 825

<210> 1228
<211> 888
<212> DNA
<213> Homo sapiens

<400> 1228

atgctgaatt ttctgctttg gaaagaaaaa aaaaagaagc tattgtccac agattgatgc 60
ttccataatg gaatcagctt taattgcaag gaatgaagaa aaacaagagt ggaccttcaa 120
agctacaaca ttttcctcct cccctccctc cccaccagcc ccttccccac caagaactgc 180
tatgatgtcc caaagtgagg tgttgttgat tccagtctca atgggatttt ctgactttaa 240
tgtttgcaag gcatttcacc agaatacagc tataaacggc cgctcccaac aactgggctc 300
tgactcaccc acacccactt agtgtccact aagtagtcca gggtgactca gtttaagcac 360
atctcaggtg aggtcactct gcatatacct tggcttacct gaaatagcct gaacttgaat 420
ctcacataag ggaaaactag tcatcaatca ccaactcatt gactaccctc aggaagtcct 480
gcagaaatca agagtccttg aggagaacac gtggatcata ccaaaaccag ggtttaaatc 540
cattctgctt aagagttcta tcagtcagtt taaccataaa ttacgctaca gaaacaaaca 600
acccaaaaac ctcagtggct tacagattta tttttcactc acatgtttgt aatgatccat 660
cttggttgta atccatattg cttcagcacc cagtctaaag gagcagcctc taaggggggc 720
atgttggtct taaganggaa aagaaaggtg ggaaccacat gatggctctt tcatcttccg 780
ctaggaaatg atacccttta ctttcatgac atttcattag cccaaacaag tctgtgacag 840
gcccnatgtc agncaccaca gttaaatatc ctgcatangg agggatag 888

<210> 1229
<211> 810
<212> DNA
<213> Homo sapiens

<400> 1229
gatgcttcta aattgtgatc actttcagga ggcagcactg cagctggaag gatgcgagcg 60
acctagggtg gagtggctga ggcggcagat ctgaacttgc ggaggataag aacccaaact 120
ttgactacat cagtccgcac ctcgccagtg aagcaaagga cgggttatct ttttttttt 180
ctaagactca aacttgggca cttgatccct tttcttggat tgctttggag gagacgattt 240
gctggcaacg ttgggaacag tcaggactgt gttgtaactc ttacttttaa agcgacagta 300
naggatcaga ctttttaaat gtttggaatt caagatactt taggaagagg accaactctg 360
aaagagaaat cgctgggcgc ggagatggat tcggtcaggt cctgggtccg gaatgtcgga 420
gtggtggacg ctaatgtcgc cgcgcanagc ggggtcgccc tgtcccgggc ccactttgag 480
aaacagcctc cttccaactt gaggaaatcc aacttctttc acttcgtcct ggcgctctat 540
gacaggcagg gccagccggt ggagatcgag cggacggcct tcgtggactt tgtggagaat 600
gacaaagaac aaggcaacga gaagaccaac aacggnactc actacaagtt acagctcctc 660
tacagcaacg gtgtccgcac ggaacaggac ctctatgtca ggctcatcga cttcggtcac 720
caagcagccc atcnttccan ggacagaatt agaatcccga aatgtgccga gttcttctga 780
cgcacgaagt ggatgcgtan gtccaatgct 810

<210> 1230
<211> 818
<212> DNA
<213> Homo sapiens

<400> 1230
gacatgctag tgctcggccc acccttctgt ttttgtagcc aaggcttgat tggattttct 60
gtatgtataa tgggctgttt caaaatggtc ttgcctcatt gtttcttcat atcttattga 120
aaccaaccca ctgttgatct caatctgtgt aaggagaatg cggagtatgg cattcgcagg 180
actgaatccc tagattttaa gtttggaagg agatccaacc gggcagatga attgaccggt 240
ggtgaatatt ctgtagcatt ttcctccctg gagaggaatg ccgccaccgc tgggaaccgt 300

0962045.02800

ggactggcat gtgagccagt ggctgtgaaa ggcgctgtgc cctgtgtcct ccgtgtactt 360
tagagcagga gcgtcacaca tggtggagcc gggtgatatc ccgggcaggc tcccgaaagc 420
tcctggtggc ccatcagggg ctggtttttc caccttttt ttttttttt tttcctcgag 480
acaaggtctc actctgtcac ccaggcagga gtgcagtggc atgatcttga ctcactgcaa 540
cctttgcctc ctgggttcaa gcaattctcg ttccttagcc tcccgagtag ctggcattac 600
aggcactcgt caccatgccc ggctcgtttt tttttttgg atttttagta nagacagggt 660
ttcaccatgt tggccangct ggncttgaac tcctgacccc aaaatgatct gcccgcctaa 720
ccttccaaag gctgggatta caggtgtgaa ccaccacgct ggccctncta actttttttt 780
ttttnaanaa cccttattat cccaattttt tctatgaa 818

<210> 1231
<211> 679
<212> DNA
<213> Homo sapiens

<400> 1231
ttcaggtata ccaatcagac ctagatttgg tcttttcaca tagtcccata tttcttggag 60
gctttgttca tttcttttta ctcttttttc tctaaacttc tcttctcgct tcatttcatt 120
catttaattt tcaatcactc ataccctttc ttccgcttga tcgaatcgct actggagctt 180
gtgcattcat catgtatttc ttgtgccatg gttttcagct ccatcaggtc atttaaggac 240
ttctctacac tggttattct agttagccat ttgtctaatc ttttttcagg gattttagct 300
tccttgcgat gggttcaaac ttcctccttt agcttggaga agtttggtca tctgaagcct 360
tcttctctca actcatcaaa gtcattctct gtccagcttt gttgcattgc tggcaagtag 420
ctgcgttcct ttggaggtgg ggaggcgctc tgcttttag aattttcagc ttttctgctc 480
tgtttttttcc ccatctttgt ggttttgtct acctttggtc tttgatgatg gtgacgtaca 540
gatggggttt tggtgtggat gtcctttctg nttgttagtt tccttctaac agtcaggacc 600
ctcagctgca ggtctgttgg agtgtgccag angtccactc cagatgctgg ttgcctgagt 660
atcancagca gangctgca 679

<210> 1232
<211> 679
<212> DNA
<213> Homo sapiens

<400> 1232
atgctttcaa gtcctgtggg acgttaatgt tagtctttta agttgagtcc tttttggtta 60
tattaagagg tagttctgat gtttcaaagg ccatccagaa ataggaatgc ctgaacagga 120
atttccaatt aagtcggtca gaatcctgaa cagaggatat gatgaatata ttacggtata 180
actattagtg gtatctgtca gatgacttta attttaggaa tagcatgatc actgtgtata 240
atcttataca gaagagaact gaataatagt ttatgttcct gaaacggtca taggcatttg 300
agtaaaatgc agtatataga tttacttgtt aatattttgc ttaaagatga atatttaaaa 360
aatgaaaaag catattactt atacaggaca gtggaaaggt tgagaccaaa aagctggtac 420
ttttagtgtc ctgtctgttt agttctattc ttatttttca tttatgcaat gtttcaaaag 480
tgtaagatgc tttgtgatta aagtgtgcgt gtatgtatgt gaatgcgttt gtatgcatgt 540
acatacagtg tgtgcctttt aagtgcattt ttaaaattag ttggtttgnt acttaagatt 600
ttttttttt ttttaactga aagaggagct tgnctgatct aaaatagttg catgtancct 660
ggtggctaag gagagctca 679

0552945-070200

<210> 1233
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1233
aaggtcgaca gcccggacgt gaagaggtgc ctgaatgccc tagaggagct gggaaccctg 60
caggtgacct ctcagatcct ccagaagaac acagacgtgg tggccacctt gaagaagatt 120
cgccgttaca aagcgaacaa ggacgtaatg gagaaggcag cagaagtcta tacccggctc 180
aagtcgcggg tcctcggccc aaagatcgag gcggtgcaga aagtgaacaa ggctgggatg 240
gagaaggaga aggccgagga gaagctggcc ggggaggagc tggccgggga ggaggccccc 300
caggagaagg cggaggacaa gcccagcacc gatctctcag ccccagtgaa tggcgaggcc 360
acatcacaga agggggagag cgcagaggac aaggagcacg aggagggtcg ggactcggag 420
gaggggccaa ggtgtggctc ctctgaagac ctgcacgagt gagtgtcccg ggccgtgggg 480
tttggactcc tgagcggcag cggtgtgacg cgcaccctgg gtccgagccg ctcctcctgt 540
gccagtccct ctgggatggg tcccagggat gtcgtcctta ctcgggcctn ccaccttcac 600
agctgacccc agggccccgc ttggctggca cttncggcgg cccctacaga gaggcagctt 660
ccagggcttt gaacttgcct tgcccctggn cttctgggga aagtggcttt tttgccgagc 720
cttcaaggtg ggcccangta ggtaggcccc gagcccaagc accccggntt ttttgacggg 780
g 781

<210> 1234
<211> 717
<212> DNA
<213> Homo sapiens

<400> 1234
catgggtctt ctgggtctgt tagaataatt accaagtatt tggatagtta aaagttgcaa 60
cgctagggtc ttttatactt gctctaggac atagttgtca ggtatgaaaa atttaccatg 120
gcaagatcca tttgttgtat taatcactac ctttccctta gagttgattt atggttcaga 180
gggatattct ggaaaatgct tagatcaaac aagaccacat tcattcatgg agaaagagtg 240
gaatgcaggt tcgtagtaaa gaaaaataat ttccagggct cctgggaaaa agctttggtc 300
acttaaatgc ccttgggctt tctgtaagta aacatctgca gtcctctcta ttggttttct 360
agcatatttc acacaaaagc aggggagcag agtagtgtta attaccctga gccaagtcag 420
tattaatctc aggtctccat tgttgtttaa gattgatgga taaagatgtg actgcccaga 480
actacctttg ttctcttact ggaaagatgt ggacttggag gggcaatctg gagttaatag 540
tcagaactag attgtatcct ccttactggg atgtgagctc tgtcacctga gtaaccaatt 600
tctttgtaaa gggatgtaat ctcaaatctt aactttcaag ctgccaggct tggnttgctt 660
ttatatcccc aaatggaacc cggaaccttc tttattccaa tggtacattg ngggnaa 717

<210> 1235
<211> 749
<212> DNA
<213> Homo sapiens

<400> 1235
ggcctttttt ttttttttt tcaaatgccc ctttcattat gaaactcttt tttaactttt 60
aatttaagtt caggggtatg tgtgcagatt tgttacatag gtaaacttgt gtcatggggc 120

0505205-020200

tttgttgtac aggttgtttc atcacccagg tattatttta ttttcatttt agtttttaa 180
atttcttttt agaggcgggg tctcactgtg ttttgcccag gctggtctcg aactcctcct 240
ggtctcaagc aatcctctcg cctctgcctc cccaagtgtt gggattatag gcatgagcta 300
ctgcactcag cccaccattt gttttaaaaa gggtggatcc tatttgtata aaaagccatg 360
tgcattttct gtgtacttgt ctacacatta atttccaggc tgggcgtggt ggctcacgct 420
tgtaatccca gcactttggg aggccaaggg gaggcagatc atgaggttag gagatcgaaa 480
ccatcctggc taacacggtg aaaccccgtc tctactaaaa atncaaaaac aaaattagca 540
gggtgttgtg gcgggcgcct gtagtcccag ctactcagga ggctgaggca ggagaatggc 600
atgaacccgg gaggtggagc ttgcagtgag ctgagattgc gccactgccc tncagcctgg 660
acaacagaat gaggctccgc ttaaaggaaa aaaatttctg gaatgatgtc caataaatca 720
naaanaggga cttgaagact aatgaggac 749

<210> 1236
<211> 862
<212> DNA
<213> Homo sapiens

<400> 1236
gggggggagaa attacagact ctcagactga ggatagttat gacgaagcca ttaccagtga 60
aggcaatgta actgcagaag atagtgagga tgaagatgaa gacaaaattt ggcccccatg 120
tattagagta attgtcatta gatcacctgt gttgcagata ggatcactct ttatcattac 180
tgctgtaaac cctgctacaa ttggaagaga aaaggatatg gaacatactc tccgaatccc 240
tgaagttggt gtcagtaagt ttcatgcaga aatttatttt gaccatgact tacaaagtta 300
tgtccttgtg gatcaaggca gtcaaaatgg cacaattgtt aatggaaaac agattcttca 360
gccgaaaact aaatgtgacc cttacgtact tgagcatgga gatgaagtca aaattggaga 420
aactgtctta tcctttcaca ttcatcctgg cagtgatacc tgtgatggct gtgaaccagg 480
gcaggttaga gcccaccttc gccttgataa gaaagatgaa tcttttgttg gtccaacact 540
aagtaaggag gaaaaagagt tggaaagaag aaaagaatta aagaaaatac gagtaaaata 600
tggtttacag aatacagaat acgaagatga aaagacattg aagaatccaa aatataaaga 660
tagagctgga aaacgtaggg agcaggttgg aagtgaagga actttcaaa agagatgatg 720
ctnctgcatc tggtcattct gaaattctga tagcaacaaa ggtccggaag atgttggaga 780
agatgggttg gaagaaagga aaggnctggg gaaggatggt ggaggaatga aaccccatcc 840
anttnacttc gggaacacat ca 862

<210> 1237
<211> 729
<212> DNA
<213> Homo sapiens

<400> 1237
gttttactat gttgttggct attttatcgt tgagttgtaa gagttctttg tatattctag 60
atacaaatcc cttatcaggt atatgacttg caaatatctt ctcccattct gtgtgttcct 120
ttttgacttt cttgattgta tgccttgaat taaaaaaaat gcctaatttt gatgaattcc 180
aagtttatca tttttttaa ttttttcacc tgtgcttttg gtgtcatcta aggaggtttt 240
gcctatgcgg tcatgaatat ttactcatct gttttcttct aagagtgata atagtttcag 300
ctcttatatt gagatatatg atatattttg agttagtttg tgtgtgtgtg gtgtgaggta 360
ggggttcagc ttcattcttt tgcatgtgga tatccagttg tctcagtatc aattgttgaa 420
aagacatttc ccccttggat agtcttggtg ctcttgtcaa aaaccaaata actgtaaatg 480

0960203.0020000

gagcaattgt agtttgaatg gaatgggtca gcacttggtg gcagcagggg tcttggctat 540
gtagtttcat aagctcccac tcctggagag cctctgnttt cctctcaaag ccaggttttt 600
ctgnctcgct gcgttttggt gcctgaaagg cttgggtggc atggtacctg gagtactggt 660
gtcggagcnc aaagtgagga gaaaagacca ctctactttg tgggaaggcc ttgggcantt 720
tgggcanca 729

<210> 1238
<211> 620
<212> DNA
<213> Homo sapiens

<400> 1238
atcaagacca gcctgggcaa gtttgagaga ccctgtctgt gttagttcat tctcatggtg 60
ctatgaagaa atacccgaga ctgagtaatt tgtaaagaaa agaggtttaa ttgatgcaca 120
gttccacatg gctgagaagg cctgaggaaa cttataatca tggtggaagg cacctcttca 180
cagggtggca ggagagagaa tgagtggcaa gcaaaggggg aagcccttta taaaaccatc 240
acatctcatg aggactcact tactatcatg agaacagcag ggggaaactg cccctgtgat 300
tcagttatct ccacctggtc ccacccttga tacctgagga ttattacaat tcaaggtaag 360
atttgggtgg ggatacagaa ccaaaccata tcactgttat ctacaaaaga ttttttaaaa 420
agtagccaag tgtggtggta tgtgcctatg gtcccagcta ctctggaagc tgaggtggga 480
agaacttttg agctcaggag gtcgaggctg cagtgagcca tgattacacc actgcactct 540
agcctgggtg acagagcgag agaccctgtc ccaaaaaaac aaannacana aaaaaacccc 600
aagctaaaaa atttatatac 620

<210> 1239
<211> 837
<212> DNA
<213> Homo sapiens

<400> 1239
tctgtttgtt acagcttaga tacactactc tcttctacca gtcattactt ccttggccat 60
gttccgttgg aactcagggc tcctgcttac ctcaattctt cacttctgct gaactctgtg 120
ttactgctgc ctagaaaagg gtgtatgtgg ttaggagtaa taggtgaggg tgaattcctg 180
ggggacatac tgagttagct gcgggatcct gatatttggc tgagagtcta agaaattgtt 240
tcctaggtaa cttggtataa ttactctttg gtcatgctaa ttttaaatgt cagatgaaca 300
aatcaagagt aaattgggaa agttccatag gaagcctaag cactcatctt aaccttactt 360
agtcttctct taactggact tttctagccc aggaagaggt taggatagtt gttcttcaga 420
gtttggtcta cctttaagtt ttcatgattc aatactctta agatactttg ttttaaaatt 480
actgaaagcc tgattaaaag gagatgtgag aagaaagaat atttgtagaa tggtgtttcc 540
agcagtgagt cagaatctaa aatatgcaga gaagggaaat cagatgcatc ttcaaaatac 600
tggatttgat gtgaaagatt ttctgtttgg gtttggtcta cagttatccg tttgcaaaga 660
acttcagctg ccacctagtg atttccactg gagtgccgac ttantggctc tttcttactc 720
ttctcctcan gtgaacacat tctactcagg taggtgactt aaaagcttat ttaaataact 780
tttacaccag ggcattctaa agtagaggaa tcatcccttt gatttgagan atactat 837

<210> 1240
<211> 770
<212> DNA

0050209-0450209

<213> Homo sapiens

<400> 1240
aaaaaaaaat gtatttgagg cctgcatgat ctcaactggc tgtaaatacc tttcagattt 60
cctgggttat tgcttagtct tctactgttc ctttccgtct ttatctgacc aattcagagt 120
cctgcttcac aaatgccaaa ccattttagt ttctgtataa tggaggcatt tttttcctct 180
ttaggtcaca tgtctttcac agagattttt gtcatagatg tcttgaaata ggaactgtaa 240
aagacattat ttttgaacgt ttgaacattg ctttttattt tctcaaagga gtttgcacat 300
gatcaacaga tatattcatc aaacccacct acgagatgag aaacccagac tcaaaagttg 360
aggggaggag aagtgctcta ctttgagaag aaacaacaga aattaagctc aaatgtctta 420
taaaatgaat cctgaataat ccttttacat tcaaacattt tgacagtttt tgggcatgag 480
aggaggagtg aggagtttat ttggagccta aattatctcc aaattgtttg tttgctatta 540
aagggctgaa agagaagtaa gcaaaacaaa aataaaattc cactggctct ccactatgga 600
tgagaagttg cacaaaggcc tanctgtttc gttggtggag agctacatgg ctgcccaagt 660
tttgcaatag aacttanaga atggccttat atgggaatta aaggatggga agccaaatgn 720
ggttttgagg acttaaaccg gacacttcca ggtggtgcaa acanggtgcc 770

<210> 1241
<211> 763
<212> DNA
<213> Homo sapiens

<400> 1241
attcagcctt caaagggagt gaaattctga tacatgctac aacatggatg aaccttgaga 60
atattacatg aaataagcca ggagcaggac acatatttta tgattccaca tatactaggg 120
tacccagaat ggtcaaattc atacagacag aaactggaat agtagttacc agggactgtt 180
tggtggtgtt cggggtggga gtgggtgtta agtttctgtt tgggaagatg aaaatgttct 240
ggagacgtat agtggtgata gttgcacaga aatgtggatg tacttaaaga cactgcatta 300
tacttgtaaa atggttaaaa tagtaagttt gatgctgcgt atactttacc agggtaaaaa 360
caatgcaaga gaaagattgc cagtgcatgc tgaaaattaa gattactagg aggatatttt 420
tcactcttga gactaatgac aacaattgaa tgttgggaag cacagtatgt gggagtgtgt 480
aagtgggtct tgctagtagg ggatgtcact ttagcaaaat ctgttggaag ttgcttatct 540
tttgtgtgta ttaacatgaa gattttctca gttgaataaa acaagttaaa gaatactttc 600
tttgttgtaa aacagcatat ttatatacat ttataaatgc nttaagttct anaaggatca 660
tgagtaaaaa tatgaattta aaaattaaag tcacagattt aggtgntgca cctacctacc 720
ttatgggttt ttctactaca cttacatacc tnttnataat ctg 763

<210> 1242
<211> 810
<212> DNA
<213> Homo sapiens

<400> 1242
ggccttttt ttttttttt tttctggaga cggactctcg ctctgttgcc aggctgaagt 60
gcagtcatgt gatctcagct cactgcaacc tccgcctccc gggttcaagc aattctcctg 120
cctcagcctc ttgagtaact gggattacag gcgtgcgcca ccacgcccgg ctaattgttt 180
tatttttagt agagatgggg tttcaccatg ttggccagga tggtctcaaa ctcctgacct 240
tgtgatccgc ccacctcggc ctcccaaagt gctgggatta caggcgtgag ccaccgtgcc 300

0050203-0050800

tggcctctcc acctttttg catctgtcaa tgcccctagc tctctagcag cagctgtgca 360
aacaccagga gggcccaaag gggtcttggt aagacacttt tcagggcact gcggcagtgc 420
tatggtcccg tggtcaggag acctgcagcc tgtcagtaac tgacagtgtg accttgagca 480
agatcaactc tatggcttgc ctcctcttat caaatggcac aactatttca gcttagaagg 540
ttgttgtgag gttacaatga aaaagcataa tgacttttta aaaaatgact caacttgata 600
aaaatacaaa atactgcctt tattcaaaat gaggcagaga tgaataagga gggaattttg 660
tcccagttaa atatttattc catttaaact actcaaaagt ccagttgccc caataattaa 720
taattttcac tttcccaaac caccaagcaa ggngcactgg cattctcacc tgcgggacct 780
atgtttccca ttccgatgcc tttanttang 810

<210> 1243
<211> 711
<212> DNA
<213> Homo sapiens

<400> 1243
atctaaaatg cttttgtttt aaatggacaa aatttgccaa acacctttt acctttctgc 60
ctggaaaaat gttttgatgt gttggctttc cacctcctga tttttgtgtg tggctccttc 120
ccctaccccc tcccgccccg ccaaatgttg ttgtacactg ccttgtctgt ttcatttcca 180
cgtgtgggtt cactgaccac attagctggt agctcctggt attgtatgct tcctatccag 240
aatttgttcc atagaaaacc tgtgtcttca acatacttgc tttgaaatta ttttgatctg 300
tatcagcagg aataggtttt gagatcctgg atattaactt ctgggtgcca ctctctctag 360
aagctaattg actgatttgt ggtggaggcg agatgagagt ctatacattt gacctatttc 420
acagagctta ccttgcaagc tattgaaatg caaatacaga ctagcttaga gattctaaga 480
attcacacat tcagttcttt gtttttttct gaaaaataag cattcaaatt tcatgcacat 540
tctattattc atgtgcctta tatttaggtt ccgcttgtat gtctagataa atcttatcac 600
cattatttaa aatttcatga atgaaacttt gcatctttaa tactaacact agcctagacc 660
aatcaaaata atttgaaatg cagcccttaa atgaactnct ncgngtgtct g 711

<210> 1244
<211> 628
<212> DNA
<213> Homo sapiens

<400> 1244
ttttagaaga ggtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 60
tgtgtgtgtg ttggagtttt gctcttgttg ccctggctgg agtgcaatgg cacgatctca 120
gctcgctgca acctctgcct cctgggttca agcgattctc ctgccttggc ctcccgaata 180
gctgggatta caggcatgcg ccaccacacc ccgctaattt tgtattttta atagaggtag 240
ggtttctcca tgttggtcag gctggtcaag atagaatagt acttttcaaa atgtggtttc 300
ttgaccagca gcagcagcag cagcgtctcc tggaaattta ttataaatgc agattttaag 360
gccctggtcc catacctact gaattggaaa ctctagactg gggtccagca atctgtattt 420
taacaagcat gccagatgat tctgatgtac actcaaagtt tgggaactgc tgttaagaga 480
ggataatgaa agttangcag aggaaattag atttgatgtg ctcataagca gggatccata 540
naagattttt aatttttatt ttttaatcat ttacttattt tccatgtntc caagtcacga 600
accanccatg ggcacagacc aagaccaa 628

<210> 1245

0962945.0420

0050345 0050000

<211> 689
<212> DNA
<213> Homo sapiens

<400> 1245
acacccgacg ctctggccca cacagacgct actctgtagc atctcaggtt ccctctggct 60
gcactctgga ggaccacact cgttttcttt ttggctgcca gaggcccccg catccaccgc 120
tgagctggga gaaagatggc ggcagccgtg cgacaggatt tggcccagct catgaattcg 180
agcggctctc ataaagatct ggctggcaag tatcgtcaga tcctggaaaa agccattcag 240
ttatctggag cagaacaact agaagctttg aaagcttttg tggaagcaat ggtaaatgag 300
aatgtcagtc tcgtgatctc gcggcagttg ctgactgatt tttgcacaca tcttcctaac 360
ttgcctgata gcacagccaa agaaatctat cacttcacct tggaaaagat ccagcctaga 420
gtcatttcat ttgaggagca ggttgcttcc ataagacagc atcttgcatc tatatatgag 480
aaagaagaag attggagaaa tgcagcccaa gtgttggtgg gaattccttt ggaaacagga 540
caaaaacagt acaatgtaga ttataaactg gagacttact tgaagattgc taggctatat 600
ctggaggatg atgatccagt ccaggcagan gcttacataa atcgagcatc gntgcttcag 660
aatgaatcaa ccaatgaaca attacngat 689

<210> 1246
<211> 845
<212> DNA
<213> Homo sapiens

<400> 1246
aattatggcg acctccgcga cgtcgccgca cgcgcctggt tttccagctg agggtagatg 60
cggttactat gtggaaaaga agaaacggtt ctgcaggatg gtggtggccg cagggaaaag 120
attttgtggt gaacacgctg gagccgcgga ggaagaagat gctcggaaaa gaatcctgtg 180
tcctttagat ccaaaacaca cagtatatga agatcaacta gcaaagcatt tgaaaaaatg 240
taactcaaga gagaaaccaa aacctgattt ctatattcaa gatattaatg caggcttaag 300
agatgaaaca gaaatacctg aacaattagt tccaatttct tctctatctg aagagcagtt 360
ggaaaagtta attaagaaat tgagaaaagc aagtgaaggc ttgaattcta cacttaaaga 420
tcatattatg tcccatccag cattacacga tgcacttaat gaccctaaaa atggcgattc 480
tgcaaccaag cacctgaaac agcaggtatg tttaggctat agtaactact aaacatggcc 540
tttgttcatt tgttaaaact gttttaaatg taattattaa taagatttta ttttgtttac 600
ctttgagggt accaaatatt tccatttcaa aaatatatag aaacatatac aaaaaattga 660
gggcatggat gtgattctga gtaccgtata ttaaatattt aaaggcaaga gagaaaaatt 720
ttaagtcaaa taccaattat caatgtaagc atactggctt atgcagaaat taccctgctg 780
gtttccattt gaacccaatg ngttactcta gtttataaaa taatcntgng aagtttgcag 840
ctttt 845

<210> 1247
<211> 821
<212> DNA
<213> Homo sapiens

<400> 1247
gtgaaatgaa tgacagcaat attataagtc atccggttcc aagatggccg aataggaaca 60
gctccagttt acagctccca gtgtgagtga cgcagaagac agttgatttc tgcatttcca 120

actgacgtac caggttcatc tcactggggc ttgttggaca gtgggtgcag cccatggagt 180
gtaagccgaa gcaggacgag gcatcacctc acctgggaag tgcaagaggt cagggaattc 240
cctttcctag ccaagggaag cgtgacagat ggtacctgga aaattgggac actcccaccc 300
taatactgtg cttttccaac tgtcttagca aacggcacac caggagatta tatcccgcgc 360
ctggcttgga gggtcccaca tccacggagc cttgctcact gctagcacag tagtctgaga 420
tcaaactgca aggcagcagt gaggctgggg gaggggcatc caccattgct gaggcttgag 480
taggtaaaca aagcggctgg gaagctcgaa ctgggtggag cccaccacag ctcaaggagg 540
cctgcctgct tccgtagact ccacctctag gggcagggca tagcagaaca aaaggcaaca 600
gaaacttctg cagacttaaa catccctgac agctttgaag agagtagtgg ttctcccagt 660
acagagtttc agatcttgag aacagacagg cttgcctctt ttaaatgggt cccttgaccc 720
ccaagtagcc taactggaga agacacctcc aatangggct gactgatcct natacagctt 780
gggtgcccct ttgaaacaaa ctttcanagg aaggatcagg c 821

<210> 1248
<211> 696
<212> DNA
<213> Homo sapiens

<400> 1248
aatcttatgt cgtgccttat atatttttac aaaaagtggt atgtagatac aaatgaataa 60
atgtaaccac ttaattattt tgaaaatatc cataagattt agctgttttt gtatggttga 120
tatgtaagaa atttggtttg ttttaaccat ttataggtag gaaattatcc taaaaaataa 180
gatgcaagat tatgtttcgg tttcttcctc ccaatacatt tttatgtccc catttgatga 240
atttttctaa attccatttg cacacttaaa agttctaaat cattgcatat gttgtattga 300
atagaatgtg aatttctcag caagatatta ggtcccctct aaatgtaatc caaattgata 360
tcatttctat cgatttctgc aaattaaggt attctctgga aaaattagat tatttggatg 420
cttcatgaac aaaataatct gtatcttcat catatctaag attcttctat gacttccaac 480
tggaatattc agaaaatgat cacattacaa atgatcactc tagcttccat gccactttcc 540
tgaaatgttc ttgccagtga gaaatcatca cttcttcctt ggaatttcta aatattttat 600
tgntcaaagg cgtaattctt tactaagttg taaactcatt gagataaaga actatagtct 660
gnatatctgt tgnctcaaaa agtgttttac acatag 696

<210> 1249
<211> 777
<212> DNA
<213> Homo sapiens

<400> 1249
aatatggtta aaatttgaca agataatcct gaagtttgta atgacaagtc tggagacaat 60
ataaatgcct ttcagtgggg aggacgattt taagtttatt tatatgttta ctattgaata 120
tgtgcagtct gaaatgaatg gtgcatctcc atttgttttt caagatagat taaaaatcca 180
aggacagaag aacattgtga ataataagct cccatttgtt ggcgatagta ggtggagtga 240
tagaagaggc tgtgggtaca taaacaggtg atactagtca agagcaggtc aaatggaaag 300
aatgaagaca tgtttggagg ctactggaat aattccaagt aaaagttgct aaaggacatg 360
tactaggata atgacataat gctttgtaaa aaacaaatct gaaaaaatta taggtgaatg 420
taatgtacac aaagctatct gaacattgca gattatggga agagaggagt caaagatgat 480
gattccaggt ttcaaatctg gtgacaatat gtggttcatt tctcatctgc cctcccctcc 540
tatgtgtact ttgctgttcc ttctcttata agtggggtaa tgctaaagtt ttcttcatcc 600

0552545-020200

cttgctttcc ccactctctt tcttccacat tctctttctt cttcgtggnt tcagctgtca 660
tctctttttg gatgactccc catttttacc tctgggtctg atctctttct caacctctgg 720
gccttcatat cccttgcttg cttgggatgg tatcatggta tgancatggg cntangg 777

<210> 1250
<211> 848
<212> DNA
<213> Homo sapiens

<400> 1250
attataatga ggattaaagt aaagaacaga ccgggcatgg cagctcactc ctataatccc 60
aggactttgg gaggctgagg cagaaggatg acttgagcca ggggttcaag accagccttg 120
gcaacatagc aagaccccat ctctatttaa aaagataaat ataaatatat aaagaacaca 180
ttgcaaagca tgtggcagta gtgagctttc aggaactggt ggtgctaatg aataaatagc 240
accttagtaa tgctcattct atctcactca caaactggac agttcatgca tttgctgggg 300
tttcattttg aagtaagagg atggtttgtt tctgcttagt tttccccagt gactgagaac 360
cctagcaaga aaacgaaaca cctgtgcaga cacattatac ccatggagct gcatttctgt 420
atgtactttt tgcaggccat tatcagacat tacactgccc cagaggttaa ttgtaatctc 480
cagagtccat tgcacttcca cagtggctgg gatctttggc cactttccca gcctgtttat 540
ggggagcctg acctgaagca catctcctaa gtgttttcca agttggcact gagtctctcc 600
gacttggaaa tgccagcaca cagctttggt gtgcaatgat ttagctctta tgaaggcgcc 660
agtgaaatgc ccactcctac ccggtgttgg acattttgga gacctggaaa gaagtaagca 720
gtgttattga caagcacang ccctgcaagg ggactgtggg aagttaggca tgaatctggc 780
ccttggcctt aacaaggact ggtgaagaca ctnagcattt cctcatgcat caaaatggag 840
gccaccct 848

<210> 1251
<211> 749
<212> DNA
<213> Homo sapiens

<400> 1251
cttgctgcct cttccggctg cggggcgagt agtcgtccga cgtctggccg tgagacgttt 60
cgggagccgg agtctctcca ccgcagacat gacgaagggc cttgttttag gaatctattc 120
caaagaaaaa gaagatgatg tgccacagtt cacaagtgca ggagagaatt ttgataaatt 180
gttagctgga aagctgagag agactttgaa catatctgga ccacctctga aggcagggaa 240
gactcgaacc ttttatggtc tgcatcagga cttccccagc gtggtgctag ttggcctcgg 300
caaaaaggca gctggaatcg acgaacagga aaactggcat gaaggcaaag aaaacatcag 360
agctgctgtt gcagcggggt gcaggcagat tcaagacctg gagctctcgt ctgtggaggt 420
ggatccctgt ggagacgctc aggctgctgc ggagggagcg gtgcttggtc tctatgaata 480
cgatgaccta aagcaaaaaa agaagatggc tgtgtcggca aagctctatg gaagtgggga 540
tcaggaggcc tggcagaaag gagtcctgtt tgcttctggg cagaacttgg cacgccaatt 600
gatggagacg ccagccaatg agatgacgcc aaccagattt gccgaaatta ttgagaagaa 660
tctcaaaagt gctagtagta aaaccgaggt ccatatcaga cccaagtctt ggattgagga 720
acangcnatg ggatcattnc ttaatgtgg 749

<210> 1252
<211> 792

09/20/2005 09:45:03

<212> DNA
<213> Homo sapiens

<400> 1252
cgtggagaca tgcaccatcc tggtctggtg tggacaagga gcagggcagc ggggcaggca 60
gggtgaggat ggactccttg aacagtcttg cactgaggag agtgttgact gacatatttg 120
gactcttcta ccttgtctgt catggtctaa tgcatgtctt ttctgggtgt ggtttctttt 180
ctttttttt ttttttcttt tttcgagact gagtctcacc caggctggag tgcagtggcg 240
tgatcttggc tcactgcaac ctccacctcc cgggttcaag cgattctcct gcctcagcct 300
cccgagtagc tgggaccaca ggtgtgtgcc aatacaccca gctaatttgt gtattttta 360
gtagagatga ggtttcagca tgttggccag gctggtctca aactcctgac ctcagatgat 420
ctgcctgcct tggcctccca cgtgctggga ttacaggcgt gagccacgcg cccagcagga 480
tgtggtttct tgaggatcct ctcagggctt tggcctctcc cagctcctat cccactacta 540
ttagggtcac agaggaggag gtcaagactg ggatttaccc atgaaggctc tttggatgaa 600
atcagctgga tattggctgg gtcactttgt taaagaccag aacctggggt gggaacctgt 660
gcctgtttgg atgtcanaac ccacagccat gggcccctgg nccaactttc taaccaagtt 720
ttggccctgt tttgccttgg aacacttggc tttggggcaa atggtccacn ccctatcttg 780
gccttgngct tg 792

<210> 1253
<211> 642
<212> DNA
<213> Homo sapiens

<400> 1253
ccaagtttat tcctcctaat tatcacacac ctccttatct cactgctgag ccagaggtaa 60
cttaccaccg attaaggcca caggataagt ttctggtgtt ggctactgat gggttgtggg 120
ggactatgca taggcaggat gtggttagga ttgtgggtga gtacctaact ggcatgcatc 180
accaacagcc aatagctgtt ggtggctaca aggtgactct gggacagatg catggccttt 240
taacagaaag gagaaccaaa atgtcctcgg tatttgagga tcagaacgca gcaacccatc 300
tcattcgcca cgctgtgggc aacaacgagt ttgggactgt tgatcatgag cgcctctcta 360
aaatgcttag tcttcctgaa gagcttgctc gaatgtacag agatgacatt acaatcattg 420
tagttcagtt caattctcat gttgtagggg cgtatcaaaa ccaagaatag tgagtggctc 480
tttcactggc aattctcaaa tgatatacat ttaaagggca gatttttaa aaagatacta 540
ctataataaa catttccagt tggtcattct aagcatttac ccttttgata ctctagctag 600
tcaggtactc caaattgact ttgcancang gtggcanggt ca 642

<210> 1254
<211> 685
<212> DNA
<213> Homo sapiens

<400> 1254
aaagtacatc ctttttgtct ccatttttc cctttcttaa acaaagcaaa catttgtata 60
ctcacacact gaaggaaaaa agtgcaagtg ttataagata attagaacgg ttaggataat 120
tgccttttat ggatacataa tgcttcagtt gtttactgct aaatgaaatg taaaagtata 180
tattagacta aggaatagtg tacaaaatag atctaaatac aaaggaaatt gtgttctgtc 240
tgaaaatttg tagatgggtc taaattaaca agaataaatt aagaaggata tatacacact 300

US 2005/0059030 A1

catttatacc cttgtgcgta tctcacatat gtgaacacac acaccaaata cactgaaatg 360
tccatattta gtgccaaaaa ttgtgatgaa aaaccagtgg gattatcctt tgtaatagct 420
cattctttaa gttgcatttc aataaggcat tgctgtgaat ccagaggaga ttgtcaatta 480
cagaattttt ttcatgatct agtatttgct tggtgcctca gagaaaatgg ttgntcatct 540
ctgcccctca ctgntcatgt ttgggactat tggttggctg cgccagtaga gcttattctg 600
ataagctcac caaatttcag gagtancctc ctttcaataa cttcacactt gngcatgtgg 660
cttaantgaa cttactgggg actca 685

<210> 1255
<211> 752
<212> DNA
<213> Homo sapiens

<400> 1255
acccgcgccc ttggtcccgc ctcggagcct cggccccagc tccggccccg acacgggagc 60
tgctcttccc tcgcggaagc ggtgccgcct ggcccgcggc agcgcagacg ccctgccttg 120
ccctcaggct ggccgggccg cctgtggctg gagaaagccc cattgtggcc tgagtgcgcc 180
ccgcagccag tcgggatttc tctcgcagag agaggccttt gttcgcctca ccccatctga 240
ctgccccgtg ctctgtccca gcctcatttg ctccccaagc cccaacctgg gttcctgctc 300
tggcaacaag gagcaggtgg cagcaagggg cgttttcgcg ccccctcccc taatcaccca 360
ggaaatctct gagcttggcc acctgccctg ggggaggaga cgcgaggcct gcgcacccca 420
ctctgcttca tccctggttg ctctccccac tcctgtggcc cctccgccgg cgtttgtgct 480
gtgtgacatc cctctcctcc accgctgcct ggggttgggg gcagtcgggg cagtcaggcc 540
aggccaggcc acccctgggt gaagagggca ttggggccag aagggtctga ctgaccacct 600
tcaaagtttc tggtcttagc tgtcccgccg agcagaatat aaagtgctga aaccagaacc 660
caaaactggg acgcaagggc caaaaccttg cgcaaggggc caaccgggna atcgggncac 720
cattgccccc ttggnccttg ttggggccct tg 752

<210> 1256
<211> 561
<212> DNA
<213> Homo sapiens

<400> 1256
gctacagcag aataaaaact gctgtcaaag agctattgcc agctatcagt ggtggtacaa 60
ggacggtttt gtgttcatct gaaacccagc tgaatttata attatgtagg aaataaacag 120
ttaatatggt tatataatag aaacagtacc acacattgta actaaattat actatgtatg 180
cctacactac cattgtaact tttggaataa tgattatact atttgcctta ttgctttttg 240
aagtatgggt attttagtgc atactttgta gacctcaaaa cccatgaagg gtctcaaaga 300
agctggctgg atacaagcct gctgtggatg ccttttttact ctcatagatt gggattacct 360
aaattcaacc tattctctgt ttacaaactc caactagagc agctatgcga ccttgtgcct 420
ttagactctt ggtttttcat ttctccccgt cccttcccca ccttttttaaa gtaagccaca 480
gcttttctga ttgaaagagt gaaaggccag tgcatataat gacaaactga tgataacctt 540
atattggcag tnnggggggn c 561

<210> 1257
<211> 776
<212> DNA

0050450-0042000

0050350:0050800

<213> Homo sapiens

<400> 1257
tttggtaggg taaggatagg ctttcttgaa acactagcct ttagctgagg tattcgcaca 60
cagcccctgt ctctgcataa ggagataata accccaaatc aaaggactgt cttctgttaa 120
ttactaaatt cccatttttc cactttaagt tgtgtggctg gtaatagcgt ccgccttctg 180
atataagtca tagcatgcaa catgcacttt gcaagtgcat tttgcttgaa tattttgcaa 240
agatattcta ttgaattgag aggcagcaag tatttgacgt aatgattaca cttgatcaca 300
caaaaacact tcacagtgcc atggctggtc ttcatagtag tcagctcttg actttgcttc 360
tgtttttttt ttttttctcc ccacaagact gttagctttt gctgtggctt caggagcatt 420
tacatgtctt aaaagcttat aaataatata aaaggctgac tgtgttagta gtgcagtagt 480
cagtgcataa tgccaaattg gtagtgatgt ctgcacgaca tgctgacttg aataagttat 540
tttcaagttg tctcattaag gtttgaactg gggatgggac agagatagcc tttatcacat 600
atttcttttt aattnttatc ttactttntt tttttttaa gctaaaggca aaaagaatgc 660
acatacttat tttaatggga ttagaaaaat gagttgttcc ctggtaagct tgacccccag 720
tattntgaca agttttgcag caacccttaa aaacctgggn tttttctcat ccccnc 776

<210> 1258
<211> 726
<212> DNA
<213> Homo sapiens

<400> 1258
agacataaga gcaaaactgg agtcgctgac cattgagaag taagcatttt tagggaggca 60
agtgttgatc agaaaggatc ttgactacct ttgaacttga aggtcagaat gtttacacaa 120
gactcagtag aagtgaagag aaataaagtg agataagttg ttcactggag agcaaatttt 180
gaaaatagaa caattccaag ggatgataag tttaccttgt ggccctccgc ttgaatagca 240
ggtagagaat acagatcaaa gtcttagaat gaaggtcaag agtgtgtgaa accagagagt 300
ttgaaggatc accaacatgt tgtgatggag tgggctacag ttcaacacat ccctgttgcc 360
catattcttt gcactttggt gagttaacca taaataaatt cttgtctgat atcctcttaa 420
aatagaattt accttatttt ccaaccagat tatttaaatg ttttgcagaa gtgagtattg 480
atttactgaa ctgttcttta ataatcacag ctggaaattg caaaagatca tcaactatga 540
aactatataa atagaacgag ataaagaaat gggaaagtgc cttcttccct tagttctcta 600
ttcagttggt gaagaactgt aataaatctt attgaaatct agagttttta attaagaaaa 660
cagaaagctc atgttaaatt tacngataag agttatgcct ncctcaatat tgccaacttt 720
antttg 726

<210> 1259
<211> 773
<212> DNA
<213> Homo sapiens

<400> 1259
aatgatttcc tcagtgatta cgtacagagc gagtccctgc gggttagggg ccccctctgg 60
agccatcctg atggctttgg gggccttgct tccattttcc attattatgt ggactaccgg 120
agcgacagcg cagtccaaga ccttgcagga tgtctcgccg caagcaagcg aaaccgagat 180
ccctcaaaga ccccaactgt aaacttgaag acaagactga agatggagag gcactagatt 240
gtaagaagag gccggaagac ggggaggagt tggaagacga agctgtgcac agctgtgaca 300

gctgcctcca ggtgtttgaa tcgctgagcg atatcacaga acacaagatt aatcaatgtc 360
aactgacaga tggagtggat gttgaagatg atccgacttg ctcttggcca gcttcctcac 420
cttctagcaa ggatcagact tcccctagcc atggagaagg ttgcgatttt ggagaggaag 480
aaggtggccc tgggcttcca tacccgtgtc aattctgtga caagtcgttt agccgctcag 540
ctacctaaag caccatgagc agagtcacag tgacaaactg cctttcaaat gcacctactg 600
cagtaggctg tcaaacacaa gcgcagcccg agatcgcaca taaaactcca caccggggac 660
aagaagtacc actgcagtga atgtgatgct gcgttttcca gaaatgatca cttgaagatc 720
ccttaaagga cttacacgtt caacaagncc ttntaaatgg ggccanttgg tcc 773

<210> 1260
<211> 800
<212> DNA
<213> Homo sapiens

<400> 1260
aaattgctta ttaagcctca ggtttcttca cttacaaaat gaggataata attgcacctg 60
gtccacaggg tcatgacatg gattcagtag aaagctcagc agtgtacctg acttaacagt 120
tgttcacact aagatcttta aactttacaa tggtgaaaag gcaatatgca ttccatagaa 180
ctcatacaac cattttgttc ttaactttca gtaaaatatt caataaatat tcaataaact 240
aattcaaaaa attactttat tacaaaatag gctttgtgtt agaggatttt gcccaactgc 300
aagctaatgg aagtgttctg agcacattca aggtaggcta ggctgagctg tgatgttcag 360
tggattaggt attaaatgca tttttaactt acaataattt caacttataa tgaatttatc 420
aggacttgat cccgccataa gtcaaggagc atctgtacac caactgttgg ttattatttt 480
tcatccccac aagacagata tagttctgca tttctcatgc agattctaca ggcctttatt 540
ctaatttttt aatgtgccaa ttttatcata tttggtttct tcagtcttta atatattcat 600
gtagatgtct gtgaattata gtctatctat gcttgtaggc tttaaaatat atttaagtca 660
atggtgggta gaaattttat tttagcttaa aaaattaatc ttataaaatg cctgctgaca 720
tttcatgtaa gaattcttta ctcaattcat gnttttctct tcttnnctgt ggagtatatt 780
tattgactgc anatggaagc 800

<210> 1261
<211> 768
<212> DNA
<213> Homo sapiens

<400> 1261
gtcatggact ggaagttaag aacttccaca caataacaaa aattatgggc cagacacagt 60
ggctcacact tgtaatccta gaactttggg aggccaaggt gggaagatca cttgagccca 120
agagttcaag gctgcagtga gtggtgatgg agccatgcac tcagcctggg cgacagggta 180
agaccctgtc tcagaattaa aaaaaacaac aacaaaacaa catacataaa tacctgattt 240
gtgtactact gagaaaagtt cagttcttgg ggagagtttc agtttttccc atcaagaact 300
gcgtggtatt ttttgttatt tgtgtgtgtg tgcgcgtgtg agacagagtc ttgctctgtc 360
atccaggctg gagtgcagtg atgtgatctt ggctcactgc agccttcaac tcctgggttc 420
aagcgattct cgtgcctcag ccacctgggt agctgggatt acagacgcac accaccacac 480
ccagctaatt tttgtatttt tagtagagat ggggttttcc atgttggcca ggctggtccc 540
gaactcccga cttttcaagt gatccaccca ccttggcttc ccaaagtact gggattacag 600
gtgtgagcca ccactaccag ctgagaactg tgtgttctta tgctccgtgt gctacttata 660
tctcagacaa cgaccagatt ttttaccata ccaagtnaaa tagtaaggag aagggaaact 720

US 09/513,800

gtncatatat ctttttgnct tttaggaaac ttttacaaat gggattca 768

<210> 1262
<211> 853
<212> DNA
<213> Homo sapiens

<400> 1262
agccaccgct cccctccccc gcccgacccc tgtgcgaccc ccgcggggcg cggggtctga 60
gccttgcggg cctccgatcc cctcctcagc gttcgcgcgg ccgagcctgc agaaacagag 120
ctggggagaa agcgctctgg aggccgctgt gcaccccttc ctgcagggct cagactggcg 180
gtgtgatgtg ggtttattgc cttggcctga ggcaggtggc ggctgcttct ctcggagttt 240
tcaaagacag ggaaagtgat gccgagtggc tgaaggtcac tgaggacagt gccgggagat 300
acgtgaagat tccttcccag ggaaggaatc tggaattccc acgcatgagt agagggctct 360
agagagaccc gcgcgctggc ccttnccgaa acccccttggc tccagtgcac catgtgagtc 420
cctggccgcg ctcggtgtct ctccttcggc ccagatttgg ggatgggaat tcctaatgga 480
gaaatcgctc atttgcatag tcagtaccct cacgcctcct aagtgtagcc tcattatcga 540
cacagacgcc tgcagagtcg nttctctata atgcaaattt tgcacgatat ttttgaacaa 600
cgtttttgag ttatcatagt aaatgaaaag gcaattacta gttatttang aagaaggaaa 660
tggtttgaag tagagataac ttttttacct ctgggggggaa aaaaaggcna atgacttcag 720
attccatggg caggtcaaaa tcagaactgg taagatttct gcatatctgg ggagtatcnc 780
attaataatc attttcctga aaattacnct cttcttaatt aaactggant tttgcattaa 840
aaatgtgaag ata 853

<210> 1263
<211> 697
<212> DNA
<213> Homo sapiens

<400> 1263
gaagggagac agggaagtgc tgggaggaga agggtgggtc cctggcgagg gctccacccc 60
cgggcctgtg cccacagacc taggtgaaga caggcactcc agccttcacg tccaaatgtt 120
gcatttccca agaccacttt gacccgccac gcccccattc tgtgcctata aaaaccccaa 180
gaccctagca ggaagacaca caagctggat gccgagagaa acacattggc gaaggaatac 240
acaggtggat ggacgtcgag aggaatgcac tggtgtagga gcacactggg atgccagcag 300
gccatcgact ggtggaatga cacaaagttt ggctggggca gttggagaag agttgggcca 360
ccaagcggcc agactccagg ggaaaaccat ttcccttctg gctgccccat ctgctgagag 420
ctgcttccac tcaataaaac ctcgcactca ttctccaagc ccacatgtga tcctattctt 480
ctggtatgcc aaagccagga tacagaaagc cctctgtcct tgccataagg caggggtcta 540
attgagctgg ttaacagaag ccgcctatgg acggctaaac taaaagagca tcctgtaaca 600
tatgcccact ggggcttcag ctgtaaacat ttacccctag acacttgccg tggggtcggc 660
gcctnacagc ccgnctgtct gnatgctccc ctagagg 697

<210> 1264
<211> 844
<212> DNA
<213> Homo sapiens

0302045.0702800

0050250-050800

<400> 1264
tcttttgaac tctcctgtgg tcagctgtct gctttccttg ctcagcacgg tgttgggatg 60
gggtttgtaa atttaatttc agataacatc ttgtttgtga aaaaaagaaa actaaagatc 120
agtgtaacaa taatagtgaa gcatatggaa taaaactaaa gatcagtgta acaataatag 180
cgaaacatat ggaattgtga aggaaaataa ataggtttag tatacacaag aacatattgc 240
tctgatggtt ttattttatt ttatatttgt tttttctctg actttaaatg ctcctaaaga 300
cacatttggc atttttgcgc cagtagcaag gatgtgcaga gatgtattgg tggaagaatt 360
ctagtggttc cctattaaaa ttctataact tgccgtatta ccagtaaacg tgagctgcca 420
gagcctacag gtaggcaagg gctcccagaa ggagaggcat gaggaaacct tgccaagaag 480
gcaggggaag ccccagtggt cactcccaca tggcattcag acggagggtc ctccagcatc 540
gtgggctcaa gagttgtcca agtgtgtgtt cgtgtgtgtg tggtgtgtgt gtgagagaga 600
gagagagcac gctagctctc angatgggga tgttggggag gaggcctaga actgggtttc 660
tcctctgtgt aatctactct ctctttatcc tcctcccaga tcctctcacc ctcgggagaa 720
gactcttaga gaacttggta caaatgcata ttccttagcc acccccttct gaattcccgg 780
tttcanccag gaattggaac cgggccccan gaatgggcca ttttnaaatc agggatcctt 840
tctt 844

<210> 1265
<211> 834
<212> DNA
<213> Homo sapiens

<400> 1265
tttaaagaga tcaaactaga taaaagttta ctttattctt catgatgtct gataggttgt 60
ttgctgatat aggtgctgtg tctggttttc ctttcatgac ttgtacctag tgtagctatt 120
tatagtgtat ttgacaaact tttccacttg tagactcagg taggcctgct tgacctcctc 180
tggggatatt tgttaatgtc ttgtcagagt tgataaaatt ttccatgttc atgctttctt 240
ttgattctca taataatctt ctaaggtaac taaaaaagaa tccttatttt cacatttgat 300
taaggaagct ggtcctaaga gattaagtca cttggtcagg gtctcttggt gaggtactta 360
agtgaaattg gttttccagg tgctggcctt ccttttccaa actaatccta ctttgcgtgt 420
gacctgaaaa acatttttgt gttacctgtt tttgtttgtt taaacatgta cttgtttatt 480
agacgaaaca gggagcccaa ataaaaccag atgtgagctg cttttaacca tccctgaatc 540
gtaatgatcc atgtgtgaat tatccctttg tagctagttt ttaatcccag actgggctct 600
tccagttttt cagcctgctg tcaagtctcc ccagcccctg acttggtttt gtcagagcag 660
attagagaga aattctacag tgcgagaaca cgatgtgtat gatttangaa gcagaactct 720
ttttttttt ttttttttgg anatcagagt tttctttggn ttccatttac ctgaagtaat 780
gcattggtca tttaaactta aaagctttca agaatggggt catgaacatg tnag 834

<210> 1266
<211> 861
<212> DNA
<213> Homo sapiens

<400> 1266
agatggtact acgtgtgcat gtgccaccat gcctggctaa tttatttta agatggagtc 60
ttgctatgtt gcccaggctg gttttgagct cctggcctca agcaatcttc ctgagacagg 120
aatcccaaag tgctgggatt acaggtgtga gccactgtgc ccagccaaat attagaactt 180
ttaaattcat ttagtatgta agcttactgc caagcatgaa agaatcactt tgaaggccag 240

taatgtttta aaggtctgga agattctctt gagggctagg aagcattatg tgctaggttc 300
ttgaaccagg agaaaagggg tatcactaan aagaagggaa ggaatcctgg tatgcaaaat 360
agcttgggcg ctatccttgc acatttgaca agtttagtga agtactattg aactgttcag 420
taaagtatct gttgcctata gataaaatgt cttttgtaga tacttatata tctacctacc 480
tatagatatc tatatatctg tatctatata tcccttaaag ctaagctaat ttccttaacc 540
ttttctctgt tgatatttgt ttggtagcct ttatctgatt ctagttaata actcgtaccc 600
tgtcattttt ttaaaaatac cctttggntt tgtaatgtgt tctttcattc ttcttcccaa 660
ttcagttttg gtaccgttcc tgttacgtaa atctaatctg ggtgagcaga gactttctta 720
ggattatgcc cttggtgaag gcaatcacag ggcttaaccc tgaaggcgcc catactgact 780
ttatcagtta ttctanggag atcaggtttg gggcactaac ttaatctacc aactcctaag 840
ataattaatt tattattggt t 861

<210> 1267
<211> 800
<212> DNA
<213> Homo sapiens

<400> 1267
ggccttttt ttttttttt ttgagacagg gtcttgttct gtcacccagg caggagtgca 60
ggaacacaat cacagctcac tccagcccca acctcccacc tcagcctccc aattagctaa 120
gaccacaggt gtccagctaa tctggttttt gtttgttgta gatactgggt ctccccatgt 180
cacgcaggct ggtctcaaac tcctgggctc aagtgatcct cccacctcag cctcccaaag 240
cgctgggatt ataggcatga gtcaccgtgc taggctgaaa tcttattttt agtaacatta 300
cacaagtcta ctcaaataaa tttgataaac ttgaagaaat gataattttt caaaagaaca 360
caatttattg accctcaaga gagaaagtct aaaacagacc aattatcaca aaagaaacag 420
agaaaagagt taaaagactc ctctaccaaa agcaccagat ccattgattt tcacaggggt 480
aattctgaga aacttttaaa aatagataac atcagctggg catggtggct cacacctgta 540
atcccagcta ctcgggaggc tgaggcagga gaatcgctga aactcaggag gtaaaggttg 600
cagtgagccg agattgcact actgcactcc agcctgagtg acagagcgag actctaaaaa 660
aaaaaaagaa aaaaaaaaaa actctggaga gataaacagg cagatacaaa gaatcacaac 720
cacatcttgn gagcaataat ctcccangga accggtggcc anatgggtaa gcctaaaatg 780
taactgggca aattgctaga 800

<210> 1268
<211> 741
<212> DNA
<213> Homo sapiens

<400> 1268
agcagtaggc gctggggccg cggcggaccc tcgctgccct acctctctcg cgggttagtg 60
cggggtcggg ctcggccagt cctggccagc tccgggagag cctggcccga attcctgcct 120
ccaccctctt tctcgccgcg aaggtgactg ttccttttgc cccagccctc tcagacccgc 180
cccggattcc caggcatcgg gagacgcgga aaggagtggg gtctggtgga ggccccgggc 240
gtatcgctct ccaggccgcc ctccgcgggc ctgccccggc caccgcttta acgtcggaga 300
gaaggaattg gggagaaagg tttaagagcc tgcgacttcg ttgctgaact tttcccccc 360
aagacaggct tccgaaagct gcgccactgg agggatccgg gacctcagac tactcgggtt 420
tggccctggc atgtgtggga gcagttttta ttagagagaa tgctcaattt gcaagttaat 480
ttcaagtctc cagccacgtc aggaaaaaaa catgaaggaa ttaaaggagg ccaggccgcg 540

0050450.0004

caaagataac aggcgtccag atctggaaat ctataagcct ggcctttctc ggctaaggaa 600
caagcccaaa atcaaggaac cccctgggag tgaggaattc aaagatgaaa ttgttaatga 660
ccgagattgc tctgctgntg aaaatggtac acagcccgtt naagatgtct gcaaggaact 720
gaacaaccaa gancagaatg g 741

<210> 1269
<211> 811
<212> DNA
<213> Homo sapiens

<400> 1269
gtgcaatgag atctaaatag aaacagcaaa aagtttaaaa gcaggggcat gatattaagg 60
catagagttt ttcttagttt tctttttcct tgtttgttgg tttatgtaga gttaagttgt 120
tatcaggtta aaataatggg ttataagata gtattcgcaa gcctcatggt aacctcaagc 180
caaaaacaaa caaacaaaca acaacaaaaa aacacatagt ggatacacaa aaaataaaaa 240
gcaagaaact aaatcatatc cccagagaaa atcaccttca ctagtggagg ataggaaaga 300
aagaaggaag agaagatcac aaaacaacca gaaaacaaat aacaaaatgg caggagtaag 360
tccttactta tcaataataa cattgaatgt aaatggacta aactctcccg tcaaaagaca 420
gagactggct ggatgaaaaa acaagaccca ttgattgttg cctacaagaa acacacttca 480
cctatataga cacacacagg ctgaaaataa agggatggaa aaaaatattc catgccagtg 540
gaaaccaaaa aagagcggga gtagttatat ttacattaca tacaatagat ttcaagacaa 600
aatctgtaag aggagccaaa gaaggtcact acataatgat aaaggagtca gttcancaag 660
gtgatgtaac aatgtaaaat atatatgtac ccaacactgg agcacctaga tatataaagg 720
gaatattatt agacctaaag agagangcct tgatacaata atggctggag aactttaaac 780
cccattttca gcanttggac ngatcttccc a 811

<210> 1270
<211> 837
<212> DNA
<213> Homo sapiens

<400> 1270
ggccttttt ttttttttt tgtctgagac agagtcttgc tctaccaccc agtctggagt 60
gcagtggtgc aatctcggct cactgtagcc tccgcctccc aggttcaagg attctcctgc 120
ctcagcctcc caagtagctg agattacaga cgcccaccac taggtccagc taatttttgt 180
atttttgtag aaaaggggcc tcaccatgtt ggccaggctg gtctcaaacg cctgacctca 240
agtaatccac ctgcctcagc ctcccagagt gctgtaatta gagtcatgag ccaccacacc 300
tggcctaaat gcactcctat aagacaatgt ggaaggtagg ggccaaattc cacacaacca 360
gcttagaaga caaacttta cagcaaagag ccatcatttg gagaaggaca tatgtataat 420
ggcaaagagg tattaatacg tgaagtacct gtgacattga ggatcgttac ctagaattga 480
cattcagtat ttacttcaca tagctctgta actgggtctc ttgtaaacag gcattttgtc 540
ctccccttc caatactgtg aacccattat tatgtcacct ttcctcatga cagtcctata 600
aactaggtaa agaacaaacg tctctattca cagacagaac aggggaaaca agataaaaaa 660
tacaactttc cagtatttaa caaattctgt caagtctaga caaaaggtat gatgtctaaa 720
tgaactgtta gtgggctatg ttgaatctca aaattatctt tctccttttt tttttaagag 780
atgatctcat tctggtgncc aagctggaat gcaatggctt aatcatactn actggan 837

<210> 1271

09/25/2003 09:45:56

0956045.002200

<211> 819
<212> DNA
<213> Homo sapiens

<400> 1271
aaaaaaatga aaaaaaattt cttatgagag tgaatgttct cacctctaat atgtgtgggt 60
ttcaggataa gagtataaat ggagcctgaa tactctatct aaatatctca aaattatgaa 120
ttcccccaac aagttgctga ataaactgtg cgttgtctgc ctgccttgac aaacatacct 180
tcaacattta aaggtctggg tttaaatgta gaattctgag gctcctcagt gtcccatgct 240
ggaatgtggt ggccttggga aaatggacct tagctttagg cctggccctc ctctcttccc 300
aagctcttct tcacactgca agggcctccc agatgatgca tgaagatcct ggcccatata 360
ttcagctaca tccacatccc tagcaaaagg gaggctaagg ccattcctca ggcctagggc 420
actgcccctg gagggaagac cagtggaaga tgcctggaaa ggccctggaa gtagcttcaa 480
ggccatttcg atagagaatt ctgggggcct gaaaacctag agccaagggg tggacctggg 540
ctcangatag gcaagtcccc ttgatccaag gtatcactgt aggaggaagg gcagtcagag 600
gagggccaga gctgancctt ctaatgcaca gggcccanag tggagtgagg aacaatgctg 660
ggattagaca cccaaatcta ctgaattanc gaagtccaag ccaagtactg gaaacaaggg 720
ctggcatatc acaagccact taataagtgg tacttttatt attaagcccc tactgggatg 780
gcancctttt aaccccttga ggatgtnacc aatggantt 819

<210> 1272
<211> 745
<212> DNA
<213> Homo sapiens

<400> 1272
tgaatgctgg taccctcaat ttattattct tgtttggata tatccaattt accttgttga 60
acattattta ctaacagcaa tctgttagcc actaggaatg taaagacaca tcataatatg 120
accttctgag ggacaaaaat tgaggcctat ttatctttgt atcccaaatg cctggtgtac 180
agctggttct cataaaatgt tgaattgctc ccggaccaga ctttagagtt tggttttaaa 240
agaaaagcca gagttcagca acagcgaagg gaatttaatg tggagaaaga aacatgaacc 300
aagaggcaca gcttagtgtt gctgagatca ggtaaagcat ccctgtgact ggggcataag 360
gtgtggcagg gatgagaggg caagaaagag tggcacaaaa gtgcttgcaa tcacagcagg 420
gactatcaag taagggcctt gagtgttgtg ccaaacgact gtggaggttg aatttaatct 480
catggacatc tctagactat tctactttag agcaactcta acctgtatga acatcttcca 540
gttgctggat cattttcttt agggattttt ggagggggtg gggagaatct cagggaagca 600
ttcatatgtc aagcaaagtg acctagactt cagatttaca ctggaggctt cacggtacca 660
ggtgttgaaa tcacacattc tttggcacag aagctagcat tctcatttgn gcatacagnt 720
tatgnctcga ttattctttc agttg 745

<210> 1273
<211> 787
<212> DNA
<213> Homo sapiens

<400> 1273
atttacagat agattagata atctatctag agatagatag ggagagatat ctatcaatac 60
atatctctat ctagatatag atagatggtt ttctatatag acctatctat ctatatatgt 120

atacatctat atatgtctac acatatctct atacacatat atatatttat atctacatct 180
atatttctac atgtatatag gtatgtatat atctacatgt atatatgtat atagatagat 240
atatacatag gtatctgtat atatgcatat acatgcctat ctatctttat ctacatgtat 300
tacatagata gggtaattac tgataaatcc tttggccttc tttgtaaatc tctgggctaa 360
agacccctcc agtattatac atgttctggt ctagattgct cactcaccag ttctcctcac 420
tatctagaga agatccactt agcaggcctc cccttaaaga agggcacctt aactggactc 480
actcctccca tagtagactg cacagtacac aagcagaaga ggagagctca ataataaagt 540
caccataaag gataattttt aaatgaataa agaaatcaga aaatccagta ttggctagca 600
catatggcta tcggcaagct caccctacaa aaaaatagtg agaaaacagt tcgaatattg 660
ccgnttgggg cacatattct acaaaaaggg aaagntttga aatgnatata tatttaattt 720
aactctaaaa tatttgaagg caagcccagt ggctcaccct ataattcaga ctttgggagg 780
ncagggc 787

<210> 1274
<211> 786
<212> DNA
<213> Homo sapiens

<400> 1274
attgcaatgg aagcttaact ttagtttatt tctaagcatt ttttatatct gtggagtaat 60
agaaagctcc attactcaac tggaaaggac cctaatgaca gggcaactga acagattgca 120
catgggatag ccaaactgga ctttctttgt ttcctcttta aaagtttaca atgcagacca 180
ttttttgtcc cttccttttg tttcctctga ggggctgttc gccccaggca gggtccatct 240
ttctgatctg tccaacctcc tttgtgccac acggtgctgg tcacagggct tcagtagtgt 300
ttgtgttgtg cgctcacccc attccagaac aaatccaaga ggccagtcct ccataagcac 360
aaatggaatt gtgcaaccac cagaaaaaca ctactgtggc aaactggaga agtgccaatt 420
taattctaac tgccacgttc tcatgatgtg ctccaccaac tttttagtat atgagtcact 480
ggttttataa ggttgttttt accacagtgg tctttttaaa ccacctgccc actcccttaa 540
caagagtttt ataccaatta ttagtcaaca ctgataaaag gctttttag ggctttattt 600
gnttgagcct tttcagtgaa agaaggaaca tttcctatgg gctgctcact gccttaaaac 660
agatttctat gacagnttaa cagttgggtt aaatcctaaa ccattggtaa tttccactgn 720
ctttcattta caaccaagca acaccagnta acatagtagc ctcatctcta tatatctttc 780
tctttn 786

<210> 1275
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1275
gtgatagaag atggctggca ttccttcctt cctgagcaag aatttgaact ctattcttca 60
gctgtgagtt aacttttgag aactgtggat tatgagaagt aacccaatac cttatttgac 120
ttgtgaaaat gatcacttct tttgaagagt aataaggtga agttgactta tccattccta 180
atcttaatat atttaaaagg attgaagcca tgcagagtat gatctctgat cacaaaggaa 240
ttagattaat aatcagtaat actaagatat ctaggaatac ccccaagtat ttctaaatta 300
aacagaacgc ttgtaaataa tctgcatgtc aaagaaatta gaaaacattt tgaagtgagt 360
gataatggtt atgtaacata ttgaaatttg tggaatacag acagctaagg cagtgtttag 420
agataaactt acagctttaa aatttttact agaaaggaaa gtctaaaatt attgacctaa 480

0962946.0720

gcaccaattt aagaagctag aaaaaaaaaa gcaaagtaac tagaaagaaa aaataataaa 540
aataagagca gaaagcaata aaataactag aataagtaag tttagcaaag ttggttgata 600
taagatcggt atacaaaaac gaattgaatt ggcaacaagc gatctgacaa tgaataaaat 660
atttacgaat aaatttaaca aaagaaattc aaggctatac ctgaaagaca taaacattgt 720
ggaaaagttg cagagactaa ttaaagagag atctggnact caatggagac atatggtaag 780
gtagggtgct gctttgngaa gacattgata gagaatttaa cttgaggctg g 831

<210> 1276
<211> 705
<212> DNA
<213> Homo sapiens

<400> 1276
catgtccaga agcaatccac agtttgagaa accaagtttg ggtaagattt ctggggtcca 60
ttgctggttt acagggataa tcagacagac tatttgaaat ctatcaggat gatgatgatt 120
tctgtcaggc ctgatggggc tcagctcatg aatagcatgg gggttctggg atcagctccc 180
tgggacaggg caggcctgga ggggtcacct gtaaaaagtt ggtaagcagg ggcattgtca 240
ccaggcttcc tcttccatgt caatggagtc tggaggcaga gttggaatcc agctctgcac 300
ctttttgctg tgcaccctca ggcgggtcag caacctctct gaacacacac ccagtctaca 360
aaatagaaga aaaaccctat aaggtggttt ttggcagggg agaggacatg ggaagagatt 420
gaataaatta gttgtccatc ctagcataga gcccagaaca aggcactgaa aagacttctt 480
aaatttttt gtccaacaac atcttggaca gttctcattt atgtcaacat gcctggtcct 540
gattttgttg gtcatatttg catgtcatat tttaaaccat gaagcataat aaccaactaa 600
gtaagaaagc cctggcaaaa aagctgagag gtctggtgca atggatcacg cctgtgatcc 660
cagcacgttt ggaagccgan gtgggncaga ttgctttgnc ccaga 705

<210> 1277
<211> 752
<212> DNA
<213> Homo sapiens

<400> 1277
atgatgtttt gtgtgtgttt taattctcat ctatgacatt ggaataatga caggacctac 60
ctcatagaat tgtgaagatt aaatgagata ttataggtaa actaattaga acaatgtctg 120
acacataata agtgccctta agtgttaaat gagaatgatg ttattgtttt gtgttacaga 180
attagtgtat ctgtggaaaa ttggccaaaa caaattctga tggatcttct ttattgctgt 240
ttaaatattt cagacaaaat gaaatataac ctagaatatg aacagtgcta gatatgcata 300
cttgaaacaa aaatcatcat ggtcatttat atatttctat tttactaaga tttttttctc 360
ttataaaaat aaattatacc ttctaatagt aaggaaattg cctctgccag tttttgntgn 420
ttaatttggt ttaatttcaa acattaaaat agcacattaa ttgatcaagg aatctcaatt 480
actttcaaat gctgcaaata tactaatatt tattcatggc agtcacagca ggggtagagg 540
gacaggagac aaccatcttc tagaggaaga acttttaaaa caattatatt aattccattt 600
ataggaaaaa gaataattca tagaaaaatt aatggtgcag tcctaaaagc atgttccagn 660
tactattccc aaaacaatgg gtcagattct attggattca ttggctatta atcattttgg 720
cancttgggg ctatgctggc cctaacaggn tt 752

<210> 1278
<211> 810

0505305-050800

0050203-0050368

<212> DNA
<213> Homo sapiens

<400> 1278
tgtttttcca ttcccaagaa aatgcaagat tgtgttttgg ggaagattct caactgtgag 60
atgacagcgt atgctatgtt cctttcattg caattggtgt tttatagcat cctgcccagc 120
ctggcccgca tttggccccg tagccatgct gtcctcaggc taggatctgg ttagttgttc 180
cagactcaag ttggtccctc cttctgctct gtggagaaaa atcacaacct caaagggata 240
ggtttttttt tttatggttg ctcctgagag tggcatggtc cctctagatg tcagcaaata 300
ttaaggcaat taaataaggc aaattaatta tgggaaacat tagcattgat ttctgaagac 360
agtcttcttc ttgctgagtc tagcctcacc ccttcttgcc ttttaggaag agttccatgt 420
tcttagacaa gcttgttttc ggataaaata ttagactttt ttcttagaaa atccctttgt 480
tttaaaattg gtaatttttt aaaaatccca atctctggct acatttgagt ttgaggaaat 540
tcttttcac atctctaaat atgttncaat ttgatagtat tagtaaataa gtaaataaaa 600
atgccttatt ccacaaatgt ttattgagat ccttctaatt tccagtacca ggaatacaca 660
catcaatagg acatggntct tatacttcat aaagcataga aagcaaaaag aactgcagtt 720
atctggtcaa gtatctgatc tctgaaagag aagaaatttc canccngtat agtcaatatt 780
atttcaaaaa tttggngaat ggccattgaa 810

<210> 1279
<211> 764
<212> DNA
<213> Homo sapiens

<400> 1279
cccagctact caggaggctg aggtgggaga atcatctgag cccaaggggg ttggggctgc 60
agtgagccgt gatcagacca ctgaactcca gcctggacaa cagagtgaga ccctatctca 120
aaattaagaa aaaacaacac aaatttactt tcttagagct ctggaggtta gaagtctgaa 180
gtgggtttca ttgggacaaa atgaaggtgt catcagggcc cctctctctc cagaggctct 240
aggagagaac ccacttcctc gccttttcca acttctagga gccacctgcc ttccttggtt 300
cctggcccct tcctncacct tcaaagccag cagggtggca ctttcaaatc tctctctgac 360
cctggcctca tcacatctcc tctctgactc tcatcttcct ctctctttcc tttataagga 420
cccttcagat tacactgggc ccacccaagt aatccaggat aatctctcct tctcaaaatc 480
tgtaatttag tctcacctgc aaagtccatt tttgctatgt aaggtagcat gttcacagat 540
tccagggatt aggatgcgga catctttagg gggccattat ctgtctacta tatgcctttt 600
ctcttggtcc ccttttggtt ctggtaataa tctttgacct ataagacaag aataatgagt 660
tcacacctaa caatccatgg tgagtctttc tggngggctc tgcttatgga cagagcaggc 720
agntttcttt ttggctggca ctgggcatgg gactgntctt ttga 764

<210> 1280
<211> 758
<212> DNA
<213> Homo sapiens

<400> 1280
attatcaagg actagcataa ctgtgattat gtaaaaaaaa aacaaaacaa aacaaaaaaa 60
ctattattta gtctggtagg gaaatacttc tatgagtatg ttacaattgg aagttgtatt 120
tgtgcctatt ttatctagtt ttagttaatt ccattgcttc ggaagataag tggacgtcat 180

agatccatcg caagttctcg ttttttggat tttaaaattt tgaccattaa gttttctacg 240
atagataaac atgttgtgga catttaaaac cgtaatttaa aactatgagc gaaaaatctt 300
ttcaagatgg atacatttta attcattcaa gtagcatctg attagccaag tcggggaaag 360
attgcagtcc gcaaagctgg cttgtgataa ggttgaggtt acattttaag ggtttgggta 420
ggtgtgtttc ttacagtgct tttatatgtt aaggtatctt aagcagacac atggtttaaa 480
agttcagtat ttttagtact ttttcattgg cagaatttgg acaagctacc agaattgcta 540
actcctaaag gataaaagta ataataatag tgtgtcccag gcactgctta tttttacatg 600
gctcttttat gtctagcttt tccaattcaa cgttgagtca tgtttgctga aaatattttt 660
gggtattggt tgtcagaaat aagctggtag agatgaaacc caatgtgtaa aaagccctgn 720
gatgtggaga tgagcattgn cccaatttgg accgnacc 758

<210> 1281
<211> 705
<212> DNA
<213> Homo sapiens

<400> 1281
aagttatgct ctgtacttac tcaaaaaacg tacaatctaa ttggcaataa acaaaggaat 60
gaccatgtgg acctccctaa gttagtgagc cctggtttgc aaataagtgt tgcttacatc 120
ctaacacagg tttgcctccg ccccacccac acttccttca ggtgccaagt cctgcagctt 180
ggcagcccca gaggcctgct ggccccagct tttcacctcc atggcctcct tacacaggtg 240
accgcactgg actggccggc catgggggac acacttttgt tcttccatca gttggggttg 300
attaattgaa agacaatgac ttctcgactg tgcttgttta tcttcttaag tcctcttccc 360
cgccggctcc cgtccccctg ctttctaacc tcaggaaaca ttttcatgat caattcattc 420
tcttgtatcc tactttggta acatgacttt tttttttct accgcttttc agctgagttg 480
tggagtaggc agaactttat tatctgacct gggaagctaa ccactatgtg atactgtttt 540
ctgaggaaaa tatgttagat tccacatggt aacttgacaa acaaacttga aacatggctg 600
tttgaaagct gagatggttt gtgagaaaca ttgtgangca atgtggcgtg aataattgnc 660
agatacacca gtaagtacct ttgagtttan gggaagaagt gatta 705

<210> 1282
<211> 639
<212> DNA
<213> Homo sapiens

<400> 1282
agtagccgtg gcagcagccg cggcggctcc gcgagctcgc cgggtgggct cagttcagcg 60
cacgccggag ccgagcgcag ggggcgggga agggacctgc tgcagctgca gccgcctggg 120
cgctcctgga gcgcgcggtg actccccggg tcggcccgct ccatgcagct ccgttgcgga 180
agtgtagcgg ggggaggcgg cggccaccgc ggcactaagc acgagaggcc ggggctcggc 240
cccctgcagc actaggctct gggagccgcg cgcggcgcgt cccagtggcc cgactcgccg 300
tgcgcccggc gcccaccgca gcctgcatgc cccgcgctgc gccttgcccg gcccccgccg 360
cctcctgctc gcaccgctgc agccgggcgc cggagtaata tgctcactcg agtgaaatct 420
gccgtggcca atttcatggg cggcatcatg gctggcagct caggctccga gcacggcggc 480
ggcagctgcg gaggctcgga cctgcccctg cgtttccccc acgggcggcc agagttcctg 540
gggcttgtct cangacgagg tggagtgcaa cgccgaccac atcgccgccc atnctcatnc 600
tcaaggagac tcggcggctt gcctgggcca cttggctac 639

0956450-0704000

<210> 1283
<211> 790
<212> DNA
<213> Homo sapiens

<400> 1283
tttgaatact tggatgctag gggatataga ggcactgaga gataggtgtc ctccaaggat 60
ctattctgga tctttctctc ccttctttaa ccctttctc ttatctccct tttctttctc 120
ctgggtagtt ctgtagcttc cactgtcacc tccagtgtgt tttcccagct cttaccttca 180
tctggagacc agtcttgagt tttcatcctt tgggcagcta tcttccacca gtatctacaa 240
ttcagtctgc ccaaagcaca tcttcttcct atgctactct ctttctgtgc ttatgggaaa 300
ccaccatttt ctctctggca acttagcagc caagagaaat ggctgagtct tcaaggatga 360
atgtgacgtg gtacccaagg tcatttgatg tttctaccct taacacctgt ttgtcaccct 420
tcttgcactt gagcaaaact aaactgctgg tccctgtact tcccattttt cccatttatt 480
tctttcccaa tagttccacc aattagaaat gtcctaattc ttcccactcc cttattcgtc 540
agatacattt ttaagtttag gctcaaatgc cacctnccca gagtttcctc tgatacctct 600
ttgcagctag aaatgatctg nctttctggg aactcccata gcttcatact catatctatc 660
tatactgctt atggcacttc tcactgncta ctggaccttt taactcttta tatatggctc 720
ctccgatgcc aagtgtaaac tccctgagaa tagttaacga atcttttaa gttcccgnat 780
taaanctgnc 790

<210> 1284
<211> 806
<212> DNA
<213> Homo sapiens

<400> 1284
atttagatat ggaagctgag gggatgcaca gaggcagcca gaacctaggt cagggtctcg 60
ctcggtgctg accgcccccg gggtcgagta ggcgatgggg gagcccggct tcttcgtcac 120
aggagaccgc gccggtggcc ggagctggtg cctgcggcgg gtggggatga gcgccgggtg 180
gctgctgctg gaaggtgggt gcgaggtgac tgtaggacga ggatttggtg tcacatacca 240
actggtatca aaaatctgcc ccctgatgat ttctcgaaac cactgtgttt tgaagcagaa 300
tcctgagggc caatggacaa ttatggacaa caagagtcta aatggtgttt ggctgaacag 360
agcgcgtctg gaacctttaa gggtctattc cattcatcag ggagactaca tccaacttgg 420
agtgcctctg gaaaataagg agaatgcgga gtatgaatat gaagttactg aagaagactg 480
ggagacaata tatccttgtc tttccccaaa gaatgaccaa atgatagaaa aaaataagga 540
attgagaact aaaaggaaat tcagtttgga tgaattagca ggtcctggag ctgaaggccc 600
ctcaaatttg aaatccaaaa taaataaagt gtcttgtgaa tctggtcagc cagtgaaatc 660
acaggggaaa ggtgaagtgg ccagtacacc cttntgacaa tttggatcct aagttgactg 720
cccttgagcc aagtaagacc acaggggctt ccatttaccc ctggctttcc ccaaagtcnc 780
agaggntcat catgaagcng gaaaag 806

<210> 1285
<211> 883
<212> DNA
<213> Homo sapiens

<400> 1285

0050450-0042000

agtgaattac cacccagtgc cactcgattt aggctagata tgctgaaaaa caaagcaaag 60
agatctttaa cagagtcttt agaaagtatt ttgtcccggg gtaataaagc cagaggcctg 120
caggaacact ccatcagtgt ggatctggat agctccctgt ctagtacatt aagtaacacc 180
agcaaagagc catctgtgtg tgaaaaggag gccttgccca tctctgagag ctcctttaag 240
ctcctcggct cctcggagga cctgtccagt gactcggaga gtcatctccc agaagagcca 300
gctccgctgt cgccccagca ggccttcagg aggcgagcaa acaccctgag tcacttcccc 360
atcgaatgcc aggaacctcc acaacctgcc cgggggtccc cgggggtttc gcaaaggaaa 420
cttatgaggt atcactcagt gagcacagag acgcctcatg aacgaaagga ctttgaatcc 480
aaagcaaacc atcttggtga ttctggtggg actcctgtga agacccggag gcattcctgg 540
aggcagcaga tattcctccg agtagccacc ccgcagaagg cgtgcgattc ttccagcaga 600
tatgaagatt attcagagct gggagagctt ccccacgatc tcctttagaa ccagtttgtg 660
aagatgggcc ctttggcccc ccaccagagg aaaagaaaag gacatctcgt gagctncgaa 720
agcttgtggc aaaaggctat tcttcaacag atactgntgc ttaaaatgga gaaggaaaat 780
cagaagcttc caagcctttt gaaaatggat tgcttgaaca agcgccttga acttcgattn 840
tgaagaaatt actcctggct ttaaagaagt acttcngngt ggg 883

<210> 1286
<211> 764
<212> DNA
<213> Homo sapiens

<400> 1286
aaaagatgtc tataataaaa tttatttata ccagtggttc tcaaaactga ctgataatca 60
gaaaaccctg gggctctttc aaaaacaatt aacaaaacaa ttctattttt agacccatga 120
atacatattt tgggggagga aggaggaggg tatagatctg tattttgaaa agttccccag 180
gtctccttgg gaaattatat gaacaatcat gtttgggaac aaatgaatca tgttaccact 240
gggaagaagt ttgttataca tcctaaccaa gaaacctaaa tggttcttaa gcatctgcta 300
gcagaaacag ttataattat gaatacctaa tgtctgttag attttgctga tccctcacct 360
acctcaggaa gaaacaaacc caaaaaagta agatacggtc ttttttattt gtgttaatta 420
aaaaatgcta ctcctaaaaa tatactaact ttccacactt ataaaggtgt ttcttatttt 480
aaattcctca atgagtgcgg agaagacaac atagaagctt cttctctttc tttctgtctt 540
ccttcaactc tgtttctctt cttcctttta tctttccttt cttttcttct ttcctctgac 600
tggattgntt ataacacttt agaaaatttc cctgactgga agagggccaa tctgaatgag 660
cttttgtctg tcttgggagt agaatgaaag cagattctga gcatggaccc tgactttcag 720
aaagactncc atctcctnct cagtgcctac tcttncctca gtat 764

<210> 1287
<211> 763
<212> DNA
<213> Homo sapiens

<400> 1287
gagagggccc ggactagggg cggcgggcac cgcaggagct ccgcgcggct gcagcgcggg 60
cgggagcggg gacgcgatgt cgccgccgcc gcctccttgc gggccggggc tgcgcctccg 120
gggctgagcc gccgccagag ccgacagccg agcagccgct gggcgctccc gcggcgcagg 180
aggatgggct gcggcgggag ccgggcggat gccatcgagc cccgctacta cgagagctgg 240
acccgggaga cagaatccac ctggctcacc tacaccgact cggacgcgcc gcccagcgcc 300
gccgccccgg acagcggccc cgaagcgggc ggcctgcact cgggcatgct ggaagatgga 360

0950450.0020

ctgccctcca atggtgtgcc ccgatctaca gccccaggtg gaatacccaa cccagagaag 420
aagacgaact gtgagaccca gtgcccaaat ccccagagcc tcagctcagg ccctctgacc 480
cagaaacaga atggccttca gaccacagag gctaaaagag atgctaagag aatgcctgca 540
aaagaagtca ccattaatgt aacagatagc atccaacaga tggacagaag tcgaagaatc 600
acaaagaact gtgtcaacta gcagagagtc caagcagaag ggcagatgga cttcttcagt 660
gtccttcacg gactggatcc catcaaagaa ccttgaagaa gtggcttgcc cttgctggac 720
ctgaattcta ctgagtccct ggcaagaacc gnnttactgg nag 763

<210> 1288
<211> 733
<212> DNA
<213> Homo sapiens

<400> 1288
tgaaaaaacc aaagtgcttt atttaatcac ccggtctgcg gattgtgttg aatcaaggtg 60
tcagtgattc taggtggttc tgtctccccc taaactgaga cagagcagat acttcaggaa 120
aacgtggaag ttggtccgta cttctacaat cctactggcc cagcctgacc cccatgtgac 180
agctttgaga gttttcatgc agttggagac aaacacaggt caatgacaac aactacagca 240
tgtgatgtgt gctttatgat ctaagcactt tcagagcctt tcaaaaactc agggtctgtg 300
tgtctgggca ctgtgaactt gaaagaaagc cttcaccctg tccctgataa ccttgtgttg 360
tcctcagatg agcccatgtc taaagctccc atggccaaag acagttacca gcttctcacc 420
tagccggtca cctctgtcta acttggtatg atcactgaca actttggcca attaatgaag 480
aggtggcctc aaattgttca ggaactcgaa aagcacatgt ctgaaggggc taattgtagt 540
gataggaaac tataaaagta aggatgttgg attagaagtt agctgatcat caggagatca 600
agaccagctt ggccaacatg gtaaaactcc atctctacta aacatacaaa aattagctgg 660
gtgtggtggt gtgcacctgt agtcccagct acttcaggan gctgangcag gagaatggct 720
tgaacctaaa ang 733

<210> 1289
<211> 825
<212> DNA
<213> Homo sapiens

<400> 1289
tgggagaatt aactccaaaa ctttgacctg aatcatgtgg atttgtccca agattatgct 60
agatgcacca agcatggccc aaattggttc ttttttaaat cccatggggg aagtgcaggc 120
tccttcctgt ggtgcctctt tatagcctca ccaccatgct aacactgagc atggtgagga 180
ggaggaagct ttggctagct aaacatgttt aataaggcca taaaaactga gaaagaaaaa 240
cattcaactt tagctgaagc tcctttgata caaaagtttc attctgtcag aaataagcca 300
tagtacagac tcagagatag aggcagtttc tagagaactc ggtcttatcg tgggttctgg 360
agcacacctc tcagaccagt caggaacact ggggaggtga cagcaggtcc ccaggggcct 420
gcagggaatc tttcagctgc acggattggg atttccctcc aaaccaaact gtcctttaag 480
gggcagcctc ctcttttact aactccaccc tttctcatct ctgggaccca gcagggacct 540
ggagaggcca acagccactg ctacctttgt agtcttcaaa atattgaact gcaggtccca 600
agatgcattt caggatttaa gacaggtgca ctaatgataa ccattccttc accaagtagc 660
aacattcttg ccagagttct tgggaaacct ggtttttttct ctactctnca tctctgctgc 720
tctcatgctt taaattgata aaatatggct caaaaaaaga aagccgccaa agactcttat 780
ccttattggg gccccatcan ttgggcaccc caancccttan gtggg 825

0562045.0420000

0962946.0720

<210> 1290
<211> 799
<212> DNA
<213> Homo sapiens

<400> 1290
gcggctgaag ggccttttt ttttttttt ttggtagaga gacacaagat tattctaaaa 60
tgtatatgga aagcaattcc aaaaaagaag agtagaggaa ttgccctccc tgatgttgag 120
aaccgtacag ctacagcaca gcgttatacg gctcctggca gacaaccagt cctgctgcag 180
cgaggtgggg acaaggccgg gagcagctca cttcccagta gaggccatcc gatggcgcca 240
gggcacgggg cagctgccgt cctcatggcc cggggtaacg tgggcacagg gtttcctcat 300
cccactgtgc tctgtgtctc ccctgagccc ggtgatttta cgcacctgac ttcgttagtc 360
ttctcggcaa tgcccagcgt gcagaccagg ctcgagaggt gtgtcggtgt gcccagggtc 420
acgcagcttc ctggtggcca agccgaggtt agaagctagt tctggtgggt gcgaaagccc 480
ccgatgtcgg cagctctgcc accaggcccg cacaagcagg tggtgtaaga ggggaggcgt 540
tggggccggc agtgctcaag tcaggattga gccgtctatc tggaaggtct gttgagggtg 600
tgtgctggtg gccgggangt ggtggcaagg ctgactacct gccattttcc tgcagtgcct 660
aagcccagga aagggagcag ccccccggtca ggacccaact gaggacaccc catcctcatg 720
gaccttggtt ccgnttttcg ncccccacaa atgggcttcc aacataactt tccccgangg 780
cttctttctt ttccaaaca 799

<210> 1291
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1291
aacaagccgt taagctattc tagctcccca gacttgggga atgtgtacca tacataaaca 60
aaaattctct gtctaactct gttataattc atagcaatct tctttccagc atatcactta 120
aatgtagaag aggtactaat gtgtgtcatg aaaatctatt ctagattcgc agataactct 180
agttcccccg tgccccttt atgatttaaa atcctacctt aatagaggat ttttgtccta 240
tgatcaaaat atatttcaaa aacaatgttc ttctggcaga taaccctact taatctgaaa 300
gcatcagtga ttttattatt tctaataatt aaataataag taaaagtgac taccactcaa 360
tgtggaaaac ttggaaaata caaccacaat ttggagaata aaatcaccaa aaagtctcac 420
attcacaata tatcaactgt tatttatttt atgaatttgt gtatgtaccc atatatatgt 480
atgtttgctg tcatattatg tatttggctt gtaacctact ttttatcatc tgtaagtatt 540
ctctaatatt atttaaactc ctttgaaaat atttttaagc ctatataaaa ttgtcataag 600
aatgtccata gccttttaaa gatttccctg atgttggatg tttagattgg ttataattta 660
tcagttataa aaggctataa ttatattatt ggtcacaaat ttttgnctgc atttttgatg 720
actatcttaa gaatagattc cagcagtaga ctatttttta aggatcctta aaaaggngta 780
n 781

<210> 1292
<211> 846
<212> DNA
<213> Homo sapiens

<400> 1292
ttttcataag gacatcatat atgaattaga ataggaatgt ttactaactg ccctaaaaca 60
taaagatggt gctcctgaac gctacaccag ttgccccagg gcactgtagt gaactcacag 120
ggaggcagcc ggacattttt aaatttcaag ggaaacacag tgacatttgc cagctaccat 180
gcaaactgcc gttattaaat tgtttagacc cattaggcac ttgctttggc ctaggtccag 240
aacaattagg tacttctttt ggcctagagt ttccatgaaa aaaactactg aaacactaaa 300
gatgctggga accaagaaag tttaagaatc tctgtaataa gaataagaaa tctatacgag 360
gctgggcacg gtggctcacg gtggtaatcc cagcactttg ggaggccaac aagggtggat 420
cactggaggt caggagttcg agaccggcct ggccagcatg gcagaacccc atctctacta 480
aaaatgcaag ggttagccgg atgtggtggc gggcgcctac agtcccagct ccccaggagg 540
ctgaggcagg ataatggctt gagcccggga ggtggaggtt gcagtgagcc aagattgtgc 600
cactgcactc caggctgggc aacaagagtg agactttatc tcaacaaaaa aaaagaaaaa 660
aactatcaaa ctgctgtctc tgtcaggctc cactactctg gtgtgcaact gcaagaatta 720
cagacagagt gcctcagaga aactgactgg ccttgaaaac ctaaactatt cattgataaa 780
aaccgtgagt gatgatatgg acacctggaa ggaacagttt ggggtacagt tttaaaattt 840
ccagca 846

<210> 1293
<211> 851
<212> DNA
<213> Homo sapiens

<400> 1293
ctctttccgg gacaacatgg cgccgtccac gccgctcttg acagtccgag gatcagaagg 60
actgtacatg gtgaatggac caccacattt tacagaaagc acagtgtttc caagggaatc 120
tgggaagaat tgcaaagtct gtatctttag taaggatggg accttgtttg cctggggcaa 180
tggagaaaaa gtaaatatta tcagtgtcac taacaaggga ctactgcact ccttcgacct 240
cctgaaggca gtttgccttg aattcccacc caaaaatact gtcctggcaa cgtggcagcc 300
ttacagtact tctaaagatg gcacagctgg gatacccaac ctacaacttt atgatgtgaa 360
aactgggaca tgtttgaaat ctttcatcca gaaaaaaatg caaaattggt gtccatcctg 420
gtcagaagat gaaactcttt gtgcccgcaa tgttaacaat gaagttcact tctttgaaaa 480
caacaatttt aacacaattg caaataaatt gcatttgcaa aaaattaatg attttgtatt 540
atcacctgga ccccaaccat acaaggtggc tgtctatgtt ccaggaagta aaggtgcacc 600
ttcatttgtt agattatatc agtaccccaa ctttgctgga cctcatgcag ctttagctaa 660
taaaagtttc tttaaggcag ataaagttac aatgctgtgg aataaaaaag ctactgctgn 720
gttggtaata gctagcacag atgttgacaa gacaggactt tctactatgg agaacaaact 780
ntacactaca ttgcaacaaa tgggagaaag tgctgtantg caattaccaa aaaatggccc 840
atttatgatg t 851

<210> 1294
<211> 850
<212> DNA
<213> Homo sapiens

<400> 1294
ccatgagact cttatctttg aatgtttttc cgttgcttcc gcctctgtga acaacagaag 60
tgagaagggg gtctgttttg tgcacttatg gggtatactt ttatttgtga agggctttgc 120
agccagcttt atacatggat aatcttataa cttgatagat aaagatgaag gcccagtgta 180

tcataggtga gaaacttcaa tggtacatat ggtgcctcat aatcattcag aagcagaaca 240
ttggttcact cctcttaacc cacagcatgg gttaaagaga ccattgccaa gaggccttcc 300
ctcttctaga agggcatcat ttgttaggtc ctttttccat ggtttggaat taaaaaggca 360
atgactagaa acatatccct catggtagac tctgtagcag attctactgt aaaggctaca 420
caacagatgt taaattctct tgtgaagtta tgctaaaaaa tagaattggc taaacaggaa 480
agtacctgtg cagatgctgg cacttaaggc ctatggagaa aacatcaggt gttatagaga 540
gtctgttgta gggaattaac gaaaagacca ctgagttaag tcaaagaatg gtctatttga 600
gtttaggtgg tctggtttat ggggaccctg gctaaggagc atactccaaa ttcttggtgt 660
taaccctctc agtagtcata agaatagtct ccctggtgca ctgnattctc tcaaaggttt 720
taaatgtttg catgaagcca tctttagaac gtcagatggt ctctcttcaa ctggaatgac 780
aagagctgaa agaaatgtgt gacccacgan gacaccgaaa ccgatgaatg acatgctgag 840
actggaaatn 850

<210> 1295
<211> 800
<212> DNA
<213> Homo sapiens

<400> 1295
ttatagttat tcttttcctt atgaaaaaca aaaaggggac tgggcgtggt ggctaacacc 60
tgtaatccca gcacttgggg aggctgaggc gggcagatca caaggtcagg agttcgagac 120
cagactggcc aaaaggatga aaccccatca ctctactaaa aatacaaaaa attagccagg 180
tgcggtgggg cgcaccagta atcccaacta ctagggaggc tgaggtagga gaatagcttg 240
aacccgggag gcggaggttg cagtgagcca agatcgagcc acggcactct agcccaggtg 300
acagtgtgag actctgtctc agaaaaaaaa aagaaaaacg ggatcgagat ggtttgcagg 360
attagcaagt gatagagata tattgaagac atagaaagcc agtgtggttg ctcacaccta 420
taatcccagc actgtgggag gccaaggcag gaggatcact tgagtcaatg agttagagac 480
caacctgggc agcaaagtga gaccccatct ctacaaaaaa atttttaaa aatcagccag 540
gtacggtggt gcacacctgt aatcccagct actaaggagg ctgaggtagg agaatctctt 600
gaacccggga ggcagaggtt gcagtgagcc aagatcgagc cacggcactc tagcccaggt 660
gacagtgtga gactccatct nagaacaaaa agaatacagg atagggatgg tttgcaggat 720
tatcaagtga tncagatgta ctgaagacac agaaagncag tgtggttgct cacatctata 780
atcccacact ttgggangcc 800

<210> 1296
<211> 634
<212> DNA
<213> Homo sapiens

<400> 1296
aacgcgctcc ttgtcattgt cacactgtgg tggcctgggt ttgtcctcct tgcatgtgcc 60
agcagtgatt gatgactcac aggggcaatt ccattgtccc agagcctgga gctcctgttg 120
ctccggggtc ctctttggtg ttgaagagaa gcactcatcc cttcgtcaga agacacacac 180
acacacacac acacacacac acacacacac atacgcacac tccatgtagg cttagtaagc 240
ccagccagtc agtgcccagt cagccgtccc ccttccttgt ggctgaaccg caggaggtgg 300
gggtgcatct gctctgcacc actcagccag agatgcagga gcctctgccc agctcagaat 360
agatgatgtt ttcttattag tggctttatt taaaagccat cccagtcatt tcacattttt 420
tttttaaagt tttgattgac atctatttgg tcaacctgtg ctccctatgg actaaaatag 480

US 2005/0059030 A1

ctgactgggg cattgtctgg gcttattaaa cctgcatgtt gtgtgtgtgt gtgtgtgtgt 540
gtgtgtgtct gtgtacacgc acgtgtgcac acgcaggaca agcatagcat ggaatttgat 600
ggagtggatg tggagggaan tgaagtggnc tncg 634

<210> 1297
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1297
gagaaacaag ttggatgacc taacatcctg ttagagactg gctggaagag gaacccagaa 60
gtagactgca ctgtttgacc ctcaccggtc ggtcgtatgc agagtggttg tgttcttgag 120
ctgaggaatg ccggccttgt tgcctgtttg gctttgatta cagtatttgt agcagaatgt 180
tgctatggag attcatgcca ggtacgcagt gggaggtgat ctagaagacc gtgtgccagc 240
cactcgtagg taatcactgg cgctcagaac atgctgagac aagagttctc gttggtttat 300
ttccttcccc agctgtgtga gttttcagat ttcatcattg gaaatgatgt cttacccaat 360
gatacaaaag cagaggaaat gcctttgtag aatttcttcc aagggaagaa tgaaagtaga 420
gaggtgactt agcttagctt tgttgtctct agaatacgtt acagtgtgtc aagggaaggc 480
ttttcaaagt atttgtcaag ggattgtgag gaacgtagtc cattactttg tcaaagagtt 540
tatgtgaaaa gtagatattt gaataatttc ttatatttca agcagcgtta cagctaatgt 600
ttcttttaaa tcaaaccttt tatctccaag gttaactaat ggcacctcga ggttacatct 660
gcagcccagt gtctaggata gtagaggaac atagtgcaaa ttcatgtttg catcanaact 720
gggtgtggtg gctgacacct gtaaatncag ctacttccna aggctgaagt gggaaggatc 780
t 781

<210> 1298
<211> 786
<212> DNA
<213> Homo sapiens

<400> 1298
aacagaaatg ctgttcagtg aataccaatg cactgaatat acaaaaaagc ttagttacaa 60
agtaatcctt aatggaaatc tatattgaaa aatgttgagt ataaaagtca aatatttgta 120
acatatatcc aaggagtatt ccagagagca gacctattta tgaataattt taaaagtaag 180
cagagaaagt actctgtttt aaacactgta tacagtgttt gaatttgaat cattttccac 240
ttttatgttc tttataatgt ttagaaataa aacataggtt cttattttac acttgcatcc 300
atggagcaca aatcctacca acacaatcag gcaatgtaag ttttccaatt agaacaactc 360
aactgctgga attgttaagt aattgaatga tgagtatttt gtaagagttc agtaaatact 420
tgaatgagta attggatatt ggaaaaggca ttaccaggta gttcaaccat aactctcata 480
gtattttcta aatctgcaaa tatacatgat tttcccccaa aatattatac attaagttat 540
ttcagaaaat ggactagatg cctctcctta aaggtaaggt cataagcacc tcttgaagtt 600
gagaataatt taaaatcatt ctgttaaaaa tcacagtagt ttttattaaa attactattt 660
agtgtttttc gagtgaaagg cattgtgcan tgactttgnc taccttatct tatatagtct 720
taccatagtc ctacttggat aattttgnaa aatatcgatt ttatcagtgg agaaaactgt 780
gagtta 786

<210> 1299
<211> 836

0080704502

<212> DNA
<213> Homo sapiens

<400> 1299
cagcatgtta tcctcatttg acatgaaaaa atgtttgata gacctatggg gattaagata 60
aattaaaaat gtgtggggtt tgatgaaaga aaatctagag tcctagattt taaaaagcag 120
ggatactctg tcctttgcta taggtataag aatatatatt cttataagaa taccatcatg 180
aaatgtgtgt cttcattctt acaaaggaag aagtattaca gtatcctagc actaatctct 240
ctcagcaagt ttttattttg ttcttttaaa acagatatgg caacttaaaa ttcatctaag 300
ctttaacaag ggtctaaata cacccctgcc aagtgattgt ctgccctaca ttcatcccat 360
atgcctattt aagtttacat ttaaattaat tagatgtaaa taaaagtaaa aatttagttc 420
ctcagtctca ccaactacat ttcaaatgct cagtaaccac atgtggccaa tggctacctt 480
ttaggcagtg cagttttagc acattttcac tgcctcagaa agctctctta gatgtgtagt 540
actgactcgt gtctgactta aataactcaa taatccctgt ggctttcgat atcctcatca 600
ctgagctgca gtctgtcagg aatattttac ccactggttc tcattctaac cgatggaatt 660
atacagaata aatctaattg ttcctttcca taccagcact tggtaagtta ttatgtgccc 720
atgagtcctt gnctttacag ctaagtttct acatttcttc ctttattact cacgtgangt 780
gggatggtgg gaaccctcac catttaacta tcgggccaaa ggtgatatga anaaat 836

<210> 1300
<211> 782
<212> DNA
<213> Homo sapiens

<400> 1300
agaaaagatg tgttcatcta attcactatt ctccaaatac agaatagttt ctctatgata 60
aagcactggc atcttatcat gacggagagg gtagtagcct tgaatgatgt tttaactggt 120
aattgctttt atatcaaaca cttttcagct gattatgaac aagattcagc ctaattttaa 180
agctaaaatt aaaaatacgt ggggcctcag ttttacctat aaacatgtaa tgaaaaggtg 240
tttttatttt tttcctgtgg cctctcaagg aagaaatgat tctatcttta acacgttttt 300
atttatttta tgaatgggca aatatcctaa caaaaagaaa cacacgtctt accattcatc 360
ttgggagaga aggctattgc ttgataacta aggaatacta tttttgaagc acctttacag 420
tacttgacat gtcagttatg ttttcaatgt tcagccctat gtcagcctgc aggaatttct 480
catctgccca tgtctgtcta ttcatattgg taagtttcag cacagccctc tttaaaactt 540
cattgtgtta ctaatattta atttttaagt tttaaaatct agcacttctg tgctagatcc 600
tcgaatcaat ttttacattc ttttgaaatt tatagtaata tttttgcctc atccctatac 660
tcaataattg cagtgagcta tattatcact taagtaactt tattaccaat tgngctatat 720
tctaccatca caaagtattc ttttaggcat tcttcanatc tgcattttca ntggggcttc 780
ca 782

<210> 1301
<211> 823
<212> DNA
<213> Homo sapiens

<400> 1301
caaagtatac aaatgttggc agggagcatt cattttacag gtaaacatac tggcatagaa 60
ggattttagg caacctcatc agggtcacat agctaataaa tgtcagaatg ggattgaacc 120

0050204850

tgggactgtt agattctacg cctcctcatt cattcattta ttctctcact cattcacatg 180
ctctgttatg ctgtatggtg ttgagtacca tatttcagat attggcacat tcggcttgta 240
taaggggaga cgctttttg cagttggacg gccattgaag acaagttggt caccccaagt 300
tttctttcca gttcttctga aaaactcact aaagaaaaag aaagcaagaa atacagaaaa 360
gtatagaaaa ataatcctta ttcccaccac ctagaattaa gttgttaaca agatgaaaac 420
ttcatactga aaaaccaccc tttctagagg cgatttacca cttattcctt gcctttcaaa 480
atatttactt ttcaaggtaa tctctcctta ttaatttgaa aaaaaaaatg tttcttttaa 540
atagagattg ttaacttggg gtctggctag gctgtgaatc ctctgatatt aaacaaaaga 600
ttttgttgaa ggtgcttata aggctttatt tttcttcctt tctgctctag ccccatatgt 660
gcaggatttt cattagatcc tcaaagagtt ctgtgacccc caccctctcc ttctaccttg 720
gtactttgaa acattctcac tacagaattt antgggggaa tttgggcatt tatttggatt 780
attaagagtt gggaaactgn ttctaactaa gcagatgatg ngg 823

<210> 1302
<211> 794
<212> DNA
<213> Homo sapiens

<400> 1302
gtgtctttac tcatttcaaa ggcacttcgg aaagcaaaag atctttatga ttcagtctgc 60
tcttttgaac aagtgccctt ttgcttgttt ttttgttttt tttttaaatt aatgtattaa 120
tgtatattat tgactcagcc aatgtctaat tacccttaaa tttttttctg ggggagaaaa 180
cccatccttc ttctttttt tttgaggctt tgaattttct atttgtgaat ctgtcctttt 240
atttgaatat aatttttaa attgcattta ttttgtttta tgatcaagtg aaatttatgg 300
aaaaatatac taattaaatc atcctttgtt agctttaaat caaatagatt attgtacata 360
ataaagttta tagtttatga taaatgtatt cttttaaaac tatgggatga tccagttctt 420
ctctagttgt ctggaggact tttgtgtttc aggctattga gtgaatgaat tagctaatga 480
atactttggt ttaacttagc aaaggagaca caaaataatc taacatggca ctatagcatt 540
tattgctaat tttagaagga aaatgatttt gatttctgtc atttatatat acaatatttt 600
atgaatggga tagtacaaaa taatcatttg taangtccag gatgtgtttc tggtttcaga 660
aaaaaaggcc atttactcca tctatttgat ggtatacttg gtccttacag gaatctcatt 720
ttttggatct aaacattttc tttgcctanc acagtgttgn cagaaaaggg tctgcantgg 780
cttatacctg taag 794

<210> 1303
<211> 769
<212> DNA
<213> Homo sapiens

<400> 1303
ggcctttttt ttttttttt tggatagagt ttcactcttc ttgcccaggc tggagtgcaa 60
tggtgcaatc ttggctcacc acaaccttcc cctactgggt tcaagcgatt ctcctgtttc 120
agcctcccca gtagctggga ttaaaggcat gtgccaccac gcccggctaa ttttgtattt 180
ttagtagaga tgaagtttct ccatgttggt caggctggtc ttgaactcct gacttcaggt 240
gatctgcccg cctcagcctc ccaaagtgct gggattacag gcgtgagcca ccgcgcccgg 300
ccaagatcct gtatcaaaaa gaaaaaaaga agtagcagac acagtgtagt ccccgtggac 360
cctgcactgg cctcccttgg tgtggtcact gttcttcact gtggtgttat gtgtcacagt 420
cacagagcca cattgggaca ctctgcagac cacactaact gaagactgtg gctttcccat 480

0960345.0720800

gcgtgccctt tctgttctgg gaccccatcc agcaaccaca ctgcatttgt ttggtttttt 540
gagagagggt ctcgctctgt tacccagagt gcactggtgg aatctcagct tttaatatac 600
tttgggtttt ggaataattt taggtttaca gaaaagttga aggcgaagta cagtgggctt 660
acgctgtaat cccaacactt tgggaggcca atgcgggagg attgcttggg cccangaatt 720
tgagaccagc ctgggcaatn tagtgagacc ccatctnttt aaaaaatcc 769

<210> 1304
<211> 770
<212> DNA
<213> Homo sapiens

<400> 1304
agcatatgcc cagtctttgt gttatgtttc tcatggatga aaagacagta taggccaggt 60
gtggtggctt atgcctgtaa tcccagcact ttgggaggct gaggtgggca gatcacctga 120
ggtcaggagt tcgaggccag cctggcgaaa ccgtgtcttt actaaagtaa tcccaactac 180
ttgggaggct aaggcatgag aaacacttga aactgggagg tggaggttgc agtgagccga 240
gatcacacca ctgcactcca gccaggggat agagcgagac tctgtctcaa aaaaaaaaaa 300
aaaaaaaggg aaggattgat tgatttactg agagaagtat aaggaaacaa aatgccccaa 360
gacccttgtc cggaaggaag ggagggaggg aaaggaaagg aaaggaagga aaggagggag 420
ggagcgaaaa gacagtaaag acagtatgaa catttactga gagaagtata attatcaggg 480
gaacccgccc ccaatatttc aacggaggtt ctattttcca taagtgttgg ccggctgaga 540
aataaagagt acaaagagag aaattttaca gcttggccac caggggtgac atcacgtatc 600
ggtaggacca tgatgcccac ccgaacctca aaaccagcaa gtttttatta aggatttcaa 660
aaggggaagg cctgtatgaa cagggagtag gtacaaagat cacatgcttc aaanggcaaa 720
aagcngaaca aagatcacat gcttctgagg aaacaggcaa gggccaagcn 770

<210> 1305
<211> 825
<212> DNA
<213> Homo sapiens

<400> 1305
agcagttgca caacttccag caactttctc agccggctac taatgagctg aaagccagga 60
acatccgagg agaagagaaa gcttccagcc ctcctccctt caccctggaa atccagacac 120
ccccaccccc accctcagat cactttaaga taatttcttt attcgtttgc ccgacagacc 180
atggctccct ttggaagaaa cttgctaaag actcggcata aaaacagatc tccaactaaa 240
gacatggatt cagaagagaa ggaaattgtg gtttgggttt gccaagaaga gaagcttgtc 300
tgtgggctga ctaaacgcac cacctctgct gatgtcatcc aggctttgct tgaggaacat 360
gaggctacgt ttggagagaa acgatttctt ctggggaagc ccagtgatta ctgcatcata 420
gagaagtgga gaggctccga aagggttctt cctccactaa ctagaatcct gaagctttgg 480
aaagcgtggg gagatgagca gcccaatatg caatttgttt tggttaaagc agatgctttt 540
cttccagttc ctttgtggcg gacagctgaa gccaaattag tgcaaaacac agaaaaattg 600
tgggagctca gcccagcaaa ctacatgaag actttaccac cagataaaca aaaaagaata 660
gtcaggaaaa ctttccggaa actggctaaa attaagcagg acacagtttc tcatgatcga 720
gataatatgg agacattagt tcatctgatc atttcccang accatactat tcatcagcaa 780
gtcaagagaa tgaaagagct ggatctggaa attggaaagt gtgaa 825

<210> 1306

0050503-0070000

<211> 786
<212> DNA
<213> Homo sapiens

<400> 1306
gatcgggtag gcggctcttt gtcgaagcta gaggaccggc aggcggcagc agcaactacg 60
gcggcggcgg cagaacccag cagcgatgtg gaggtggaga cccacaggag ccccggactt 120
cacctgagct acctcagtgg tcaccaagag tggcaagata aagaaaaccc tgagttgggc 180
gggaccagga tgcctgaccg ggacagctat gccaacggta ccgggagcag cggtggaggc 240
cctggaggtg gtggcagcga ggaggccagt ggggcagggg taggcagtgg cggggccagc 300
tcagatgcca tctgtagaga cttcttgagg aatgtgtgca agcgaggcaa gcgttgccga 360
tatcgccacc cagacatgag cgaggtgtcc aacttggggg tgagcaaaaa cgagttcatc 420
ttctgccatg acttccagaa caaggagtgt agccgcccaa attgccgttt catccatggc 480
tccaaggagg atgaggatgg ctataagaag acaggagagc ttcccccacg gctgaggcag 540
aaagtagcag ctggccttgg cctttcaccg gctgacctac caaatggcaa ggaggaggtc 600
cctatctgcc gtgactttct caagggtgac tgtcagagag gagccaagtg caagttccgt 660
cacctgcaac gggattttga gtttgatgct cggggtggag gaagcactgg tgggggcctt 720
caacangctt cagtccttcc caggacgacg tcattgatct ctatgatatc tatgancntt 780
ctgaca 786

<210> 1307
<211> 685
<212> DNA
<213> Homo sapiens

<400> 1307
tactttctga gatgaactgc atttgttcag ataggattaa tagccaccac acccagtagt 60
ttttttttta ttttttaggg atatttgcct ccccggaacg ctgtgtcact ttgtgctgct 120
cctactaaca aagtatgaaa ggactgtcct ttctgcacat ctcagccaac tggtgatcta 180
agctcattaa aaaaatattg agtcactatg tcagggcaac tttgaatagt tggtcttctg 240
tactagtgaa gagggcatga tgttttagag tcatgatgga agcagtgacc tgcctccagg 300
agtgtctcag gagcatgagg acactgggca cctttctcac agcccaactg ggggatcatt 360
agctcaccaa aacttcttat atcttcccta atgaactggg ctctctgcaa atctttttt 420
ttttttttt ttttttttga gacagagtct cgctctcttg ctctgtcacc ctgactggag 480
tgcagtggcg caatctgggc aagctgtgcc ccctgggttc atgccattct tctgcctcag 540
cctcctgagt agctgggact acaggcgcct gccaccacgc ccagctaatt tttttgnaat 600
ttttagtac agatggggtt tcactgngtt agccaggatg gctcnactcc tgacctcatg 660
atccgcccgc ttggccttcc aagta 685

<210> 1308
<211> 733
<212> DNA
<213> Homo sapiens

<400> 1308
tttagattgt ccaaatggtt tgcaagcatg gaagtcacat ctccctcctt ccctcccatc 60
agccctccag ctgcctgacc tccctgggga atgccagtgt taaagcactc ctattgcttc 120
ccgagcctta gattgttctg tgaagtcacc aaagccgcca ttctggcctc ccttggataa 180

0000-0000-0000-0000

atggggcaaa tgagactccg ggagaggaat ggctttgtct gtaggtgcac agcatgtcag 240
tgacagagcc gtgcctggaa cccaggtctc ctgactggga ggtcccagct ctcgccgttg 300
ctctaatcca ggccaggtcc tactgtgctg acagaatgtc ggctgttggg cggtagtacc 360
catgctgccc tctaaccaca ggctgtctgt gtcatgtgac tcaatgcacc catcagtggt 420
ctgtgatgag tgggtgggag gatattttgg ctggcctctg gcccacttgt ccacgtctgt 480
cctggtgtgt cagtggctgg cttgtgacct ggcatgtccg tggcaggtgt ggaaggagag 540
cctctagtga gttcccagag tggacagagc ccttcagagc cacaggatcc cgaggcttcc 600
agcttctcag cccaggacac ctggtggcca tgggcaangt gagcaggacc cctgtggaag 660
ctggtgtgag ccantcagat canagaacgc agcccccttc ccgcccggat gaacatgaca 720
cttttgcccc cgg 733

<210> 1309
<211> 824
<212> DNA
<213> Homo sapiens

<400> 1309
aacttccata aaatgaagca aaatatgaaa acagctagtt gatttatcaa taatgtgaaa 60
ccctccttct gaatttttt ggtaaaaatt accacactga aaccaaaact taaccttggc 120
ttggactctc agataaattg cttttgtatt ctttgactac aaagtattct caaaaagaag 180
aaattatttc tgatggtaga tcaaactcta gccaagaagg tctagataaa ctagaggact 240
gtataattat ctaaagtaat tcaggggac ttttagaaaa attctttaat ttttgttcct 300
gtgtaaaaat tattattaat ggatggcagc ccaaattact attcttcttt taaaatttgt 360
ttcaagtgtg tcaccaggca ctcataaaat tcatttattt gttatataac tcaatgacct 420
gaaataatag gtgctcattg ctttttcatt tgatccttaa aaacaatttt attctgtcta 480
aaaaaaattc tcctgctaaa atccaaatga ttacctggct ataggaggag tcccatttta 540
tgaacatgta tgaaatattt agttggattc agatgaaatg caacttagag aaaggaatgg 600
ataccagtag agaagatgga aagagacaca aaaatcagac tttgcttaca tcaaaattag 660
gtctgntgtc taatcctggt aacctagagg caagctgaaa atagatggta aggataaata 720
gatttttaaa cacagtattt atatttaaca gaatgtcata aaaatgacag aatgccatga 780
aantcacatg tcaaaacttt gattaaacca accaggaaat ttaa 824

<210> 1310
<211> 746
<212> DNA
<213> Homo sapiens

<400> 1310
gaggccaata aacactagat gttttggtgt tttatttttt cttttctaca gacctgttag 60
gttggtgttt cagtccctgc tcaccactcc caagctcaag cccagctgca tttcaaaaaa 120
ctgtaactgc taaactttcg cagcatatat aacaggctca gcaaatgtgg tccttgggtt 180
caaatttctg tacttcataa ctttttcttc cagcccctag cccagttgtt ttatactgtg 240
ctcttagttg aggcttttt ttttttttt ttgagacaga gttttgctct tgttaccaag 300
ctggagtacg gnggcacaat ctcggctcac tgcagcctcc acctcccagg ttcaagcgat 360
tcttctgcct cagcctccca agtagctggg attacaggca catgccacca cgcccggcta 420
atttttgta tttctagtag aaatgggggt ttcaccatgt tagccgggct ggtcttgaac 480
tcctgacctt aggtgatcca cccgccttgg cctcccaaag cgctgggatt acaggtgtta 540
gccaccgngc ccagcctgca agaactgttt atgtcttctg ggcttctgtt actgcttgaa 600

0050945-020200

tcaaagcact tgtattggtg atctttttc agtattgggt tttgcttgag agtacattgc 660
ttcagagctc tttacaaatt actgntctaa tccacatgac taggcaataa ngggctccac 720
ctttgaatcc ttaaacatca gtgngg 746

<210> 1311
<211> 756
<212> DNA
<213> Homo sapiens

<400> 1311
tttttacat ctttcaaata gagatcaatc ataatattgt taaaaggcta ttggttagaa 60
gacagtcata atgtgatgga ctttgtgtgc acacaagtga acttgatgta aaaaacttcc 120
attttcacat tctggtggta tctttaatat catgacttgg agagggacgt tagtagatga 180
gaaacataat ctatcagaaa ctcttatagt tctctcacta caaatatggc atcagcaaaa 240
ctcctaatta ccagagatga tgctagtgta gaaaaaatcc atggacaagg tgagttgcac 300
agtgatttag aagagtttta tccaaatatg aggaatttta gaaaaccttg attacctatt 360
ttgctttcac tttctgtctc atgtgatcat aggagtgata tgacatcaat acacacattt 420
atataagttc aaaagtgtaa aaagtaaaat agaggttcct cttcaaagac tttcctccca 480
atctcattag gaataaatag taacctctct tagaagcaaa atttttcaa agacctgtgt 540
taacattctt aaatatctgc tagccgtaat aaagaaatga atgtacttta tgtccttagc 600
tcccacaatt taacctaaat atttgccctg gcatgcttat actggtccaa gcaagcatta 660
ggtcatagcc tgtcctcttc cttatttcaa ggtgttttta cctttctnca gattccaaaa 720
gttacttcct ccttnctttg gtctcctctg nctttg 756

<210> 1312
<211> 650
<212> DNA
<213> Homo sapiens

<400> 1312
tagcattcag taaatttcac aacacctttc tgcctccctc ttccctctcc cctctcccct 60
tctccccacc tcaccccacc tcacccccctc cctcttcctt cctcttttcc ttccctcctc 120
ctttcttttt accctctcct gcccctgacc cggtacctat accacttgga ttatttacag 180
caaatcttac agatgtcagt attgtcttgt tctgaagcta aaaaggacaa tgagttcccg 240
ctgacctcgg tacaatggat ctcgctggag cacaatatgt attttataca ggcagtgaaa 300
agcctacaag taattgagag agagagaaat gtcactgtag catttctgtt gacactgcac 360
tctgcgtgtg gagggaagcc cggggcctgg cggcagagga gcagccgcgg ccgcgctgtg 420
cacccaggaa cctgtccttc aggagggagg cggcggtaga aattaatctg ctcagatttt 480
ccaactaatg aagtattccc aggaccgaag gggccacaca gagacgtctg cggcgctgct 540
tcccattcgc gcagatgcac acggattccg ggcccagcgc taactcggat gtgttttcca 600
gctccgttta ttgncttcca taatgcttag cgtactgntt gnatatgttg 650

<210> 1313
<211> 685
<212> DNA
<213> Homo sapiens

<400> 1313

0962045.0420

ggcctttttt ttttttttt tctggccagt cacgtgaagc agtgggagtg gaaaaggaac 60
aaagaaatct gtaactggtg gtgatcagtt actgtaaaca ccacttcacc tagaccagcc 120
tgagtatttt tctttcgggt ttttttttt ttttttttt gctagttgca aaatgaacat 180
atttattata aaaaagttga aacatatttg ttttttgagg caggctctcg ctctgtcacc 240
caggctgaag tgcagcggcg tgatcatgct attgcagcct catntcctgg gctcaagcaa 300
tcctccaacc tntcaacctc ccaagtcgct gggacctgac ctcaggtgca tgccaccatg 360
cccagctaat tctttttact tttagtagag acaacttntc accatgttgc ccctanactg 420
gtatgaactc ctgggctcaa gcagttntcc caccctggcc tcccaaagtg ttgggattac 480
aggtgtgacc caccatgcct ggctgaaact tatgttttct tttctcttct ttttttttt 540
ttttttttga nacggagttt cgccatgttg gccaggctgg tcttgaaccc ctggctttag 600
gngatccgcc cgtnttggcc tcccacagtg ctgggattac aggcgcaagc cccacagcca 660
gccatggaaa gcattctgnt gcttg 685

<210> 1314
<211> 866
<212> DNA
<213> Homo sapiens

<400> 1314
acttttttca tgttctcctt gagtgaagga tgaggaaatt gaaagcagag tatgcacctt 60
ttattaggag attcaaactg catcctactg gattagcctc aaaagtccta aaatacaaag 120
acatccatct gacagatcac tgaggggagg acttgttttt ctgttttaga atagtttccg 180
attaaacttt ttagctcaag aagaaaagaa gctagttatt tctcacccag gagtggattt 240
gtggtttggc ttcaccatgg cttcctgccg tgcctggaac cttagggtgc tggtggctgt 300
cgtgtgtgga ctactgactg gcatcatttt gggactgggc atctggagga ttgtgatcag 360
gatccaaaga ggaaaatcta cttcctcatc aagcacccct acagagttct gcaggaatgg 420
tggaacctgg gaaaatggca gatgtatttg tacagaagag tggaaaggac tgagatgtac 480
aattgctaat ttttgtgaaa atagtaccta tatgggtttt acttttgcca gaatcccagt 540
gggcagatat ggaccatcct tgcaaacatg tggcaaggat actccaaatg cgggcaatcc 600
aatggcagtc cggttgtgca gtctctctct atatggagag atagaattac naaaagtgac 660
aataggaaat tgcaatgaaa atctggaaac cctggaaaag caggtagagg atgtcacagc 720
accacttaat aacatttctt ctggaagtcc cagatttta ccatctggat gcccataaaa 780
ttaactgctg agaaccatca cttagtgctt cccccaatgg nttggaccag atnttcaaca 840
ctttccagaa atgctttnac ctgggg 866

<210> 1315
<211> 830
<212> DNA
<213> Homo sapiens

<400> 1315
aattttatat gatggtactg tgatctggag agggaatatt catacactaa ctttctgcta 60
ttactttagg aatatctctg aagtaaagaa gtatggaata aagagataat attatgactt 120
attattttcc aagctggata gataagatga aaagggaaac aaagaatact ccaaatgctt 180
ctataatgca ctttcaaaaa tatacatctc cagctaaaat ttaatgtaaa tgcttaattt 240
gcttgattat aggtattatg cagttattta cactatactg cgtaagctat agtgctctat 300
agttttagct catctataat gcattgataa tgtaaatgta ttcatacttt tatcaccaca 360
attatttgaa aaaatcttgc ttttgtaaaa tgaactgttt agatagaagt atccattaca 420

0505304.0050

cttggcattg taagaatgta ttgactgctt agaaagggcc aaaataaata tccctagata 480
tgcataattt atatatgaga ttaagttata tgtattatgc gtctataaaa catgtatgtt 540
tttgctgtcg cagatttaat gtaagtatag attggtattg gtctgtgcct acatgtatgt 600
gctccatgag tacagaatca gggagttgta tataaaggcc tcattgatga tagtgggaac 660
aaagctgaaa agagagcaat tgagagagaa agagggagaa ggaaagagaa tagtagtgga 720
ttaagctagc attggtctat acagatccgc tagctgcctg ctattggttt ncagcatttg 780
aagatgaaac atattcatta gctttcanaa cgaatggctt taataanggc 830

<210> 1316
<211> 849
<212> DNA
<213> Homo sapiens

<400> 1316
gaatttacat ttaaagatta agcagagtga gaaagagaaa tctgcctttt gttgtgtggg 60
gtgaggagga ggcatctacc cctggccttg acgctatctc ccatcacctc tgctatccag 120
acaggactca ccgaggtgag aataccggag ggccttatct ttaattgggt ttagttttgc 180
cagtctgaat aggtttaaag agactcgata aaggggaac aatagattat ttattgactg 240
gacgctgaag cctttagatg aagaagggag agacaaagct gcttaacaac ttgattagtt 300
catttttatt ttaaggtgag actgtctctc ttttggtgga aggaagggct agagaacttt 360
ggtgcaattt gaatgactta aaatgtctta tttcctctcc cgacaacccc ctacccttct 420
cagcaccatg cacctccctg atttaacagg agtttcgttt acccccttgca tttaggattg 480
atgaactgag aaaagagggt aaaggctttg ggattgatca ttaatgtttg gttttgtgtg 540
acttgtttta aatgcgtgat aaattgatgc tgacggtact tgaatgagta agaaaagcaa 600
atgaagccta cttttaatat ggaattagtt gactttatag tatggctcaa ctcagcctag 660
aggagaaaaa aaaaatcact acaagtctgt taggtagatt tgnattttgg atttgaacca 720
tgaaatcttt tggttggact agtttaaaaa aaggagaaaa catgtcttat tgactccaag 780
tatttggaaa catggaatat caactttaga aggtcttaaa atgaanaaaa gtggaaaaga 840
tggttgntt 849

<210> 1317
<211> 854
<212> DNA
<213> Homo sapiens

<400> 1317
aatggctgga tgcatgtcag tgcataggat ttgagtcatt agtgtgccac aaaacatttt 60
accaagaaat ggtgcgtcat caaatagttg aattacaatg gtagctgtaa acgggaccca 120
atttacaaaa gtaaatagtg tccccttta caagaaagaa aattaaccat gctcattcag 180
attctgaagt ttaattagct ttaacttgct aaaagaaaga aattgaacaa gtaaatagca 240
tgtacttcac catatatagc aaatcctgaa tcactgccat tttttatata actgacccac 300
atgggttctt tgctttttct tttatctgtt tacctcagat ttttttttt taataaagga 360
ctataatttg attggcttgt aaattcttcc catttctaac atgctataag actttaagcc 420
taatttcctt tgagccttaa tcctcttgct aattgatgtg actgagttgt ctggaatcaa 480
cctccttggt gcaaatgact gagactgtga cgttctatgg aagcagtttg gtccgggaat 540
gaatcctttc attcagcaaa caaatgccat gccagctgag tcctgaaaga gcccatgggc 600
acgtaaagga atatagttgt tttacaacat gtcccccaaa attatttgac actcttctca 660
ttagcaagtg ggactctgcc ccttccactt ggatctgagc tctgtaactg cctgccaata 720

US 2005/0059034 A1 Mar. 17, 2005

gaatatggca gaaatgacgc attggatcaa gtttctgggc ccagacctta agaacctagc 780
agcgtccact ttctggctnc ttggatgctc actctttgga acccaacttc catgcctggg 840
atgaanccta aagn 854

<210> 1318
<211> 823
<212> DNA
<213> Homo sapiens

<400> 1318
taaaatctag gtgtgatgca gttcagaata aataaattca aatgacatag gttgccttgc 60
tttgttgtag ttttcaaaaa tggacacaac agagttcata tttgataata caaatagccc 120
ttgtcggtgg catgatagct ttatccatca tttatagttt atgacttgtg gttattttaa 180
aacattgaaa gaattttgaa aaaagtcata aatgtctgta acactagcac ttttaaggca 240
gataatagac atctaaaatc ttcagggcat ggctatggct ttagaatcat ctgaataagt 300
tgaaaatatt taagaaatat aggtctgttc atccaaagaa ttaaataatt tgcctttgtc 360
acgatggaat aaataaaata tcacaggtta tttttgttgt ggtagatgcc ttttaacaaa 420
aggcaatccc tggagactgt tgtagaaaag gacaaagcaa aacgggtgtt ttggttttgc 480
tttattttga ttgattgttg tttgttgtca ttactttcct tgtacaatca cttttccatg 540
gtcaccctct tttctgcttt atactaattg ccctgttgag gtgtttccat gtcaaatgca 600
gctcttgccg gaactgaaaa tggcagtgcc aagggagctg tgcaagtata atcaaagctg 660
gaagatttcc tccatccacc cgcgacccca aggcttaagc attcccttag gaaccaaagc 720
tgactctttg ggaaagttat cacagcctta ttangttaca acccttgaag gtggttttgg 780
tggtttganc cttaaaaatt tgcgaacctg gtttgggnaa ctg 823

<210> 1319
<211> 819
<212> DNA
<213> Homo sapiens

<400> 1319
cggcgccagc ggccgcacgc cgcggagcag gggctcggag gtcccgggat tacggtgctc 60
gagcacgctg gtgggaaagg acccgggact tgaacagtgt tgtgcggcgc catgcaggtc 120
tccagcctca atgaggtgaa gatttacagc ctcagctgcg gcaagtccct tcctgagtgg 180
ctttctgata ggaagaagag agcgctacag aagaaagatg tagatgtccg taggagaatt 240
gaacttattc aggactttga aatgcctact gtgtgtacca ctattaaggt gtcaaaagat 300
ggacagtaca ttttagcaac tggaacatat aaacctcggg ttcgatgtta tgacacctat 360
caattatcct tgaagtttga aaggtgttta gattcagaag ttgtcacctt tgaaattttg 420
tctgatgact actcaaagat tgtcttctta cataatgata gatacattga atttcattcg 480
caatcaggtt tttactacaa aaccagaata ccaaagtttg ggagagattt ctcttaccac 540
tatccatcct gtgacttgta ctttgttggt gcaagttctg aagtttatag gttaaactta 600
gaacaaggac gatacctgaa tcctctacaa actgatgctg cggagaataa tgtttgtgac 660
ataaattcag tgcatggctt gtttgccaca ggaaccatag anggtagagt ggaatgctgg 720
gacccaagaa ctcaaaacag agttggcctg ttagactgng ccttaaacag tgtcacagca 780
gattcagagg ttaacagntt accaacaatc tctgntttg 819

<210> 1320
<211> 788

0050-0050-0050-0050-0050

<212> DNA
<213> Homo sapiens

<400> 1320
cttataatgc atatgtatgt aaatattaca ggatttaagg ttgaattttt taaaaagaaa 60
gttatagtct gtaatttcca tttgttataa taatgacctt taatcttgtc atttggaacc 120
ataaagcatt tttatcaggt acctctgttc caagggattt atgtcttaga ccatagctga 180
attgaatgtt tgcaaaacac tgctatagga taaggtggtc tttagttttg aacgtgtgaa 240
aggactgcac acttttcagc cagggtttga gttactgccc agggtcatcg tttcaaagta 300
attcgaggag tgatttaaca tcagcatttg aaatgtagtc ttcatctcct gggatccata 360
aaaaaatgtg aacagggaaa tggtggctaa gcagagcctg aaataataac ttggcaaaga 420
aatgagttta tcaggtcgag tcaaaacatg gcatcccctg ttacactcaa gaaatgcttt 480
cttcatgtaa atgtttatac gggcatatat aatcacaatg ggaacagtta aaacccccctc 540
ccttcaaaaa aagaaaatct atatcagttg ggtttggttt tggttcttca ttggctcaag 600
gcagttaact gtctcagtat agcctttggg gagatttaac ctcattctag ccatttttcc 660
atcctgaagg ccaagaagga ctattagaag ggtttttgag gggtttcnga ngtgaaggcc 720
caagaccccc ataatgacat cattangtat tcttgaaagg ggttaccaga cccacaccgc 780
tcgaagtg 788

<210> 1321
<211> 844
<212> DNA
<213> Homo sapiens

<400> 1321
ttattaaaca atctcattta acatttaaaa gaacaatagt attcactttg cttattgagg 60
gtggtactgc agaaagattc agaacatagg ctctggagtc agactgccag gctttctatc 120
ccagcatctt ctcttgctct tgcgtgacct ggggcagatt acttaaattt ttttctaccc 180
cacatgcctc atttgtaaag tggagttgta gtggtaatac ttcatatgat tgttggggag 240
attaaataaa taatgcatat acagaattta aagcagtgct gaaacaggaa atatccatgt 300
taaataactg atcattttct ttttaaagct cagtttcctt ttcttctctc aatacttaaa 360
aggtcagaat aggtaaatgt aagcaaacaa gactgaaaaa ttaaccagca ttgntttatt 420
ttctaaaatc aggtgggaaa gtctgtgtct catgagaaca aagaacaaga ttcttattca 480
gtagaaagtg aaaagaaacc agaagttatg gctccagtca gttctacacg tttgagcaaa 540
caagtccttc ctcatgatag tcttcctgca aatagccagc catctcggag gggccgctgg 600
gggaggaaga acagaaaaac ccaggaacgt tttggtgata aagattctaa actgctcttg 660
gaagagacgt cttcagctcc tcaggaacaa tatggagaat gtggggagaa atcagaagcc 720
acccaggaac aatcactgaa agtgaagaac agctggtggc ttctgaggag cagcccagcc 780
aggacgggaa cctgcctttc cagagaagac tcatgagggg ttgaaccctg gcgangacag 840
ntaa 844

<210> 1322
<211> 823
<212> DNA
<213> Homo sapiens

<400> 1322
ttctaatggt agattgaaag tccaaatgca ctttttccag gtggcatctt tggatcttct 60

0356305.00800

gtgtctcttc ttttaagaac aatgcaaatg tacttattga ttatcaaaaa cgaggatttt 120
tttaagtatt cataacacac atttaacacc ttggtgtcct gggccccaga gttcctttga 180
aggcccatac caatattttc aatgtaaaac tcagtctttt cagaagaaaa tacagtatat 240
gaatgtttta cgataacatt aattacctga ttttcaatac agttatgact gaggaatgat 300
atttctaagg gcacattttg aaaactccat aaatcgtatt gtattaacac cttaatagat 360
acaatagtaa aacttaagaa tttttctctg tcatgtgacc ctctgttcct gcagttttgg 420
ggttcattaa aagcacaaat aaaacaattt aatctctttg aaataaagta ataaaagtac 480
cttttagaag ttttcttttt cccttgtgta taaaacttct ctatgtttct gtaatgaaca 540
cataaatttc catacttttt cccttaactg gttattttct taaaagtcag aatttaatat 600
ggcgtatttc ttttttgccc ctcctgcccc ccccaccaac tgatattatc cattccatag 660
gccacagtta tttctctagg cctgcatagc gacattttca tactacttta aaactaagtg 720
ggttgtgcac agtatcaaaa accttctagg taactctgag cgacttctaa ctcctccagt 780
tggaaccatc tatggagaaa atttgtctaa tagatgcagg tcc 823

<210> 1323
<211> 825
<212> DNA
<213> Homo sapiens

<400> 1323
taatatatgt aatatttctt agctaatagc agtgactaca acctgaagca ccctcctctg 60
ttcctttagt ttatttcagt catagttgtc ttgcaagtcc cagcacaaaa tccctcttcc 120
agaaagcatt tccattgatc tctcttgtat ttgcactttt attgaatcta cttacaatca 180
ctacccaccc aatttagcac ttaattgagc ttaaatttta tcatgtggat taattctctt 240
ctcagtttga tttcaaacac attcattttt agtcacaaaa tggtgtgagt tatgagggat 300
gaaggtaggc aagaatctga cttgaaggag ccccacagtt tacttggaga gtgatcctaa 360
tattgaattt tcaataagaa tgtctatggg gggtactatt tatgaatgct tttatgtgct 420
tgggcactta tattatctga caccctagta atcttgtggt gatcattgcc actttaccaa 480
tgaggacagc tgtaattaat aatggttaag gaacttgagg gtcacccagc ttctcagtgt 540
cagaatcagc tacgtttaac gttgcttttt ttgtgataca aagtggcaac ttaaatgcca 600
aaagcatgtt aggtaagaca gtcatgggaa atcattgatt tttgcaggtc ttgaagaatt 660
attctcatta ttttatcatg gttaatgaaa aatgcatatt gnaataatgc ctctattgat 720
taagtagatn gaaactggat ttgggtaatt taggcttgca tttccctaag gttggaaatg 780
gccttccttg acttaatcag gggttggggg ataaannaaa aattg 825

<210> 1324
<211> 848
<212> DNA
<213> Homo sapiens

<400> 1324
gtcggtgtct gcgcgctggt gtctgaggcc caggctgagg cctccgctat tgctggagcg 60
caggcggcgg agaggatgac tgccgctgcc attctctctt gagctagcga gccgccgcca 120
ccctccaccc tcccccggca gggcggagag gagcggccgg agtcagcgat ggtgcccggc 180
gaggagaacc aactggtccc gaaagaggca ccactggatc ataccagtga caagtcactt 240
ctcgacgcta attttgagcc aggaaagaag aactttctgc atttgacaga taaagatggt 300
gaacaacctc aaatactgct ggaggattcc agtgctgggg aagacagtgt tcatgacagg 360
tttataggtc cgcttccaag agaaggttct gtgggttcta ccagtgatta tgtcagccaa 420

0962040.0020

agctactcct actcatctat tttgaataaa tcagaaactg gatatgtggg actagtaaac 480
caagcaatga cttgctattt gaatagcctt ttgcaaacac tttttatgac tcctgaattt 540
aggaatgcat tatataagtg ggaatttgaa gaatctgaag aagatccagt gacaagtatt 600
ccataccaac ttcaaaggct ttttggtttg ttacaaacca gcaaanagag agcaattgaa 660
accacagatg ttcaaggagc tttggatggg atagtagtga agcttggcag cacatgatgt 720
acaagaacta tgcagaatca tgtttgatgc tttggaacan aaatggaagc aaacagaaca 780
aggctgatct tataaatgag ctttntcaag gcaagctgaa ggactactga gatgtttgga 840
atggggtn 848

<210> 1325
<211> 853
<212> DNA
<213> Homo sapiens

<400> 1325
tttacttctc ctgaaatgtg acagatatta cattaatcag tagagaaaga gtgaactcat 60
taataaatga cactgggtca tacctggtta aatggaaaaa aattcattcc ataacacata 120
attcacagaa agtactcaac agattaaaaa tctaaaaatg aagagtagaa cttcaaaaga 180
aaatatagga gaacatattt atgactttga cataggaagg tttgttaaca catagagtaa 240
accagaaagg aagagattaa gttttaaaac ttctgttcaa gaaaagacac catagttata 300
agggaagcac aaatgaatga agttggaacc atgtaccata tccgaaaatt aactcaaaat 360
ggatcaaaga caatgtaaga tctaaagcta taaaactctt ggaagaaaac aggtctgaat 420
cttcaatttg gcaaaggatg cttagataat gccaaaagca caagctataa aagaaaaagt 480
agataatttg gacttcttca aaattaaaaa ccgtgtttca aaggacacca tcaagaaagc 540
aaaagacagc ctacagaaag ggaaaaaata tttgcaaatg atatttctga taagagtagt 600
attcagtgta tataacaaaa agataaccca atttaaaaat gggcaaagga tttgaataga 660
tatttctcca atgaagatat ataaatggcc aacatggtca ttaaaaaatg ctcaacatca 720
ttagaaatta gagaaatgca atcaaacctc tatgaagcct gagccacata gtgagaccct 780
gctttacaaa attagaaatt tgnccaggat ngngggtgca cctgggctag tactcggggc 840
tgagtggagg atg 853

<210> 1326
<211> 842
<212> DNA
<213> Homo sapiens

<400> 1326
ggccttttt ttttttttt ttttttttt tttgagattg aacatctaat ctcatagttg 60
ccaagacagt ctctggtgta aaagaaaata ccaagcaata gtccttaact ttgaagctgt 120
catggttagc atatattagt atttctagac tcagatttta gtttaaattt atgtctgtgc 180
tatagttaca ggatgattta gcaaaattgc ccgcaattag gtcatgtgta acctagtggt 240
tagggtgtta cttatgatag tcgtgatagc cattctaacc ctgcttatac tgtctgagtg 300
attagcactt cattggtata gtttatttta tggctgtata aaagtacttt cagccttttt 360
caagttatgt cacacagaaa atttcgtttt tctaggactg taaatggatg aggcagctgt 420
taactggcta taggctctgt cattcctgag ggctgagtca atcaatattt ccacccatct 480
ataaaccact gttgcacatt agtgtgccag tgcacattct ttgagaaatt gtggatgtat 540
ggtatataag gccattcaac tactcaaata ttaaatgctc aagttaatat tctgaggctc 600
ttaatcaaga gtcttgaggg ttagacaaat agtagaaact aaggaatcat tttcaattga 660

0525045.0042000

agttagcatg atattaaata tctttgccta tattggataa tgngcaaact gattcatgaa 720
actaaattta ataatactat ttttctattt gaaaaaaatg gccaagtttt cngnatggaa 780
aacttaatgg atttcttggt tanccaaata atctttggga atttatgagt aaacccgccc 840
ac 842

<210> 1327
<211> 862
<212> DNA
<213> Homo sapiens

<400> 1327
tagatagggg atagacaaat ctcccatgca gaataattcc aaacaattta tgtagatatc 60
ccactcttaa ggaggtatag tataactctc tagtccttat gtgtgggttt tgtatagtga 120
catccttcca aagagtacag tatagaaagg gggaaaaaga ggaactttac agtggaaaaa 180
cttgacaaac actactttag ctaggtcaag gttaatatca acagtgataa atcatgttga 240
tagtatgtac ccttgatatg atgttatgag aatggtacct ttacctttgt ggtcttcctc 300
ccaacaactc ataaaccccg tctaatcatg agaagttaga caaatcccag ttgaggagca 360
ttccacaaaa taccttacca atattttcct caaaaccatc aaggccataa ataacaagtc 420
tgagaaacaa taggaaagcc agagaaacta ttacagccac aaggagcatt aggagacatg 480
actaaatgta ttacggtgtt ctacagtatg taaaaagtaa ggaaatctga ataaaacacc 540
aattttaatt aatgtataat attaatgaac caatattggt acacttttat taactaaaat 600
ccatatttat tccgattagt ttttacctaa tgctgctcat tgnttttaa tccctattag 660
atggggagca cccacagggc angggattgt gtggtgtttc atttacctaa tgtgatgccc 720
aacagtaacg gggtactttg ggaagtattt cttggagtga ctactgggaa agaaagtcct 780
tanaagttta taggnctgac ttaaacnttc cccaatttta aggtggaaga aaaaattggc 840
ttaaggggaa ggccatatgg gg 862

<210> 1328
<211> 744
<212> DNA
<213> Homo sapiens

<400> 1328
atcgtatttt aaacttgagt tcagacttag accttatgag ttgaaggtga tttcctgcct 60
tactgagtct ttctgttatc agacctataa tttgtttaca ctatactctt ctgatattat 120
tagtagtagc caagattttc ttcactcttt tcttggaaaa ttggatagaa ctgttaaggt 180
acagccttct gggttcttac tgtccttgaa tcttttcatt tcttccttcc tccctttcct 240
gttgcacact aatgaagatg gacatgaaat ggacgtgaaa cattaggcaa ggcaaggcct 300
gacagatttg gctggtaaac aactagtcaa ctttttgaat ttagacagtt attaattact 360
taggcagaga aaaaagtagt ccaaggtgcc atttctctgt gccccttgtc tcacacttga 420
aaagagtgac accgaaataa aaggggctag ctaacgattg tcccttgaat ggtgggacac 480
cctgttgctg aggaatcatt gttatactgc agctaagcct gtttagtctg caaatgtacc 540
ctacaaggtt gaggaagaaa ggtctcatgt ttcattagaa cctgagagga gatgggaaac 600
tctcctgaca gaagcatcct ggggcaagag agaggtgagt ggaaaacgtc catccatata 660
gcaacttctc acaagcctct cttgnccatg ttccaggatg attccatggc cttctgncaa 720
gatagcttgc ctgggattca nacc 744

<210> 1329

0050250.0002000

0508203.0002000

<211> 865
<212> DNA
<213> Homo sapiens

<400> 1329
ggccttttt ttttttttt tgagacggag tcttgctctg tcgcccaggc tggagtgcag 60
tggtgcgatc tcagctcact gcaagctccg cctcccaggt tcacaccatt ctcctgcctc 120
agcttcccga gtagctggga ctacaggcac ccaccaccac gcccggctaa ttttttgtg 180
ttttattag agatggggtt ttaccatgtt agccaggatg gtctcaatct cctgaccttg 240
tgattcgccc accttggcct cctaaagtgc tgggattaca ggcgtgagcc accgtgcccg 300
gccgggtgta tcatttttaa acagagctga caacaacagt accttccttc tagttatgct 360
gttgagaatg aatgtcgcat gtacaaagca cttcgcaaca tgcctcacat atagtaagta 420
ctcaataaat ggcacttatg acatttatca acatcaaatt tttgtgaatt accaatttta 480
aaaagcataa ggttcaaaat atcatataga gcatgattat tttatatgat gtatcctagt 540
atttgaatag tcatctttgg gtgacgggtt gtagtgaatt tcattctttg attcttacct 600
gtattttcta atatttcttt aatgaatgtg atttgcttgt gtagtcagca ttttaattag 660
tgggatatgg gggatcagtg agcaatttgt cgtaggaaca ggagtcaaag caggggagaa 720
agctttagtt ctggtttctc aatttctaag tcattcattc accttaaatc aaanttaaat 780
ngacctaagt tttttctctg gtttgcttaa tcttggcctg aacaataatg cctttaaaaa 840
ctgggaaatt ggcaaagngg attat 865

<210> 1330
<211> 855
<212> DNA
<213> Homo sapiens

<400> 1330
gactttcaca tttactagta gggctgagag aggctttagt gaggaaggaa tattcagaat 60
aaaacggttg agaaagctga gaagaccatt gagttttgat cagttgtgaa tagagtgcaa 120
agccatggcc aagctgtttt tggaaacgct ggccggcgtg tcttcagtgg aaaaagcaaa 180
tcaaaatgga gcgagagcaa aggggcgtcc tcagtcctcg acctacaatc actgtatgga 240
atcggtcctg gcagctgaac ataggaggtc actggaacaa gtgatagtgc agattggctt 300
tcaaacatcc tcctggcttg agttttatca gctacagtgt gggtcctctt ttgaagcctt 360
aattcacaac agcagctttt tgggggtggg gctgggcggg tgttgtcatt gttctttccc 420
ttcctgtaag tgtcgctagt tgctgcctcg tatctcaggt ttttctctgt ttttgagaaa 480
tggacagttt tttgaccagg atgtgacttc atgtttccta tggtgacttc taaaaccagc 540
acagaatgat atgactcaac acagaccgac ttggttatgg ggatgatgag ccgcacagac 600
ctcactagtt gtgcacaaat aatgtgctat gatggggtgt aaagtgaagg cagaanaggg 660
tcagccgcat tggtatggta ctgggaaagt gctggncaac gatttgagtt agttttagat 720
atcattgnaa tctttaatca gacattctca agtttcacac agtagttttt gaggtatgtc 780
acacacncca aatgtgtaac agttcaccct ttccaaaatg gggcatgccc caaacatgtt 840
aanaaaggga agcct 855

<210> 1331
<211> 826
<212> DNA
<213> Homo sapiens

0002700450 : 2005.05.30

<400> 1331
gaattgggtg gcggttgact gtagagccgc tctctctcac tggcacagcg aggttttgct 60
cagcccttgt ctcgggaccg caggtacgtg cctggcgact tcttcgggtg gtccccgtcc 120
gccctcctcg tccctaccca gtttcttgct tccctgcccc atctccgccg ctccccgcag 180
cctccgccga gcgccatggc tcctaggaag ggcagtagtc gggtggccaa gaccaactcc 240
ttacggaggc ggaagctcgc ctcctttctg aaagacttcg accgtgaagt ggaaatacga 300
atcaagcaaa ttgagtcaga caggcagaac ctcctcaagg aggtggataa cctctacaac 360
atcgagatcc tgcggctccc caaggctctg cgcgagatga actggcttga ctacttcgcc 420
cttggaggaa acaaacaggc cctggaagag gcggcaacag ctgacctgga tatcaccgaa 480
ataaacaaac taacagcaga agctattcag acacccctga aatctgccaa aacacgaaag 540
gtaatacagg tagatgaaat gatagtggaa gaggaagaag aagaagaaaa tgaacgtaag 600
aatcttcaaa ctgcaagagt caaaaggtgt cctccatcca agaagagaac tcagtccata 660
caaggaaaag gaaaagggaa aaggtcaagc ccgtgctaac actggtaccc cagccgtggg 720
ccgaattgga gtgtccatgg tcaaaccaac ttcangcctg acaccaggtt tgactcaggg 780
tcttcaagan ccctgggctg cgtacttcag cagcaggana agcggg 826

<210> 1332
<211> 807
<212> DNA
<213> Homo sapiens

<400> 1332
agtgcgccgc gctgcgctgg gcgccatggc gctccccgga gcccgggctc gcggctgggc 60
ggcagcagcc agagcggccc agaggcgccg ccgcgtggag aacgcaggag ggtccccgag 120
tcctgagcct gcgggccggc gcgcggcgct ttacgtacac tggccttact gcgagaagcg 180
ctgcagttac tgcaacttca acaagtacat ccctcgccgc ctggaggagg ctgccatgca 240
gaagtgtctg gtgaccgaag ctcagacgct gctgcggctc agcggggtgc aacgggtgga 300
gtctgtgttc tttggtgggg ggacccccag tctagccagt ccccacacgg tggctgctgt 360
cctggaggct gtggcacagg cagcccacct gcctgcagac ttggaagtca cattggaggc 420
taatcctact tcagctccgg gctccagact ggcagagttc ggggcagcag gggttaacag 480
gttgtctata ggcctccagt ccctagatga cactgagctc cggctgttgg gacggacgca 540
ctcggcctgc gatgctctgc ggacgctggc agaggcccgg ggcctctttc ccgggcgcgt 600
gtctgtagac ttgatgctgg ggctgcccgg cacagcangt gggggcccgt ggcttgggca 660
gctgcangga actggtgcac cacttgtgat gaccaacctt ttccctttta ccagcttgtc 720
cccttggaac cggggcaccg gaactctttn gcccaagttg ccaacggggt gcccttccca 780
agccccttga ccccggaact tngcaan 807

<210> 1333
<211> 814
<212> DNA
<213> Homo sapiens

<400> 1333
cttgatgatt gggttaagat ctggggcgta catatatata ttttgttgtt ttgttgtttg 60
tttgcaagac tattttatag gcctattttt tatcagaaga catataatat ctttttttt 120
tgagtgttca gccattgagc cattggtgat cattacctag atccattaat tcattagggg 180
ttacaaatag tgccattcca cctggattca tttatttgtt gaaatacttc tgtgaggaga 240
aacttgactt catctgtttg gttgattctt tctctttatt actggttttc agaataaaga 300

gttggttatc tagcattctc caaagatgac caatttttt ttaatgtcag aaactgcagc 360
ctttaaacta gttactattt tttaatccat tgcagttacc attcttattg atgcttaaat 420
tgttacatct ttggccagtg caagcctttt caagttggct cccaagtccc tttgagacag 480
tctggttatt agtctttgat ggcttcctta ctaaccatcc ttactaggtg gtatggcagt 540
aggttccagg ggttgttctg tatggattaa cttattctca caagaaccct gtgaaataat 600
acttttgnta tccccatttt atgggtgaag agaggaacct gagagattgt gacttacctg 660
natacctctc tagaagaagt acagggatgt aaattcaact actcattcta gtgctctttt 720
cacttttcca atctgatgcc tcttaaaatt acttctggtt catttttta agnaacttgg 780
attgactaag cttaaaattc atcctactna gncc 814

<210> 1334
<211> 747
<212> DNA
<213> Homo sapiens

<400> 1334
agaaaatacc aaaatgtact cggcgttatc taaaattgta gaacactatc ctttgatcta 60
caagtgccac aaaaaactaa aattagaatc ataattcata agcaaagcta ttatgaagaa 120
aatgtgagta ttggcatata aaagaaaact cctgcaatgt aattagctag atgcaggcag 180
aactttacag gagaagcctt gtattttcct gtcatggata atgaagtact catttctgga 240
ttggatttga ggatgcaact atgtccaaac ctggaagatg aatggccatt ttctcataag 300
ccagggctga tggcctgcaa aatgctgaat ctacatgaaa ataactgatc agttttactt 360
aatgagaagg tcagacctag catagcaaat tggaagttat atataggctc ataggttact 420
ctggttgata gaagcttgat aaatatttgt tgaactgtat tattgaatga atgtttaaag 480
tctcatcgga aatgatcaaa tcttttctct tctaccagaa tgttaataag cagagaaatc 540
gatttgagtt tcatttcttt ttattttccc tgcctaccct cttatagagg tgttgatcag 600
tgaaataatt aaagaaaagc aataaatggg cagaaaaatc cctaacatgc tctaccagat 660
atccattgcc acaaaatага ccctgcaaaa cttantggct taaaaccatg ataattgact 720
atttggcttg atctatnggg ccgcccn 747

<210> 1335
<211> 705
<212> DNA
<213> Homo sapiens

<400> 1335
atataaatgg attgtgcctg acattgtgtg ggaaattgat gagtatatcg attttggttt 60
gtatcatgaa cattaaaata ctttttttgg tcatctcgag gaaagagaaa tagtttattg 120
agatagtttc ttaacttatg aacctaatat atcacggttt tattttaatg atataagtaa 180
tagaatatca atgaaaaaat ctgtataaaa gaaataccca gtagcccata attttaccac 240
agctgccact aactgtttgg agcattttct tttaattata cttactatat gtggttagta 300
tcttttaac ttatcgattg agacaggatc ttgctctgtc actcaggctg aagtgcggtc 360
ttggaatcat aactcactgc agccctgaac tggctaaagt agtccttccg actctgcctc 420
ccaagtagcc gggactacat gtgtgtgcca ccatgcccga ctgatttttt aatttcttgt 480
agagatgaag tctcactatg ttgcccaggc tagtctcaaa ttccttagct caaacctctc 540
acctcagcct ctcaaagcac tgagattaca agtgtgagcc actatgcctg gcttgagttt 600
ttttctttta attntttttct tttcatgaat actaccacag aatagtattt tagttccctt 660
tttaaaaatt atgtaatcat ggngaatatt cactttggna ttttg 705

0052045950 : 0052045950

0020020042950 : 20020306

<210> 1336
<211> 726
<212> DNA
<213> Homo sapiens

<400> 1336
atgtgtctat gagaatgtgc tgggtcataa tcagttgctc tgtgaccctg gcagggtttt 60
ttttgtgttt ttttgttttc ggaagcggta taattctgca gtggtgtgat catagttcac 120
tgcggcttca aactcctggg ctcaagcaat cctcccacct cagaccccaa gtacctggga 180
ctacaggcac aaaccactat gcccagctaa ttattttatt ttttggtaga cggggtctcg 240
ctatgttgcc caggctggag tgcagtggca tgattatagc tcactgcggc ctgaaactcc 300
tgggctcaca caatcctcct gcgtcatcct cctgagtagc tgggaccaca ctcacgcact 360
gccatgcctg gctaatttta aagtttttg tagagatgga gtctctctgt gttacgctgg 420
ccgggaactc ctgggctcca gcgaccctcc tacgtcagcc tcccaaagtg tcgggattac 480
aggcgtgagc caccgtgccc agccccctgg gcaagtttaa cttctctgtg ccttggactc 540
cccagtgtta aatggggtag tagagggaga cagccctccg agagccttcc tgccctgtgc 600
ctgcccaaag cagcagtgct ccgcacgtgt tgctggttct tcatctgaac tgcgcttctg 660
gccgccatgg nctccagtca ttctgctcac tctggtcaca cagtcatgaa naactccccg 720
ngaaac 726

<210> 1337
<211> 654
<212> DNA
<213> Homo sapiens

<400> 1337
catgctctct gctgatgttt accttcacat cttctatctc cccaggggtt tctcacaggc 60
tttatgtcag tttcttggat gcatcacctt ctccctctca atttcgcagt atgtgggttg 120
ggagaaggtt ccagttgtcc ttgtccgttc tccattttct catagctgaa agtttttaat 180
ttatctttta tgtaattata tatattcata tcaccatcca tcaagctggt ttttaaaact 240
gaaaattatt tcatattttt aggaagctac tcgattgcat gtatgtaagg ccagctcatt 300
ttaatctcat attaagttaa tcaagtaaag acctttataa aaaagaagat tttgggctgg 360
gcacggtggc ttatgcctgt aatcccagta ctttgggagg ccgaggtggg tggatcacga 420
ggtcaggaga tcaagaccat cctggctaac atggtgaaac cctgtctcta ctaaaaatac 480
aaaaaattag ccaggtgtgg tggcgggcac ctgtagtccc agctacttgg gaggctgagg 540
caggagaatg gcgtgaaccc aggaggcaaa gcttgcagtg agccgagatc gcgccactgc 600
actccagcct ggggaacaga gtgagactcc gctcaaaaaa taaaaatnnn aaac 654

<210> 1338
<211> 672
<212> DNA
<213> Homo sapiens

<400> 1338
taagtaccgc cctgttgatt ttgtctttca aagttattat ctgaagattg cacataaaat 60
tccttgtatc agtggcactt ttattgggtc tttgtgtttc ttttctaact tttccagttt 120
attcctttga aattagttgg gcccatggtt tattaatttc acgaaaaatt ttcttcccca 180

aagggccaac ttttggcttt ccttctcttc cctgacattt gctcacattc ttgttacttg 240
tattttcact tttaattttt cttttatctt tcatttttt cttatgtaaa ttttggccaa 300
cgcaagcaca gcagtgcttc tcaaacttta aggtgcacac gaagctcctt gggtctagag 360
ctcttgttaa aacgcagatt ctgggctgcc gcggtggccc acgcctgtaa tcccaacact 420
ttgggaggct gtggcgggcg gatcacgagg tcaggagatc gagaccatcc tggccaacat 480
ggtgaaaccc catctctact aaaaatacaa aaattagctg ggcatggtgg cgcgcaccta 540
tagtcccagc tactcaggag gctgaggcgg gagaatcgct tgaacccaag aggcggaggt 600
tgcagtgagc tgagatagtg cctctgcact ccagcctggt gacagantga gactctgctc 660
aaaaaaaaan an 672

<210> 1339
<211> 706
<212> DNA
<213> Homo sapiens

<400> 1339
gaaaagatct ccctgcacac tgtagtcact gtatttgtac agcaagggac ttgttcccca 60
agcctggagc ttttggaact gaatggagcc cagaggcaag agtagtgaaa tgaggctgac 120
ctttgcttct ggttttgctt gctacttgcc agtatgtggg ttccctggag gaacacacag 180
gtgtcttggc tttgccactg ggcattttgg gtgatttcgt taactttgcc tgttttgacc 240
agaagagagc ctgatcgtga taggaggagg cgggggactg acggggttat acaatcttca 300
catatatata cactcagtcc catgccttga gtctagaggc tggggagagg gcccagctgc 360
acgttggttg aggccagcag tacatggccc ttgaggctat gctgatagca acttgtggca 420
cactttgtac ttcatactgt gaggaacatg aaataagcca gagccaggcc tgatcttgaa 480
agaaccctct gtcaagtggg aaggcctgtt gcagacatgc atcaactggc ccagctggct 540
tatccatggc tgtccctggg cctnctgtga atccagagga ggctgctcca gcattgataa 600
ggctgggatg gggcaggttc cacaaggagg gaaagctcac cccantgtaa aaaggaanga 660
gtgggggata agctatctca tgaataacct gncaaaggcc ccaaaa 706

<210> 1340
<211> 819
<212> DNA
<213> Homo sapiens

<400> 1340
ttcagaaggg cttcgaaaat aggcaggtgt ctatgacagg tctgtccata gctcaaatta 60
tttcaaaaaa attccttgcg ttttcctttt gttctgccat agaagatgat tatttttttt 120
ctccatgatg ttgtcttgct tttctgttag agggctgtca tgtggtgtgc taaacttta 180
gatagccaga gattagctat ctaaaagttt cagaatgact gaaatagtta ttttttcttt 240
ctttctgttt ttattatgtg tctttgcaaa ggtttgttga gggaaaatta ccaaataaag 300
tttgaaatag tattagtacc tttaaatgtt ttctttaaaa tatcttaacg atagatagat 360
agatgataga tagatagata ggcagataga catagagata tatggaatgc ttcattacgc 420
atactagaca cttgttgatt ttttaaaagg aaatgaattt agaaagcaat tttcctcgaa 480
accagttttt ttcttctttg gtaaaggata agtcattctt acaactctca atgatgcaag 540
gtgaaattta tccaatttta agtagggatg ctaaataatg tagagaagac acaagcactt 600
gttttggaga cagaatattt gccctctggg cccagatgtg ccatttaaaa ttgaggntct 660
ttcattcatt tattcattct tgcccttggt tggnaaaggg tattgggaaa gatcgnaatt 720
aaagataaag tgtaaaagaa agaaaattgc cttgaaacaa acaaagtgca cacgggctaa 780

Doc No. 6,852,490

agatactatg tatatgccct gttaaagnct aatttggtc 819

<210> 1341
<211> 818
<212> DNA
<213> Homo sapiens

<400> 1341
gtgaagatgt ttcgtatggc aaattcagta atgctacctc agtatatagt tctgtatacg 60
tatttggacc aaagttatta gataaaccaa aaatatttca tgaagcatct tctgcttcag 120
agtccatatc cagccaccca gctatgaatg tatttagaaa gatatttggt ggaggtggaa 180
tttctaccag aggtcaagag gatttgtagg gatagcctca agaatgccag atgagtgtgt 240
cagaaagcct gctcctacct ctcgccagct gcgtgacttt aggcaagtca cttaagtacc 300
ttatttcagt ttcctcacct gtaaattgaa caggggttga atggaataaa aagccctttg 360
caactctaaa agtcaattaa cacacttact aaggtgtttt aagtgaccag gaaggaaatc 420
agaactaacc tggattgtta gcgaagaaaa cagaagccac caacaagcct atctgtcctt 480
tgcaattttg ctccaagagc ctattagcaa tttgaattct gagcctctaa gaaaacttat 540
gctcaggtgg cccctccaag tgttggtgcc agagcactct tgccttgtat cctcacctac 600
gccttccatg aactcatagc agtgctgtgg cactgcangg gtgttttatg cattcacgtt 660
aggagcatga gcagaactgc atatgccagc accacatggg cagcagagac ttcccactgg 720
cagatggatg ataatggagc tgcactggga acaaccagga ctgtccagtc aacatgatnc 780
agatgaacat nctggcttaa gtcactactn tttccaag 818

<210> 1342
<211> 761
<212> DNA
<213> Homo sapiens

<400> 1342
ttcatcctgt tgtttttgtt atgatacata atgctgctgt gaacattatt gtacctgttc 60
tttggtgcct tgtgcatata tttctattgg gaacacacca aatagtgaaa ttgttgtaga 120
tgtaatgcca tgtatgagag ttcctgttgt tttgtatact ctccaaactt agaactgtca 180
gtctctttaa ttttagccat tctggcatgt tcacaggagt atcacattgt gggtttaatt 240
tgcatttccc tgattactta ttactaataa tcttttcata tgcttatttt cttttagaac 300
gtgcctatgc aagtctcttg tccatttttc aactgttttc tatttcttat gaatttgtag 360
gagttctttg cagcttctgg ctatgcatcc ttcattaatt ttgtgtgttg caaatatatt 420
cttccatttt gtgacttgnc tttttagtct caaaacagaa tcttttgatg agaagaattt 480
cttaattttg atgtaacctc atttatcact cttttccttc atggttggca cttgttgtgt 540
cttgtttgac aatgttgcct atcccaaagt catgaagatt ttctcttatg ttaacttcta 600
aaagttgnat catttgnctt ttatatttat atctacataa tgcacctgga attgagttat 660
atgaatgctg tgaatttggg aaggcgggtt ccttttttcc acatggatat ncaatcnact 720
cagccncatt tactgggggga agacatcttt tttctaaagg c 761

<210> 1343
<211> 614
<212> DNA
<213> Homo sapiens

0050250-0050950

<400> 1343
gatactgttt tttgtctcct catttgttac tccatttcct gttctaggat ttcttatctt 60
tgggatccct aaagaaccaa gagcagagag ctttgcagtg tattgttttg gacaatttaa 120
atcttatgca tatacagtca tgtgctacat ataatgtttc agacaatgat ggactgcatg 180
tacaatggta gtcccataag attataaatc atatttttat tgtgtccttt tctttttctt 240
tctttctttt ttttttttt tttttttgaa acaaagtctc gctctgttac ccaggctgga 300
gtgcagtggc acggtcatgg ctcattggag cctcgacctc ttgggttcaa acagtcctct 360
cactttagcc tcccaatagc agggactata ggcatgggcc actgcatcca accgattttg 420
tatttttgt agagatgagg tttcaccatg ttgcccaggc tggtctcaaa ctcctgggct 480
taagtgacct gcctgccttg acctcctgaa gtgtttttct atggtcagag atgtaaatac 540
ttgncattgn gctatagttg cctacagtat tcagtacagt acatgctgna catgtttata 600
gcctaggagc cgta 614

<210> 1344
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1344
ttgtatattt ggattgctgc tctaggttga ccctcagcta aagaaaaatg cttccttatt 60
tagttttatt ctgcctgcct gttagtttga aaggtaccac ttgtttgctt catgcagttt 120
ttttttttt tttggttaaa ctcagcctct atatgtgttt atatgctttc atattttctt 180
caagtcactt ctggattggt aattcacgta ccagagtggc cgatgccata tttcttgttt 240
attctttttt ttcaatttca tggccttcca gcagttttct gggaatactt tctgccagtt 300
cttgtttact tctctgttta tatgcgtcgg tattggaatg ctagaacgtt aaagtacaaa 360
atatagaaaa tataaaattt ctgttcatac ttttacatct taaactggaa agacatatct 420
cacatttttt aaccatttat gtgttaggtg atatgctaag ttcattattc atgttactta 480
atcatttaca acaactcttt ggcgtataga tgccatttta ctggtgagga aactaaggct 540
tacaaggcga tgtagttctt ttttaagggt catacactta gtgaaagtga ggctggaatt 600
ttaaccctga cagggtgacc ctagagtgca gttacccggg tatactctct gaggagtcct 660
gtatgaatca cgtcctggga atttttccca agtgaaatga atgcttctgg aagaactcan 720
ccaattggct tgaattcctg gggaaatttt tgggccaaat attggaccag ctggaaatat 780
agnaatgggg tatcacatgc caaactggac ctgncattta ncctgaaagt c 831

<210> 1345
<211> 456
<212> DNA
<213> Homo sapiens

<400> 1345
gaatcttggc ccagaatctc actctcccag ccccatggaa agatggggaa aagatttcat 60
tctgctgatc aaatttgtta gaagacattc tttagagtct gaaaaaatat atttcattag 120
cagttctcta ggtagtggaa tttttagtga tgtttactct tttttccttg ttctaatttt 180
cctctaataa acagaaaaaa agcaagagta acccaccaaa tttggataaa gggcttctgc 240
ttttcatatt ctcttcaacc agaacagctt aacttttctc catttattta tttaagtatt 300
tattcatatt tgaaacaggc tggggtgcag tggcatgatc tcagctcact gcaacctcca 360
cctctcgggt acaagtgatt ctcctgcctt ggcctcccaa agtgctggga ttataggcgt 420
gagcctccgc acctggacnt ancttgacnc tatgat 456

0050-0050-0050-0050

0052452000

<210> 1346
<211> 819
<212> DNA
<213> Homo sapiens

<400> 1346
aatcagataa ggagcataac aaatatttta atttatttcc ttaagacatg tcatgtaatt 60
acaagataat gggttgtcta gttttacaaa tacagggcaa gtcattcaaa aggtcacttt 120
tttgattgac ctcttctcac atctatcact aatttttttt aaaagttaat ttacattgag 180
ctttccctcc agaataatta tttttctgta tctattgtct atatctttct taggccttct 240
agaaatagga ggactttgca tatgattttg tttatatgcc catttatatg aaaaaataat 300
aatgtcactg tgaatctgca caatgcagag aaaaggcctt ggattaaata ctatttttac 360
cactgaacta ttgcatgacc acgagcaaat tatttaactt ttctgagaat caactcctca 420
atggtaaaac tgaagaagga aagacaatat tatatgtaaa acttctggca taaaataaga 480
atccaatgat attggttctc tttaaaaatg gaataatttt ctatatgttc atttggttat 540
aagaggaaac agaaataatg tgctttgagt tcaatataat ctatgtctta ggacttcaag 600
tgaacagtct taaagtatac attatttact tgatggatga aatggctacc tagatttggt 660
aatacgtatt aagatgcatg tttcagaaat aaaaaagtta ctataaaaat tgctaatata 720
cttataggga tattttgctg ggttaaaggt atgaacctaa ttnggtaatt tgcatttccc 780
ccaaaggtaa ggaaggagcc aattnccttc agaantatt 819

<210> 1347
<211> 839
<212> DNA
<213> Homo sapiens

<400> 1347
tgtcacccta gggccgcccg cagccgagtg tcgggggcgc agcgttgtaa tgtgtgcgga 60
cgccggacca ggactcattt cttcaagtgg tttcgacttc ctattatctg gatttgatcc 120
atcacttatg tcagatcaac taagcctggt ccatcatggt tacaaagtgc ccagcctggc 180
accatgcatg gtaggtactg cttagattaa gttgtatgtg tttcttttcg gtgctgtaat 240
aaattgccac aaatcaagtg gcttaaaaca agaaaaaatt attttcagaa atccaaaata 300
aaggtttcag cagatgccat gctccctacc gtggccctgg ggaaggatct gttccttgct 360
gcttctgggt tctggtagct ttctgcattc tttagacttc cttggcttgt ggctatatca 420
ctccactctc tgcttctgcc tttatagcac cttctcctct gtatgggtca aatcggtctc 480
tgcatctctc ttgtgatggc atttgggaac tcaccgggat aatccaagat aatctcctca 540
tctgaaattc cttaacttac ctattcagag accgtttttc cagagatagg gcagggcata 600
tttttgggag tctcatcagt ctaccacacc catggatgga ttctgcataa tattgtggtc 660
agtcattgga tcttcatcta ngcacttgta ttaagtccat tctcacagtg ctataaagaa 720
atgcccaaga ctgagtaatt tataaagaag agaggttaan ttggctacag tctgcaggac 780
tataggaagc atgctgggga agcctcagga aacttacaat catggcaaaa gtcnagaaa 839

<210> 1348
<211> 849
<212> DNA
<213> Homo sapiens

<400> 1348
tggcgtaaga ggcggcggtg gaggcgctac gctggcgtaa gaggcggcgg tggaggcgct 60
acgctggcgt aagaggcggc ggtggaggcg ctacgctggc gtaagaggcg gcggtggaga 120
cgtttcgctg gcgtaagagg tggaggtgga gacgttacgc tggcgggcac gatacaactg 180
cagctgcaat aaactggtcc ttatacctgt tgggttctaa cccagaagtc cggaaaaaag 240
tggatcatga attggatgac gtgtttggga agtctgaccg tcccgctaca gtagaagacc 300
tgaagaaact tcggtatctg gaatgtgtta ttaaggagac ccttcgcctt tttccttctg 360
ttcctttatt tgcccgtagt gttagtgaag attgtgaagt ggcaggttac agagttctaa 420
aaggcactga agccgtcatc attccctatg cattgcacag agatccgaga tacttcccca 480
accccgagga gttccagcct gagcggttct tccccgagaa tgcacaaggg cgccatccat 540
atgcctacgt gcccttctct gctggcccca ggaactgtat agtaatttga aggtcaaaag 600
tttgctgtga tggaagaaaa gaccattctt tcgtgcatcc tgaggcactt ttggatagaa 660
tccaacccag aaaaganaag agcttggtct agaaggacag ttgattcttc gtccaagtaa 720
tggcatctgg atcaagttga anaagagaaa tgcagatgaa cgcttactat attattgggt 780
ttgggccctt tatcattgag aaaggcntta ttttaagaga ancttggcat ttacaattta 840
cagaatcat 849

<210> 1349
<211> 820
<212> DNA
<213> Homo sapiens

<400> 1349
agttgtttct acattttctc caccaccgct ctggtttcct ggaggccttg atcttgcctg 60
cccaggcacc cctcaggaaa gtcatagccc tgtggctggg gagggtggag tgttgtgggc 120
catcaggaaa taaactggca gtcacaaagt tctgaagggc atagccaccc cttttctaag 180
aatatttaaa ggaaacaggg cttggaggat cctaaaatta gctggccttc cagtcacatc 240
cctaaagagc agaggcactg ggccttccct cttcctgccc aagcccaggg tggaccctga 300
gtgccctcag gcaccacact ttccactgct tctctttccc tccattggtg ccaggggaag 360
ggaatgcctc gtgcctggca tgcctgcttt agaaggcagg ggccacaaaa cactttgtga 420
ctgcctggca tcctagtgtt actgggtaca actgacggtt taggtggccc cctggccaag 480
agtgggccca agactccgac tgggccaacc acgcccctct cctggggctc tccatgctgg 540
gggatgggga tggctggaga gggtctttct cggctgtggc tcttggataa gaggcttggg 600
acacttccac tgtctcaacc ctgtcccatt cctgaggtct ccactgctag tccattctgg 660
gatctgccac tacctgccat aaatttcctc tctgtgtagc tagccagatt ggcttctgca 720
gtttccacta aacttaattg gttgaagaaa caaaacccag aagagaagga gatggagncc 780
taaangggaa caaattcact ttacatagtc aaccctggng 820

<210> 1350
<211> 809
<212> DNA
<213> Homo sapiens

<400> 1350
agcaactgtt tggcagtcag agtcccacat cctgctcaac tgggtcaggt ccctcttaga 60
ccagctcttg tccatcattt gctgaagtgg accaactagt tccccggtag ggggtctccc 120
ctggcaattc ttgatcggcg tttggacatc tcagatcgct tccaatgaag atggccttgc 180
cttggggtcc tgcttgtttc ataatcatct aactatggga caaggttgtg ccggcagctc 240

US 2003/0224353 A1

tgggggaagg agcacggggc tgatcaagcc atccaggaaa cactggagga cttgtccagc 300
cttgaaagaa ctctagtggt ttctgaatct agcccacttg gcggtaagca tgatgcaact 360
tctgcaactt ctgctggggc ttttggggcc aggtggctac ttatttcttt taggggattg 420
tcaggaggtg accactctca cggtgaaata ccaagtgtca gaggaagtgc catctggtac 480
agtgatcggg aagctgtccc aggaactggg ccgggaggag aggcggaggc aagctggggc 540
cgccttccag gtgttgcagc tgcctcaggc gctccccatt caggtggact ctgaggaagg 600
cttgctcagc acaggcaggc ggctggatcg agagcagcta tgcccgacag tgggatccct 660
gcctgggttc ctttgatgtg cttgccacaa gggatttggc tctgatccat gtggagatcc 720
aagtgctgga catcaatgac ccaccancca cgggtttcca aaaggcgagc aggaacctgg 780
aaatctcttg anagcgcctn ttttgcgaa 809

<210> 1351
<211> 745
<212> DNA
<213> Homo sapiens

<400> 1351
ggaaggaaga taaggtgcct cctgtctggg ggataacagn gctctcttac ctcactcaga 60
gtgaatacag gcatggaaca aatgagtatg tgcgagcagg gatgcactca ggagaggagc 120
aggcagtggc tggactggct gttatgacta ggggcggggc tcactgccac cctcccacac 180
cagactatca gcagcagcaa gagcgtctcc tgggcagctg accccaaaag tgctgagcat 240
gtgctggcag taaaacaccc caggcttctc attaataagg atgctttctg tttgtgtctc 300
ccctgaaaca ttctcaaagg gttttccctt ctgttacatc attagctatc ccagcagcct 360
tcagggtggg aggcacaaga tcattcctgt tgtacatggg gaggaagcag gtctaaggat 420
ttgcttggag cctcatagca aaccagaaac agggctgggc tgagaatcca gtctctgcca 480
catcccgtgc ataggtacag tggcacctga ggtaggaggc atgggagaga gtgggatgaa 540
cagacctctc tccagccctg agatgtccat ggtttggctg tttcagcccc cagagttgtt 600
gggggtcctt gtgaagcaac tccacacagg tgttgagtgg ggcacagggt actgtcagct 660
tgttagtaag agggattcct tgggcccaga taatttgnca gcagctncaa gagtgggacc 720
ccaactctgn cttctctctt ttaga 745

<210> 1352
<211> 876
<212> DNA
<213> Homo sapiens

<400> 1352
ggtctaagtt tcctgcatca gcaacagaat ctagtaattg ttacaaaact cttgaatagc 60
tgggagagat gcaaactcta agctgcctgc cctcttaaaa cttggtcttt tgtattttaa 120
acagttgagt tttatgtcat ttgtctcaaa attagtcttg ggtcattata tatttctatc 180
tactgattta tacattcagg atcaggtctt gacatttagt acatttaaga tggttatcag 240
gttgtagtca tcaagcacct atttctggct gtggccaccc agccagaccc atagagggta 300
gaaaatttgt agatgactgt catggcctta ctgacctctg aacccctatg taatacttga 360
gtgaaaagga cttggaggct taaccagatg actagctgac atacctctgg aagaaggcag 420
gcatcggagc cctcttccag agcatcagag aagatcaaag agctcagatc tcccctccag 480
aaagtttcat tcaaacactc atgaccatat caacacttat atgtcaataa tatctcttta 540
agaaaatgcg aatgtcattg ctgtactcct ctgtgttgcc tatggtggtt caattgtgtg 600
agtcaaaact ccaagccttt gggtcacttg gtcactcatg cctctatcaa taaaccctga 660

0050305-0050800

gcacctggga ggcagcctga cagagggaag aacaaggact ttggcatcaa cgccttctan 720
gtccaaatcc cagacaggca atttgcaaac tacagcttgg ncaagtaatt taacctctct 780
gatcaaggtg cccacttgta aaactgggac attcacagna tctacctttg aggctgtaat 840
gaaggtaaat aagattatgt aaatgcccan cctggt 876

<210> 1353
<211> 755
<212> DNA
<213> Homo sapiens

<400> 1353
gttccagccc cgcgatggcc tccgcgggca gcaccgctcg gcgggcgggc tccggaagct 60
ggcactcaga aaggggagaa gggagaggtg ctcggccgca gccaactcca agtggctcca 120
tgcagcaggc gaacaaagtc tccttgaagg ccacctggac tgacgcggag tccaagcagc 180
ccaggtgggt agcgggagaa ggtgtcccgg ctgcggggag cgagaacccg gcccagcgcc 240
tccctggtgg gcagggcctg gagcgggcgg gggcggaggc tgcggcccga gaagcccgca 300
gagacaggct ggggccaggg atcgcctccc gagaggtgcc taggccgtgg cccagagtcg 360
cttccccact gccccgccca ccagccaggc gggggccagg gatcgcctcc cgagaggtgc 420
ccgggccgtg gcccagagtc gcttccccac tgccccgccc tccagccagc ccctgcccga 480
cctcgcagac cacctcagtg cgcaggcgac tgccctcgcc aggccgcgcc gccctgcctc 540
gntcaccccg cccgcgctga ccccacccca gcaaggagtc cgaccagacg gcaatcgacc 600
agacggcgat cgggagctac taccagctgt tcgcancggc tgtgggcaac gtggaatggc 660
tgcnattctt gnctgaacca gagcctcagg gaaaatccca ccgacgacaa ggtaaggtct 720
ttaagtgttt ggggcaaaag acccangtcc ctttt 755

<210> 1354
<211> 740
<212> DNA
<213> Homo sapiens

<400> 1354
ttttttataa ggatgaaaat ccgttgcaga agattttgcc ttgagtccca ttggctaaaa 60
ctgggttcca tgcctgtgcc ctagctgcaa gggatgctgg gaatctgagt atctagcact 120
tcctcctgga ctgtgggaag ctgactctgc cagggtgaca atgggtgttc atagacagct 180
tgcccatgta cagtggggaa tggaagagtc ctgtactctc ctcctcaatg cctgtgtctc 240
tcccacggct gcaggtcaga ggattcccag ctcccaaccc cgcagctagc caacccagag 300
ccaggagaca agagtaatga acctgaagat gctgggacca gagacccaga ccccactcca 360
gagggagcct ggcagtcaga cagcagctct ggaagcagag ccctggatga agtggacgag 420
cagctgttcc gctccgtgga gggccaggcc gcctctgacg aggaggaggt ggaggaggag 480
aggtggcagg aggagaagaa gacgccggca gccgaggcca agacactgct ggcccggctc 540
tccagctgca gaggcaggtg tgatgaccag acggcggaga agctcatgac ttactttggt 600
cacttcggcg gtgccaacca tgcccatacc ctgggggggag ctggaggcct gcattgccat 660
gctggtggag cagctgagga ctcaaggctt gcggtgggag gaccctgggg acctctgagg 720
angangcaga attgcagcan 740

<210> 1355
<211> 726
<212> DNA

0056456-0020800

<213> Homo sapiens

<400> 1355
tttctgcggg ggacgatttc gtcggtggta ggtgggtgtg agcttggcag tacccgggtc 60
cgcgtggttg gagggtcgaa gagagtggtc tagaacgcca ctcaaagggg agggcctaag 120
actaagcccg ccttgccctg aagtggtcgg gggcggggag ggagtggcta gagccccgtg 180
gggtggtcgc cggggtaaga ggttggaagt aggtttaagg cagggctgaa agttgattct 240
gggttggaat ccctggactg gggcaagtaa tgggagctct ggggatactt tggtacttgg 300
tacttggtgc ttgggtttga ggaatcgaag ttctggggag tggacggaag gaaccggcag 360
aaacggagcc caggcttggc ctcttggagt gggagtcaag gattgtttaa ttatccttaa 420
ccagcctggt tctctttctt gcaagaattt tggagtctgt attctttgaa gtgtctagac 480
ggaactaatg acggaagtca acttagcccc agcaggaaag ctggagcgcc tacccaaagt 540
tggaggaaat tcagggtcct gaagtctttg ctctccccat ctgcatgcag gctgctatca 600
tgaggttgaa tcagaacacc ttgctgctgg ggaagaangt ggtccttgac cctacacctc 660
ggagcatgtg cccaggtatc ttttccgcct gacatggggt gcgtatcanc acccanagct 720
gtgtaa 726

<210> 1356
<211> 870
<212> DNA
<213> Homo sapiens

<400> 1356
ctacagttta aattctgatt tttctggcta caagtttcta aaataagttg tgcttcctta 60
aagtcctatg aactgaaaac tagatgtttt atcaggcgct gcctctaaac cccccaacca 120
tcacagaagg aaatctcttc actgctggca ttgacaacta ataactgagg gtgcccggaa 180
tccttcaccc catgtctagt gagtctacgg aaccagggta attgagacaa tatctgttac 240
aggaatcaac tcctggatac atcacacttg agtcaaagcc tggaaagctg aggaagcaac 300
ccctgagagc ccaaaggaac gtcctaaata taatggaaat tatttactac gccttgtggg 360
aattgcttta ctctactatt tgcagtagga ctatatacta tagcaccttc agggtggaat 420
atctgacagg gaatctcaat tgctgtagca ttttgcttaa ttattatcct catagcagga 480
ataactgtta ctaacaaaag ataatatgtg ggcctttcca aacatgtgcc tctgcctctc 540
attaggtagg gaatgttgtt tctatctcaa ccaatcaggc ctagtaagag actgctgaaa 600
aacttaaagg tctaaaaagc taagggaata ccaaaacaac cagacagatt cttggtttgg 660
gagcagaatc atagcatggg tcaccccatt cctgggccct ctcctaataa tatgcctagg 720
actaatggtc ttaccctgcc taantaacct ttttcaaaag atttttagct gacagactca 780
tgaccatttc acacacacta cccaaaaaca ttacagggta tttctgcagt caatccaaga 840
cccaaaactg ctggcccctt gcacaggaag 870

<210> 1357
<211> 810
<212> DNA
<213> Homo sapiens

<400> 1357
aaatgttagc tcttattaca ggctacagga aagaactttt aggaattagt tgcagcaatt 60
catggcaact agaactatgt cccattgagc tgtcagaagt gtcctgaggg atcacaagat 120
cacagagttt tattttattc tttctgaaaa gaaaatctaa ggggagttta cccagtctgt 180

0955204650.0N5000

atgggagcca tgcagatgac tcagtttggc tctttaaaag aactattttt aaaaatagaa 240
gtaggactgc tgagaaaaaa atagtacttt aaagtataca tgggttggcc aggcgcggtg 300
gctaacgcct gtaatccctg cactttagga ggccgaggca ggcagatcac gaggtcagga 360
gatcaagacc atcctggcta acacggtaaa accctgtatc tactaaaaat acaaaaaatt 420
agccggacgt ggtggtgggc acctgtagtc ccagctactc gggaggctga ggcagggaat 480
ggcgtgaacc caggaggcgg agcttgcagt gactgccctc cagcctgggt gagagagcga 540
gactccgttt caaaaaaaaa aaaaaaagag gctacaaccc aacggtgttc attctctcct 600
ggccatgaca gtcagtcttg ggtgcgagtt caggctcccc agaacttagc agtctacagg 660
cctgacggtt tcaaaggaac tctagttgtt ggaaagcacc agangtagaa aaactganaa 720
ggggtcttgg catgccanaa taaagctgtc ccctctaaat atggttacac actggcacct 780
acttggcaaa agagattgaa gacttcancc 810

<210> 1358
<211> 783
<212> DNA
<213> Homo sapiens

<400> 1358
aatttcttca ggtactcttt tttgagttac ttgtctggtc agatttctgt agtccttcta 60
gacagtcctt ctgcagaaaa gtataaagtc ttcatctgtt cattcattca ttcagtaata 120
acgtgcccat tcctgggcta agcagcgggt gtccagtgaa aaaagggaca tgatccaagg 180
actcaaggaa ctcatagcct agcggggaca aaagatcaac catccagtaa acatacaagc 240
tcatttccca ctacagcttc tggtcactag tatgaaagga gagaacgggg tacattaaaa 300
agagcagtgt ggtgaggagg ggctatcagg aacccacata gatgatgatt tggtcaaaga 360
agctctgtcc taggcagtaa catttaagct aagacctgaa ggtggagaag ccagccagga 420
gcagtgaggg gaagacttca ctggggagag ggagcggagt gtgctccagg atatttgagg 480
actcaaaaga caggctggaa tgtggtggag aaggaggcat gagctctccg gagctgagca 540
tcagagttgt gagccatgta gatgtggagt ctgtgtgttg gtataagtgc agtgggaagc 600
actgaaggtg agtgacatgg nctgatttat gctgcacaca tgtgaatttc agcaaaacaa 660
aatggtggca gcaaagacag ggaagggaag gaattctagt taaatttagg aagaatcaat 720
aaggcttgct gagataaagc cctaggatcc agtngatanc tgaatgnctt ttgaaagtag 780
ttt 783

<210> 1359
<211> 771
<212> DNA
<213> Homo sapiens

<400> 1359
acattgtagc aaaatggcga ctgtcattca caacccccctg aaagcgctcg gggaccagtt 60
ctacaaggaa gccattgagc actgccggag ttacaactca cggctgagtg cagagcgcag 120
cgtgcgtctt cccttcctgg actcacagac tggggtggcc cagaacaact gctacatctg 180
gatggagaag aggcaccgag gcccaggcct tgccccgggc cagctgtata cataccctgc 240
ccgctgctgg cgcaagaaga gacgattgca cccacctgaa gatccaaaac tgcggctgct 300
ggagataaaa cctgaagtgg agcttcccct gaagaaggat gggttcacct cagagagcac 360
cacgctggaa gccttgctcc gtggcgaggg ggttgagaag aaggtggatg ccagggagga 420
ggaaagcatc caggaaatac agagggtttt ggaaaatgat gaaaatgtag aagaagggaa 480
tgaagaagag gatttggaag aggatattcc caagcgaaag gacaggacta gaggacgggc 540

US 2005/0260200 A1

tcgctgccct ctcccttccc tgcactgntt ttcctccctt ccctctgccg tgatagatgc 600
taaggagtgg ggtggaggtt ggaagtggga agcaacagtg gcgtatagga aaaagaaaat 660
ataccccgtg cacattttca acatgtagtt gaanaagcct aaattaggta ctagaaaaaa 720
aaaaaggacn gaaaccctgg ctgatatgtg anccagaacc ttgaaaattt t 771

<210> 1360
<211> 751
<212> DNA
<213> Homo sapiens

<400> 1360
gcaaagaaat attatagagg ttttttttc attccaagtt ttaagttgtc cttgtgcatg 60
aaatatgcac atgataaaaa gggggttgcc atcaatgcat attgtcttga aaagccaagg 120
gctctttttc ggtttttctc tataatgaag actgttagac tgaggactct ataattatgc 180
tcactgaaca aataccttga aagggaagta attccaagtc atgtatcaaa gattcaattt 240
gacatgtatt tactaaatgc ctaacatgcc tatgcatttt gtttattcat ttatagtaac 300
aagatatagt gagttcatat tctgtgccag cactgtgctc agtattgaaa aattggagtc 360
acaagattcc cactttcaag aacttacagt ccaatggagg agaaagaagt atgaaaggat 420
caattgcagg gtgacaagag agtgttccaa tagtgcagat ccagagctgt gattttaaaa 480
agatgatgca aaccagttat ctcttgcttc atggagtgga tgggctacag gaaatttgac 540
aataaaacaa agcttaaata aattgcaaca tttgtctaca actctactgt aaaattggaa 600
atgcttttcc acagaaaaac ctctcaaaat gctgaatgca aaagttggga tcacagaaac 660
attgngccta tttttggnct gctggaaact gnatttttac aaggtaatcc ctggtttcaa 720
tatagttcct gcttgcactg gcggtttctt g 751

<210> 1361
<211> 784
<212> DNA
<213> Homo sapiens

<400> 1361
gttttttttt tggatgtgga agccgagacc taaagttggg gggtgatctc tgaggagatg 60
gatcggtacc tgctgctggt gatctggggg gaaggaaaat tcccgtcggc ggccagtagg 120
gaggcagaac atgggccaga ggtgtcgtcg ggtgagggta ctgagaatca gccggacttc 180
acagcagcaa atgtttatca cctcttgaaa agaagcatta gtgcttcaat taatccagaa 240
gatagtactt tccctgcctg ttcagtggga ggtatacctg gttccaagaa gtggttcttt 300
gcagtgcagg caatatatgg attttatcag ttttgtagtt ctgattggca agagatacat 360
tttgatacag aaaaagataa aattgaagat gttcttcaaa cgaatatcga agaatgtttg 420
ggtgctgttg agtgttttga agaagaagac agtaatagca gggaatcatt atccttggct 480
gagtatgctt atatggtttt tgtattatca ttaaaatact taatattaga cagttatttt 540
aatccatgag aatgaagatt atatatttta gcatctttac tgaagaaact ctagttaatt 600
gaaatttttg actctcaatt tgggcctttt atttgaataa aattctttaa aatgcatgtt 660
tcttaagctt acataatgtc aagaatcata aaaagtgata ttttaataaa catgttcctt 720
tcttgaagat aaattctgnc taatatttaa tttaattttt gnaacaaggg ncttgcttgg 780
gtca 784

<210> 1362
<211> 752

05250450.0N2800

<212> DNA
<213> Homo sapiens

<400> 1362
aatgtgaaaa taaaaggaca gagaaaattt tccttgtaaa tattaaaaaa gaaaaatata 60
gttacagtaa tatcaaaaaa taaattttca gacaaaaagc attactagag attaaaaaaa 120
gagacaatga caaaagaatc aattcatctg gaagctctta atttgtcttg atgtacctaa 180
tgacataacc ttaaaatgta aaaagcaaac attgacagaa ctacaaggag aaatagaaaa 240
tacaaaatta taataggaaa gtttaacatg ctttttgttt ttttaccaat tgacagaaca 300
agcaaacaaa aagtaggata tagacatttt aaataaattg ctgtacttga ccaaataatg 360
ccatgtgtga aagtagtgag tacacacatg ccctcacaca gagtacctat caatagcaga 420
atacatattc ttgtaagtgt tcatgcaata tttattttaa aatgacgatc tatggagcca 480
agaggatttc aaaaggattg taatcataga tagtgtgtcc ttagaccaca atgcaattat 540
gttaggaatc aataataaaa actaatatct ccctctccct ctccgtctnc ccacggtctc 600
cctctccctc tctttccacg gtctccctct gatgccgagc ccgaagctgg actgcaatga 660
cgtgatctcg gctagctaca ccttcaactt ccagccggct gccttgggct tccaaagtgc 720
caagaatgca gctntggccn gntgcaaccc gt 752

<210> 1363
<211> 752
<212> DNA
<213> Homo sapiens

<400> 1363
tgaaatgaga catcatttgc atatatacat gttagcaaag aggaccaaac attgttggtg 60
gcttttgcag aactctgttt atatgaaatg gctttagaaa ctgaaaaaat ggagttcatt 120
caaacaagct gggaaacatg gtattttctt aggtatattt ttctagtaga aatgtaccct 180
gctctgggga gtagccctaa ctctcagatc taggcctaag ttcagtaaat atagaattca 240
ccattgcaaa aactgcaggc agtggtatct taacaggaac tgtcttagtc cttttgttta 300
gcactgtgtg gtaaccttct ttaagtagtt ctgcatcagg tttctattct ctttcacatt 360
gggcgtggag aagaggtaac atttttagct gcgtggtgta tgactgaggg attgattatg 420
gtgtgttggt aaatgtttaa caatctagtc cccaggtgta gttccaacat gaatatgggt 480
tgatgttttc atttatgtga atgaggacag tgaaattgaa acaagaaata catatgtcag 540
aatgtcactg gtttatcaat ggcttcttta ctgaatacta aaaggctatt ttctcttttg 600
tgctctgcat gattaactgt tacaaaacat tttaaaggtt actctacatt actaatgntt 660
tcttcacttc attaagttta aaccataaag acccaaaagg accaagaaac caacagcaat 720
ntacagaccc ttatttgnag tggttgctgg ct 752

<210> 1364
<211> 840
<212> DNA
<213> Homo sapiens

<400> 1364
ctcataattt atttccatgc atctttgctt tggatcctag ctttattggt gaacatttat 60
gcctttctat agcaatctgg gttttcttag ccaattgaaa tgggcattta ttagatcatt 120
taagcatcat atcaatatag tatatttggc gactttatga taagttctta tgatagatgt 180
tcaaaactct gctcaggtga catttttatg gatccacata gtttttgtca tatatgaaaa 240

US 2005/0009004 A1

gaaagcattg agttgtgcag atggttaaat gtgcattgag ttatttctct ggaatttgca 300
tgagaatgga ccgacttgta gttgtattaa cttttctagt gcccaggtta gaaagtttga 360
tctgtgtagt ttttaaaggc agcatccaaa tcacttatat tcagaagaaa atggtaacag 420
atttagaagc tgtctatatt ttccccatta tccataatac atattattgg caatatggtt 480
ttcactcttt gntgttaacg tatcaacaat gtgcaatagc cactaataat catttgttaa 540
tgcatgcttc caagttctgt atttgaaaat ctcagacttc atatatggta agcgatggag 600
taatttataa cttttatgtt gaattcttgc tactttaaaa aattgngctt ctccttttt 660
aaagcatatg acttacttaa cagctgatag cagttacctg gatttttagt atttttttac 720
atcacaaaaa gatttctctg aagtttgcgc aggggctatt tgaggcagtt ncaacttact 780
aataagtaag gtctgaaagt ataagttact ggctgaatag atagnctcat ngaaccaggt 840

<210> 1365
<211> 689
<212> DNA
<213> Homo sapiens

<400> 1365
tagtacgtgg atctctttgt actcttgccc tgggccccca aaatgtaaga tgaagggctg 60
gttcatagtg ccctaggctc ccagttttct ctgagcttca gaagctctag aactttggag 120
tggcatgtaa acaggcacag taagtggtaa gtatacccta agagtttcgt accaagtaca 180
aaaggacaag agttttctgg agtggttgag aaaggctttc accaagaaag tgatatttgc 240
actgagtctt aaaggatgag taggcctttg ctaggaagag caggtcattc caagtgaaag 300
gaacagcatt tgcaaaggta tgaagatgtg gaaccctgtg tattattggg gtgggggcag 360
atgggagggc gtgggttgca agtgtttgct gatagaggaa gcattcattc aagcacccat 420
aactataccc atcccatctt ccatctctca caggctctcc cctacatcat tagttttctg 480
cttttctgta ggtgacacag gccccaggag gctgggaagt cctggctgtt gtggtccctg 540
tgccccctt tacctgcctg ctccgggacc tggtgcctgc caccaactac agcctcaggg 600
tgcgctgtgc caatgccttg gggccctctc cctatgctga ctgggtgccc tttcagacca 660
agggtctang taaggggatg cntanagca 689

<210> 1366
<211> 693
<212> DNA
<213> Homo sapiens

<400> 1366
acagagctgg gtgtgtccct ccgagtgccc cccgctaggg actgtgcagg ccggagctag 60
gcagggacag cggggcgaac cgggctgata gagtcggtcc ctgctcctgt gaggctctca 120
ccgaatccct gctgtttccg ggcagctgaa gagcgctggg ccctcgcgtc gcgggcgtgg 180
ctgtggccgt gtctcctggt agtctgagcc cactgtgcgt gtggatccac gtgggagctg 240
ggttccagag cctggtcctg aggaggagcc gagccggggc ttccccttct cagaatcctg 300
ctcttcctcc agagagattc ccaggagaag agggaacaac caattcattc ctgaaagcca 360
ggcctcggga cctgatgaca tttgaagatg tggctgtgga attcagccag tgggagtggg 420
ggcagctgaa ccctgctcag aaggacctct acagggaggt gatgctggag aacttcagga 480
acttggccat tctgggcctt ctagtatcca aaccatatgt gatctgccag ttggaggaag 540
ggggtgagcc cttcatggtg gagagagaaa tctcaacagg agcccactca gactggaaga 600
naaggtctaa atccaaggaa tcaatgccaa gttggggaat ttccaaagaa gaattattnc 660
aggtagtatc antggaaaaa cacattcaag atg 693

US 09/756,800

<210> 1367
<211> 718
<212> DNA
<213> Homo sapiens

<400> 1367
tgatgctgtt tgctgtaggg attgacttaa attggagtca gttcttctag gacagtacgc 60
tgtgtgtgtg tatgcgcgtg catgtgtgtg ttgcagataa gggcattatc attcggtctt 120
caagctcctt ttgtccacta aatttttgtg ccctaggatc aattactttc actatttttg 180
tgatccaacc tttagcttct gacattcatt tgtattgaat tcctactcta gctggcactg 240
tgctacatat tgagaataca atggtacata ctatagacta aattccaaga gtttatattc 300
tacaggttta gagtaagttg gaattccaga tattgataag tgcctttaa aaaaaaatga 360
aacaaggtcc tgagataagg atggcctgtt tagagcaaga agaaaatcca gtgtggctgg 420
aggagtgtgg acaaggcagg gagtgggtag aaatgtggtc agtgattggg gctagtgcca 480
ggtccaggtc ttggtgggtc tcctggggca cagaaaagag cttgggtttt actctaattg 540
ccgtggaagc caatagaggc ttttaagcag ggcatgacac gatctgattt aagttttcaa 600
agaaatcttg ttggcagttg tgtancctt ctattcgaag cctggtctgt agatggactg 660
gcagcatgag catcatctgt gagcttttta ngaaggccat ttttgggacc cactcang 718

<210> 1368
<211> 809
<212> DNA
<213> Homo sapiens

<400> 1368
ggcctttttt ttttttttt ttgagacgga gtctcactct gtcacccagg ctggagtgca 60
gtggtgcgat gtcggctcac tgcaagctcc gcctcctgag ttcacaccat tctcccgcct 120
cagcctccca agtagctggg actacagaag tatgccacca tgcctggctt ggtttttttt 180
gttttgtttt gttttgtttt tgtttttgtt ttgtgtgtgt gtgtgtgtgt gtttgagatg 240
gggtcttgct gtgttgccca ggctggtctc taactcctga cctcaagcga tcctcccttc 300
tcagcctccc tagtctctgg gattgcaggc atgagctcct aagcccagct tcacatttat 360
tttcaaaagc tctttgctgg agggtctgca gagccccacc ttggggtatc attgcctgca 420
cttaggagac tgtaatgtaa atggtgcctt ctttatttgc cttccagggg cacttccttg 480
atggacacat aatcaggtca actttgacct cttgtccctg gttgagtggg gaaatcccag 540
agagaggatc acgtggttgt aggaagacaa acttccagat aactctttaa tagctttaag 600
cttaattcac ttaccatctt ttttgtgggg gtggatggca natcttggtc attaaatgag 660
tatttattga ctttatatta attaagcacc tactatatgc taggcactgg tttgaactca 720
gatagccccc atgtgtctgg gccttggggg gaaaaagatn tnatccatga atgcntaatt 780
cttcagacaa ggaatggtaa ttggatttt 809

<210> 1369
<211> 834
<212> DNA
<213> Homo sapiens

<400> 1369
ttttttaaaa ttctgacagt tttgttgact ttgcactctg atgaaagcgt aaaatcctag 60

0030030.0003

gatgaaaagc tctacctaca tatcaaataa taaaatagtt ataccctaga agaagagaaa 120
ctcactgtct cctgctaaag aaataccttc tgtctatgca acttttcttt ccccctttct 180
atacctctct tataagggca aagcatttat agcctctgag ttctaagaaa ccatgggagc 240
acggtgatct gctggtgaga taaccgagat aacagggccc atggtccagg tgccaacacc 300
gaggaccctt gttcctttat gtgagcccct gcatctggcc cactgctggg tttcaaacat 360
agtattattg aacaacctca aattgctata tttaaatcaa ctctttatca actagtcctg 420
aaaattaagg cctacagaca tcaacaaaac gagcgacaga agaaaggcat ttccaagtga 480
tgtaactggg tgactcatct cacgaaaggg cactcggagg cctaccagta gaccaccttt 540
ctggcttttg gcatgccctg acatcagcct tgctccctcc attaatcata ctacgctcac 600
atagaagcca aaacatgtca cgcttctgtt tgaaagctgn ctttttgntc ttagcaacat 660
gtcatgtttg ggggaaagtt ataatatact ggccagtggt gtcagtaagt cgggaaggct 720
aaggagcttt gatgtcangg ctttaccatt taatggtttt caaagtattg ggaattctga 780
gaatattggg ggcangtgta aataanattt gcatgcggtc ttttttgggg atta 834

<210> 1370
<211> 744
<212> DNA
<213> Homo sapiens

<400> 1370
aacagggaat gaaagctgag tgtagtggct catgcctgta atcccagcac tttgggaggc 60
caaggcaggc ggatcacatg aggccaggag ctaaagacca gcctggccaa cgtggcgaaa 120
tcctgtctct attgaaaata caaaaattag ccaagcgtgg tggcacacgc ctgtaatcct 180
aactatttgg gtggctgagg cttgagaatt gcttgaaccc aggaggcgga ggttgcagtg 240
ggccaagatt gtgccactgc actccagcct gggtgacaga gcaagaccta gtctcaaaaa 300
aaaaaaaaaa aggaaatgaa agacatgcaa tagatgattt ggtttatttc tttaaaacct 360
ggatattggc tctaaagtgt ttatttaaat aaatcagatt tagaattact gatggaaatt 420
ggccattctt ctatgccatg actctaggat gagtgtcgaa gaaatagcag tcaactttaa 480
ttcagtagac agggcaagaa gaatcaaagg gactcttaaa ttaaacccta agtagtagaa 540
catggaatca ggctttagga ggtcaagtaa gaggtgggag aggaggaatt cagttctacc 600
aatatttgag tgcctactct ttaacacact ttctaaaccc tggcttcaat agtaacaaaa 660
acaatagctt tcctgncttt ctagaactta cattctagta ngggaaacag caataaagaa 720
aataaaactt gcagcatttc anaa 744

<210> 1371
<211> 587
<212> DNA
<213> Homo sapiens

<400> 1371
tgtaagttta tagaaataaa ctgattgttc tctcaaaaac tggttttgac acaggtttgt 60
atataactgg ttattcagta atgataattt tcaaagttgt cttagtctat ttgcactact 120
acagcaaaat accatagagt aggtagctta taaagaacag atgtttattt ctttcttttt 180
ttttttttt ttttgagaca aagtctcact ctgttgcaca ggctggagtg caatggtgtg 240
atcttggctc actgtaaccc ctgcctccca ggttcaagtg attcttctgc ctcagcctcc 300
tgagtagctt ggattacaag tactcaccac cacacccggc taatttttgt atttatagta 360
gagttcgggt ttctccatct tggccaggct ggttttgaac tcctgacctc aagtgatcca 420
ccttcctcgg cctcccaaag tgctaggatt ataggcatga gccaccgtac ccggccagat 480

0503045.0503000

gtttatttct aacagttctg gtggctggaa agtttaagat caagatgctg gcagattcat 540
atctggngag gatctgtttc atggntcata natgggcctt ttcattg 587

<210> 1372
<211> 881
<212> DNA
<213> Homo sapiens

<400> 1372
tttaaaaatt atccttaagt aacagaatag gatttaatag gaacaaatga ggctctgtac 60
acacattcag gccagggaag tgtgaccagt cccaagaggg cagagtattt gaaagaaaaa 120
aaaaattgcc atagtgaatt cacttccaac tcagagtgtg atcttaaact cacggggatt 180
ctcacttctt tatgaaagtt tggggttgga tgacccctaa ggctccttct tagcactttt 240
attctttgct tccaaagtag aatcttcaac tcagagagtg ctgctgatga gtcgatagta 300
ctcattttgg gctgggtggg ggaggagagt gaaatgtcta ggggaagtgg gatgtgtcaa 360
agccaggaag agagcctcct gctgtattca gcattaacta catactacgt gaaaaatcta 420
atacggtttt ggtcccccta attttaaaaa agaatgtgaa aaaatcagta actgctacct 480
ggagtgtgaa gggaagtctg gtggacaggg tgagggaatt atttatcatc ctgctctttg 540
aagtaagcac catattaatg tcatgtatta cctattaaaa atatataaaa tgagaaatac 600
atgaagatat tagtgaagaa agaggggaaa aagaagatag cctaaaataa aaagcaaaat 660
gattcagcct ggaataataa tgctaaataa ggggtgatct gataatttag aaccgtatta 720
gagtttatta ataggaaaca cagtatcatg agttccttaa tctctggcct tttggaanga 780
aaagaaaatt ggccaaaaat aatctgggtt aagggcatgg ngatgatgaa acttcaggac 840
atgctacagt tttaaagggg gntcttaaga aaaaaaatcc t 881

<210> 1373
<211> 799
<212> DNA
<213> Homo sapiens

<400> 1373
attttgttga ccccaacaca gaagatgtag cagttcctga acagggaaat gcacatattg 60
gatcatttgt atcattcttt aagggaaaag aaaaatgttc tgaaaaatct cggaaaaatg 120
aagaattagg agatgaaaaa agacttgaga aagaacagtt actggcagag gaagaggatg 180
atgatttgaa ggaagtaact gatttgagga aaatagctgc tcagttattg cagcaagaac 240
agaagaacag gattcttaat cattcaactt ctgtgatgag aaacaagcca aaacaaactg 300
tggaatgtga aaagagtgtc tcagcagatg aagttaattc accattatca cccctcacct 360
ggcagccctt agaaaatcag aaggatcaaa tagatgaaca accgtggcca gaatctcacc 420
ctataatctg gcagagtgaa gaaaggaggc ggagcaaaca gattagaaaa gaatatttca 480
agtataaatc aatgaggaag agttcaagtg gcaatgaaaa tgatgagcaa gacagtgata 540
atgctaatat gtcaacacaa tctccagtat catctgagga atatgacaga actgatggtt 600
tttcacacag tccctttggc ttgaagccta gatcagcttt tagcccgctc atctcgccaa 660
gaatatgggg cagcagatcc aggatttcca tgagaagaaa gatggacatt tacggaagag 720
cgagagcnaa tccacacttc gcaacatctt gaatcnaggt aaaagtattt tgnctgatgc 780
attggagctg cctgatgga 799

<210> 1374
<211> 558

0956294.0076800

<212> DNA
<213> Homo sapiens

<400> 1374
aaggtggact agacaaagtt gtatctagac ccttatcata tatgtgattt gcaaatattt 60
tgattgtgtg ggttgtcttt ttacttttt aatagcgacc tttgcagcac aaattctcat 120
tttgatgaag tcaaatgtat ctaactttca tttggctgct tatgctttca gtgtcatcta 180
ggaaccatag cctaatcgaa ggtcattagg atttgcacct ttgttttctt ctaatgattt 240
tataacattg gctcttattt aggtctctga tacatctgct gtgaattttt atgtatggta 300
cgaagtggga cgggggaggg gtgtcccact ttaatctttt gcacatggat gtccagttgt 360
tccagcacca tttgttgaaa aaactattct ttcctcatga actgtcgtct tgcctctgtt 420
gttgaaaatc agttgactgt aaatgtatgg atttacttca gaactgttaa ttntattcca 480
ttgagctata tctattatgc tagtaccata cagtcttgat gactgcatct ttgtaatatg 540
ttntgagatt ggaaagng 558

<210> 1375
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1375
tattgaggca ctggcccagg gaactgagcc ttgggcctgt cctaaagctc cataggtgac 60
tgcactgcag cccacatgga gagctgcagc tctaacacag ggattttgag aggcctcagt 120
gccatttaag tggcacttcc aggacaccca tcctgagctc ccacaaaggg cgccaccttc 180
ccaagaacgt ctaattgtca ttggaacagc cagtgtcagg cagcttctgc tcaggctgat 240
gtggcgtctg acccttggtg ggttgccaga cattccttcc tgtttctgcc atgggaagtt 300
ggcactggga atggtatgga gcccccactt ctaccctgag ccttgggtgt ctgctgcttc 360
caggtgaaaa atggacattt ctgatactgc ccagccacta cggcaccaca acccatgctc 420
atagtctcca gggatgtgta gaacggcaat ggcaggacag caaacaactg gcgatttccc 480
caggtcccac gctcttgcgg agtgagtatg ttgggtccct gtccccagtg tgttccagcc 540
ttacccaggt gcacagagta ccctggggcc agcacagggc ttgtccagtg atgctcctgg 600
tgttnacaaa atggctccag agatacctgc attttgaaaa gcctgccgag ccagcaagtg 660
tagggcanga cccggatttc tttggcaaat ctgaaggtga aaagggccac ttgcctgctg 720
agtaaaaact gcctttacct ggccagtgta tgcaacttga gagaaaatga canctgcatg 780
gggcgctctg gtgggactgg gaaatctgat cnttccggga gctgganata g 831

<210> 1376
<211> 743
<212> DNA
<213> Homo sapiens

<400> 1376
gggggaggtt gcagtgagcc aagatcgtgc catcgcactc agcctgggc gacagaggaa 60
gactccatct caaaaaaaaa aaaaaaaaaa ataccaagac tgtaataaag tgggtggtct 120
ctagaaccca gacctttact tgggtgaatt ttcaagggca ttttcatcag gataacttat 180
gatagcttca ttttttacca agataatcgt cttgaagtat ggaaattccc agctttcctc 240
tggtcagtga atgcatatta atcccattga tgctggtgca gttattattt gccttanagt 300
tgagcaatag tattgaaatt ttccattgta tgtaatataa atactatttt ttatgtttgg 360

0050250:0050850

aataaaataa cactttggga tatcaattta gtttcttcat tatttgacct tttatctctt 420
gaaagtgaac tgtacctcaa agaaaaaaga gtatatataa ttctggtgct tttcactggg 480
atgaaaaaat agaggtgttc ttgaggtctt gcccttatc catagcgagt gattgaggct 540
tctcgactga tcaaggcaac tccagtccta agttctaact ccagaatatg taggattcct 600
caggactaga ctgagcagac tgctataaac gtgactccag aaggttctcc taagaattta 660
gataatgatt taccactatt catacactcg agttgaagac cttangctac tagaaatccc 720
caatctgtga gctgganaan cta 743

<210> 1377
<211> 782
<212> DNA
<213> Homo sapiens

<400> 1377
caaacatggc aaaaactatc tgataacagc caggcatata gaaagcacaa tctaatatat 60
gagtctgaat tttactgtgt cccttgctga aaaaaattca gccattaaaa taaccaaaaa 120
attcataatc aagaaatatg tttctgtcat gaatagttgt tttttacttt agagtgtaaa 180
gcatgagatg attatttgga gtggataatt attaactaat actgacttgg ggtggattat 240
ttggggtgga ttattgttaa ctaatactga gttcttgctc tgacaatcaa gaatttcaaa 300
tacacattag caccacagaa attaccaaag ttgaggaaat atatgttacg tgaaatgtat 360
ctttgaaatt ttaataagtg tgtgaactta acttccttac acatatttgc tataattttg 420
acctaagcat attttctact aaggcatgat gctgttaact gacatgatag tatactgtaa 480
aacatggctg tataattagc caaatgtatg aaaaataaac actactttac tgacaagtgt 540
aattaaagga aattggtaaa ttaagtacat tgtaattata ttgtaagtag ttaatattaa 600
aaatagtcat tcttcagctg ggcgtggtgg ctcacgcctg taatcccagc actttgggag 660
gccaaggcag gtggatcacg aggtaaggag atcgacacca tcctggctaa cacggngaaa 720
cccccgngtc tctactaaaa aaatgcccgg gccgtnaagg gaaggccccc tggtagtccc 780
ca 782

<210> 1378
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1378
atgccgggag ttgcagtacc ctcaggaagg tagcgtcttg atctgcgtgg cgtggttctg 60
tgccttggga agagatgaat gggaagcggc cagcggagcc cggcccagcc cgggtgggaa 120
aaaagggaaa gaaggaggtg atggcggagt tttcggacgc tgttacggaa gaaaccttga 180
aaaagcaggt ggctgaggcc tggagccgca ggacgccgtt cggtcacgaa gtcattgtca 240
tggacatgga ccctttttctt cactgtgtga tcccaaactt catccaaagc caagacttct 300
tagaagggct tcagaaggaa ctgatgaact tggacttcca tgagaagtat aatgatttat 360
ataagttcca gcagtctgat gatttgaaga agagaagaga gcctcacatc tccactttaa 420
ggaaaattct gtttgaagat ttccggtcct ggctttctga tatttctaaa attgacctgg 480
aatcaaccat tgacatgtcc tgtgctaaat atgaattcac tgatgccctg ctgtgccatg 540
atgatgagct ggaagggcgc cggattgcct tcatcctgta cctggttcct ccctgggaca 600
ggagcatggg tggtaccctg gacctgtaca gcattgatga acactttcag ccgaagcaga 660
ttgtcaagtc tcttatccct tcgtggaaca aactggnttt ctttgaagta tctcctgngt 720
cctttcacca ngtgtctgaa atggctatct tgaaagaaaa agtcacgttt tggcctatta 780

US 2005/0059005 A1

a 781

<210> 1379
<211> 711
<212> DNA
<213> Homo sapiens

<400> 1379
tgttaaaagg gttctatcaa ccctggattt taatttttca aatgtatgac atagtttctt 60
ttgttgttta tggaaaagct gagcaacttg gtaacgaatg tgaatatgtt tggaagccca 120
atccagctca tgtagatgca tatttgtttc catgatcatt tgaaattcta tggagtcacc 180
actgctgatt caaacctggc caggcttcct gattctaatc tcatcccagg gtgaattgag 240
gttagctgct ggagggaatg ttcagttcag ttgaatgtaa atctagcgcc aagccacatg 300
tgagctgagt gtgccaggat gccaagtgat aaatcgagga aagaaagatc acatgaggct 360
gacatcttag cactgacaca tggccctctt ctgcagaaat actgggcaaa gagttgtgag 420
tcagctacaa ggaagatagg gctttccact gaaaaaggca gtgttcaaag gactcattcg 480
tcaggaaaaa gaattcccat gtcaatgaga gctgaatgtg agctacactc atctttggat 540
aggtatttga tgaatactcg tattcttgga gtgactttcc aacatttaac taagaccatt 600
cagccttcac aacccatttg acttaaaggg caaaagtgcc tatctgcaat tttgatgatc 660
agacattgcc ttcttnccct tctactnctg ctagatccat tctagnctct g 711

<210> 1380
<211> 740
<212> DNA
<213> Homo sapiens

<400> 1380
ttctgtctgg cggcggcagc atggcggcgg gggcggctga ggcagctgta gcggccgtgg 60
aggaggtcgg ctcagccggg cactttgagg agctgctgcg cctcaaagcc aagtccctcc 120
ttgtggtcca tttctgggca ccatgggctc cacagtgtgc acagatgaac gaagttatgg 180
cagagttagc taaagaactc cctcaagttt catttgtgag gttggaagct gaaggtgttc 240
ctgaagtatc tgaaaaatat gaaattagct ctgttcccac ttttctgttt ttcaagaatt 300
ctcagaaaat cgaccgatta gatggtgcac atgccccaga gttgaccaaa aaagttcagc 360
gacatgcatc tagtggctcc ttcctatcca gcgctaatga acatcttaaa gaagatctca 420
accttcgctt gaagaaattg actcatgctg ccccctgcat gctgtttatg aaaggaactc 480
ctcaagaacc acgctgtggt ttcagcaagc agatggtgga aattcttcac aaacataata 540
ttcagtttag cagttttgat atcttctcag atgaagaggt tcgacaggga ctcaaagcct 600
attccagttg gcctacctat cctcagctct atgtttctgg agagctcata ggaggacttg 660
atataattaa ggagctagaa ncatctgaag aactagatnc aatttgtcca aagcttccaa 720
attanaggaa aggctcaaag 740

<210> 1381
<211> 708
<212> DNA
<213> Homo sapiens

<400> 1381
aaagtcgtgt ctttcgtgag ctggtggaaa caccggagcg cccgctcctg gaaagccccg 60

0352960.0702800

ttctcatagc gctcatggcc aaacgctccc cgcttggcag catccgccag ctgtaactgg 120
aggaacagga ccaggtcggg tttgggaagg cccacgtctg gctgtttaca ccaatctagg 180
gaaaaattct gccaagaaag aacccaacag ttaaagctta gtgtagtcta ggtttttgtt 240
tcgaaagtcg taaaaacagg aaaaaatgag gggacatttg gtgaggtacc aagatgtgag 300
actgtttata ttgtggctcg tttaattttt agaacctcaa acgtgtcggt ttctccagtg 360
tcacctttgt ttttcctttg taaacagaca agtggacaga aaagtaggta gatagaacgg 420
ctgccagtcc ccgccaccca cagcccaggc cccatggagg ccctcccagc gcagctacag 480
gcctgctggc caggagcaaa cagtctatgt acagaacccc tgnagacccc cggcctagaa 540
cgcctgcagc acagagcagc tgggtccgga cacaggcacg aggtccttgg cagtgtcttt 600
tctgccacac acacgccagg gtctcctctt ccgtggaaga gcangaagaa gacaggcact 660
tctanagcct gttatgtgcc agcctagtct catcactggc ccttnttg 708

<210> 1382
<211> 670
<212> DNA
<213> Homo sapiens

<400> 1382
ttgcagatgg ccgtctccct cgctggagcg gccagaaaaa ggcgctggaa aaagtgaatt 60
tcgtaaccag aagccgaagc cggagaacca aggtgatgtt atgtgggaac cgaagcctgg 120
ggtttgtgta cgttgagttg cgatgttttt ttctttcgtt cctcgtggac ttataaaacc 180
acctggagcc tgtactgtgt agttgagtac ctgaataatc gctgataaga ttttggctgg 240
gcccacagga acggctggcc gatatggtgc cacccaggtg ttcctaattc attgcttttg 300
ctaaagggtc cccaaagcga agctgttgcg gattacgtct tttgtaaaag gatgagtatt 360
aagaaaatgc ctagggcgac gcagaacctt gtaagcctgc gggtggctga aagtcactga 420
cggaatgagg aatagggtga ggtgggaata ggtagtcatg atatacaaga gtggaccctg 480
ataatggggt gaggtatggg gaaaggagct atccgacatg tccttagctc tagtctgtca 540
gtaaagatat tttgaaagat tatcaattcc tgtttgtcag atgctaaaat attagacgac 600
acagccctta ctggttangt tgngttacct tttaattggt aactcctgcg ttgtantctg 660
gttttacccg 670

<210> 1383
<211> 773
<212> DNA
<213> Homo sapiens

<400> 1383
attttagatc aagtcaccat tgtctctttt ccgtagtaat ctccctagct ggtattcctg 60
cttccactgt tggactgcct acaatccagg ctcttcacag cagccagaga gacctttaca 120
taacacgaat ctgatgatta tgtcagttct ttatttaaag ccctccaatc acttcccatc 180
atacttagaa taaaattcaa actgtactct gatcatacct gccaatcttt cagactttat 240
ctctaaccat tctccttgcc cattacattt ctgcacataa tttttttttgt ttcttgaacc 300
aactggtctt tcttcctgga atactcttcc tcttagtttt tataagatta ggtacttctt 360
ttaactcaga tctcagcttc actgactcat ccttagagat tggacttact ctcacatttc 420
tctttttttc gttctctact tggcaataat ctgataaaac atctgatctt atttattggt 480
tggttggctc atttttctgt ctcccaaaac ctccatgaca gaagaacttt gtctgactgn 540
tttcttctct agtccctgtg cctctaacca ttttttaatg aatttattgt gataaaaata 600
cataacataa aatttaccac tttaaccatt ttgaagtgca cagttctgtg gcattaactg 660

0950360.0950800

cattcacgtt ggtgggcaat gatcataagc ncccatctnt agaacttttt catctttcca 720
aactggaaac tttggacccc attgaacaaa tancttccca atccttccca agg 773

<210> 1384
<211> 689
<212> DNA
<213> Homo sapiens

<400> 1384
ttaggatctt tttcttttaa ctacttttt tttggtgtcg tatacaaaca gcctctggtt 60
ctaattactt tttctaataa gtcaagcaga atgcttgatt aaagtttttt ccatttacta 120
ttccacagtt taatatagat cttagttatt ttcttttccc atttaggaca cgtgttttag 180
taatatagac tgcatgcatt gatcccttta gaaattttac tgatgattta tatttatagc 240
cacagatgtc tatattcaaa caaagtttat ttttctatga taaaaataat acaagtgtcc 300
taaagaaaat ttggaatata taggtaaaag aagaaaaaaa aaaaaaaaaa aaaaagaaaa 360
tagatgactg cttgaagaat ttagtaagag aactttaagc tatagaaaaa gagttgaatg 420
gacataacta gaaaatgtaa caactgaaat tagaatttaa tagatggctt ttaaaggagg 480
ttaacatggc tgaagagaag attagtgaat tggaagatag aacaatagat gttatcaaga 540
ctacttcatc tgatgagtca tagtgaaaaa ttagaataca tacaaggaaa tccaatgaga 600
aattcacatg caataataga tggaagaatc atagacatga taattggaaa gaggctttaa 660
aataaacnta cntatttaaa ggagatgcn 689

<210> 1385
<211> 638
<212> DNA
<213> Homo sapiens

<400> 1385
ctccgagcac tttgttttca cttcctgacc cgtctcagaa gctcaagtgg ttgaatgttt 60
tagcctcaga atctttttcc ccaagccttc tcaggtggag ccccgctgta ccagacacca 120
cagcacagct ctgtgaggct gtgtctcttc actctgtttc tggggctgct gaggcccctg 180
ggaagccctg gagcttgcca gagcagagcg agaaagtctc tggtcctgtt taaatgcctc 240
cgcgttttat ctgtgagcgc caggctggag ccactccctg tcttctcaca gtgcccctgc 300
aagttgcagc ctcagttttc cagtggctcg tggggtagca ggtgctgcgt catatggttt 360
gggacctctg tggctgcttc cagcctgcta atagaacctc tttccaccac tgccttcatc 420
tttggggtgg caccccctgag tgctcaggcc tgagggcgct cctgtgtcct cactcgggac 480
aggcagcctc cactctggga gctcccatcc ctcgggatgc ccaggagagg ccatactttc 540
agggtggcat ggtgaattca ggggttagga tgggtaggtg gtctttcanc ccttctacnt 600
tggggttggt ttacagaaca cctgtctgnc tgtgccag 638

<210> 1386
<211> 719
<212> DNA
<213> Homo sapiens

<400> 1386
cctttgtcat tctagctgcc tgctgcctcc gcagcgtccc cccagctctc cctgtgctaa 60
ctgcctgcac cttggacaga gcgggtgcgc aaatcagaag gattagttgg gacctgcctt 120

0030030.0002000

ggcgacccca tggcatcccc cagaaccgta actattgtgg ccctctcagt ggccctggga 180
ctcttctttg ttttcatggg gactatcaag ctgaccccca ggctcagcaa ggatgcctac 240
agtgagatga aacgtgctta caagagctat gttcgagccc tccctctgct gaagaaaatg 300
gggatcaatt ccattctcct ccgaaaaagc attggtgccc ttgaagtggc ctgtggcatc 360
gtcatgaccc ttgtgcctgg gcgtcccaaa gatgtggcca acttcttcct actgttgctg 420
gtgttggctg tgctcttctt ccaccagctg gtcggtgatc ctctcaaacg ctacgcccat 480
gctctggtgt ttggaatcct gctcacttgc cgcctgctga ttgctcgcaa gcccgaagac 540
cggtcttctg agaagaagcc tttgccaggg aatgctgagg agcaaccctc cttatatgag 600
aaggcccctc agggcaaagt gaangtgtca tagaaaagtg gaagtgcaaa gagtggacct 660
ttcaggcaag ttgcgtccat gacaccagga agatgtcaag tgngnggttt ttcatttga 719

<210> 1387
<211> 731
<212> DNA
<213> Homo sapiens

<400> 1387
agaacaggga cgcaaagttg agtaattagc aaggagacca gttagaaggc cactgcagta 60
atctaagaga gacaactcta gcttggaccg gtgtcatggt gatggggata gtggaaagga 120
gttgaattct agatatattt tgattgcatc cacaggattt gctgataggt agcatgtgga 180
atgtgagaga gtggccaaga gtgactccaa agtttttggc aagtgggcag gtgaatatat 240
ggatttggag ctcaagggag caatccagcc tagagataca aatttggaag ttgtcacagt 300
gcagatggta cttaaaatca tgagaccaga tgagatcacc aaggaaatgc aaatagatag 360
aaaagagaag aagaccaaag cctaagccct ggggccctcc aatgttaaaa ggttgaaaga 420
tgaggcagaa ctagcaaagg acactgagaa ataaataatg agatataaag agaaacaaga 480
ttagtaagta tgcatcatgt gccagacacc atgctccaga caaaggatgc aaagacaaac 540
acaaccccgt cctcatcatc ctcatgctct aatgcagcag tcaggtacta caccttgaaa 600
taccattgtg attggttcag ggataggtgt aaaatgtcan gggacagtga gaccacaacc 660
ttgtacttct gtgaatgatt acncacacac acacaatcag ccatacttgc ctcttctgan 720
tgattctttt t 731

<210> 1388
<211> 809
<212> DNA
<213> Homo sapiens

<400> 1388
acttttttca ttcccgttgt tatggaggta ggctctctag gaatctggga gtagtagctg 60
gggggcaaga gcaaataaag agctcgagct tctgtggtct ctggggagat gttcccggga 120
agcctgtcta gagggcggag ggcagctgtt gagatggcgt ggctccccgg ctcctgcgcc 180
cgcgtggctt tcgcggcggg cgctgcggcc cggtattgga cagcctggca gggcagcgcg 240
gggccgaatc cggctgccgt ggctgaggct catggatcac tcttttgtgg tagggccaca 300
tctgccagag cctggagtct gcgaaggccg ggacccggtt ccccggccca cagtgggggt 360
gtgcaaaccc gagagaactg gattgcgtac ccactgcaga gtgctgaaga cggggtagcc 420
acgaggttgc aaattcgtga agaaccagcc tgggcaacat agcaagaccc ctttatctat 480
aaaaataata ataactaggt accattgtga aaaataataa ctagggattg attatagtat 540
ctttactctg tattcacaaa tatctgtatt cctggacata tttaatcctt tgatttacct 600
ctgactangt ttgtcattgt aatccctggg ctgcttanga ggataccatt tggtttgatg 660

0050350.0002

aaaaagctgg aatgataata gctcaaactc ttttgagcat ttagtacatg cttggcactg 720
ntctatatgg cttaagtatt cactcttgga tttaaccatc aacactctta tganggaaat 780
atccccaatt tacttttgc gccaancta 809

<210> 1389
<211> 835
<212> DNA
<213> Homo sapiens

<400> 1389
taacgatgtt gtgctcaggg tagtaattga gaggtatttt acaccagatt taagcctgtg 60
cttttatctt caaagatatg ctacttaaaa ttgggggaaa gtgtacagaa tggaactgta 120
tggatatgga tttttagaat agtgcacaca cctcaagtgt gtatttattt cattaatttc 180
ccccaaactg agtacctcct atgtgttagg cactggacaa aacagtaaac aaaatagtaa 240
acaaaagaat aaaaatccct gccatcatga agttccactt tggggatggg gtgagaagac 300
attgatacaa aaattaaggt acagtctttc ctgtccctcg gcatctgtgg gagattggtt 360
ccaggacctc ccttggatac caaagtcctc aaatgctcaa gtccctgata taaaatggtg 420
tagtgtttgc agataaccta tgcacatcct cctatcttta gttcaactct gcattattta 480
taatgcgcaa tacaacttaa atgctgtata aatagttgtt atggtgtatt gtttagggaa 540
taatgacaaa aaagagtcta tacatgttca gtactgactt ttttttcctt ccccgaatat 600
tttttcatcc atgattggtt gaatacaagg acgaagaacc catgggtagg aagggccaac 660
tgtgtaccgt caagtggcgg aaagtgctag agaaaaaaac caaagcagtg caggggtata 720
gggaatgcca agagatggga gtggtggnca tagaaaagat gatattaact tggangccta 780
cggtgataaa gaanggtgcc cttggaagga ctgcctgaac cctgaacagc catct 835

<210> 1390
<211> 438
<212> DNA
<213> Homo sapiens

<400> 1390
ggccttttt ttttttttt tagtagagac ggggtttcac cgtgttagcc aggatggtct 60
caaactcctg acctcaggtg atccacctac ctcggcctcc caaagtgttg ggattacagg 120
cgtgagctac tgcgcccagc caactataca tttttgaagc cctcctgatc acttccttgg 180
ttactctcat ctttgtttga agttcaatat attacttttt ttttttttt ttttttttt 240
ggagacagag tctcactntg tcccccaggt tggagtgcag tgagccatga ttgggccact 300
gcacgccagc ctgggcaaca gagtgagccc ctgtttcagg aaaagaaact gagagggnag 360
gagtaaagga atttcctaag ctactgccat gtgtcaggcc cactgntngg caatttatat 420
catttagctc ttgaatga 438

<210> 1391
<211> 881
<212> DNA
<213> Homo sapiens

<400> 1391
gtcttgcttt atttcaggaa tgcctctggc tcaggcagta gccattcttc agaagcactg 60
tcgcatcatc aaaaacgtcc aggttctcta cagtgaacag tctcctctaa gccatgacct 120

US 2005/0153306 A1

cattcttaac ctgactcagg acgggatcaa actaatgttt gatgctttca atcagagact 180
taaggtgatc gaagtatgtg atttgactaa agtaaagtta aaatattgtg gcgtgcattt 240
taattctcag gccatagctc ctaccattga acagattgac cagtcttttg gcgcaaccca 300
tcctggaggt aagccaagtc catctgattc ctctggtcat cagtggcagt tcatagcaat 360
aaacctgccc ggtagtgcca tcccacccca cttcctggag tcaggctccc ataggattgt 420
ggggttggta cttgggtgtg aaggaaacat cctccccctt gttttcaacc tagtaggcca 480
gtttagaaac aagccacagg gaaggtgttg tcagtcatta ctccctgcca ggctggttta 540
tgttagccat ttcagatgcc agtcaaccat gttattttct tctcccccac ccccaacagt 600
gtacaactcc gctgagcagc tcttcatctc aacttcagag gactgncttt ctcttttcag 660
ttagactcat ggactgaggc ttcaaagtat gagcccaatt ttgcccatgg cctggcttct 720
cttcagatcc ccatggagca actgnaaaac gaatgtncat ctacagtggc aacaagcctg 780
caggatacca agtaagttta aggagccttg agttcttgct aaggcctggg ctggctggga 840
gaaagaaccc agccttgntc atctgggctg gcccanggtt c 881

<210> 1392
<211> 798
<212> DNA
<213> Homo sapiens

<400> 1392
tgttaaaagg gttttaaata agtctctttt tcaatggtgt aagtatgaga tttgtgaagc 60
cctttccaga tgcatgtgtg tttgcttatg tttaaaaaat cacttgagtg caaacattta 120
aacacatttt ataaaactgg cgggccaggc acggtggctc atgcctgtgg tcccagcact 180
ttgggaggcc gaggcgggtg gatcacgagg tcaggagttt gagaccagcc tgaccaacgt 240
ggtgaaaccc cgtctctact gggggaaaaa aaaaattagc caggcgtggt ggtgggtgcc 300
tgtagtccca gctactcggg aggctgaggc aggagaatca cttgaaccca ggaggcggag 360
gttgcaatga gccgagatca tgccattgtg ctccggcctg ggtgacaaag cgagactctt 420
tctcaaaaaa acaaaaacaa aaacaaacag acaaacaaac aaaactggca tggcattgga 480
cagtgacaca taagaagctg atgtcatctt tgccacttag agaaggcaaa atatcttgtt 540
agataacccc tcttaaatgc tctgcttggc tagtactttt tgggcttggt cagtgattag 600
agtttaagtt gtaaatggta ttcataattt cttgtctctg tctcatccca aacagattag 660
aaaatctttg atttttgttg gtaaggagct agcatcttat taatacaaag ccttgtgcat 720
aaattatttn cagtaattat ttaatgccta atgtgcatgc tttgtgctga ntgcttangg 780
ataaaaagag gaattaag 798

<210> 1393
<211> 787
<212> DNA
<213> Homo sapiens

<400> 1393
tgaagatatg tgtcatattt ctttcaatgg ataattttaa gtgatattaa attatgtcaa 60
tagtttgaat agcaatagca accattgagc taaaattatg caacaaatag ttgcttgtta 120
acctaagata tttcaacatt tttgaaagat tagtaataaa acatgccata tttaaaaagc 180
cttaatgtga atcttctctc cactgtagtt caggggacac tcaggatgct agagtaatgc 240
tataaaaaaa gccactcaga caggtgcagt ggctcacaca tgtaatccca cctactcaga 300
agactgaggc cggaggatca cttgaagcca ggagctcaag aacagcctgg gcaaaatagc 360
aataccctcc tctctaaata tatataaata tatatatata gataattagt tgggcatggt 420

0050369-020800

aatgtgccgg tagccccagc tactcgggag gctgaggtgg aaagatggcc caggaatttg 480
aggctacagt aaactatctc actgcactcc agcctgagcg acagaatgag actccatctt 540
ttaaaaaaaa aggcactgaa atgaccccat caaatccaac cagctatgcc aggctctatt 600
tccatcctat ttctgaggag tttttgtcct tgctgggttt cctttggctt catacccaga 660
ttctgcttgc cctatataac atggatggnc tgtctgtcct ttgtcagtac ctgctcaaga 720
tgccacttgc ccanagctag agcccacgan gcaaggggca tctcttctct tcactgggtc 780
aaaggta 787

<210> 1394
<211> 866
<212> DNA
<213> Homo sapiens

<400> 1394
attattaata agacgatgat catgctaatt aagctacttt attagagttt gatggatttt 60
gtgccagaaa ttatggtggg gtctttgaaa tatatagagt attttctctt agagcaagtc 120
gtctagcatc attgaaaact ttactgaaaa ctcttcatta ctcataacat tgctcgtctg 180
tttcaaaatg acacgatagt cactttcaca gaaacataat agtatgcaat tcaaatgttt 240
aatttgctgc tgcaaaagaa ttcacaatag aattctcaat gtggggttaa ttacatagta 300
atgaaagagt aaacctattg ggaaaatgct ctaagtaaca ttgctctgtt tcctactgat 360
aaagacgtgc acgcctgatt tattttttat gctgggaaat tcagaagtaa gagaaaacct 420
tgaaaaggta tgcacatgaa taataaagtt ttttatcatt tgtcaacatg atgagaaaat 480
gatgaacgtg gataattatt atattacaaa ggctataatc acaaaatagt aatgtataag 540
aatatagcat tctattatac acaggagaac atgatacatt aaaatcattg ataacataat 600
ctaaggaaag acatcgctaa tcagaacaaa aaaaggaaga agtaatagag caggcactca 660
aaattgtgtc catgttttct acaaataatc ttcaccctct ctgnctatga gtatagtggt 720
atattgctag gtatggtatg gttactccat atatgtcaaa gacttcactg ggggaattgg 780
accatgagga cccttgggnc cnaggaaggg gaacatccac actggggcct gttgtggggt 840
tggggggatg ggggaaggga agcntt 866

<210> 1395
<211> 817
<212> DNA
<213> Homo sapiens

<400> 1395
aaacaaattg cgaaaagatg ctagttctca agactgctat gatattccac gagcatttcc 60
aagtgataga tctagttcac ttgaaggctt ccataaccac tttaaagtca aaaatgtgtt 120
gacagtggga agtgtttcaa gtgaagaact ggatgaaaat tacgtcccaa tgaatcccaa 180
ttcaccacca cgacaacatt ccagcagttt tacagaacca attcaggaag caaattatgt 240
gccaatgact ccaggaacat ttgatttttc ctcatttgga atgcaagttc ctcctcctgc 300
tcatatgggc ttcaggtcca gcccaaaaac ccctcccaga aggccagttc ctgttgcaga 360
ctgtgaacca cccccccgtgg ataggaacct caagccagac agaaaaggtc aaagtcctaa 420
aattttaaga ctcaaacccc atggtttaga gcgaactgat tcacaaacca taggtgactt 480
tgctacaaga agaaaggtca agccagcgcc tttagaaata aaacctttgc cagaatggga 540
agaattacaa gccccagtta gatctcccat cactaggagt tttgctcgag actcttccag 600
gtttcccatg tccccccgac cagattcagt gcatagcaca acttcaagca gtgactcaca 660
cgacagtgaa gagaattatg ttcccatgaa cccaaacctg tccagtgaag acccaaatct 720

ctttggcagg taacagtctt gatggaggaa gcaaccctat ggatccaagc cccaanggag 780
gaccaaacan ggtgggaata cctttanatc ttcggac 817

<210> 1396
<211> 764
<212> DNA
<213> Homo sapiens

<400> 1396
aatattgtat ccgtgccatg gctggggacc acagcttgcc cgctacacca aggaaggctt 60
cctgcacttg ggtgccctgg ggaccaccac actcctccct gacacccgct gcctggtgga 120
caactccaag agtcggctgc cccagctcct ggactgcgac aaggtcaaga gcagcctgta 180
caagcgctgg aacttcatcc agaatggagc catcatgaac aagggcacgg gacgctgcct 240
ggaggtggag aaccggggcc tggctggcat cgacctcatc ctccgcagct gcacaggtca 300
gaggtggacc attaagaact ccatcaagta gagggaggga gctggggcac tggagcctgg 360
cccccaggac atggctgctc cccccaacat ctggaccagc tgccctggcg gagagacagc 420
aaggggccgg caggtgctcg atgggccccc cagggcttct ccagggcagc acagggaccc 480
cggatgaaga ctctgtcccc cctcaggcat tcagctgccc acaagtttcc tgcaccctgg 540
aaaagccccc caccettcct ctgggaaact gacagctgtc ttccacagcc tctgatgtgg 600
acctggtact gaggagcaag actgtccagt tctcctccac atctccatcc cagaatcagg 660
atctgggact ggcanggtcc ccttctgngn ctcatctctt gcagcaacag ctggttgaac 720
ttcaagccat caacacggtg gggaaggcaa ccgggggget ttaa 764

<210> 1397
<211> 774
<212> DNA
<213> Homo sapiens

<400> 1397
acactgaaat gacattagga tctaaaataa tttgctgtca attgtacatt tgcatgagta 60
cgtatgtttg gctcattact ggtttacccc ttgagtgaat gcctgtttat gatgactgag 120
agcatattca tgtgtgatct gcgtgtttct ggaatatgct ttatacgtaa tgaaatctgt 180
ttgctgggaa ttcctgattc ttgttatata agaagaacaa cctatttcgc tcccagaaaa 240
aaaagatcaa agagctttca gaaactttga gaacttggct atttagaaaa agtgataatg 300
ggtcagtttc tcagactgta gccattgaaa attagatgca gagaattcag agatttcttc 360
ttaatggaag taataagctg taagaattga gagatcacaa tggagtgtta aaactgactg 420
tgtctaagtt gggtgtaagg gtttcctggg ttttttttata tacatgctct ccccagaata 480
cagtaaacca cagttttaga actaaacaca tctgtaaaac taaatatagc atggaaaatc 540
caatttgaat aagtcatgct ttcctagaat ttaaaaataa aaaagtcttc ctctggaaag 600
agaagtcaca cagacaatca tgtgccctat aaaagtgagt gtttatagga ctaaaaaact 660
tttaacaact ttttaaggaa atatttttgg tcttatacaa aaacatgtaa atattgcttt 720
attactttca ttttctgacc ctgctgtaaa ctactgnaac cctnacatnc tcaa 774

<210> 1398
<211> 804
<212> DNA
<213> Homo sapiens

0020090676 2009.03.26

0956340.0002

<400> 1398
caaacatgca cacattgtca aaaaacttct gaaaaggtgg actaatgatg gatattaaaa 60
cataatgcaa agatataata aataagatcg tttgatactc taagaactga tgtataaaca 120
gagtctagaa atgaactcag aatacaaaaa gaaatgtagt ctgtgctaaa ggtgatagga 180
aatgaagaaa aaatattttt aaggccaggc acagtggctt acgcctgtaa ttccagcact 240
ttgggaggcg ggggcaggca gatcacgagg tcaggagttc gagaccagcc tggccaacat 300
agtgaaagcc cgtctcaaaa aaaaaaaaag aaaaatatgc tggttgtcaa tgcactttta 360
ttgtagaaat aatgccaatc tgttatttaa attgaaaaca gtacagaagc atatttaaga 420
gcaaggcgaa agtcatcttt tctccttcct atatcatttc tgcctccatc cccctctgca 480
tagatgacct ctatcaacag gtaatgtgtc tccttccaga ccctttttggt atactttcag 540
ggatgtacat ctatgcctgg ccaggaaaga atttttttaac agcacatatc agcactactt 600
tatcagtctt ctatataaca cctcactgaa gcataaatgt ccatcaaaca gggaagaaac 660
gctctcatta tattgaatga tcagagaatg atctttgtac cctcaagtat tttaagtggc 720
ttgcaaatga catgtttggt atncccttgg tccactcctg atacctgacc ccagatgaga 780
aggactcant tagtgcantg gata 804

<210> 1399
<211> 847
<212> DNA
<213> Homo sapiens

<400> 1399
atcgcttctc ggccttttgg ctaagatcaa gtgtagtatc tgttcttatc agtttaatat 60
ctgatacgtc ctctatccga ggacaatata ttaaatggat ttttggaaat aggagatgga 120
ataggagctt gctccgtcca ctccacgcat cgacctggta ttgcagtact tccaggaacg 180
gtgcacccca aagtacagta cgggtggctg gcaagatggc cgaataggaa gagctccagt 240
ctacagctcc cgcagagatc aacgcagaag gtgggtgatt tctgcatttc cagctgaggt 300
atctggctca tctcatcggg actggttaga caggggtgc agcccataga gggcaagcca 360
aggcagggtg gggcattgtt tcaccaggga agtgccaggg attggggaac tccctccct 420
agccagggga agccaagagg aactgtgccc tgaggaatgg tgcactctag cctagatacg 480
atgcttttcc catggtcttc acaacccaca gacccggaga tttcctcagg tgcctacccc 540
accagggccc tgggtttcaa gcacaaaaca ggaagccatt tgtgcagaca ccaagttagc 600
tgcaggagtt tttttcatac cccagtggtg cctggaatgc cagtggacag atctgtcatt 660
cccctggaaa gggggctgaa gccagggagc ccagtggtct anctcaacgg atcccaccac 720
tacagagccc agtaagctaa cattcattgg cttgnaattc ttgctgctac atacagtctg 780
aaatcgccct gggaccccta acntggtagg gggaaggcgt cnccattctg agcttgaata 840
ctggttt 847

<210> 1400
<211> 782
<212> DNA
<213> Homo sapiens

<400> 1400
catgtagaaa ggggtggacc tttcccacaa gagccacatt tcttcccttg gagaattgaa 60
gcaaatatgc agtacgtaag tgaatagcag catgagaaag aaaataattt gcaatgatct 120
cctatagtta gtgagcaaag aaaattgtca gtttttttta aagtagctct tattgacaac 180
ctatcttaaa ctgaatactg aaaaaaagtc tatgaaagtt ttataatttc agtatgtttt 240

aacattcatg cgtgaaataa ctgtaaagta cactgtaata attttggtct tgctcaaatc 300
aagaattttt tagtaaccat gttattttac agacaatatt gaggcataac aaaataaagg 360
gtgctggaag cattcattcc ttacccctct cttttaagaa tacgaagatg gcattgatgt 420
tcttttgtta tttttgtctg tgaaagaaaa ataattaaag aatgttctat gacaaagaat 480
accattgtaa aaataagatt atagaaaagg ttatttaata tactattatc tcacatctcc 540
ttgatactat tttaatgttt actgcaaaaa atcatattcc tattaaatat ggaaattagg 600
tgatacatgt tatacaaatt tatggtttag ttttaggtga tatgagtaac atttatttgt 660
catcgccata attcatttgc tgtcattgnc attttattgt acaagttaaa tcttggtata 720
tatttttaaa atcagccaat gtaaacaaag ntcaaagtca tgaagagaat cttttgangg 780
cc 782

<210> 1401
<211> 810
<212> DNA
<213> Homo sapiens

<400> 1401
attaccaggc acgcgcagga aacatggcgg cggcgggtgt tgtgagcggg aagattatat 60
atgaacaaga aggagtatat attcactcat cttgtggaaa gaccaatgac caagacggct 120
tgatttcagg aatattacgt gttttagaaa aggatgccga agtaatagtg gactggggac 180
cattggatga tgcattagat tcctctagta ttctctatgc tagaaaggac tccagttcag 240
ttgtagaatg gactcaggcc ccaaaagaaa gaggtcatcg aggatcagaa catctgaaca 300
gttacgaagc agaatgggac atggttaata cagtttcatt taaaaggaaa ccacatacca 360
atggagatgc tccaagtcat agaaatggga aaagcaaatg gtcattcctg ttcagtttga 420
cagacctgaa atcaatcaag caaaacaaag agggtatggg ctggtcctat ttggtattct 480
gtctaaagga tgacgtcgtt ctccctgctc tacactttca tcaaggagat agcaaactac 540
tgattgaatc tcttgaaaaa tatgtggtat tgtgtgaatc tccacaggat aaaagaacac 600
ttcttgtgaa ttgtcagaat aagagtcttt cacagtcttt tgaaaatctt cttgatgagc 660
cagcatatgg gttaatacna aaaattaaaa aggcccttat acggcaacta tgataggatt 720
ttncaagtca caaactacat ttttgcagtt tgagaagcac gatcccttta cacatnaacg 780
accaccttna gaaatggcag attttcttag 810

<210> 1402
<211> 842
<212> DNA
<213> Homo sapiens

<400> 1402
agtgacgatt aattaaatag atatatacgt ttgtcaaatc ctcaagcaaa acactaagac 60
ccaggcacat agaccaatgg aacagaatag agaacccaga aataaagcca aatacagcca 120
actgatcttt gacaaagcaa acaaaaacat aaagtgggaa aaggacaccc ttctcaacaa 180
atggtgctgg gataactagc aagccacatg tagaagaatg aaattggatc cacatcactc 240
accttataca aaaatcaact caacatatat cagagactta aatctaagac ctaaaatcat 300
aaaaattcta gaagataaca ttggaaaaac ttctggacat tggcctaggc aaagacttta 360
tgaccaataa tccaaaagtg aatgcaacaa agataaatag atggaactta gtcaaattaa 420
aaagtttctg cacagcaaaa gaaataacag agtaaacaga caacccagag agtaggagaa 480
aatattcgca aactatgcat ctggcaaagg actaatatcc agaatctaca aggaactcaa 540
acagatcagg aagaaaaaaa aacaaaaaca aaaacaaata atcccatcaa aaagtgggct 600

0952045 0952800

aaggacatga atagacaatt atcaaaagaa gataatgata ataaaataaa tggttggccg 660
ggcgcggtgg ctcacacctg taatcccagc attttgggag gccaaggcag gtggatcacg 720
aggtcaggag agtgagacca ttctggctaa cacagtgaaa ccccgtctct actaaaaata 780
cnaaaaaaat tagcntgggc gtggtgggca ngtgcctgta gtccccagct actggggaag 840
ct 842

<210> 1403
<211> 844
<212> DNA
<213> Homo sapiens

<400> 1403
taatgtggta ccatatattc tttcttttaa ggaccttaag aatctgggaa gaattagcca 60
cactctaatt taggaacaga gatggatgaa tccacctatg gacatttact ggtatgagtc 120
actggggaag ttcactaagt cactatttaa gatgatccag aacaggtgtc tacagctgcc 180
ttaagaatga gtactatggt ggtgatgaaa atgttcctct cagatgtcca actgcagggg 240
gtgggtatga aattgccaga tggccccagc tggtgtgctc tggaatcctt ggcgccaagg 300
ccatgctgcc aggggcttct ccaggctggt gatcaaatgt agtgaggatc ctaaggcagg 360
cccattcctg gaagacatgg gactctcccg ataggtgagt ttggctcaag gactcctcat 420
ggtcctgaaa gaaactctct gagacctgta cttcagtgga agcctgtctt tcctttgctg 480
tctccttccc aagggttaaa cctacattgc agtctaatgg tggctctccc ggccttctct 540
ggctccctcg acattttctc tcacaggcat ttcctttaat aaatctctcg catatctgat 600
cctgtcttgg cttttgcttc ttggaggacc cagaataaca caagtactgt cataattata 660
tctcctcact ttaaatctct caagtgtaat tactaaaatt gtgttgtagt gggaaagtaa 720
aaagcaaggg ttactaactt tgagaagtat ctatgaaaac cactcaccca ttaaagtttc 780
attctttaag taccatttan taataacctt ttaatttcca attngtancc atgggcctaa 840
tctt 844

<210> 1404
<211> 740
<212> DNA
<213> Homo sapiens

<400> 1404
aatgctacag gcttggggca cagtggctgc tgtctcagcc tcgcaccaca tgcaactccc 60
ctgaagacgt tccttccacc cacgattgga ctggaaggat ccaggaccag ggtttgtctc 120
ctgggcttaa aatgctatca agtaaatgtc tcaaaaataa tgctttcctc accctacatt 180
ctcttctcct tcattcctgt ttttattaag tagaggaatg tttagaatcc aggactgcat 240
gttaatgagt tggaggtgag gtgcttttgg aattctccag tgttaacttt ggaatccagc 300
acccttttggg atgagagtgt ggtgggtgag cctttatggt tagcagccca gcaaccctca 360
cgaaaaatga aggccacagg ggctctgctt cgatggttac agctagcagc tgaagcaggt 420
cttttctggt agtgtagtgg ctctgaagca tttggccgga ggttggaatg agattttggt 480
atagagagag gcctcaaact tttgtacctc tgtgctttat ctccactgta atttttattt 540
ctttgtacat ttttggtatg accacttgat attgcagcga acgctgcact tgccttctta 600
atctagcttc gatcttttca aagaaatgaa aattttgatg gtcatatcgt gggcatacac 660
ttacagatna gaattaagac gtatgataga cctgagaagc tgcattttat ganggtagct 720
ngagaaaata aatttttttgg 740

0355050.0200

<210> 1405
<211> 496
<212> DNA
<213> Homo sapiens

<400> 1405
ggccttttt ttttttttt ttttggcggc ggacggacag ggtcttgctc tgttgcccag 60
gctggagtgc actggcgcaa tcacagctca ccacagccac aaactcctgg actctggtaa 120
tccttccacc ttagcctccg gagtagctgg gactacaggc acgtgccaca atggctggct 180
aatcctttaa tttttgccga tacaagatct cgctgtttct cgggtcgaca atttcttttc 240
ttttttttt ttgagacgaa gtctcgctct gtcgcccagg ctggagcgta gtggcgcgat 300
ctcggctcac tgcaagctcc gcctcctggg ttcacgccat tctcccgcct cagcctcctg 360
agtagctggg actacaggtg cctgccacca tgcctggcta gttttttttt ttggattttt 420
agtagagacg gggtttcacc atgttagcca ggatggtctc aatctcctga cctnaggnga 480
tccacccgct cancct 496

<210> 1406
<211> 732
<212> DNA
<213> Homo sapiens

<400> 1406
cgcatggtgc gccgcaccca ctgtcccgca cccactgtcc ggcactgccc agtgagatga 60
acccggtacc tcagttggaa atgcagaaat cacccatctt ctgcgacact catgctggga 120
gctatagact ggagctgttc ctattcggcc atcttggctc caccctcatg agacttattc 180
acaatcatga gaacagcaca ggaaataccc gccttcatga ttcagtcacc tcccacgggg 240
ttccttctgc gacacgtggg gattattaca gttcaaggtg atatttgggt tcagacacag 300
agccaaacca tatcagctag gaaatgaccg tagagatgaa aagatattga tgatataaat 360
aatttcaata aatatatagg gttggtttga tcagcttgaa ttttaattgt tgaagatcac 420
aaaggttaca gacagcattt ttgagagtta aagtgacatt tttcagagat taccatgaac 480
agtaacaact gtgaatagcc aaaattaagc tgaaacataa gatttgtgtt gggttctaag 540
atagttagtg ctgcaaagtc atgttgaggt gatgatctca gggattttta ggtgtatcct 600
ctgtgtatct tcaggcctgc ctcttacttc gtggttccct aattgccatt catcctgcct 660
gtatcangga ccactttacc cgtcttctct gaagttcttg ggtattttat ctgaagtttg 720
gtntttttt tn 732

<210> 1407
<211> 695
<212> DNA
<213> Homo sapiens

<400> 1407
agcagagtcc ggctgcctgg ggcgggcggc gcgtgtctgc agctgctccg ggtagcccgc 60
taggcgcgcc gtccccagcc ccgccgccgg ccctcggtgc gcccggccgc ctgcaccccc 120
aggagcagct gctgtgaata aacacagaag tggagctggg ggactgatta gaagcctcat 180
tcagtgcacc tgggccccag caggcccagc caggcgtgga ggaagaggca ttgaggactt 240
tccttacctg tttttccagc tcacccactg ccagcagaga atgctgtcca gtttcaacga 300
gtggttttgg caggacaggt tctggttacc acccaatgtc acgtggacag agctagaaga 360

09502450.0700

ccgggatggc cgtgtctacc cccaccccca ggacttgttg gcagccctgc ccctggcgct 420
ggtcctcctg gccatgcgcc ttgcctttga gagattcatt ggcctgcccc tgagccggtg 480
gctgggtgtg agggatcaga ccaggaggca agtgaagccc aacgccacgc tggagaaaca 540
cttcctcacg gaagggcaca ggcccaagga gccccagctg tctctcctgg ccgccagtgt 600
ggcctcacgc tgcagcagac ccagcgatgg ttccggagac gccggaacca ggatcgaccc 660
cagctgacca agaagttctg tgangccanc ntgga 695

<210> 1408
<211> 793
<212> DNA
<213> Homo sapiens

<400> 1408
cttgtctgct ataaattacc agagataaac atgtcantag catgattttt tgntagtaaa 60
acttttagat gattgtgcat ttaaatctta ataaaatctt tggatttctg agtcaaagaa 120
tgtgtaattt caaatacaag aaattaacat ttcttaattg acttctgaga cagcagtgca 180
caataatgaa aacaggttaa gattcaaagg gtagggttgg agaaagaaga attaggaaat 240
gtggagaaag tttggtggat gataaaaagt ctctattatg ttacacttag ctgtacttga 300
ttttgttctt taaataccta caccgtcctt gggaaacaaa ttatttaaca tattgtgata 360
ggctgaataa tgtgctgccc aaagtaactc tgtcctaatt cctagaatct gtgactatgt 420
tgntacatgg caaaagggac tttgcagatt tgattatgtt atggaccttg agatggggag 480
aatattctgg attgtttggg tggacccaat gtgatatggt ttggaagtgt gtcctggcct 540
aaatctcctg ttgaattgta atccccagtg ttagangagg ggtttggtgg gagttgagtg 600
gatcatgggg gcaaattttc ttcttgctgg tctcctaata gtgagcgagc tctcatgaaa 660
cctggttgnt taaaactgtg tggcaccttc cccttctctc tcttcctnct tctcttggcc 720
atgtaagatg tgcctgcttc cctttgcctt cttncatgac tgtgaaattc ctgangcctt 780
cacaggcatg ctt 793

<210> 1409
<211> 859
<212> DNA
<213> Homo sapiens

<400> 1409
ctgctagctt gaagtacaag aaaatattag tattctacta tttatcttgc attaaaacac 60
tttaacattg aaaacgtggg actaatcaaa acaatacagt tttttcttgg ttgctggctg 120
acttgaccca agtcactgct caaactctgt tttcataata tgatggtttt ggtgtactct 180
tcagaagaca aatgtctgac ttgcgggaaa aaaacaaacg tttagccatt tgcaaacaaa 240
ttgtctcttt gcaattgtct aatatatgca cagcagccag tagaattccc ctttttattt 300
ttttttcccc gcagaccatc ttgattcaaa acatctatcg taatccccaa aacagtgcac 360
agacggctga cggctcacac tgtaagtccc acagttggag aaatttttt aaaacaatgg 420
tgttaaagag cccactctta attgagacaa ataatgttgg cttctgagct gctgacatag 480
agctgttgca aacaggacaa ggtgctggaa ctccttggcg cacacagcaa gaacttgata 540
cttggccacg ttcaggaggc ttatcccttc tagggagggt cactggcccg gccacctcca 600
ttgattgaca tttgtcatga gagcaggtcc gtccatgtga aacggatttc aacattttga 660
gccattcatt ggtctttaca gtgactgaac ccctggcctt tattaagttc tttgngtaaa 720
attaaaactc ttaggaatat taaggaatca ataaggnaag ttgcccagta agtgtgggtt 780
tatttcacca ttataatttt cctccagaag tggagattca tgatatgtaa caatggattc 840

0952304-0920000

tctaatacag aatttttc 859

<210> 1410
<211> 754
<212> DNA
<213> Homo sapiens

<400> 1410
tattctgcct tctggaaaat tgccttaact ttaacttcaa acatttgttg attttttttt 60
ttttcagttc ttattctctg gtcttattgg ttcctctgca taaggatgca gtcttttatc 120
tttacagttt ctttgacatt ttcctctgtc ccatcattct ctgtttctca ccacttctgt 180
ttcattttgg tctcaatctt taatattgga gacattcctc aaatgcatga agatcctcag 240
tggtcattta tatttaaaag atgtgaaaag ctgaccgaaa gctctgggtg tgaagtcaga 300
gctcttgtct attggtaaac tatgctgtag gaaatcttca tatcacaatt tttctttagg 360
ttagttttgt tttctctagt tttgaatcct ttccagagga aatctatagt cttctctgtg 420
ggggctgctt atgttttaga gaaatactga agaaagggac tttgggtctc tttagagttg 480
cacataatct tctggtttta gtcatatcta cttctgtatc tattgaagtc caaagcatct 540
tgagtttagt ttttccagaa attatgcctt ctgatttctg catgattggg aagtcactga 600
gtacaccaac tggagttgga gacctggaat tccagtagtt ccaggaacct cctagtcctg 660
aacttaatgg ggtttcatga gaattgactg gcttctttan gcccttaaat ttaacattcc 720
tcacctctgg ngagggtttt gggttggngg ttgg 754

<210> 1411
<211> 860
<212> DNA
<213> Homo sapiens

<400> 1411
aaaaattgta atttgaaagg ttttaggatg ctaaaatgga gcaaacagtc tctgttatgc 60
ctgggtattt ggtttgcttt atttgtgata gaacatggaa atattttaaa actaagattt 120
gttgaaaacc ccttattatt aatattgttg tgttaaatgt ataactattg aactgtcagt 180
gaaatatgac acattttatc cagtgacatt ttaaatgaat ctcattgtag gggaagcctg 240
tgggaacacc agatgctggc gcttatttcc gtgtgcttgc agagcatgga gtagctgcct 300
tgtttacagc accaactgca attagagcaa tccgtcaaca ggaccctggg gcagctttgg 360
ggaagcagta ctctctgaca aggttcaaaa cattatttgt ggctggagaa cgatgtgatg 420
tagagaccct ggaatggtcc aaaaatgtct tcagagtacc tgtcttagac cattggtggc 480
aaactggtaa gcattttcct agcatgtaca taaatagtaa agaaatgttc caaaaagctg 540
caaggattgg aggaaacttt tgagctacga ccagcagatc agacacaaac tcgggattcg 600
agtggttcag gtttcagtaa aaataagcaa ttttttttatt ggtgtgttat taataatgtc 660
ttcataagtg acattgatgc caccattctc ttggtcccta ggtataaagc actaaagacc 720
tctttatctt ctcttctttg gttcttatat ctggtaagtt actaagtctc agattttctt 780
ttgaagtgtc tgtgggtcat tcaccttcag tattcccctt gcctttgagc tctggcanct 840
gcattatctc tgnccgaatt 860

<210> 1412
<211> 729
<212> DNA
<213> Homo sapiens

US005955600A

<400> 1412
cggtttccat ttcagtttgt cttagagttt ccatgtctct gcctacagtg ggcatcagtt 60
tttgaatgtc gtgtagtttt ttccattaaa gcccttagca cattaattat agttactaaa 120
ttctcacagt gatgattcca aaatctctgc catatatgag tctggttttg atgcccgcgt 180
tgtcttttca gactctgttt tttgccttta gcatgccttg taatttttt ttttttttg 240
ataagctgga tgtgacataa ggggtaaaaa gaactgagat aaacaggcct ttagtgtggc 300
ctagaggcct atctggctag gagttaggct gtgtttactg tttgatgtag ctttggtgtc 360
agagattaaa atttcctctc gtgtaactgc ttttgtctcc tttgttgtct ttgggtttcc 420
ctaataactc cttcataagt aggttccgag gcttgtagtt atttaagctg taagtccctg 480
ttattacaca ggagccctat tgatgtggtg tgtgtgtgtg taaaagngtt ctataatctt 540
atgattagct cttagtgagc ctgtgtcttt ggactgtgac cttcatgagt gctttttagc 600
tcctgcaacc tttacctccc aatacttaag tgagaaagta ggaaggctgg gaggcggctg 660
gagttttgna tttctcttcc cacaagttgg ntantttggt ggataacaaa ctggaatggg 720
aaacctcgg 729

<210> 1413
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1413
gtttccgctg gcggcggcgg cggcggcggt gccggagcgc gagcagagcg gagaccccca 60
ggtcttgcgg gcgcggaata tcctggaacc ttcttttgtt tgtcagcagc caaggtgttt 120
ccaggaagtt cagagagaac agaatttaag aagtgcaaca tggccagggg ctgcctctgc 180
tgcttgaagt acatgatgtt cctcttcaat ttgatattct ggctctgtgg ctgtgggctg 240
ctgggagtgg gcatctggct ctccgtgtcc caaggcaact ttgccacctt ctcccccagc 300
ttcccttcgt tgtctgcagc caacctggtc attgccatag gcaccattgt catggtgacg 360
ggcttcctcg gctgcctggg ggccatcaag gaaaacaagt gcctcctcct cagcttttc 420
atcgtcctgt tggtcatcct cctagcagag ctgatcttac tcatcctctt ctttgtctac 480
atggacaagg tgaacgagaa cgccaagaag gacctgaagg aaggcctgct gctgtaccac 540
accgagaaca acgtggggct gaagaacgcc tggaacatca tccaggctga gatgcgatgc 600
tgtggtgtca ctgactacac agactggtac ccaatgctgg gggagaacac gggtcccgac 660
cgctgctgca tggagaactc ccaaggctgn gggcgcaacg ccaccacgcc tttgtggaga 720
acggctgcta tgaaaangng aa 742

<210> 1414
<211> 836
<212> DNA
<213> Homo sapiens

<400> 1414
cggaggggcc gggctaacat tcaggtttct tcattctcac agatcaaaat tggatacctc 60
attatttta ttttcatgtc taaaatcatg actggggcca agtatgtctt caaatgttta 120
ttggccattc ttaaaaataa tgcaaactgc caatttatat ccttcacttg tttttctatt 180
aagctcattt tttcctcttg atttgcagta gctctttgtg tacaaaggat ttttttggc 240
ctgtcatttg tactgttgat attttctcct agtagacaat ttgtattttg agtttgaata 300
aaatttttgc tttgtagaat atttaagttt ttgcagtcaa gtttatgagt atttttattt 360

0302506.0002

ttggcttttg gttttgtatc atatttagaa agggcatctc tggtccaaaa ttatgaaaat 420
attcttcact gttttcaagg agtttatagg ttaattatta tatttaaatc actgattcat 480
ctggaattta ttttgggagt gggaattgag gtaggggaac caactttaag tacattaata 540
ttttgatgaa tcattgtaga gaagaaaaat taaagcttc ctaatggtag ttaaaaaaaa 600
aaaagaattt gaagattctt ggaagcagag tttgatttcc tgatatattc tctggttagc 660
ttcaggaata ctgactaatc tattaatatt agaatcaaaa taaataataa tttagaagtt 720
tangcctgga ggatttctta tttgagaaaa tggngatgaa agtgctatta cccctcattt 780
atatcctaac ttgcatgacc actaggggaa tataatttaa ccctggnaca gaccnt 836

<210> 1415
<211> 844
<212> DNA
<213> Homo sapiens

<400> 1415
ttgatactta ttttggggcc cctgtgatga ggcactatct tggctacccg gtggctgtaa 60
catggacctg ccaaaaagaa cctcatagtt tagtggggaa gacataccca agaggacaat 120
ttagaactct gtgcaaagta aagtattcta gttttgcaca agatttcgaa ggcaaaactt 180
ggcagatttt gtcaatacta attaggtgaa tcctttaaaa cttcatagac aggagtaatg 240
gtttgttttg cggttttgtt ttgtttttta tacatcgttt gatggcagat cattctgaaa 300
gtcgttgttg tgtatcattg catgtctggt gtcatgagat aggcagaact gtggggtagt 360
agattaattt tctatggtat ggtgtgtgac tgttcttcaa agacagcttc tttctgcctc 420
ccttatctct ggtccttaag atggcaataa actctggggc ctaagataac tccagttctt 480
ctctggggct atcaacactg tctttggttt ctaatactgc agtcatgacc agttttctgt 540
atccttttca cttactgtta cccactttgc cttgtcttca ccctgtcaaa acaccggtct 600
ccctttcagc agtcagtctc attccctttt gactttacag tctcttattt ggcaatctca 660
tccagtttct tgcccacagt tactgctatc ctnccccaga ccttgaacat cagtcttaca 720
ggtatccttt tcataggaaa acagaaatta aagactttta acttacttgg tcgtggattc 780
tggaaangga aacaggataa attangcnta gtaaattgaa ggatgggtaa gtcctactta 840
tagc 844

<210> 1416
<211> 787
<212> DNA
<213> Homo sapiens

<400> 1416
agttttgctc cgaaagactt accgaggagg gagcttgcgg tgcgttctgg gaaagttgct 60
gggccagctc ctttgtttcc agtctgagcg ttgcgttcgg tttcccgagg gtcttctgag 120
gcaccgcggc tgcgggcttc tgagttcccg gctctccgca gggaagcctc ctcttcgtac 180
ctcgtttttt ggctcgtggg gggtcctccc accgctggcc gacgcagcca gcatgtccgg 240
ggtgcgcgca gtgcggatca gcatcgaatc ggcctgcgag aagcaggtcc atggggtggg 300
cctggatggc accgagacgt acctgccccc gctgtccatg tcgcagaatc tggcgcgtct 360
ggcccagcgg atagacttca gccagggttc gggctccgag gagggggagg cggcggggac 420
cgagggggac gcgcaggact ggccgggcgc cgggtccagc gcagaccagg acgacgagga 480
aggagtggta aaatttcagc cttccctttg gccttgggac tcagtgagga acaatttgag 540
aagtgccctg acagagatgt gtgttctcta tgatgttctc agtattgtta gggataaaaa 600
atttatgact cttgatcctg tctctcagga tgcacttctt caaaacaggt atttgtggac 660

EP 3 502 139 A1 20190626

tttaattgaa taataaaatt ttatttatta aatcccagga ccctttttt ggctttgngc 720
ttggtggtcc attttccttt ctttgcaaaa attaagtncc cnatgaagaa ttaaaggact 780
taactgg 787

<210> 1417
<211> 802
<212> DNA
<213> Homo sapiens

<400> 1417
ttttttaaaa ccagtaacaa aggagaatag tatccttaac aggataaaat tatctatgtc 60
atgtcaacag aaggaatcat actgaattgt gaaatattgg aatcatctcc cctaagatca 120
ggaagaaaac aaagatggct gctatcacca ttattattta atgttcttct agaagttttg 180
gacaatgtca tattatatga cttagaaata agaattataa ctatctgaaa ggaagaaatg 240
aaattatcac tatttggaaa tgatagaatt atctacctag acaaaaggtt taattaaaaa 300
acatttggaa ttaataagaa aatttagcag aagatctagt taaaagataa acatcccaaa 360
gccaaaaatt gtgttatata atcatctcca ataagaagct gtgacagaaa aaagatctca 420
ttcaggagag caataaaaaa cagaatatct agaaataacc ttaaaataat ttgacagtaa 480
tttgatggaa agacctactg tgaagtgggt gttctgaatt atgagagtta tatgaatagg 540
aaggaatggc atctaatggt atcacccctt aaatatttct gtcaaatcat aacctagaag 600
ttatctctta ctcttctttc atgnttcata tctaatcatc cctaagttcc ccgagtcccc 660
ttttcattag catgcaaatt aattcctatc ctaccctatg gttccttcaa ttttagacct 720
ttattatttc taacctagac tttgnaacct ctttactccc agnctttcc aatcatctat 780
cccttcntac cactactggc ca 802

<210> 1418
<211> 766
<212> DNA
<213> Homo sapiens

<400> 1418
aatagggtac gagacaagtt tgagtgtcgt tgcactcacg tggtgagctg catgtgtcgt 60
gggctgagtg ctagtattgg tctgtgatgg attgggatca gacccttgtc catgaccata 120
aaatcttgag caatattgca gcaagccaaa tggcaaagat gactatgtgc cccaagacca 180
cactttttt tcctatagtt tttttaagag agacacggcc tcgctctgtt gcccaggctg 240
gtcttgaact cctaggctca agcaatcctc ccatctcggc ttcccagagt gctgggatta 300
caagcataag ccactgtgcc aagcctccct aaatgtttaa atcttgtcat tgccaccatt 360
ctgcaagatt tacctttgaa tctagaaaag aacttggagt ctttctacta ggcctatccc 420
cacaccactt cccatcatag aggtgaagaa cctgaggccg ggacacacca caggactctc 480
agaatgacac agccagtcag attttcctgg cacaaaaccc agtgttcttt caaagccacc 540
attcttttcc tgtaactaat gcaaaagcaa atcttagccc atgacaggga atcacagatt 600
ccaaatgagt gccctcagaa tgactggttt ccttgaaagc agctgtttca taaacatgac 660
tttgcggggg cagctnangc cttccatgca gtggagtctg ctggtcttgg ggctgctctg 720
ttaagcaaag gatgggaacc aaaggnctga cattttaata ttagcc 766

<210> 1419
<211> 845
<212> DNA

0501250450 : 04200

0050450-092000

<213> Homo sapiens

<400> 1419
gttttcaaag accctctata acttatttca tgaggaccct gaagaagaat cattatatca 60
agccattgct gttgtaacca gccttttact caggatggaa gaagttggaa ggaaactaca 120
tagccctaca tcatcagcca aaggattctc tggtactgtc tgtggttctg gaggacccag 180
tgaggaaaaa acagggagcc acttggagaa agatccttgt tcctttaggg aggaacctca 240
gtggtcattt gcatttgaac agattcttgc atcgctgttg aatgaaccag cattggtgag 300
gttttttgag aaacccatag atgtaaaagc caagctggaa aatgcaagaa tttctcagtt 360
aaggtctaga accaagatgt aaatccctag gaattgccta tcatagacaa gtttactaac 420
attcctgtag ctgtcagttt gattcctgtg agtagggctc agggatttat cttgttacca 480
atgtgtctga aggccaaaat atatatccag aagcacaatg catcattcct ttgttgttga 540
taatgggctt tgttagcact ttttaaaaca aacaaacaaa caaaacaaaa aagcaaacca 600
catttgttat ctcaaatttt gatgatattc tcaaatacaa atatactttt ttatatttca 660
caatatatgc aatatcaggg gaatatgcta aatggtacca ccaganggca caagcatatc 720
acttttagta aggaaattac taagctgggg ttgctattta catatgaatt actggattat 780
tttgaaaaag acggggttat ggccttggtg gtantgaagc ttgaaatggc atggctatcg 840
ntnaa 845

<210> 1420
<211> 851
<212> DNA
<213> Homo sapiens

<400> 1420
tttatgcatc atggtttgat atatgcttga aatatttact aaattagata ttgctgcatg 60
tggtccatcc cacatataaa tggaaaagag aaacttaaca tagttcataa attaaaatat 120
ttggtttcag ctgtattcat attgaaacca taaaagaatc agaattactg tgggtttatg 180
attgtcaggt taccaccatc actacaaatt ttctgataac aacatattag tattctgata 240
aggtttgtgg cttctttgca aggatatttg aatactactc aacacactac ataatggtta 300
actattgttg tctttatttt aaggaaggca tgaatattgt tagatttgcc cctaagtaat 360
tgagtgatca tttttatata caagaaaatc agagtagaat gcaaaatttg gaacaggaac 420
tcaataatac ttataaataa gttgattcaa agaaatgttt caatttcttg acattgaatt 480
catgatgttt tgcttttaac atgtgatttt taaaaaatac tgttatgtgt acaggggaag 540
gctaacctga gactttccct tcatgcgtat tcttcctgtg cactgcaaaa ggaaactgtg 600
tgactgcttt ccttcctgac tggccatcac atagggttac tggcagatgc caggaatcca 660
aggactaaag gaataaaggg tggtgttata gtacctgcgc taagagatac tgncaaactc 720
agangcaccc ctnctcctca tgcttaaccc taaaatggtt tagaactctt atggataatg 780
gttggattaa gggagatctg ggaaatggga ttggaattta accantganc cctggggatg 840
ctactgccaa a 851

<210> 1421
<211> 736
<212> DNA
<213> Homo sapiens

<400> 1421
gtaccagccc caaaccctgc cagcagtatg ggggaggatg catttctcca caccttgctg 60

aaggatgggg acttggcaga gttcagtgat gttttagggt tggaacattg attcctttct 120
ctctctcttt tttccctttt ctccttgtgc ctctcttcct gtgggtgcct gagaaaatac 180
tcagcctgta tgactgtggc ctgagtcgag aaggagtgct agctctgaga agaaaaggtt 240
tatttccact ctcatgtgac tatccatcta tccatctctc catccatcag cccattggac 300
aatatgtacc cagttcctat atccagctag ctactgtacc aggtgccagg catttcggga 360
agaataagac agacaaggtt gtcgtcctca tccttctgct ctaccaggaa caagtgaagt 420
gataggaaga gcttttcctc aaatagctct gagttgtccc aagtccagcc tccagatcag 480
agaccgtggt tagggccctg gaggatgccc acagcacctc ccatgtttgc atgctaactg 540
gaggctgcct cttcaggtgt gaggaggcaa ctgtgcaggt ggggcaaggc tgcctttcat 600
ccccctnctt tcttctccag ggatctggta tgctgagttt gcttttgaaa tggaggtcct 660
ggccagaggt ancctggnaa atacaggtct taatctaaaa aaacaaaact taatggggga 720
aagagtnttg gggaaa 736

<210> 1422
<211> 700
<212> DNA
<213> Homo sapiens

<400> 1422
aaaaaataca agctaagcaa cttgtcctct gttgtttcct accactaagt ttgcattaga 60
agagactggc agtcaaacac acaagaagaa acacaagtat tggcaattta acagaaacaa 120
atggtagtgt atcatggaca tctaaggttt gtagggctaa atcataccct cttctagtaa 180
gtcctgaaaa aaatgtattt aaaacatatg ttgaagaaaa tagcttttag aggggcagat 240
aataggcttt ggacttagaa attttataaa aatccattgt gcattcttta ggcttctagt 300
cctattcagt ttttgctatg agctatgatt tgtttgtgga agcaaagtaa aggcagccta 360
tttcttaccg cctccacttc ggctgggtca taccagacgt tgatgtaggg atgctgtaag 420
gcgtcgtcca ctgatattct ttttgctggg tcaatcacta gcatctttga caacaagtcc 480
ctggcttggc tggctgaaac aataaatgag aaaaacaatt agtaagattt tgatttcagt 540
aaggaaattt gtcagagagg aaatttaaga aaacaaagta tggaatagta tcttccttcc 600
aaacatcagg taaatccctt gatgtgatgg aaaagaaaat gcattttaca cctgnttctt 660
tgggctctaa gcctaangct tcattctgan gctcttccaa 700

<210> 1423
<211> 695
<212> DNA
<213> Homo sapiens

<400> 1423
tggaaaactt atcttatcat accatccata accctcaaag acaggttttg tggaggagga 60
gcagtactgc tgagttcact tttagttgtg ctcattcctg ggcttcttgg ataggaaggg 120
aaggctgaca ggccaggttc tgtctcaagc ccatataaga gttgagttgc aattgtagtt 180
gaagaaggtg aagctcagag aagtttagtg acctacccaa catcacacag ctgcacttta 240
aaaccagttc tttatctgtg tgactccaca gctgtcaggc taacaaagga ctgcacatca 300
agtcacctat ccggttttct tgtggcattt gaagggagtt aagatagatt gtgacattga 360
aacaaaggta ggcttctcat ttagtgtatt tgcccagaaa aatgaggaca caatacttgt 420
gttttcttgg tggcccattt tactccctct tacaaacata tggctaaggt cttgaaaagt 480
tgggtgtgtc tcagttgagc ctttcagaga ttacttatcc tgccccattc acctctcccc 540
tgtggtttca gtcctccagg actgtgggga ccagtacccc tcacccccgt gactggttat 600

0962946.0720

actcaccgtt gagagagagg gggcaggact ccttcgggcc aggctaatcc aaactattct 660
ctangtgggt gtannggggt aaggggactg ctgta 695

<210> 1424
<211> 811
<212> DNA
<213> Homo sapiens

<400> 1424
ctaataaatc tggtcagttt taaaatttct tattgaatca gttttagtaa tatgtcttta 60
taagaatttg ttccttttgt ctaatttttt agtataacat tgattattat tcccttataa 120
taatattttt gagatctgtt ctttatttct gatttgggga ttttgtatct tccctttttc 180
ttggtcagtc taggtaaagg cttatggatt ttatcttttt aagatcccag cttttagtta 240
gttttattga ttttctccat tattctcatt taattaattt ctgctctgat ctttattatt 300
ccattccttc ttcttacttt ggctgtaatt cacttttcat tttcttggtt cttaaggtgg 360
aagcttagat gattgatttg aaacctcttt tctaatatag gcatttaaag ctatacattt 420
cctgctaagc agtttttag cttcacacca taaattgcga tgtgttatga ttttgttttc 480
atttagttta aatatattct aatgtctttc atgattgttt ctttgactct tgggttattt 540
aaatgtgttc ttaaattcca aatattgaag atttcccaat ttcttcctgt tgntgatttt 600
taattctgtt atgattggag atcatacttt gagtggcttc agtccgctga atttattcag 660
acttgntctt atgtggnctc acatatagtc tgttctgcca gtggtctcta tggccttaaa 720
aagtcatgta ttcacctggt actaggacag tgtgctggaa atgcanggca attgggtgat 780
agttgncaaa tcggctttgc ttctatcant g 811

<210> 1425
<211> 872
<212> DNA
<213> Homo sapiens

<400> 1425
aacttagacg atttctcaga actggtgttc tcttgtacac agtttgggaa tgactgcttg 60
gtacacttgt tgttatttct gaaaattgat attaaaataa taattnatgt actaccactt 120
gaattctttt atcagttaat ccttcttcct tcttgcngat agtggagggc taagaaaagc 180
angaagtcat gaatgattga gaaacaaata aatgccactt atctcattcc tcccctggga 240
aaaaagaaca gctttgaaat ttactgtatc tgtcaccaat ggagaaattg atagtattga 300
gtatatttaa aagaaaagct attagcaaga tcagttagga ctgcctgant gaatttccaa 360
ctgttttccc catactaatg ctaagccatt gctagaattc cttctatgtg gcagtgaaaa 420
cgtaaaatga tgtcttccca ttacaaatca natgaggaca agtgagtagn tattgtagga 480
agccagcttc gggattaata tgagggaaag tttgcaaaca tagaagaacg gacattgtta 540
aaagatgtna cagagtagat taaatgctat gactgtatga tccaaaacca ggcaaccata 600
tccatggcta taaaatattc caattggaag ggaacttagg ataatagtgg atggatttca 660
gcttttatac caagtccaat caattgtaga agctttctga gtgctatgtt tgagggaaat 720
ccatatctca gtgggaatga atagcatgat caattagcaa aagatcctat ttttaggaat 780
tggagatttg gcagcatagg gatcacctac ttgccatctt gaattaagtt caattgggca 840
ttttgcaagt cggctggtgg ngatgcacan aa 872

<210> 1426
<211> 795

0960292.0004

<212> DNA
<213> Homo sapiens

<400> 1426
gatcaagatg atggatatgc caattacccc tatctgatta ctatacatta tatgtattga 60
aacattatta tgtaccccat aaatatgtag agagcagtca agggagctgg cgagtacttt 120
tcccactggt tattgtatat actgtgtctc taaaagctga ctggtctctc ccaccagctc 180
actttctact tgagacatac catattgcag tgaggctaga atactgggaa ggggaatgac 240
agtcctttag aaaagagggt ggaaccagtg taaggaaatg tggaggaggc agaatttcac 300
tttggactct tcactcctcc ttttcttcat tatttatctt cttccttaga caggtaattc 360
ttactcagct gtggtctaag gccctgtgta cactgagttt atagagcttc tggactggtt 420
tgttattctc cccatcccac tccttgcttc aaatatcatt ccattaaaag caggtcatct 480
gattaaatcc tgaattgtct tgttattttt ttcttactca gtttagaaaa gtagcaagca 540
caatctggtt tgtcagaaaa gagagggttg agagctaaag ttaagtatca ggaaacgtgt 600
gaaaaagtaa gtttcatcct aggatttata aaggatgaag atcaagagct ggttaggaag 660
agttaacatt gnaaacaatc atttgaaggc aattcaagct tctggtgcan angagttatt 720
attaaatata gttgtgtaaa aggaggcatg gatattcacc cctttagtgg ccataccggg 780
attaaaatnt tcccg 795

<210> 1427
<211> 791
<212> DNA
<213> Homo sapiens

<400> 1427
tgctgattaa cattctctta acaaggcact taatctatta tataattcag tgcacttaat 60
ctatgaagca gtattcacgg ggctttcttt tgtttctcaa ggccagggat gctgtcttgt 120
acatctttgc actctccaac agtgctacat ttaacaggta ctagctgcac tctttgaatg 180
atgaggtggt tggtgaacca ttttcagcta gctaagtcaa ttatggtgag ttgcacaaga 240
tgcccatgtt acaaagaata aatgctagaa aaatgattta tatatggaca aattactgac 300
caagacaatg tccttgtttg tacaatggac attgttcagg cagagctcat gggttgcatt 360
cacagaaagg gctcattggc tggtttaaac agaacccaag aagagagggg tcaatgaagg 420
caggactggt gaaggaaggc tgtgtccagg gccttatagg gatgaaaggg gatgagacag 480
tggacctatg gactgtgaat tctgagttcc agtctttgcc tcttgaaatt tagtgtcact 540
tttgagtcct gtcccctcca ggaagctttt cctgatccct gaaccagtta actaacctcc 600
tatgacccca tagccctgtg ttgggacctt tatcctggtg tgctcctgca tggccatttg 660
gttcttcctg atccgcctct agatctaagt catgtctgtg agggctgcgc tttttctggg 720
gtcatccatg tgactnccan actgccttgc acttcaagcc acttggacaa atgcctgtcg 780
aantagacgt t 791

<210> 1428
<211> 836
<212> DNA
<213> Homo sapiens

<400> 1428
tttctctgac actggacatg gtcatataaa atcaggtata gaacctttc aaagacttca 60
aatggattaa tctcagaaaa tttaggtgga atttttggat ttcagattat ttacttcctt 120

0956305.0012000

gtagttataa ttgacttgga ttagtaggtg cacacaatga tttttatctg ttaaggtaaa 180
agataatttt taatgtgaca aaattttctt taaaaatttt aattggaaag taaaacattt 240
cctttaatct acatgacata cttcatcctt aagctccttg agagcagaga gaccctatct 300
tatcatctct ccattggtac cacataaccc acaccattcc tatttattga taccaataat 360
cctttcaatg taactagtag gcttttgagt atatgcacaa aactgtaact ctactaataa 420
gctcttctgc ctatgagaca ttatcgcttt ggatcatcct tatttccata acagtttgtt 480
ccattctgcc attacaatgc caggatgtaa agctccaggg gtgcaggaat ctttcttttt 540
tgtttactac tctatctcca gcatctagaa cattgtctgg cacaggtaac cactcagtat 600
ttgttgaatg tatgaataca tttttttaa gacacaatga caaaatggct gcagagactg 660
cttttgttgt atgggatgaa gacctcagat ttagtggcag aaaatctcaa tgactgtccc 720
agcttgctat gaatttactg ggtcatctta ngtgtgccct taatctctct gngcttttct 780
tatatatgaa atgattatgt tagatctgag gcatggataa acttcatcac cnttaa 836

<210> 1429
<211> 811
<212> DNA
<213> Homo sapiens

<400> 1429
aaataaagaa gaaaaagaaa aagaaacacc gagaagacat gcgaggaaga cgccttaaaa 60
tgtacaataa ggaagtacaa accgtctgtg ctggcctgac ccgcatcagt aaagaaattc 120
tcacccaagg acaaataaat agcacttcag gacttaataa ggagtccttc aggtatctga 180
aagatgaaca gctgtgccga ttaaatttgg gtatgcaaga atatcgggta ccccagggag 240
tacaaacacc ttttatgact caccaggaac attctattcg tagaaatttc ttaaaaacag 300
gtactaaatt tagcaacttt attcatgagg aacaccagtc caatggtggt gctcttgtcc 360
ttcatgctta catggatgaa ctctcatttt tgtctccaat ggagatggag agattttctg 420
aggagtttct tgctttgaca ttcagtgaaa atgagaaaaa tgctgcttac tatgctttag 480
caatagtgca tggagcggct gcttatctcc cagacttctt ggactacttt gcttttaatt 540
tccccaacac tccagtgaaa atggaaattc tgggcaagaa agatattgaa acaaccacca 600
tttcaaattt tcacactcag gtcaacagga catactgctg tggcacctac cgagcaggtc 660
ctatgcggca gataagtctc gttggagcag tagatgaaga agtgggtgat tatttcccag 720
agttccttga tatgntagaa gaatcncatt tctggaaaat gactttgcct ggggtcactt 780
tctagccctc cgacttcagt gtangtcccc a 811

<210> 1430
<211> 846
<212> DNA
<213> Homo sapiens

<400> 1430
taatgtggaa tttctctgct tactgccttg tacttttgat ccagctgaac taaactaact 60
caaatgtgtc atggtgtttt cttcattttg cctgcttaac tcatgtcttt ccagccttaa 120
actcaatgct cttccctttg ggaagagttt tctgaccctc catctcttcc cgtggctgat 180
cacagcgttt attggacagg gctctgcttg tcattttcac atgtgtgtcc acctctggac 240
tgtcgctcta gggtacagag cagcctctac cccagtgctg gacaacactc tgcccacaca 300
gatgggtgct ccctgcgtcc tgagtggact ttcctgaaag agaaactgag tctggccttc 360
tcttgtttac aatttgcctt cacctctgct ctgaatgctc ttggaggtct ctagcccttc 420
tgtggtttgt tgtcttttcc cctcagtctt gctgcagcat ctgccactgt taaacacctt 480

0508045.00000

cctgaaattc tctcctccct gatggcctgt gacatgacac ttcctttgct cttccctagc 540
atatgtaaac tctcctgttt ctctccttca ctggctcctc caaaccctta gagatgggtc 600
ttcccacagt tttgtttcca aacttctctc tctgccctct caccttctgt ggcttcacct 660
gtcacttgtg tgcagacaaa tgcttcgtag tctgtgtgtg taacctgaat ccctcttctg 720
agcctacgtg tgtgtccagc agcctgattg acatcatcac ctgaatgcaa gtcccagcat 780
nctaagaacc acacattcca aaagtcagct gatcacgggt cacacactan ttcnggccct 840
aaataa 846

<210> 1431
<211> 856
<212> DNA
<213> Homo sapiens

<400> 1431
catttagttt tttatcaata gatttggacc actatgctta aagctaatca gcaagtgatt 60
ctgactagca gaacaccttt gaatttgagc aaacgtactg tggttccaat tgttgtcact 120
cagaggtaca agaagagttg aattaattct cagtggcctg agtaaagatc tagaggcaac 180
cactcacata ttttagaata ataataataa ttctcttgga attcttccag gtctgtttta 240
ttaacttcct actttctata ctaaaagaaa aaaatagatt agtaatattg ttaacctgat 300
gatgatagaa gacttactct ttttaaacaa attttcaccc tttctaacag tttagctgaa 360
catcctgaag caagcgaggg aaaatataaa gcattgcaaa ctcaaaagca catataaatc 420
aagtcactta aaataatgga ctcaagaaaa aaaaagaaaa catgatattc ctggtgaagc 480
ttttgttttc acaacaaaat tttccctggt tacagaaaaa tatttctgaa gtataaaaaa 540
gtgaaggcat aaacatgata atgaatgaca actggcatct tcattatggg gatagaagag 600
attggtgtgg tctgtggcaa aatgaagaat gcatgccctg tcttatcaga cattatgctc 660
agcttcagca gatggttatc atttggggag tcagagccgg cagttttaga ttttactttt 720
ttccccaaag aagccaaatc cagattttaa catgaaatgt ccggcttata aaggtggctc 780
aatttttgga cagcatgtag accaaacaaa atggaccata agctatttgg ctatgggtgc 840
aatggagacc cctcnc 856

<210> 1432
<211> 834
<212> DNA
<213> Homo sapiens

<400> 1432
agccaatttt tctcagcatt gtttctggac ctttctgagg gtgggatctg ggcatcttca 60
atggcttaac aagtatcaca gatgaggaaa cagacttgga gaggttaagt gacatgctca 120
agacaacact gctggaccgc agctgaatgc acagctagaa ggttggcttt cacaagtaca 180
gtctacaaaa agacctgcta gagccattat tgccccccat gcaggatata cgtactgtgg 240
gtcttgtgct gcccatgctt ataaacaagt ggatccgtct attacccgga gaattttcat 300
ccttgggcct tctcatcatg tgcccctctc tcgatgtgca ctttccagtg tggatatata 360
taagacacct ctgtatgacc ttcgtattga ccaaaagatt tacggagaac tgtggaagac 420
aggaatgttt gaacgcatgt ctctgcagac agatgaagat gaacacagta ttgaaatgca 480
tttgccttat acagctaaag ccatggaaag ccataaggat gagtttacca ttattcctgt 540
actggttgga gctctgagtg agtcaaaaga acaggaattc ggaaaactct tcagtaaata 600
tctagcggat cctagtaatc tctttgtggt ttcttctgat ttctgccatt gggggtatga 660
gtattataga acaattagac cctgtatctt ttagcaatta cttgaagaaa taccataata 720

0502450.02700

ctatatgtgg aagacatncc attggggtgg tattaaatgc tatcacagag cttcagaaga 780
atggaatgaa tatgaagttt tcgtttttga aatatgccca ntcnagccag tgta 834

<210> 1433
<211> 860
<212> DNA
<213> Homo sapiens

<400> 1433
gttttccact gactctactt cagctctcaa attctttata tgtagctcca tcatgcctgt 60
aactcctttt gattcagacc tgtcgtctca catttgaact ttggaagata gcctcctgac 120
tggtattttt tattccatac tctgctttat tatacacgtt gttgcccaga ggtctcttta 180
aagcagatct gatcattcta cttctagcaa ccagtggaat aaagtccaaa ttctttggct 240
ttccataaat tattctttgc cctttgaccc cagattatct tttgaaccta ttaacagtca 300
actgtgtatt attttgtagt cactcagaat agtttatttt ccatgttact tcattccttg 360
gttctttatt tatgctgtct atttgcatgg aattgatggc tgacttcatt taacttcagt 420
aagcacttaa taggtcgcag gcaaggtact gaagataaaa agtcagttaa gacttctttt 480
ggggagagtt ggaggacaga ttctgattta tcctgtaagg ctcatctctg atgaaacttc 540
cttgatcgaa tgatttttt ctcttgntat ggcttttctc ttttttagaa ataatatgtc 600
ccctttctt tttacctttt cagttcccag ctgaaaatga cattctttta aatctaatta 660
taaaagtaat gaatggttat tgngaaaatt ttaaaatatt tcagaaaatg gttaaaggaa 720
aggtgattta caccattcag agatcacctc ttggttaatt tgcttaagtc aggttatttt 780
tccccaataa aaagcccctt ttggttcanc tggnggggaa ccttccccca tggggaagtt 840
tccacccaaa atcttttnaa 860

<210> 1434
<211> 877
<212> DNA
<213> Homo sapiens

<400> 1434
tagctaatta gtggattttt tttttttaa catcaaatgg cacagcagta tgtctaaatt 60
gcccttaaag aaatacaaaa tgggccgggc atgtggctca cacctgtaat cccagcactt 120
tgggatgcca agccaggcga atcgcaaggt caggaattcg agaccagcct ggccaatatg 180
gtgaaacctc gtctctacca aaaatacaaa aattagccag gcatggtggt gggcgcctgt 240
agtctcagct actcgggagg ctgaggcagg agaatctctt gaacctggga ggcagaggtt 300
gcagtgagcc gagatcgcac cactgcactc cagcctgggc gacagagtga gactccgtct 360
cagaaataca aaatgagtag taaatttatc tttgaaatct gcaaaacaaa tgtaccctaa 420
atgttataaa taaaggtcag taaatttaag ttaaacagtg tgggggcaaa ggatttttat 480
catctttata tccatttctc tttttttatc ctccccttt acacatagat gcgaatcagt 540
agttgttgtt tttggaattt gtgacactgt gagccattgg ctgtgcttcc atatctggtt 600
tgttggccaa actttggagc tatgtcgttt ttcacctctc agatactaag gatgagcttc 660
ccatacttgg cattagcctc tgggatagtc agccaacgtt atcttcttct anggacttgg 720
tactcaaccc gagcactcaa taagtgcttc attcaggtca tagcttggac tctgcattgg 780
tgattggctc tctggctttc tttttttaaa tttgagaata ttcacatncc agaaaattta 840
ccggttaaac caatttaang gttantaacc tatttac 877

<210> 1435

US005750800

<211> 630
<212> DNA
<213> Homo sapiens

<400> 1435
atactcagga atatgccact tctccctgtg aaagccccaa tccaggccaa tcccacccat 60
cctcttttgt ttaatcctct taaaaaagag gaatgggagg cataacctac agacccagga 120
aaaaaattaa tcatagctac catttgttaa gcccttatta tgggcgggca ctatgcagat 180
ggaacctact ttcttattta cgttcctaag tagggaaagc ggggagtaga agagggtcaa 240
cacatagacg gtgagtctca gaggttctgg acagtcacag ggacagagag cattttcatt 300
cctgctgtgg gagagtgtcc tgggccagtt gggctacctg gcgctggcat cctctggagc 360
ctctccaagg ctgtggcccg ggagcacact ctagtcctcc agtagcacct actccagcag 420
tgtcttgaag atctggggca tgagttgggg gcagtataat tacagtgact tgtgagatag 480
gaaaaggctg ggtgtgggac tgaataagat gaatgaaaga ttagtagagt ctaaaggaca 540
gagaaaccac tgcttatcat agcacacccc gttaaaaagc ngatgaaagg gcaagnttct 600
taccaagctt cctttggggg ttccccnga 630

<210> 1436
<211> 745
<212> DNA
<213> Homo sapiens

<400> 1436
aagttaaaag tggatgcaga agcgagcaca gacggggcta ggggtttcag agaaagtaat 60
tgagagtgct ggcaacagca gctgaaatat agagaagttg taggattagc tttttcgccc 120
aaagcagctt cagcccacgt tttattccca tcgagggagg gagaatgggt gccgctgagt 180
gggcggggga gtggtccctg aaaggaggtg gagtgctaca gcccctcccc gttggctctc 240
gctgtttgtc cgttgttggt ttatactaat ttgacaacag ccgcctgttg agtctcctcc 300
agatcgcagc tgaaggatct gttgagcgct tcaggaaagg cggtgagatc cggtaccgca 360
gcagagcact ctcagctctg ggtcttgcag gcgcagggct cccccatgcc agcagaaaga 420
tttcctctgg tgaagaggac cgtcgaatct gtcctcctca agacacctct tgtacagaat 480
ttattcgaat gccacggcca aggtcttcct tgaaaaatgt taaccgatgt gtgctttttg 540
tcttttgtca tcctttcttt aggacaggcg acactaacag gtgaagatct cgggagacca 600
tgactaagaa aagaattgct gtgattgggg gaggagtgag cgggctctct tccatcaagt 660
gctgcgtaga agaagcttgg aacctgtctg ctttgaaagg actgatgaca tcgganggct 720
ctggangttt caggaaaatn ctgaa 745

<210> 1437
<211> 764
<212> DNA
<213> Homo sapiens

<400> 1437
cagtttgcaa agggacagaa ttcgtctcac ttattcactg cttattgtgt gcctctcgtg 60
ttttttcttc ttgtgggtcg gtgtatttga tgctggttag tagagacaaa gaagaaggac 120
aaacaggata aaggtggatc tttggtgtgg accctctgca ctgcgaaaga agccacatca 180
ccgccaatgt ggaaaatatg caaagtgccg ttaggaagaa ggaaggatat gtgtgcagca 240
tatgaagtgc cttgaatacg attaacttcc cttcatgagt agtaaatagt agataactct 300

0305050-0020

gatcaaaaaa gggattcatg tgatttatca agctgagcaa ctgcgcgtct gcagagaagc 360
tggaggtcaa tcttgaaatc tagggcaaga ggagcactag gcaattgcca ggactaagaa 420
gttaatcata cccttggact gcttccatct gtctcagagt gacagcgctg ctctcagcga 480
gcaggcatgc tttatagcag cagatcagga attaatattt tctgtgaaac ctcaagcatc 540
atttgcagta acttgggttt tataaaaatg gaacataatt ttatatgaat aaatcacgtt 600
cagctagaaa tacgagaggc tgcaaaaaat tatgcttgac ttaaaaaaaa agagagagga 660
acgagcaaaa aagccaacat gaaaacagtt gttgaagcga tggccttgga ggcacagata 720
gccatgtggt naaatgggcn tntatcatct gaaaggcaac ctgc 764

<210> 1438
<211> 733
<212> DNA
<213> Homo sapiens

<400> 1438
gatgtatatg tttgaagtgt gcgtgtagca ttggggacag gcagaggctc tgctcactgg 60
ggaatgatgt tctggtggaa caccccatgg acttggagct tgagaagtgg gctttggcca 120
ggccctggca ctgaccacct aggaacagtc atcttttcca agcttctggt tcctcttctg 180
taaggtgcga gtccctaacc acctttccaa agacagcatc ctgtgcaagc tgtcacggga 240
gggggaaggg ccctggtgac cctcagggcc tctagagcct gtgggcaaga gctggccctc 300
catgccaagg tgccaggcct aaccctggtg aagagtgacc caactgggcg actgcctgag 360
gcctcagagg angacaagga gaaggtgcac agnagcaggg tgcacacctt gccctggcct 420
ntcctagggt agaggacggt gtgagccccc agaggctgtc atccagcctg agaggtttct 480
tggctcttcc tcccatgccc agggttctcc canactgcag agcaagatcc aggctccaca 540
caatgccaga ggccctgcct ctatcttctc tctggccagc ggccctatcg ctaaccccac 600
acatgangga tactgctttg gcatcatcgt ttgtgagggc caaggctggg gaagggtgga 660
cagagtgtcc ttccctgggg aagctgaacc canggaagat ggaantggac atggccccaa 720
aaaaccacaa naa 733

<210> 1439
<211> 859
<212> DNA
<213> Homo sapiens

<400> 1439
aaataagtat atctgtcaaa aatcatattt ttatgagatg tgtcaatact ggtctcgtgt 60
catttaggct acttggaaaa aagataaaaa aaatcctgtt tggctccaaa aaggaaaaat 120
cagcccctcc tgcatgagtg ggagctgcaa ccctttagaa ctgataatca caaacccctc 180
agaaccaaag tgaaatgaag gaaaatatgt aacattaggc attgatggaa gaggactaga 240
tcctagtgta agcatcctaa taaaaggagg ggttcaaaga tgctctccag aaccagtatt 300
tcagacttcc tatgataaac taaatgtgcc agtaccagag actccaggaa aaaccagaaa 360
tttgtttttg caattagccg agcatgtagt ccagtcttta aatgtcaatt catgttatgt 420
ttgtggaaaa actgtagtaa gagtttccat aagaagaact tccataagaa gcccaagaat 480
tagttcctac agacccagtt cctgatgaat tcccagccca aaagaaccac cctgacaatt 540
tttaggtcct aaaagtctga attattagac agtgttgcat agctagagaa ggaaaaggat 600
tcactcatcc tataaggcgg cttagttgtc ttaggcaaaa gctgtataat ggtaccacaa 660
atacagttac atggtggagt tccaattaca cagaaagaga tccattcagt caatttncaa 720
ggntgcagac tgcttgggcc cacccagaat tcacccggga ctggacgggc cccaccaggn 780

0962450.02800

tatactggga tatgtgggca ccagagctta tgctaaagct gnctgatcag tgggacaggt 840
aactgggtaa ntggcaccc 859

<210> 1440
<211> 751
<212> DNA
<213> Homo sapiens

<400> 1440
accgagctcc ctcccaggcc cgcgaacttg gccattcagc cgccgctgtc cccgccgcgc 60
gccctcgcgc ctctgcctga gaagccaggc gctgttcccc caccccagaa gaggatggca 120
aaggtggcta aggacctcaa cccaggagtt aaaaagatgt ccctgggcca gctgcagtca 180
gcaagaggtg tggcatgttt gggatgcaag gggacgtgtt cgggcttcga gccacattca 240
tggaggaaaa tatgcaagtc ttgcaaatgc agccaagagg accactgcct aacatctgac 300
ctagaagacg atcggaaaat tggccgcttg ctgatggact ccaagtattc caccctcact 360
gctcgggtga aaggcgggga cggcatccgg atttacaaga ggaaccggat gatcatgacc 420
aaccctattg ctactgggaa agatcccact tttgacacca tcacctacga gtgggctccc 480
cctggagtca cccagaaact gggactgcag tacatggagc tcatccccaa ggagaagcag 540
ccagtgacag gcacagaggg tgcctttac cgncgccgcc agctcatgca ccagctcccc 600
atctatgacc aggatccctc gcgctgccgt ggacttttgg gagaatgagt tgaaactgat 660
ggaagaattt gtcaagcaat ataagagcga nggccctncg gcntggggag aagtggccct 720
tccgggggca aggtggcttg cccaaggagg a 751

<210> 1441
<211> 807
<212> DNA
<213> Homo sapiens

<400> 1441
ggtactcatg taatgattgt tactagtgta gttggtgcat agggatgggt gaccctgcaa 60
aaaaggggca cagcaaactc tatttcaggt acaaatggac cttatcttta ggcaaatcct 120
tgaaattttg gcaggggaa tcaggttttc ctgtgagttt tttgtttttg gcttttcata 180
gacatctaca tgaagtctct gctttagaat cttaaaactg tagcttcaga ggccgggcac 240
ggtggctcat gcctgtaatc gcagcacttt gggaggctaa ggctggagga ccacttgagc 300
tcaggagttc gagaccagcc tggctaacag ggcgaaatcc tgtctctact aaaaatgcaa 360
aaattagcca gacatggtgg cgggcgcatg taatcccagc tacttgggag gctgagggag 420
gagaatcact tgaatcctga aggcagagat tgcagtgagc cgagatgaca ccactgcatg 480
acggaatgag actccatctc gaaacaaaaa actgtagctt cagggattca cttaaattat 540
catttatagg ccaggagagg tgtggctcat ggcctgtaat ccaagcactc tagaaggctg 600
angcgggtgg atcagttgag gccaggattt tgagaccagc ctgggcaaca tggcaaaacc 660
ctgtttctac aaaaaaagaa ttctcttggg tgttatgata cacgcctgta gagacagggt 720
cttgggcccg ggcncaatgg ctcacgcttg gaatcccaac acttttggga ngcccaagcc 780
ggccggatca cnaggtcagg aaaatca 807

<210> 1442
<211> 756
<212> DNA
<213> Homo sapiens

0302459.02200

<400> 1442
tntctctgtc acctcaccct tccctgtgcc acatgggccc tctctctcct gccaggacgc 60
tgcggctctg gggacctcgg agcctggggg tggctctggg agtcttcatg accattggct 120
ttgcactcca gctcttggga gggcccttcc agaggaggct acctgggcta cagctccgac 180
agccctcggc cccatcccta cgaccagccc ttccgtcctg cccacccccgg cagcgactgg 240
tgttcctgaa gacacataaa tccgggagca gctctgtgct gagcctgctt caccgctatg 300
gggaccagca cgggctgcgc ttcgccctcc ctgcccgcta ccagtttggc tacccaaagc 360
tcttccaggc ctctagggta aaaggctacc gcccacaggg tggaggcacc cagctccct 420
tccacatcct ctgtcaccac atgaggttca acctgaaaga ggtacttcag gtcatgcctt 480
ctgacagctt ctttttttcc attgtccgag acccagcggc tctggctcgc tctgccttct 540
cctactataa atccacctca tcagccttcc gcaagtcacc atctttggct gccttcctgg 600
ccaatcctcg aggcttctac aggcctgggg cccgtgggga ccactacgct cgcaacttac 660
tatggtttga ctttggcctg ccctttnccc canagaagan ggccaagaga gggaatattc 720
atccccccag agaccccaac cccccacaag cttgca 756

<210> 1443
<211> 755
<212> DNA
<213> Homo sapiens

<400> 1443
gtgtaatgga tttaaatttt taggtatctt tgtctacttt ttcataaaat gaaagaacct 60
ggctgggcgc ggtgactcat gcctgtaatc ccagcacttc tgggaggccg agacaggtgg 120
atcacgaggt caggagttca agactagcct ggccaagatg ctgaaacccc gtctctactg 180
aaaatacaaa aattagccag gcatggtgtc atgcacctgt catcccagct acttgggagg 240
ctgaggcagg agaatcgcat gaacccgggc agcagagatt gcagtgagcc aagatcgcac 300
cactgtactc cagcctgggc gacagagcaa gactccatct caaaaaatta aaaaaaaaaa 360
aaaaagaacc caaatggcat tttccttgat gtagtcacat tttttgtgat gataatgtac 420
aggatatcta gcaattatgc tggacatata agcacataag atttatgaaa tgattttgga 480
taatgtataa ggtactggaa tctggcactt tatttgctac ttattttcag cactttattt 540
gctattttct gtctctgatg agtagatccc catttgtacc acagtattaa tttttaattt 600
ttcttgatta tcattataaa cagaatcaga ggcagcactg agttttcaaa ttactcttgc 660
tttgcttcac agttccgtag agatatctca ngggtgcctg tgagcagatg ctgantgaac 720
cctgccccag tcttgnccct acctttaccc cacct 755

<210> 1444
<211> 740
<212> DNA
<213> Homo sapiens

<400> 1444
agtcgtaggc gctggccgct gacatgttga ggactacgcg cggcccaggc ctgggccccc 60
cgctgctcca ggccgcgctg ggccttgggc gggctgggtg gcactggcct gcgggccggg 120
cggcgagcgg ggggcgcggg cgggcctggc tgcagcccac gggccgggag acgggtgtgc 180
aggtgtacaa cagcctcacc gggaggaagg aacccctaat cgtggcgcac gccgaagccg 240
cctcctggta tagctgtgga ccaactgtat atgatcatgc gcaccttggc catgcttgct 300
catatgttag atttgatatc attcgaagga tcctaaccaa ggtttttgga tgcagcatag 360

0962945.07200

tcatggtgat gggtattaca gatgtagatg ataaaatcat caaaagagcc aatgagatga 420
atatttcccc cgcttccctc gccagtcttt atgaggaaga cttcaagcag gacatggcag 480
ccctgaaggt tctcccaccc acggtgtacc tgagggtaac cgaaaatatt cctcagataa 540
tttctttcat tgaaggaatc attgctcgtg ggaacgctta ttcaacggca aaaggcaatg 600
tctacttcga tctgaagtct agaggagaca agtatggcaa attggtcggc gtggtccctg 660
gtccagtcgg aaaagccagc ggactcttac aagcgtcatg ccagtgactt cgccctgtgg 720
aangcggnca aaccccanga 740

<210> 1445
<211> 857
<212> DNA
<213> Homo sapiens

<400> 1445
caaatgcaga aagagaaaac caaatacctc atgttctcac ttctttgttg ttgttgttga 60
gacagactct ctgttgccca ggctggagtg cagtggcgct gtcctggctc actgcaacct 120
ctgcctcccg agttcgggta gttctcctgc ctcagcctcc caggtagctg gggctacggg 180
cgcccgccac cacgcccagc taatttttg tgtttttagt agagacaggg cttcaccgtg 240
ttggccagga tggtcttgat ctcctgacct cgtgatctcc cctcctcggc ctcccaaagt 300
gctgggatta caggcgtgag ccaccacacc cagccatgtt ctcactttga agtgggagct 360
aaacattggg tattcatgga tgtaaagatg gcaacatcag accctgggat tactaggaag 420
gagagagggg agggagcaag ggctgaaaaa ctatgtattg ggcactatgc tcactacctg 480
ggtgatggta tcatttatat tccaaacctt agcatcatgc aaaatcccta tgcagcaaac 540
ctgaatctaa aataaaagtt gaaattatta ttttaaaaga aaatttacat ataaccaggt 600
atttggttca ctgagcacac atgtantaaa atcttcccta gagccaggca aagctttca 660
gtttttagtg aggagtgcgg tgtctctacc aggttcctna gacacatgat ccagcttgga 720
ctcttccagg atctgttgga gaaacatgta ggctcacgat ctgaatgaga ngaagggacc 780
ttctatgtac ccaataaatn catcaatcct tgtttcttac aatctgtttc agtgaaaagg 840
gttccttgaa cacaatg 857

<210> 1446
<211> 843
<212> DNA
<213> Homo sapiens

<400> 1446
gtacctttgt ccttggactt tggtgatgtg gtttgacccc agctagagag tgaggggaac 60
aacagcaaaa ggcaggacaa agactgactc gtgagaggag gcccaggaac agggggggcat 120
cgtgaatgag gaggacgtgg gggcccaaga aagtgagctc ttgcgcactc agtcaccagc 180
ccccttctgg ggtccaagct gtgtcccctt ctctaaagag gtaagccctg agtcatggga 240
agatggaaac cggggctgat gagacaggat gtttttaag caccgtggtg tcttgttgac 300
ttgcacatgc acgggggtct tgggtaacca cagggctcag ggtatttgca ggaacagttc 360
aagtgctcac ttgtcttggg gctgtttatg gggaagtggt ttccacagtg agaggacgtg 420
agatattgtt gtcaccccgg accacactta gctacttcct tctcactaaa gctctgtagt 480
catattttcc ctggcagagc agaaacttct atgttatccc acagctgttc taacggtgta 540
gacttgactt atgcaatgat gccaggagtc ctgagcagca cagcccaact tcaatcacac 600
acagatggac agagctgtat tagcaaagcc tgagctactg agcgatgana gttcagccag 660
gctttcagac atctggtcat tcaaganaga tatgcgctaa ccaaggacct aaagatgtgt 720

0050345-0042000

taatatgggt gctatatcat aaggaccttg aaataaatgt tcttagcctt tggccaaaag 780
gtccatgtnt aggaatctat ttttccatng aaattaattc aaatttggga aaaatgncca 840
tgc 843

<210> 1447
<211> 809
<212> DNA
<213> Homo sapiens

<400> 1447
gagctagcat caccctgaga aagcaggctg gccccaggac tcacgggcgt ccatgcagct 60
gatggagggg agctggaccg gacgactgtg ctctcttagc tctagcatca ccctgagaaa 120
gcagcctgtc tccgggactc acgggcatcc atgcggctga tggagggagc tgggccggac 180
gactgtgctt ctcgtgcttc atgtagaacc cttaggtttg cccctgaagt ctgtctgctc 240
catgtactat ttagttgctt ttcagcatag agcttggttt tccctttttt taattgtaag 300
aatgatgtgc tctggcatgt cacactgtga aaggggacca gatgatggag cctggactga 360
aagggtgaat ggggccgctc acctcagaac tctccctgct ttgctttgct gggagcaggg 420
agcagggcag cctgggagag gctggagttc ctcaaagggc agagaagaat ggccttcagg 480
ggaccacagg gaggaaccat gccatgatag actcaaaaag ctagattatg ctaataaaaa 540
ggggaagaca tctgtgacac acaggaaaca gtgttcgtgg ccttgccata gaaggcgcag 600
taaaggagga aaactccgga gactccctgt gaattcttgg ctaagaatgc acgttatctg 660
cagtgatcta aaaacacaaa cgagaacaga agtgagtggc cctacctgtg agatgcacag 720
tgctgaaccg gnacccaacg cttggcttgc aaggatggga agcttggctt gccgtattga 780
attggtcctn gggaaagaaa attttgna 809

<210> 1448
<211> 698
<212> DNA
<213> Homo sapiens

<400> 1448
gcactcaaag gctcaactcc ccacaggcgt gtgttgccag gggcagaagg cttggcccct 60
gggtcagcat actctccgga cagctcatcc ctgccagccc aggtccctgc agccctgggg 120
ctagcacagg ggatgcggac ctcggcctag gtccccacag ctgtggggct ggctcggggg 180
acggatctct gctaagcatg gcccctgcca gctcaggtcc ctgccactca gtggatggga 240
ctttggcgga gtgtggggcc cctgcaggga gggtctagac aagcaacacc aggaacctga 300
agcctccctg gccggggctc agctgtcgcc aggatcgcaa cagttaagct gcctgcagca 360
ggataagtga gccgatgctg ctccttaatc agggacatcg aatcggaggc cttgggagga 420
gcagccggct ggctgccctg cagaggccag gtctgcccag caaacccagg aaggtgtggc 480
gtccccgctt cgcggccaag atggtgctgg tgctgcgcca tcctttgtgt gcccgggaag 540
ggcgttccgg gagccggtcg ggggctcctg actcgcattg ggcagcatga cggtgcgccg 600
gctgtcactg ctgtgccggg acctctgggc gctgtggctt gctgctgaan gccggcgcaa 660
gtgcntgggg cgcgggccgg gtcctngcct tcccggaa 698

<210> 1449
<211> 901
<212> DNA
<213> Homo sapiens

0050345-0020000

0050305-0020000

<400> 1449
cttgtgtcta gcccgtgatt gacattctag agataatatg agaaatattc cagacctgac 60
cttagagttt gtaatccagt tgggagaaac aaagcctttt atgcaaaaca taattagaga 120
accaagcaat atcatctata atctaaaagt aaaatgtgag gtatgttttt aattccaaga 180
gcctgtgagt ggttctgaag tgcaagtgtc ttcttgtgtt tttcagaggt ttgtgtttag 240
atggctcagg tttaatctct aatggggata gcagggaacc agatgagacc tgctgaggtg 300
gccacagtac tgattctagt gggcaggctg cctcccctct gatactgtgt aaggcattac 360
taatgctggc aacagtttgc atatagccaa ttgccaaaag cagcctgcac atccctcctg 420
aggctggtcc cgtaaattct tctctttcct gtcgtaaagc attcctcatc accacctccc 480
ttttcacact ttatgcaagg ccgtgcactg ggacagcaaa tggctgcaac tttcactgct 540
tgcttttccc aagtcgaaga aaagttccaa cgctggcaaa gcaaggacat tgctattttc 600
tgacgatcga atgtcttcga ggaactagct tcagtgctga tagggtctgt gttcctctag 660
taagaatagc actgtttcca ttagagggga ccaggatggg tagacaggct tagacgtctg 720
attactcttt gctctggnat ttgnatgaca gctcgggtgt ctgcttacct tnctgaggat 780
gagagccata cattatccat ttaatacagc cacagtgaca gtgcttgata atggctacat 840
ttacctacac tgggtgccct anaacattaa tagttcactc tatgaactcg ttggngggcc 900
t 901

<210> 1450
<211> 736
<212> DNA
<213> Homo sapiens

<400> 1450
gattgtaact actgcattct agcctaagaa acagaaagag acactgtctc aaaaaaaaaa 60
aaaaaacaag aaaaaaaaag aaagaaaaaa acagatcaga ggccctggcc tggggtcagt 120
ttctccagaa aggcctgcac aatggagttt tcatgtaaaa aatttcttac atcctgattt 180
taaaaaatca gatgatcagg aaacattgag ttccgattcc tttgttacaa cctccactaa 240
agctaagtaa cagctgctgt attaagatgg ggctcccccc ctccatccca cacctgcctc 300
ccttacatgc ctaactcctg ttgtaaatag ggaccctaat ctgatgtttt tgtagtccct 360
ttcctagggg cactgtgggg aggtggaagg aatttcacct ttgttgttgg acagacttag 420
atttgagaac tggttctact acttactgtt tgtgtggtct gggacaagtc acttggtcca 480
agtaagcttc tgcatctgtt aaaaaaaaaa aaaaaaaaaa aagtggcggg gagctaagaa 540
ttcctgccca gcaagttggt ttgcagatca gaggcagtgt gtgagaagta cttaacccag 600
cacctggcat atagtagatg ttcaggacat cgtagcaaca ataagggaga catntcacaa 660
aacattttgt gagaaaggat cagtttctat ctagtcaatg ncttaaacat tcataggntg 720
gtcatggtgg gaactg 736

<210> 1451
<211> 697
<212> DNA
<213> Homo sapiens

<400> 1451
gagtggggac ttttgtccct ttttgtcagt gggaggctgg gctgggagag gaggcaagga 60
acagcacact gtagaaatgg agagtgagga atgggagagg cccagagctc agtatgcaag 120
ctgtgtacag cggaggttgc cggactgtct ctgatgggct gctagtgggg tggtgctggg 180

gaaggttgac tcgctaaaag aaaggctgct gcagtcacat gttatagggt acatctgtga 240
gaattaggga aaggaaattg ctccgtgtca atgcagtctt acccagggca catggcttgg 300
ggatgatgta tgaagtggac tttagttccc tgggtttagt tcccttgttg tgcagtgcac 360
ggcttggaca aatacatggg tggccttgac taaaaggctt tggttcaacc aggtgctttt 420
ctcatcgcag cttaactcct ggcttcctaa cactccccat gcgaggcagc cccaattcac 480
ctctaaccct gggaggtgcc aggaaacaga gttggagccg catctactgc ttgacttctc 540
aatgcaaact taactatttt aaagtgtaca gttcagtggc attcaataaa ttcgcaatgt 600
cgtgcagcca ccacctctgt ctagttccaa tacgttttgg tattgcctca aaggaaaccc 660
cgtacccacg angcagtcac tccccattcc tnctnct 697

<210> 1452
<211> 779
<212> DNA
<213> Homo sapiens

<400> 1452
tagttcaact ttcccatgag agtttttgga ggaggtgtct cagggttgtc agggtcggcc 60
ccgcctgcct ctcaggtgtg tgtgatttca ggtgattacg tttttgaaga agaaggacaa 120
gttcatcagc ctggtgttga agcacatcgg cacctcagcg cttatggacc tgctgctgcg 180
cctggtcagc tgtgtggagc cagccgggct ccggcaggac gtcctgcacg tgagtgcggg 240
agttcccccc gttcccgagg gcaggggtgc tgcaggaagc cagctggtta agtgcaggag 300
ctcagagcac cagggcgccc ggcccccatc tctccaccta gcgtgcattt ctccgtgggg 360
ctgttagggg ttcttgtcaa ggattgtggc ctgtaccttt tccactgtcc cgacttaact 420
cgctcagaag cacagagcag agaggtccct tctccccgca gtctccagcc tccggctctg 480
tgaagaggcc gaaatggact ttcctcgcct gcctcctttt cccctgccag cgcccacccc 540
tgtggcttag agcaggaggt cagtgaggtg ctagccctgc gtccaggcct gtgcctgcca 600
ggagagcccc ggtggacagc agttccctgc agagccccgt tgtttaccct ggagtgtgga 660
tgcctctgtt ctgatggtgt ttaatcagtg agaacaggtg ctacagttcc cgaaaagagg 720
angatgcccc ccanagaagc ccaggaaatc cgtgctgaca aacttctgct nctggtcgg 779

<210> 1453
<211> 751
<212> DNA
<213> Homo sapiens

<400> 1453
tcttaggcaa ctcacttaac cttcctgggg caatttactc cctctgagat gagaaagttg 60
aattaaataa tccgaaagca tcctgtcaag ctctgaaaaa tgctatgctt caaggtacac 120
agacttctca ggaagaattc atagctacaa gcatgtcttt ttataaagac cacaggtggt 180
tctcaggaag tttgcatatt acaaatctat ttcgggtttc tgaaatatgt gtctctagct 240
tttcctgact acttcttttc atctgcctgg tcccatggac caagaattta gggattccga 300
agggagagag gggaaagatc tgcttaaaac cagaggactt gcaggaacct cttctgggcc 360
gtgggcttca tcttcccaca ccgagcagag cagacctctg tgcctgccct gcagctgtag 420
gtcttgagtt acctctcctt ccccttcctc catctgtacc tccttaagag cagggccctc 480
cctgtcagac agacctcagc cagcggccct ccgcaggtcc tggcctgctt ccccacaccg 540
ttccctgtgg tgacctgcct ccctgcttgt tttccaggct ccccttccct gcgggcatat 600
ccgctcctct cggtgatcac ccggcagccc actgtcatct nccacctggc cctgccaccc 660
cgggaatcgc ccaggcactg tcctgccacc aggtcaccga ngcggctctg ctgaagcccc 720

0052945-070200

aaggggccan ggcctaccag canccgagtc a 751

<210> 1454
<211> 741
<212> DNA
<213> Homo sapiens

<400> 1454
agcttcgcgc tagtgctgtt ttttttttt ttttttttta gcaatggcgg ttcccggcgt 60
ggggctcttg acccgtttga acctgtgtgc ccggagaaga actcgagtcc agcggcctat 120
cgtcaggctt ttgagttgcc caggaactgt ggccaaagac cttaggagag acgagcagcc 180
ttcagggagc gtggagacag gctttgaaga caagattccc aaaaggagat tctctgagat 240
gcaaaatgaa agacgagaac aggcacagcg gactgtttta atacattgcc cagagaaaat 300
cagtgaaaac aagtttctta aatatttatc ccaatttgga cctattaata atcatttctt 360
ctatgaaagc tttggtctct atgctgtcgt agaattttgc caaaaggaaa gcataggttc 420
actgcagaat gggactcata ctccaagcac ggccatggag actgcaattc cattcagatc 480
acgtttcttc aatctgaagt tgaaaaacca gacttctgaa cggtcacgcg tacggtcaag 540
taatcagttg ccacgttcaa acaagcagct ttttgaatta ctttgttatg cagaaagtat 600
agacgatcag ctgaacactc tcttgaagga gttccagcta acagaggaga acactaagct 660
ccgatatcta cctgttctct tattgaaaac atggccgccg ngtattttcc agactgnata 720
gtcagaccct ttggctnctt a 741

<210> 1455
<211> 809
<212> DNA
<213> Homo sapiens

<400> 1455
cttagatgcc tacctggtgt tctgttgtat tgtggctgag ctggcactca aattacaaga 60
cacagtcctt tccactcttc cctccccttt ccttctagtt ctttcactca ctgactttat 120
aaaaaggaga atatgtccaa cacattgttt cattacctag tatagttcct ttaatgacac 180
ataacaaaca tcttttaaca taaccgttac gtgtttcttc tgtaaccgta attttaaaca 240
tctacacagg atttcattga acagtaactt tagtccctgc ttcctgaaca ccgaggtgct 300
caataactta catacattac ctccctgagg tctcttggag gtaggtatgg ttgctgccat 360
cttgtagatg gggaagctga ggctgagaca tgcaaagcca cagcctgggt tcacacagct 420
ggtcagagac aggatcagga ttcaagccca ggtgtgttta ccaccaaagc caaaggactt 480
ccattgcgga ggaaggctgg ctgccccaga ggaggctaca gcatgtaata ggaggtcttc 540
tcctgtagct ctgtgaacac tgtgagccag ctcaggcaag aatctgcccc ccaaaaagat 600
acccaaatgg ccaataggac atatgaaaag gcagtcagcc acactagcag tctagacaat 660
gcaaattaga accacaaggt gatggatacc actacccacc cacaagaatg gcttaaagga 720
aaaagacagg taatatgaaa gtattggaga tgcttacatc cactggngca agtggcaatt 780
ggnccacccc tttggaaact gcttggcng 809

<210> 1456
<211> 700
<212> DNA
<213> Homo sapiens

0088270.0052050

0956245.02/2000

<400> 1456
agcggcgcgg agactgcggg gcgggccatg gcggcgaacc tgagccggaa cgggccagcg 60
ctgcaagagg cctacgtgcg ggtggtcacc gagaagtccc cgaccgactg ggctctcttt 120
acctatgaag gcaacagcaa tgacatccgc gtggctggca caggggaggg tggcctggag 180
gagatggtgg aggagctcaa cagcgggaag gtgatgtacg ccttctgcag agtgaaggac 240
cccaactctg gactgcccaa atttgtcctc atcaactgga caggcgaggg cgtgaacgat 300
gtgcggaagg gagcctgtgc cagccacgtc agcaccatgg ccagcttcct gaaggggccc 360
catgtgacca tcaacgcacg ggccgaggag gatgtggagc ctgagtgcat catggagaag 420
gtggccaagg cttcaggtgc caactacagc ttccacaagg agagtggccg cttccaggac 480
gtgggacccc aggccccagt gggctctgtg taccagaaga ccaatgccgt gtctgagatt 540
aaaagggttg gtaaagacag cttctgggcc aaagcagaga aggaggagga gaaccgtcgg 600
ctggaggaaa agcggcggcc gaggaggcac agcgggcagc ttggagcang aaccgcccgg 660
aacctgagct gcntgangct tcacgccggg agcaacgctt 700

<210> 1457
<211> 890
<212> DNA
<213> Homo sapiens

<400> 1457
acaacatcag aaacatttta cctagagtga attctacata taatcattca gggggaaaaa 60
tgtgaaacca agtaaggatt ataatactta gtttattctt ctcctttggc aaactttata 120
aaggctctca aactttgctc tgaaacttga ttcaaaagtt gaaagatcca agcctgagtt 180
atttttgcaa ctactctttt tgcaacatca gggaatgttt ctctgttttt aatagggaaa 240
tgttaaattt ccctcttaat atttaattaa ttttaacaga gcattaaaaa aggatcttac 300
cgattccaaa ttggagattg catctctgtg ctcccacaaa acccctgtgt tggtttctat 360
cacaggacac attgctcttg tcttagtgta tcaatctgtg cccttgtttg tgccaagtac 420
cagatgataa actcctcgaa agcaggaaga gtgaggtgcc tacctttatg tcctagtacc 480
cagcacagtg cttggcaggt agaagttatt cactggatat gtttttgctg aatgaataca 540
tcaatgaaag gagatgcaga ctttaaatct acggtataaa aagggttgta aaatacagaa 600
gcaatacaaa ttaattagaa aataaagtgt tgacacactg gatcccattt aagtgtgcct 660
atctccattt cattttgaa gttctttggg ttttgcttga gatattcatt cctcctttcc 720
cagangttcc ctgctctnca agcaatctga gctggatcgg gctgcgttgg acaaggtgac 780
ttctaagctc tattcgtacg ttcattcagc aaatctttcc aaagcgtttt cttcanaccc 840
ccttgggctc tgaacgggna cgctcatttg taagaaacat gcntcagttc 890

<210> 1458
<211> 907
<212> DNA
<213> Homo sapiens

<400> 1458
tacatgcaat gaatgtggga aatctttctg caggaaatca gtattgattc tgcatcaggg 60
aattcactca gaagaaaaac cctatcaatg tcatcaatgt ggaaatgcat ttagaaggaa 120
atcatatctc attgatcatc agaggactca cacaggagag aaacccttg tttgcaatga 180
atgtggtaag tccttccgcc tcaagacagc cctcactgat catcagagaa cacacacagg 240
ggagaaatcg tatgaatgtc tgcaatgtag gaatgccttc agattgaagt cacacctcat 300
tcgtcatcag agaactcaca cgggagagaa accatatgag tgtaatgact gtgggaagtc 360

cttccgccag aagacaacac tctctctaca tcagagaatc catacaggtg agaaacccta 420
tatttgtaaa gaatgtggga agtcctttca ccagaaggca aatcttactg tacatcagag 480
aactcataca ggggaaaagc cctatatttg taatgaatgt gggaaatcct tctcccagaa 540
gacaaccctt gctcttcatg agaaaactca taatgaggag aaaccctata tttgtagtga 600
atgtggaaag tccttccgcc agaagacaac ccttgtagca catcagagaa cacatacagg 660
ggagaaatct tatgaatgtc ctcactgtgg gaaggccttt agaatgaagt catacctcat 720
tgatcatcac ccgaactcac acaggagaga aaccatttga atgtaatgaa tgtggtaaaa 780
tcattcagtc aaaggacaaa tctcaatcta catcagagaa ttcatacagg ggagaacccc 840
tatgtttgta atgaatgtgg gaagtccntt tgccagaaag caacccttac tggacatnag 900
aaaatnc 907

<210> 1459
<211> 736
<212> DNA
<213> Homo sapiens

<400> 1459
aattaaaata tccagttagt ctttattttc aagttcaaaa ccttattgcg tactgaaaat 60
gcatgaacta ctggacactt ttacaagctt actttcacag gagtctggta agatacgtgc 120
tattctcata tttttctcac tagagggaaa acataaggca tagagagaga ggcttgctga 180
gtctggccca gatcaggcgc gttcattcgg ccgacccttg tgctggctgt accctgcact 240
gtgatgctct ctctgcctcc cacatggctg ccagagtcgc ctttctgaga tacagatact 300
gtcatatttc aacttaaaac catcactgtc tccaccatgg aataaaggcc gctgtctgga 360
gcatgcattc tcggccttgg gcagggcccc agcgtcctcc tccggagttg ggagctgctg 420
gccctgcacc gtgccggccc tgggctgccc ctgctgcttg cccttggagt cctgccctgc 480
tcaggctcag cactcagctg cctctgcaga tgccctcctc aggggcccta ctctcctggc 540
cacttcactg aagaattggc catttcccgc cttgtctgca atgctttatt ctcagccctg 600
tgagcctctg ccagggcctg gctgacaatg cttgcatctg gcccctagca tctctcacag 660
cgtcttgaac cccggtgctc aactgcctga gattgaactt aagtcaaacc cacttaancc 720
ttaaaatncc aantgg 736

<210> 1460
<211> 695
<212> DNA
<213> Homo sapiens

<400> 1460
ggctggcaac ctggcatcag gggaatttgg ctgggccact ttatggagca atgacccttt 60
ataaataaag tttaatccca aggcaaagtg tttatcttgt agtctttaaa tgttacattc 120
ttgatgtcag aagaaggcat aaggagaaag tcagatcatg gattattttc ttctgtttgg 180
actcaccgtg cttgggaata cttctgagca ttagagagca cttcattcat tgcagagtct 240
ctggcctccg aggctgcctt caccatcagc agcttcagct tctgggagtt tcctttccag 300
aggcagagct gatgccttcc ttgtgacaca gcaggatcgt cagaatgaca gccccagtga 360
gtgctgagtt aatgttatga atcttggagg acctggaatt atttacactc ttttgaagac 420
agccacttct tcagtaaact atgcaaaatg ggaggaaaaa ctatggcttg ttaaaagcgc 480
tggatgatga aaacaaatga gaataatctg gcagccccgg tagaaaaaaa atgctaattg 540
gtttctctct ctgtttttga gacagagtct cgttctgcac tccagcttgg gagaaagagt 600
gagactccat gtcaaaaaaa aaaananaaa gaaacaagaa aatgtgtgaa gggaaaggcc 660

0960450.0720

aaggggtgg ggcttctctt tccaatgana agttg 695

<210> 1461
<211> 826
<212> DNA
<213> Homo sapiens

<400> 1461
cgcatttagg tctctcatct atttcaagtt aatttttgtg tgtgatctga ggtccttctc 60
attttgtact gagtcaaact gaagagcccc ccacctcccc agttggcctg ccacactttg 120
ccttctgcat ttgggtctca gctcaaacat cctcactcca gggaggcctc ccctgtcaat 180
ctaaagcagc tgcctccctg cagtttcagt caccacccca ttttattggg gccgtcagaa 240
atggtctgac atgttgtctg ttgcctccca tataagctcc atgacaacag accctgtcta 300
gcttactgcc ttcgtttcta gcacctagcg cagtgcctga cacttagcca gagctcagac 360
tattatttga aagcttcttt tggttaaaag aaacattccc agtggatttt gcttaagact 420
ttgtaagtgt ctctggcctc atggagttgg agggctgagt gggaggggat ctaccagcat 480
cacagtcaca ggtggtcact cgtcccttgc cccagccatc ccattacttc acaagacagc 540
cccttccatc cttggacaac tctgatgatt agaaaattct tcctgatgtt ggacagagac 600
ctgcttcccc atcgctggca ctcgttatcc actgccttcc tttanggaca actggagttg 660
aacttcacat tttgacagtc ctttaaatat ttgaaaccag ctatcggatg tctcttaaat 720
accctcctct gggcttgaat gcttctaaat cttttcaact ggtccttcct ggaaccccaa 780
aanggcttgg acctttttgac cccttaatcn ntgatgaaag gccctg 826

<210> 1462
<211> 846
<212> DNA
<213> Homo sapiens

<400> 1462
atcttttgga gcttctcctt tgtaaaatgg gacaggatgc tgttttaaga tttaagtgct 60
tcttatgcaa taggagctca aagagtggga gctgttgttt attaaaaata acaatatcat 120
tatcatattc tctacctaaa gagacctgtt gaaattggac agaaaaggaa cgtttctgtc 180
ttgataagtc ttaaaactcc agtaccaagt gcagcattcg tttcttgtga gatatttgta 240
gaatgggtgg atagaaggat gggagaggag aggggtctga agaattcctg tagcaagcta 300
aagaggtatc atcttccaat tgagctattt ttagccttac tcatcatttg taatcaaaac 360
aatccttttc ttagccttac tcctccccca cccctgcccc cctactactt ttgcgatggt 420
aatcgtcatt gccaacttac tttctttgga atacacaaac agagctgtct ctttccgtca 480
tggagatttt aacagtaaaa aactcactgc accattacct ctgccttgta ttccagacaa 540
tagtaaagga cattgtaaca tcactgtgtc agcgcaaaca aagaactatg taattttatc 600
ccatattaat acagtgtcac gcaggaggta ctatcattag atggcaatct ataaaaatgg 660
cccctgagac caggcactgg cacaattatt tattcttcaa ttatttattc agtcctaagg 720
atggaaatgc tgacagacac tgcaaaatgc tctacctacc aatttacaga aattgaatga 780
cggaatcatt tggggactgg aatactttta ttggncccta ttttaattaa ttaaaatctn 840
ccttcn 846

<210> 1463
<211> 748
<212> DNA

0960450.0720000

0052045.0002000

<213> Homo sapiens

<400> 1463
ggttcatggg tcaggtgtcc acaaagcaga cccggatgct gtgtgagcca cagtcctctg 60
cccacaaggt gcccggcctt gaatgtccag cggtgacttt gacctctgat gagccagcct 120
ggaagaggac agacctgtgg agaagaggct cagggcccca agagcaggcc tggcggggtg 180
ctgagggcaa ggtggctatg gcaggcttta tggaggggag gcggccagga gcctgnttng 240
gctgagcttg ggcatggagt gggtaggcct ctggtgcctg cagagcctca tgtaactggc 300
atcaggacta cccagttgcc gccatgctcc tggcccccta cctgccttct ccctgtgggt 360
ctctctctgt nctacacaca ccccgnctct tgaaggctgt ctgcttccat ctgacatgca 420
ttagacccca catgcctgca aacccacacc agggcacact ggcttgggag cagatagggt 480
tactggttcc tgaagctagg gagccctcct catctcagcc tctctagtta gtaactgttt 540
gaccttgaac agatcgcttg atatcattag gtctcagctt cctcatctgt aaaatgggtt 600
catgtttagt gtgtaggctg gtgagagtca agtgaaatct ctgaatatgt aaagggactt 660
tttaaaccag tgattcttgg ncgggcgcan tggctcacgc ctgtaatctc agcatttttg 720
gaggccgang caaggcagat caccttga 748

<210> 1464
<211> 798
<212> DNA
<213> Homo sapiens

<400> 1464
gtacaaaagg acatgatatt ccatgttagc tatatttctc tctgaaaaaa aaattccttc 60
ttttagaaaa gtttatcaaa catttaatct aggagaataa actattgaca actacagaat 120
ttgttcccgc agaaaatacc taaagtctct gctcatttca tgtttactaa tatttcatta 180
gtcaaagcaa gtcacttaac caagctcaaa gccaagagac agagatatat atcccatctc 240
ccacattaac acatactcta ctgagagtta cattcaagtc atatggtaaa gtttatggat 300
gtaaagttct attatagaga gggagtgaag aattagagaa agtaatccgg tctatcacat 360
atattattgg tttggactca gaaacaaatg gtttgaataa acaacttaag aagcctgatg 420
agttataagg gacttttgtg ttagtgattg ataccacatt tacaatcaca gtctctctaa 480
tcactttcag gggttttcat catagattac ttttgaattc atcaattatg gtaagcactg 540
aatagaaaat aagggtcaga taaaacacag taggttagag atgaagagtg cgaattctat 600
tccagctcta tcactgaggg tgaaatctca cacatttcta ctgattttct ccccccctcag 660
tattatgatc tcaaaaaaag gagtactact cttctttttt atttttttctt agtatagaaa 720
gcatacaaaa ggcatttgta gaattctgng ccgtagcata aattaccagg anggacgant 780
taaaatcccc cacaatcg 798

<210> 1465
<211> 850
<212> DNA
<213> Homo sapiens

<400> 1465
aaacagtgaa acttgttgaa gagtacaaat tcccaagcct gtttattaac caattttacc 60
caagaccagg aactcctgct gcaaaaatgg aacaagttcc agcacaagtg aaaaagcaaa 120
ggacaaaaga tctttctcgg gtgtttcatt cttacagtcc atatgatcac aaggacttca 180
gaaatgggct tgggaaccag ctgagttcag gatcccacac ctctgctgca tctcagtgtg 240

actcagcgag ttccagaatg gtgctgccca tgccaaggct acatcaagac tgtgcgctga 300
ggatgtccgt gggcttggct ctgctgggtc ttctttttgc ttttttgtc aaggtctata 360
attagaatac aactaatgga aacatctata aagaagaata catttctaat taaaatcttc 420
aatgaacagg aaagcgacat ctccattctc caagggcaat aatttgtact ggtcatgctg 480
cctccttctc agccactctt cttaatgagg ctccccctgt ctcacattga gttgggccca 540
ttggttattt gacctaaaac ctaatcacgg ctaccatagc acatccttca aattaaactg 600
cttttggttt acttttagca agaaatgcaa gcggttgcat tttttctgtt tgtttcaatc 660
tctaatcttt aagtcagaac ctaattgtca gtggctctgg ccatctttc ctcatgtgga 720
agaattttct atctttaata aacttttttct ttggtttttt ttttccagat ggagtttcgc 780
tcttgtcccc caagctggan tggtgcaatg gcacgatctc aggtcactgn aacctntggc 840
ttctgggctt 850

<210> 1466
<211> 854
<212> DNA
<213> Homo sapiens

<400> 1466
gtgcatcatt ttaggggtta catgatgttg aatatgtctt aggattggta gtgttaacca 60
tgatcatttg gttaagatac tctctgctgg gtttttcac tgtaaaatta ccgtttttcc 120
cttggtgctt aataaagatt ttagaagaga tatactctga aactgtgcaa ataccctgtt 180
tttcttcaaa ctttcaccca ctgattttag catccattgg tgggtcttgc tggcatcagt 240
tactgcttaa tgtttgtcta atgttgattt tctgttttct tcatttcttt tacatttatt 300
gattggaaat cgtctgtagg gaagatctgt accttcctga tatatttatt gatgattatt 360
aattatttat agctgtggac tcattattaa taaatgaggg ttttatgagt aatacttgta 420
aaccttagga gaggaatgtt gatgtattta acttgtaaac tttgttttca gcttcttttg 480
tgttaggtag gtacatgtat gcttgggtgt aggataaata gcaatgctat aataatactg 540
tatatattgt tatatgaaga ttgcatttta tttcaagatt tcctttggag ataacttta 600
aaacattgag atttcaaacc acaagatcac taattacttg cataacactt agcataattt 660
tctcctaaac gatatcatgg tctttctata gttaacactc aaggtgattt tctttattgg 720
tctctttgcc ttctttattt ggaatttgag gcacttagta tatttttta taagttatag 780
ccacacatca gtacttacca gcatgataag cagttcttta ctataaaatt aaagttggna 840
accattaagt gtaa 854

<210> 1467
<211> 806
<212> DNA
<213> Homo sapiens

<400> 1467
ctcattttgc tccaaatttt aagttgcttc agaaatttaa ttagccctct gcttactcta 60
caccatggaa aaaaggtaat atagtagaaa ttctgatagc aatttcaaaa gatgtccaaa 120
atagacatta atcattggaa tgtctttcat tgttaataag cacagtatta agtggtttaa 180
gttctagaat gattttaata aagtcattta tgatacttag ctgtgcattc caaactgtaa 240
aggaaaaggt aaaaaatgct acttaaaaat aagctaaaaa ccaagacagt cggtgaggtc 300
tgtggaaatg gtagtattca tcttgggaga aacatgctac tggaaaggcc tggatttgtc 360
tagatgggag tcattaagac tgtgggacct aaagtattca gcacaataaa gcaacaggac 420
atttcaatgt tttccctggt agcctgagag agaagagggt tggggttatg ggacccaggg 480

DOCKET: 3950-2000

gaagaccgaa gacaaatctt taaagaaaaa gataaatatg ggtaagggtc cctaaggcag 540
tgacggccta agcacactgg tactatcttg actatcttgt ggtcaaagtt atttcctctt 600
ctgtgctata atcctctcct ccactaatcc actctgagta aagatctgtt acacaccata 660
cccttggtca tggtgcccag gggaaatgaa gaggagagta ttacaggcaa ctggaagatt 720
aagcatncca gaccccattc tgangtatca gaaatattga ggaggatact ggcttnctaa 780
gattatgtgg aatgggggcc tacaac 806

<210> 1468
<211> 788
<212> DNA
<213> Homo sapiens

<400> 1468
tggtgttgcc attaatggta gttagaaata tgaagaggag gccgggcgtg gtggctcacg 60
catgtaatcc cagcactttg ggaggccgag gcgggcggat cacgaggtca ggagatcgag 120
accatcctgg ctaacatggt gaaactctgt ctcactaaaa atacaaaaaa ttggccgggt 180
atggtggtgg gcacctatag tcccagctac tcgggaggct gaggcaggag aatggtgtga 240
atccgggagg tggagcttgc agtgagccga gattgcgcca ctccgctcca gcctgggtga 300
cagagcaaga ctctgtctca aaaaaaaaag aaaaaagaaa aaaatacgaa gaggaggcag 360
ttggaagagt agttccatct tggccaggtt cagttgctgg tgggcagcct accagagaat 420
actcacaggc agtcgtggct gcagatgggg acctgagcat aaacctttgg aaagatgcag 480
tttaggacag gggaggagaa gggtgatcag aagtatgggg aaaaccaaga gcctggatgc 540
tcaggaagga tccgccggaa ggaggagttt ggtcagcagc atcagatact gctgtcattt 600
tttagaaaga tgaaaagagc aacagtcctt ggatttagtg gttagaaggt agtctttgnt 660
gctttctgga ggaccatgtc agtgaagacg cagaaactgc atttcgggaa aagatgtgga 720
tggtggggaa gcagaatttg gggcttgnta gaaancttgg tgcanggttg tggtggaaag 780
gaagggat 788

<210> 1469
<211> 787
<212> DNA
<213> Homo sapiens

<400> 1469
agacggcggc ggcgtggccg cacgcgcggc ccggcttctg tcctcgcggc gctccggctc 60
ctggcccccc acgccatgca gccgtccccg ccgcccaccg agctggtgcc gtcggagcgc 120
gccgtggtgc tgctgtcgtg cgcactctcc gcgctcggct cgggcctgct ggtggccacg 180
cacgccctgt ggccggacct gcgcagccgg gcacggcgcc tgctgctctt cctgtcgctg 240
gccgacctgc tctcggccgc ctcctacttc tacggagtgc tgcaggactt cgcgggcccg 300
tcgtgggact gcgtgctgca gggcgcgctg tccaccttcg ccaacaccag ctccttcttc 360
tggaccgtgg ccattgcgct ctacttgtac ctcagcatcg tccgcgccgc gcgcgggcct 420
cgcacagatc gcctgctttg ggccttccat gtcgtcaggt gggtggcggt ggcgctgctt 480
ttccaggagc ccccgacaca ggccgacccc tcccggtctt gccctcccag aggccgcgtc 540
taggttggac acccccctacc cacagcaagc agtgcctgct ggcgcccccg aggctgtcct 600
gggccagcgg gaggaggcca agccttgccc gagattcgct ccctcccgaa ngagcccccg 660
cttgtgcctg ccccaaggca cagccccttg gggtagtggg ggacagaatt tcgnccccaa 720
gancccgggc cctggtttcc tttgggacgg ggcttgggga aggacacttn tgagcccccc 780
tggtgaa 787

0050-0045-0200

0508200.00700

<210> 1470
<211> 850
<212> DNA
<213> Homo sapiens

<400> 1470
gctctgcctg gtggcgccgg gaggctgttt ttccactcac tggcgcgcag actccatccc 60
actgttttct tctctctttt ctggagttag attagtctga agccgccacc agccccaggc 120
ccccgtgcag aagaaaagcg ggagggaacg gcggaggccg ccgctgccct gcaccgccct 180
cctggaggcc acttggagag tccggccccg aggaggccat ggccacaagt gcccacagct 240
ggccccaggc ggggtggagc ggagctgctg ggaggctgct ggataggaga ggggtcacgg 300
ctgcggaaga ggaggttctt cgggacaccc gtggatggac acggcaagga aacaccaggc 360
caaccacagc tggggataaa atagcacaac cacaccctgc cgtccagcgc ctcccagcct 420
gtgccccttc ctagtaccac cagcaaccat caatcccgtc tcctcctgcc tcctctcctg 480
caatccaccc cgccacgact atcgccatgg cagccctgat cgcagagaac ttccgcttcc 540
tgtcactttt cttcaagagc aaggatgtga tgattttcaa cggcctggtg gcactgggca 600
cggtgggcag ccaggagctg ttctctgtgg tggccttcac tgcccctgct cgccggcccg 660
gaactacctg tacgggctgg cggccatcgg cgtgcccgnc ctggtgctct tcatcattgg 720
catcatcctn aacaaccaca cctggaactc gtgggccgaa tgccagcacc ggaggaccaa 780
gaacttgntc cgccggcccc acttctcttc taagctcatc ttggacttgc gntgtggccc 840
tgcactgtct 850

<210> 1471
<211> 520
<212> DNA
<213> Homo sapiens

<400> 1471
aacaaatgat tgatacccac aataacctgg acgaatctcc acagaattat ggtgagtgga 60
cgaagggtaa tcccaaaggt tacatgtaga attccattta agtaacattc ttgaaatgaa 120
taaattataa gagtggggaa tagattagta gttgccaggg gttaaggagg gaaggaggag 180
cagcactgaa tagaaggggt cataactata aaaaggcaac atgatgaatc ccggtgttga 240
cggaaatgtt ctgtaccttg cttgtataaa tgtcaatctc ctggtactgt ggcatttgca 300
atatttgcaa attttattta tttattcatt cattcatttt tctgagacgg agtcttcctc 360
tgtcgcccag actggagtgc agtggcgcga tcttggctca ctgcaacctc cgtctcctgg 420
gttcgcacca ttctcctgcc tcagcctcct gagtagctgg gactagaggt gcccaccacc 480
atacccagct aatttttttat atttttagta gagacggnnn 520

<210> 1472
<211> 860
<212> DNA
<213> Homo sapiens

<400> 1472
tatattccgt gggagtgaca ttaaagacct tactgtttgt gagccaccaa aaccacagtg 60
ttctttgcct caagacccag ctattgttca gtcctcacta ggctcatcga cttcttcatt 120
ccagtccatg ggttcttatg gacctttcgg caggatgccc acatacagtc agttcagtcc 180

gagttcctta gttgggcagc agtttggtgc tgttggtgtt gctggaagct ctttgacatc 240
ctttggaaca gaaacatcaa acagtggtac cttaccccaa agtagtgcgg ttggttctgc 300
ctttacacag gatacaagat ctctaaaaac acagttatct caaggtcgct caagccctca 360
gttagaccct ttgagaaaaa gcccaaccat ggaacaagca gtgcagaccg cctcagccca 420
cttacctgct ccagcagctg ttgggagaag gagtcctgta tcaaccaggc ctttgccatc 480
tgccagccaa aaggcaggag agaatcagga gcacaggcga gctgaagtac acaaagtttc 540
aaggccagaa aatgagcaac tcagaaatga taacaagaga caagtagctc caggtgctcc 600
ttcagctcca aggagagggc gtgggggtca tcggggtggc aggggaagat ttggtattcg 660
gcnagatggg ccaatgaaat ttgagaaaga ctttgacttt gaaagtgcaa atgcacaatt 720
caacaaggaa gagattgaca gagagtttca taataaactt aaattaaaag aagataaact 780
tgagaaacag gagaagcctg taaatggtga aaataaagga gactcaggag ttgatcccaa 840
aacagtggag gaaatgcccn 860

<210> 1473
<211> 828
<212> DNA
<213> Homo sapiens

<400> 1473
aaataagaag accaccattg aaaaactaag gtaccctggg tttagcttgt catctgttct 60
agaaatggtg gctcagaggc tgggtgcggt ggctcaagcc tgtaatccca gcactttggg 120
aggctgaggc gggcggatca cgaggtcagg agatcgagac cacggtgaaa ccccgtctct 180
actaaaaata caaaatatca gccgggcgcg gtggtgggtg cctgtagtcc catctactcg 240
ggaggctgag gcatgagaat ggcgtgaacc cgggaggcgg agcttgcagt gagttgcgat 300
cactccactg cactccagcc tgggcgagag agcaagactc catctcaaaa aaaaaaaaaa 360
aaaaaaaaaa aagaaatggt gtctcagaaa atgtacagca aactgcttct cacttcattt 420
ttttagcaaa ggtcagattt tctggatcat aaacctggga cttggttctt ttttgggggg 480
tttcttgttt taaatttctg ccagatcagc tgcctccttt acttcccttc aaacaacaat 540
gtgctgctta ttacataagc tagcagggtg tcaggaaatt ccactgatgt gttttctccc 600
acccttatat tagtaatttt tatacaacat ggagacattg aaatattttc atcanatggg 660
gtagcttttg atccaaatat attcaaagac attatcgctg aaatgccagc ttcatacaaa 720
tcatctttcc angtgtcact acactgcatt tctatggacc gtgagaacta atttgacaaa 780
atagangntt ttgagggaaa aaccagtatt tatttttaa tctcctaa 828

<210> 1474
<211> 734
<212> DNA
<213> Homo sapiens

<400> 1474
ggttctttta ttaattttca aaatagttac aggtaataat acctaattat ttcattgata 60
caacaattga tgtaactaat tcagtatagt aaagaagcaa aaaatttttg caaagaaaaa 120
ttatatgagc tggtagagtt ttgtttctgt tcttttttatc cttctaagat aaatcaatgt 180
gattttacag attaatactg attatagcaa ctcttcttgg aatacatttc ttccacatac 240
gtgtgaaaga gtagttggaa atctcaagtt tttaataaat cacatgatca ttaaaatagc 300
cctgatccta tcttggggta caaatactta gtgtgaaatg tgccccttcc ctgtttcagc 360
cttctgtttt acctcctcat tttcatgttc tcccagatgt taaaagtgat cctggtatct 420
gattcctctg taccccagtg cttcctgctt gttcgctcat ctttcttctg ctgaaagctg 480

US 09/503,289

gacttgcttc ttgttttgct ttctttggtc aactgggttc tggagaggca cttttctgat 540
gaggaaaccc cttctgtggt gtccccgagg cccctgctgg gaggggctgc tgagctgtgg 600
gctccttgag cctnctcgca gaagcgggtg atgagtatgg ctcataaacg caaggccatg 660
aaaccaatcc tctgcttttt ccttgtaagc caacgacggg gcctttgatt ncagactcta 720
angnagcttt ggag 734

<210> 1475
<211> 802
<212> DNA
<213> Homo sapiens

<400> 1475
ttagaaggtg agattagcat aagcagaggt ttgagggaag agtgggagca aggagtggag 60
gacaggaaac aggaaggaga ctgggctgct ggtggggagg aggcaggaca ggccctgtga 120
gggcagggca aagtgggagt cagcgttggc caaagcgaga gagccccagg cagtggagcc 180
tttgatgtca ggcctgaagg cagtggggac tgtcttagaa ttttatgctg agatgaaaat 240
gtatgactga aaaattggtc tggtggcagg aggtgatcag agtgggtggc cgcaagaggc 300
ttcctgggga atgggcttcc tcagtatccg ggtgcagcag gtgggccaga ggcgacccat 360
ggcagccccc agtgtcaacg tgagcaagtg caggactgtg gacaagactg tgatgccatg 420
cccggggcag agaagatgat ggaaaaggag aagttgcccc agatccagtg gctcacagaa 480
gcactcttcc tgaggaagag cttgttcttg aagtttgcac ccacagcttc tcctaggcga 540
tgggcttgga gagctgtggt cagcatcaag agctagcctg gcagcagggc aaggatgtgg 600
ctgcgagatg gcatcgtggt acccactctc tctcggtgcc tcantgtcct tgtggaggat 660
ctggcctcta tgacttgagt gatggtaaag tgagatgatc ccatatgcgt ttgacttgtg 720
cttcacacgg gtggtgccca ntaaatggaa tgggtattat tttgaagatc cttttnggga 780
aaaaatgtcc attctttaan aa 802

<210> 1476
<211> 728
<212> DNA
<213> Homo sapiens

<400> 1476
tttgctgagg ggcaggcaca ggagtcctgg ctgagctcat ggcctgaggc tgcctagcgg 60
ccacggggaa tggttgcaat ggcggaggca gaggcagggg tggcagtgga ggtccgtgga 120
ctgccccctg ccgtgcccga cgagctgctc actctctact ttgaaaaccg ccgacgctct 180
ggaggggggac ctgtgttgag ctggcagaga ctgggctgtg ggggcgtcct caccttcaga 240
gagcctgcag acgccgagag ggtcttggcc caggcagatc atgaactaca tggtgcccag 300
ctgagcctgc ggccagctcc accacgagcc cctgcacgcc tgctgctcca aggactgccc 360
cctggcacca cgccccagcg cttggagcag catgtccagg ccttgctgcg ggcctcgggg 420
ctcccagtac agccttgctg tgccttggcc agcccccggc cagaccgggc tctggtccag 480
ttgcccaagc ccctttctga ggcagatgtc cgtgtcctgg aggagcaggc ccagaatctg 540
ggcctggagg ggaccttggt gtccctggcc cgggttcccc aggcccgagc ggtgcgtgtg 600
gtgggggatg gtgcctctgt ggacctgctg ntgctggagt tgtacctgga gaatgagcgc 660
cgcantggtg ggggccccct ggaggacctg naacgcctac ccggcccctg gcactggtgc 720
tcttcaca 728

<210> 1477

0050305-0050800

0050450-0040000

<211> 853
<212> DNA
<213> Homo sapiens

<400> 1477
gatgaaatat gcgaaaaatg ggttctaaaa tatttcaaag ggaaaatgaa gtgaaggaaa 60
catcatgaaa ggggaaagga atgaggtaaa caagtcttag gaagagagtt aagaaaaaat 120
tccgctggac ttggccaaag aaagaagggg atctagtatc tctatgaagg aaaaaagagt 180
aaagccctca gtgtgaaccc agtgagaaca ctgacaaatt tgggaaaagt taaatactga 240
tttcatccaa ataaagcctc taatcttaag cataccaata ctttggcata ccagaagaca 300
ccttagaaat caggatagcc tttgcattca ttttggtaag aaaactgatg ctgagaggat 360
aaattaccta aaaatcttaa aacccaggca agttagtcaa agaatcaaga ttagaattca 420
ggtttccaga gacagggctc attctaatgc ctcaggtcac tggcccgaac aaatctgctt 480
cacagaattc cttagaaaga gatacacaat tctttgctgg gattgggtcc ctggaggaca 540
accatactat attcttgtta atatgttttt tctttttta aatttaaact tttgttcagt 600
tgagatgatt gtgaaactag gtatctttca ttctgactcc tagtttaaca tttaattttg 660
actcccaatg agttacgtaa aagcaaaact atactaagaa tgggaaaaag aactatttct 720
gccatttgta catatttaag atggtttctt catataattg aaaactgcag atgagtaaga 780
gaatgactag gaaatgagat ncagttttat gacncatatg atgnttaagt caccaatgaa 840
ccccatattt gac 853

<210> 1478
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1478
gacaggaaag gggttctatc catgatctta caattcctaa acagcaacag catcatggac 60
gtatttgttc ctggcgtcat aagcctgcat acggtaggca ttcagttaat aggtactgat 120
tggtctaaca gaggaagctg ggcttgatta taaaataaac taggctatga aatcatgcct 180
cctaaaagct cattaaaggc agcaacacgg gatggggact gtaaggaagt tgtctcccac 240
ctgcctccct cctcagacac acatcattcc gcagatgtga aaacgaccca gactctgccc 300
gcatgtggcc tcccggaccg ggcagtaggg ccttgccccc accctcatga agactgtcgg 360
ctgtgttaca gaactgctgc tctgtctctg actcccctca ctcccatgct ttgttggaaa 420
ctcaagttgt gaaaccacaa aacacagaaa ggaagtggtc aactactgca catactcaag 480
ctatgtagtc tcagtttatt ccattcttgc aggatcattg taggaaggca taagagtcct 540
gcttactggt gagccactga acacaaactc ccttctcacc tctgccttgg atcccgccat 600
gcctgaggtc tagggctaga agcgttgttt catccacatt aattccggtc ttgggcaacg 660
tggctatttt ctgacctgtc tgtcttncca ccctagtggt gaattctctt tctgggatct 720
caactccttc tcctgtcacc cagcttttn cgagcacccc agtccatctg gcatatcatt 780
agaatgttaa acctaaacgg taagcccttc tgngaatacc tttaagtaac n 831

<210> 1479
<211> 723
<212> DNA
<213> Homo sapiens

<400> 1479

gaacccctac taactgtgag ctcctgagga gtcaggcctg agtctgtggg tcatctagca 60
catccttaat agaatgattg cctggatgtg accaccctca cccccaaccc tcacacaccc 120
tgccagcatg cctcagacct taccccagct caagataagt ctcagattgc aggatacctg 180
ctgcagggaa caaaggtgaa tgattgtctt gtgagcctcc tgttgactga ttctgtttta 240
catggctgca cagagccctt gtggttattt ggggttgggg tggtggcttc tgtattagtc 300
acttctgcat gaaccatttc actcaggatc tgaggccaca gttcctttct tagtcactga 360
tacatctggc agacttgaaa ttaatcagac aaacattgtt catagttaac atatccttgg 420
aagtttctca gctataagga agaggtcttg gtggctaggg aggcctttct ctgtatcctg 480
ttctatccag tgagagccta gagggtgctg cccagccata ttctggctag cctcagcggt 540
tctcctgaaa aaaaattggc atctgacaac ctggatggtg actataggta gtcaaatcca 600
gctggctggt ctcctggggg ttagcttcca tggagctgca agtcccctga aatgatactg 660
gcagtgttgg gacagcgtgt ncgaangcct gggtttttca gaactgggct cancaaaatg 720
tct 723

<210> 1480
<211> 860
<212> DNA
<213> Homo sapiens

<400> 1480
acagtatcac catgcctctc atagcgccac gacactagaa gaaacctcac tgattgctgt 60
ccctgtctac agtccaagag gatttcaaat gggcccacac ggtatagctg agaacccgaa 120
tcccttgctg atgccagctc attttctttg gtctcatcct catcactcct ccaagaaaac 180
tacccagtcc agagggactt gcttttgcta taagtgggtt agatcttgag ataaggaaat 240
agcaaaatgt tggtgtaaca ttgagtgtgg aaatgtggcc tgagggaagt gagtgctggc 300
aggagctgag gaccctgttg ggaggggccc gtgaaacctt ggcatagacc tcgccagcac 360
agctgtttgg aatggaggca ggaagggcag gggaaagcca tgagagaggg aattttcaag 420
atggtcagtg ttctcaatcc acagccatca cagaagaaac taatgaaata tgggtacaat 480
ctggagattt ttaagtctct aagaagtgga atttgtgaga cgaaaggctt ccagaaagct 540
ccctttctga cctggcctct acccctagag ggccttagcc ttgctgtggg gaatgaaact 600
cttcccggtt gtagggtttt ggtgctgtcc acccccagcc cagccagaaa tgtggcttct 660
gtacttctgc tgcagttcaa gccacttttc caggtatgtc ccatctgagt ggagatgggg 720
ctgacggcag gccacaaggc ccaagcttcg ggcaccgggc ccggtanctt gggacttgag 780
gcttgactgg tgantaatgg gcagggaggc cttttggga aacgtgccaa taccttgac 840
nggccttttc cgggggactt 860

<210> 1481
<211> 832
<212> DNA
<213> Homo sapiens

<400> 1481
atggggacag taacagcaaa agagagatca ctaaaggaag ctctaaactt tatttcaaat 60
ttcaacaata acagccacca gttattgagc aactactgca tgccaagtac ttcactaagt 120
gctttgcata tttttcctca tctgttccta acaaccccac aggttaacta ataaagtcct 180
tatttacaga taagtaaata gagaattcga agttaagtaa cttgttaagt aacttttctg 240
aggtcccagc cagtaaacaa gagagcaagg attagtactg gcaagggctc tagtcaatga 300
actgacaaac caagccttct ttaagcttta ggttcacagg cttacactgc tggtgctgga 360

0050350650.0720000

tccctcacat gatggtatca gactctgggg aatcaaaata ctgtcccagt cattgccaga 420
gagaattgag atcttcagtt tgacccccgg aatttttaag actctttcag aatacctcag 480
aaacttaagg aaggaaacat tttatttgac tatggtaaca aacagcacaa cctacaagac 540
ttttctggct ctaatatgga tgattcatct atggaagtat ttgcttagta aacctgacat 600
gcttcttacc attatcttgg cccagaatca gagagtaaat gctccgaagc ccaaatacat 660
tgaggaagta ccaggatgca gaactcaccc tggcaaagca aaatgaaaat ggtgtggtta 720
ggtattatat cagagagtaa tgcagttccc acttncctac cacccaaagt tggtcaagtg 780
gttggnaaag aagtcaccct tgggatgggc tatattcatn caaagcacaa cc 832

<210> 1482
<211> 783
<212> DNA
<213> Homo sapiens

<400> 1482
ttcatgtaga tatgcatgac tcttggccag tgattctcaa cctcggctgc acattggcat 60
caactgggga accttcaaag ctcctggcat gtgggttcca ccctcagaga ttgtgatgta 120
atgcactgac agtcaaattg ggaacaactg taaattggct cagttcattc atcttttact 180
gctgtacaga agatttcatt gtataagtac ttcacaactc atgtactgat ttctagttga 240
tgaactgttt caaatttttg ttatttcaag caattctcta atgaatgttg ttgtacttgt 300
ctcccttga atgttcctct ggggtatata ctgagaagtt tgaattggca catcaaaggt 360
tgagcatctt caccttacc aggtattatc aacatatcgt tttccaaagc atttacagaa 420
atgtgtgctc ccaccacttc tctgcctctt tgacaacact cagtatgatc acacattttt 480
tttttgccaa ttttatgcat gtgaaataat tttattgttt tagttgttta tttatcttag 540
agaaaaggtc ttgcagtagg ctcctaggct ggagtgcagt ggtgcgatcg tggctcactg 600
taacctcagc ctcctgggct cggacagtcc tctcgcctag gcgtcctgag tggctgggac 660
tacacttgcg catcatcacc atgcccgggt agntcttttg gttttatttt tagagacagg 720
gtcttgctgt gcttgccagc tggctcgaac tnctggnctc aagtgatcct catggcttga 780
ccg 783

<210> 1483
<211> 795
<212> DNA
<213> Homo sapiens

<400> 1483
tctctccagc tgcaatggaa gacttgtctc ttccccttct gccataattg taagtttcct 60
gaggcttccc cagccatgtg gaactatgaa tgaattaaac ctcttttctt tataaattac 120
ccagcatcgg gtatgtcttt atagcagtgt gaaaacagac taatacagaa gtatatgtta 180
actttctctg ctgagcatgt tggtgcttgc ctgtagtccc agctacttgg gaggctgagg 240
tggaaggatc atttaagacc agcctgggca acatagggag atcctatgtc caaaaaaaaa 300
aaaaaaaaaa aaaaaaagca tgttaaattt ttcatcagag ttgacagctt ctcaaatggt 360
cagtttttgt tatatacatt gttgaggctg tgtgttagaa actttcagat tcatgaacat 420
tattcaatgt tctttgtagt ttgttccttt tattgtaata tagtctctat ccctattaat 480
gctttttcgc tactgatacc tgacttttt ccccttaatc tttgacttgt aatatgtgag 540
attaatctat ttgaataagt agacttattt ctgctctctg aattttatat tttctgatcc 600
atttactttg ctgtgtgtgt gttttgtttt tgtttttgtt nttttttttt tttgagtcta 660
gctttgttgc ccaggctgga gttgcacgat cttggttccc tgcagtctca gcctcccagg 720

US 2005/0042600 A1

ttcaagtgat tgcctgggca atctccgagt agctgggact acaggcgtgt accaccatgn 780
gnggctaaaa atngg 795

<210> 1484
<211> 722
<212> DNA
<213> Homo sapiens

<400> 1484
aagtagatat aatagggtaa aggagaagtg gtggtaaaga cgaaaagagt agggaacagg 60
tggttgaagg aatcagatta tccccagtag aggggaaatt tatggttgtt tgctttagaa 120
taaggagtta gttgctgaaa taaaagagca ttctaatata agtgctagaa gctattttaa 180
ctgtatgaaa tggatactga gccaagatgg ctgaatagga acagctccag tctacagctc 240
ccagcatgag cgacgcagaa gatgggtgat ttctgcattt ccaactgagg gaccgggttc 300
atctcactgg ggagtgctgg acagtgggtg caggacagtg ggtgcagagc accgtgcatg 360
agccgaagca gggcgaggca tcacctcacc cgggaagcac aagaggtcag ggaattccct 420
ttcctagtaa aagaaagagg tgacagatag cacctggaaa atcaggtcac tcccacccta 480
atactgcgct tttccaacgg gcttcccaaa tggcacacca ggagattaca tcctgcacct 540
gtcttaaagg gtcctacacc cacggagcct cactcattgc tagcacagca gtctgagatc 600
aaactacaag gtggcagtga agctagggga gggggtgccc gccattgctg angcttgagc 660
aggtaaacaa aacggnccgg aactcgaact gggtggagcc caccacagnt taaggaggcc 720
tg 722

<210> 1485
<211> 703
<212> DNA
<213> Homo sapiens

<400> 1485
atgaaatgct taggtttcca ggccagtcta cagaggaaca tttatctctt atggtagtta 60
aactgtagta ctgtggactc tggccacaat gtaaatcaat cttcatggga atatgccttt 120
gctataggac ctcctctccc cttcagagct gcagtagcat ttgtgactct gatctgcaga 180
ccctgtagtg actctaaacc aggagcaact accactactg tggcatggag tggggaaaaa 240
ggtaattgga aaagggtgga gatggggaag gacctaccaa atgcctttgt tgacacagta 300
gagaagtcat cagacataac attgaatgga ggcaataaga gagttcctat ggccctatca 360
agcttattag taggtgtttt aacaagaaat atgtaaaaat tattacttgt cggccgggcg 420
tggtggctca tgcctgtaat cccagcactc tgggaggccg aggcgggtgg ctcactaggt 480
caggagttca agacaagcct ggccaagatg gtgaaacccc acctctacta aaaatacaaa 540
aattagctag gcgtggtggt gggcgcctgt aatcccagct actcatgagg ctgaggcagg 600
agactcactt gaacccggga ngtggangtt gcagtgagcc cgagatcgtg ccactgcact 660
gcagcctggg cgacagagca agactccgct tcaaaaaaaa ana 703

<210> 1486
<211> 736
<212> DNA
<213> Homo sapiens

<400> 1486

0962045.0702000

aaatggaatg tgcacaatga aatgtgttcc aaaatctaaa agcaaatcac aggatggaga 60
aaacctttaa tgagcacagc taataagagc tcattaacat tcatacatat atatgtacaa 120
atatatcata gtaagtacca tttcttcttg gatccttcct ggcactgtgc taactgcttt 180
ctacaaattt agcttacata aacccttgat acacccttga ggtgagtagg tattatctat 240
agtttacata agatgaaata gagcctccca gcagttaagt aacttgtgtg aagatgggac 300
ccttgttcct gatggttcta gaaccttcat ccttaatgat aatgctaaag taagtacatg 360
aattgcctga agaagtggtc agagtttatc aatagaaaat ttagatagta ctcagcgtgt 420
ggaaaatgta catttatgga aatgataatg ttcactatct ctgatattct atgatctttt 480
acattagcaa aaaaaaaaaa aaaaaaaaaa aaaggccaga cacagtggct catgcctgta 540
atcccagcac tttgggagac cgaagtgggt gaatcacctg aggtcgggag ttcgagacca 600
gcctgaccaa catgcagaaa ccccgtctnt actaaaaata caaaattaga cgggtgaagt 660
ggtgcatgcc tgtaatccca gttacttagg angctgaggc aggagaattg cttnaaccca 720
ggaaatggan ggttgc 736

<210> 1487
<211> 812
<212> DNA
<213> Homo sapiens

<400> 1487
tatacaggtt gagtattcct aatctgaaat ctgaaattcc ccaaaatctg aaacttttt 60
gagtgctaac atgatgctca aaggaactgc tcattggggc attttggatt tcagactttt 120
ggattaggga tgcttaacca gtataatgcg aattattcca aaattttaaa aacattccaa 180
aatctgaaat acatttgatc ccaataattt tgcttaaggg atattcaatc tgtatagtcc 240
tttactttta gaagaaggta ggtatgatta cttactgctc agaaataata gatacttaga 300
atttatctgc aggatttcag atgggttcac tattacatac ctgattatca tgcacatcct 360
gttttaaaag tatagaatgg atgaatccat atctgggact catcttttgt gaccaataac 420
tgaattctaa gcattgtctc tcatggggat cctcacagaa ttgttgccat ccctttatga 480
aggagctgga acatattttc actaacatct cactctgctc atgtttacat aagtaaaatc 540
agtatctagg ggaacttcat aatttcaaat gaaaaaaatg gattattttg gagattacat 600
gaatcactag tacatgtaaa gcacttagaa caacagtgcc tagaatatag ctcaatagat 660
gatttttta ctaatagtag taatcctttt cataacagaa agcagcagct acaaatttat 720
caactcactg gttagaatca tctgattagc ttggaagttt aaaaatccac tgagccantt 780
ngacaccatg aaatctatct tatttctcan ga 812

<210> 1488
<211> 710
<212> DNA
<213> Homo sapiens

<400> 1488
ttccttttta gttgactgaa acaaaacaaa acaaaagggc cactggatgt ctgccttctt 60
gggggggtgag ccagacagac tgacaaacaa acagccccaa ctgtgttcgg gggagggttt 120
cgcctcccgt tttgcccggc agcagcagca tggacgtgtt ggctagttat agtatattcc 180
aggagctaca acttgtccac gacaccggct acttctcagc tttaccatcc ctggaggaga 240
cctggcagca gacatgcctt gaattggaac gctacctaca gacggagccc cggaggatct 300
cagagacctt tggtgaggac ttggactgtt tcctccacgc ttcccctccc ccgtgcattg 360
aggaaagctt ccgtcgctta gacccccctgc tgctccccgt ggaagcggcc atctgtgaga 420

US 9,506,120 B2

agagctcggc agtggacatc ttgctctctc gggacaagtt gctatctgag acctgcctca 480
gcctccagcc ggccagctct tctctagaca gctacacagc cgtcaaccag gcccagctca 540
acgcagtgac ctcattaacg cccccatcgt cccctgagct caccgcatct ggtcaaaacc 600
tnacaaactc tctctgccat ggatggcacg gtgacgttga aactggtggc caagaaagct 660
gctcttaact tcgtaaaagt nggaaggggt cncaacagct tgcancaacc 710

<210> 1489
<211> 752
<212> DNA
<213> Homo sapiens

<400> 1489
agttgcccgc ctgccccgga gagccaggcg ctaaccagcc gctctgcgcc ccgcgccctg 60
cttgccccca ttatccagcc ttgccccggc gccctgacct gacgccctgg cctgacgccc 120
tgcttcgtcg cctcctttct ctcccaggtg ctggaccagg gactgagcgt cccccggaga 180
gggtccggtg tgaccccgac aagaagcaga aatggggaag aaactggatc tttccaagct 240
cactgatgaa gaggcccagc atgtcttgga agttgttcaa cgagattttg acctccgaag 300
gaaagaagag gaacggctag aggcgttgaa gggcaagatt aagaaggaaa gctccaagag 360
ggagctgctt tccgacactg cccatctgaa cgagacccac tgcgcccgct gcctgcagcc 420
ctaccagctg cttgtgaata gcaaaaggca gtgcctggaa tgtggcctct tcacctgcaa 480
aagctgtggc cgcgtccacc cggaggagca gggctggatc tgtgacccct gccatccggc 540
cagagtcgtg aagatcggct cactggagtg gtactatgag catgtgaaag cccgcttcaa 600
gaggttcgga agtgccaagg tcatncggtc ccttcacggg ccggctgcag ggtggagctg 660
ggcctgaact gatatctgaa gagagaantg gagacagcga ccagacagat gaggatggan 720
aacctggctc aaaggcccag gcccangccc aa 752

<210> 1490
<211> 846
<212> DNA
<213> Homo sapiens

<400> 1490
aaattcttca aactgaattg caataatgac acaacctatc aaaacctctg ggatacacca 60
aagggagtgc caagagaaaa gtccacagcc ctcaacgcct acatcaaaaa gattgaaaga 120
gcacaaattg acattctaag gtcacacctc aaggaactag agaaataaga acaaaccaaa 180
cccaaaccca gcagaaaaaa aggaaataac caagatcagg gcagaactaa atgaaattga 240
aaaaaaaaaa gatacaaaga taaaaagctg gttctttgaa aagataaaca aaattgatag 300
accattagca agattaacca agaaaagaga gaaaatccaa ataacctcat taagaaaaga 360
aacgggatat tacaactggc accactgaaa tacaaaagat cattcaaggc tactgtgaat 420
ataaactgta aactaggaaa cctagtttat gcgcataaac taggaaacct agaagagatg 480
gataaattcc tggaaagatg caacactcct agcttaaatc aggaagaatg agataccatg 540
aacagaccaa taacaaacaa tgagattaaa atggtaaaaa attactaaca aaaaaagtcc 600
cagaccagac ggatttacag cagaattcta ccggacattc aaagaagaat tgataccaat 660
cctttgatgc tattccacaa catagagaaa aaaaggaacc cttccttaat tcattctatg 720
aagccagcat caccctaata ccaaaaccag gaaagggctt accaaaaaag aaacttcaga 780
ctgatatcct tgatgaacta gatgctagac ccttaacaaa tactactaat caaatcacca 840
cntata 846

00820"09469600

0020020450

<210> 1491
<211> 829
<212> DNA
<213> Homo sapiens

<400> 1491
gctgtcatgg cgggtgtgct gaagaagacc actggccttg tgggattggc tgtgtgcaat 60
actcctcacg aggtatgtac ctttgttctt tcttcgttct tgaattccca aggaagacta 120
aattcctgtc actttgctta ttgcagggtt aacgggatac agatgtttca agcccttaat 180
tacaagccgc gtgagctctt gagacacggg cgctgtccac ctacttcgtt gatccgatgt 240
cacattttta tttattttcg ccatgacctc tttattaagc cagttttctt gttgactttt 300
tccttgacat tttcatggct tcacttgtgc ttgcttctgt cagcgccatc tcaaatttat 360
atctccgttt tccatctttt ctccttgcct taccgtttct gcttaggtgc gttggattac 420
atatatttag gcttactaaa ggtactgccc ccttttcctt ctgttaggtc ttttccatct 480
gtattcacga atgttttcat caaaaaaacc cacaaaattt tttttattct tcttgtccct 540
tctataatca caccatttct ttgcttcact ttacagataa ctcaaaagag ttatctctat 600
tttctccaat ttctttctta ttcacccttg aatgcactca gtcacccttg gcgtttttca 660
agttcaccaa ttatctncat gctgccaaat ccaatggtca gctcatattt ctcaccttca 720
ttgacctaat ancagcgttt ttttgacaca tttgacactt tttccatcac gctcttttca 780
agtcaccagt tatcttcatg ttgncnaatc caagggcaac ttatgttct 829

<210> 1492
<211> 843
<212> DNA
<213> Homo sapiens

<400> 1492
ttttaatttt aatgaggctc aacttaattt tttttcatta gtaggttgtg cttttggttt 60
tgtatttaag aagccatcat tgaacccagg atccccgaga ttttctccta tgttatctcc 120
taggattctt atggttttgc acttacattt acgtgtaaga tttattttat aaaggatata 180
acatgcatac ctggatttat ttagtttttt gcatgtggtt gtccagctgt tctagcacca 240
ctagttggaa aggctatctt tgctgtttta aattgtctct aaagctccat ggaagatcag 300
tggactgtat gtaggcctgc ttctgggctc cgtattcttt tccatgcatc tatttgtgtg 360
tgttttctct tttcaccaac ttcacactat ttgggttact gtagcttaat gtaagtcctg 420
aagttggtag tgccaaacct cagggagttt ttctgaactt catcatgaga acctggttga 480
gatcattgta gtaaaacttg gaaatgtgta agattccccc ttagtctggt cttcaaggag 540
tttttaatgt tctagccagg ctaccctcag cttctagtaa tctgtcaata tcatttaagt 600
gctcctccca cttgctgtcc ccagtagctt ctcttccctg tgacctgtga ctccttatgt 660
gttagcctgt gtttctcatt tttaaggtgg cagttttcct gtgacctcaa ttctctgatc 720
caccctanaa gggttgactt tcagttggtc aacttttttc taactgtgaa gaccaagtga 780
tgactggcta actntttnca tgtggaatag aaacccaaaa gtttgttnaa gaatactggt 840
ata 843

<210> 1493
<211> 848
<212> DNA
<213> Homo sapiens

0060150-0020000

<400> 1493
tatacaaaat ataagtaaat aggaaaaagt aactatagta acagttgcta ttggaattcc 60
tctttggatt tattagagaa agtaccctaa tatctgcctt gggtatagat agtgaaagcc 120
caagcatttt gggtctggtt agaactaaac tgtagcaaac aagggaggag tttttcaggg 180
actctggaat gggagagaac actgggataa ctgagaggag ccaggagttg gtgaagtctt 240
tgcattaggg gatgtgacac ttcacaggca cccctctccc ctatgttttt actaaaaact 300
accaagaact tgatgtgtaa ggatttctta tagaggccag taaaaaggtt aagtcatgca 360
acaggaagct ttgcagaaaa acagtctata cccaaggatg caggagcaca gaagtagaga 420
acataaggag gaattcttga gaatttgctg gattatcggg gacacttcgg gctgacacag 480
ggagtggggc tgggattata ggcagagtgt aatcagacca ctgaggggca gagagtctct 540
aacatctaag ttacatactt atattttaaa tttttgtgat tttagttttt gcttgctcca 600
ttagagtaga aaataagtat ttgttgaata agttagaaaa atgaatgaat gaatgaattg 660
ctttcaggac tatgccacag aatgttagag taggaaagga ccttagggat ctattagtta 720
aacctgttga gcaattagtt caatggtggt angnattgat ctcacttcaa agataatacc 780
attacagcaa taccacagtc actgntatga atgcctccat gaatcagaca ggttacattt 840
ataatctt 848

<210> 1494
<211> 695
<212> DNA
<213> Homo sapiens

<400> 1494
agcaccacca gcggcagccg ccggagccgc cgccgcagcg gggacgggga gccccggggg 60
gccccgccac cgccgccgtc cgccgtcacc tacccggact ggatcggcca gagttactcc 120
gaggtgatga gcctcaacga gcactccatg caggcgctgt cctggcgcaa gctctacttg 180
agccgcgcca agcttaaagc ctccagccgg acctcggctc tgctctccgg cttcgccatg 240
gtggcaatgg tggaggtgca gctggacgct gaccacgact acccaccggg gctgctcatc 300
gccttcagtg cctgcaccac agtgctggtg gctgtgcacc tgtttgcgct catgatcagc 360
acctgcatcc tgcccaacat cgaggcggtg agcaacgtgc acaatctcaa ctcggtcaag 420
gagtcccccc atgagcgcat gcaccgccac atcgagctgg cctgggcctt ctccaccgtc 480
atcggcacgc tgctcttcct agctgaggtg gtgctgctct gctgggtcaa gttcttgccc 540
cttaagaagc agccaggcca gccaaggccc accagcaagc cccccgncgg tggcgcaaca 600
gccaacgtca gcaccagcgg catcaccccg ggccaggcag ncgcatcgct tgaccaccat 660
catggtgccc ttcggnctga tctttatcgn cttcg 695

<210> 1495
<211> 696
<212> DNA
<213> Homo sapiens

<400> 1495
ttgtgatgga agatttcttt ccatagatta gtataattta cgtgggctgt ttgaagagat 60
taccttctta gtggttccct taaagctctt tgttatgtat atcctgaagc ccagtcactt 120
cttcccactt gtttttgagt gtttgatcta gacaatgtaa aggcactttt aagataaaaa 180
ttattgtatt tgggggactt tgggagactc acttcccaat cattttgttt agaagcaaaa 240
atgattaaac agtactttat gtcagatctg cctgtttaag ggatttgagc acacctggta 300
gcaaagaggt ttaacctagt ttctcagatg aaaactagag gtggaggaag gacgaggaag 360

cagtccaggg tgagctgagg agctggttac ctttagccta cttctgggat gatgcacatt 420
gtcgtctagg tcagtcagcc tcctcagccc atgcattaag attcctggtt gcagctgggc 480
acagtggctc acacctgtaa tctcagcact ttgggaagct gaggtgggca ggtaacctga 540
gttcaggagt tcaagactgg cctggccaac atggtgaaac ctcatctcta ctagaaatac 600
aaaaattagc cagatgtggt ggcggacgcc tgtaatccca gctacttggg aggctgangc 660
aggagaatca ctcgaacctg ggtgttggan gntgca 696

<210> 1496
<211> 670
<212> DNA
<213> Homo sapiens

<400> 1496
agtttcactt ttagctctgg gcacctccag ctcctgctcg ccggacggct cccagggaga 60
gcagacgcgc cagacgcgcc accctcgggg cgccgacggt cacggagcat ggggtcggcc 120
tttgagcggg tagtccggag agtggtccag gagctggacc atggtgggga gttcatccct 180
gtgaccagcc tgcagagctc cactggcttc cagccctact gcctggtggt taggaagccc 240
tcaagctcat ggttctggaa accccgttat aagtgtgtca acctgtctat caaggacatc 300
ctggagccgg atgccgcgga accagacgtg cagcgtggca ggagcttcca cttctacgat 360
gccatggatg ggcagataca gggcagcgtg gagctggcag ccccaggaca ggcaaagatc 420
gcaggcgggg ccgcggtgtc tgacagctcc agcacctcaa tgaatgtgta ctcgctgagt 480
gtggacccta acacctggca gactctgctc catgagaggc acctgcggca gccagaacac 540
aaagtcctgc agcagctgcg cagccgcggg gacaacgtgt acgtggtgac tgangtgctg 600
cagacacaga angaggtgga aagtcacgcg cacccacaag ccgggganggc tcgggcccgg 660
ttttcccttg 670

<210> 1497
<211> 731
<212> DNA
<213> Homo sapiens

<400> 1497
tttgctagaa ttgtagccta gtctgtgaaa cgaaaattaa atgagaatta aacttttttt 60
taacaattaa gctttttta actttttttt agtattgcta gtattaaact ttttttcaca 120
attaaaaaat acatattggt tttggaggca cctttgatgt tctactaatt atattaatac 180
agaacggatg cttcttaaaa acttttagtg caaataagct tttaaaatct tagtatctta 240
ggcacataag taattttcat tttttagatg gataataaaa tcttactatc ttaggcacat 300
aagtaatttt acatttttta gatggataat aaaatcttac tatcttaggc ctgtgagtca 360
ttttacattt tttagatgga tactagttta ggtgcccatt ttgatgttgt ttttaaaaat 420
actgacctta cagtcctttc catctttatt tttgagtgac agcagaatcc cgagtataag 480
aaaatgtgat taattctccc atattgaagt catttaatca tgctttgcct aacagctgct 540
ttctattcag tacactgaac ataaaattct ggagtgcctt tgtgctatca taaattgtaa 600
atgtgaacca ttcttcctct taagtatcat atggtattgc tgntttgaat ttgtcagttt 660
ggtagggggt ttttctagag attgctgntg tantccggct aggaagggcc ttcttctggg 720
gacgaaactc t 731

<210> 1498
<211> 629

0052450-0052500

<212> DNA
<213> Homo sapiens

<400> 1498
gacatacttc aggccccagc caccaagtga tgtgtctctt ctgaatgtgc ataactttca 60
ggagaaaatt gtaacacgtc actggttgag aacccagatg atgtgactct cctgccttgt 120
cacagtcctc agggaaaaga aattacatat cagtggccca gcatccaggt gacgtcgctc 180
tcctgcgtga tttctgccaa gaagttcgtt ggtaacctac atctcagccc agctcacagg 240
tctgatgata actaatacct cttaccggtc aatagaagag atactgtctc tcacagctag 300
gcttacaaaa aggagtaaaa tcccaggtct cctctctgta tgaaggttat agagaattac 360
cactctcttg tatattgtat aaagcactcg gatggtacag agcatgtcat cataggaccc 420
agcagacaga tcatgtttca tgtaaacaca ccctgccaat ttttagaatt gtcatcctca 480
cacatggaaa agcccaccga tgaggtcata attctcatgc acagatgcag gccacagtta 540
aaactgtgac tatcggccgg gcgtggtggc tcacacctgt agtcccagca ctttgggang 600
ctgangtggg cggatcacaa ggtcangga 629

<210> 1499
<211> 622
<212> DNA
<213> Homo sapiens

<400> 1499
gtgcgcgccg ccgccgcctg tgggttggct agttattttg caagcgggag gggccgtgcg 60
cgctcctgcc tcaggcctct gtcccccacc ccctttcccc ggtcccaggc tctccttcgg 120
aaagatgtcg gacacggcag tagctgatac ccggcgcctt aactcgaagc cgcaggacct 180
gaccgacgct tacgggccgc caagtaactt cctggagatc gacatcttta atcctcagac 240
ggtgggcgtg ggacgcgcgc gcttcaccac ctatgaggtt cgcatgcgga caaacctacc 300
tatcttcaag ctaaaggagt cctgcgtacg gcggcgctac agtgactttg agtggctgaa 360
aaatgagctg gagagagata gcaagattgt agtaccacca ctgcctggga aagccttgaa 420
gcggcagctc cctttccgag gagatgaagg gatctttgag gagtctttca tcgaagaaag 480
gaggcagggc ctcgagcagt ttattaacaa aattgctggg cacccactgg ctcagaatga 540
acgctgctac acatgttcct gcaagaagag gcaattgaca ggaactacgt nccggggaan 600
gtgcgccagt aggagcccct nt 622

<210> 1500
<211> 738
<212> DNA
<213> Homo sapiens

<400> 1500
ccagctttag ctatgatgca gcaagcacag cagcccctta ccttcattcc ttcttccttc 60
ccactttcaa tcaattcatc tattcttttc ctttcttcag actgggcaga gagaaagaaa 120
aacagcatca gtatcttctc ctaggcccat cgtgcgtagc ttgatggtct tgagccctga 180
ttgcccaggc catgcccacc gggccacaat cggcctcatt tggcatcact ggggatgatg 240
ggtccccagt gatggcaaag cccccaagta tccctccttt tctcatcacc catctgttgt 300
ggaagatctg tcacctgggg ttcaactgga tcaggaggga aacagtgggg acccaagaac 360
agaatggggc tcgtagatat gttctgttgc ccatgcagca cgttaaaaaa tgtccaactt 420
gcccacacct gaaaatcagg cctctgactt cacagaaaat caggtacagt gggccaggcg 480

cggtggctca cgcctgtaat cgcaacactt cgggaggccg aggcgggcgg atcataaggt 540
cacgagttcg agaccagcct ggcaaatagg taaaaccctg tctctattaa agatacaaaa 600
attagccagg tgtggtagga gcctgtagtc ccagctactc gggaggctga ngcaggagaa 660
tcgcttgaac ctgggangtg gaaggttgca atgagcccag aatgggctac tgnacttcag 720
ccttgggcga cacaagca 738

<210> 1501
<211> 713
<212> DNA
<213> Homo sapiens

<400> 1501
aatgtgaaca atgcttcaga aaggaaatga aatgtctgca gcagatagaa gtgtgtaaat 60
tttgccttca ctttagagct agaatcacta tgagtggtag catttcagaa tcagaagaat 120
ggaaagctca gttgattatc attacacata ggagtaaaag gaaaggttca catttttatt 180
gacagctcat atcgaaaaga cagctcctct tagagagaag tgaattctcc tccttcttgt 240
tgtttcttct gccacctttg ccctcataca taacgctcta tctttatctt cttccctttt 300
ccctcctcct ttcctgtctt ttcttatctt cctccattct ctccccattt cctttctgtg 360
ctccctctcc tttctgcact cacctccttc acctttcatc tgtaggtgac actaaaccga 420
ggtttaagaa gagccacctt ggctgggtgc aatggcttac gcctgtaatc ctagcatttt 480
gggaggctga ggcaagtgga acacaaggcc aggagttcga gaccagccca gccaatgcgg 540
tgaaaccctg tctctactaa aaattcaaaa attagctggg cgtggtggca cgcgcctgta 600
atcccagcta ctcgggangc tgaggtagga gaattgcttg aaaccagaag gtggangttg 660
cagtgagcca agatcgcacc actgcacttc aacctgggca gaanagtgaa act 713

<210> 1502
<211> 756
<212> DNA
<213> Homo sapiens

<400> 1502
tcttccaagt gtaccaaaca agtatcattt tatgtgtatc atgacattaa aaaggtcaga 60
aagctatgta ctaggagcgc cacacacccc agtcaaaaca aaataaaaac actaaaatat 120
taccaaaaac tttgaaacaa gagggcccta aactctgcaa caattaattg atctcttgag 180
gttaggggtt tctagctaat cccttgcctg tcccctgtcc ccttccccag caggcagacc 240
aggaaggact ctgctgtttt ctggaatcat ttcaatcctt ggaggcaaaa gagatagagc 300
taagctgtga agggttgata tctccaagag aaacatactc acctatgttt gccagtcact 360
tgccttctcc aggaagtgat gatagactgg gactcagaga atcttctaga agtttgagca 420
aaaagggcag aggtcactgg tctctgaagt ctgacccaaa accatctcct taacagtttc 480
cttctaagcc gcaggggagg cagcagaatc ttccccatca catgtctcag ccaccacctc 540
cttctcccac tgctgaaccc cctcatttgc ttcccaggtg tcagtgaatc ccatctncat 600
ggccccattc tgctttggcc tttgtgctga gccctgttgg gttgctcccc agtagtgact 660
gcctgttggc ttaattgcca ccttgctggg accctatctt ctggatctnc tttggcttct 720
gactctgtgg ctgtggncag tgtcaccatn ctgagt 756

<210> 1503
<211> 846
<212> DNA

0507205.00000

<213> Homo sapiens

<400> 1503
tttgcgaaga tggcggcgct gggggtgctg gagtccgacc tgccaagtgc cgtgacactt 60
ctgaaaaatc tccaggagca agtgatggct gtaactgcac aagtgaaatc actgacacaa 120
aaagttcaag ctggtgccta tcctacagaa aagggtctca gcttcttgga agtgaaagac 180
cagctgctgc tcatgtacct tatggatttg acccacctca ttctggacaa agcctcagga 240
ggatctcttc agggacatga tgcagttttg agactggtgg agattcgcac ggtatgaagc 300
atttggcttc ttggagtttt aggtttctaa attttgagct ccaagggtat cacacagtag 360
ctctcattta agtgagtctt cccatgttta aggaaaccaa atgagaaaag gtatttttct 420
attcatttgc tctactttgt acatatttta ggtgccttat gtggcacctt aatataggga 480
ctctggtgtg tgcttcattt tgggaaggaa atataatcct gattaactac catgttgtag 540
gttttggaaa agcttcgtcc cttggaccaa aagctgaagt atcaaattga caagctgatc 600
aagactgcag tgacaggcag ccttagtaag tgaggagacc atcatgaagt tgtggggacc 660
atcagaaagt tccaaatttt gtaaaattca ttgggttatt tatttcaggt gagaatgacc 720
cacttcgttt taagcctcat ccacaatatg atgagcaagg taaggggttg taagtattct 780
nctgattttt tctgagcagc tattcctaga tgaacccttt ngtgatcctg gatccctggg 840
attctt 846

<210> 1504
<211> 723
<212> DNA
<213> Homo sapiens

<400> 1504
ctttttgcac acacacgaat acaaagagcc atacgacctt cggatgccgg aaggtccttc 60
tgaatccctt ccctgttcct taggttgcac tagtcggggg ttccatgctg gggggcagaa 120
ggaatgctct ctaccgtctg aaaccgttca tcaggaaggc cttgatttgt gatgtgctag 180
gagagcacag gatctgcaaa tagaaggcac ctgtctccct tctgcaggcc gaggagaggc 240
cgccatggac tgtgtgcttc ttcatggctt gtttactctt ctttcacaga ccctacagct 300
tggggcctgg gctcctctga ccatcctcat tgagaaagga aagtgagtcc agagaagttg 360
atgcttccta cctgttggag cggcccagca gtgtaagcgt ggttgttact gccccatccg 420
ccatgtcctt cagtgccacc attctcttct cccctcccag tggcagcgag gccagatgct 480
gctgctgcgc ctgtaagagt gagactaatg gaggcaacac aggctcccag ggtgggaatc 540
ctcctcccag cacccccatc acagtgactg gacatggctt ggctgttcag agctcagagc 600
agctcctgca tgttatctac cagcgggtcg ataaggcagt gggtttggct gaagctgctc 660
tgggtcttgc cagggccaac aatgagttgg tnaaacgtct tcaggangaa ntgggtgacc 720
tga 723

<210> 1505
<211> 773
<212> DNA
<213> Homo sapiens

<400> 1505
cccatactgt tgacattgta ttagatataa gtgatttaga gatgatgcta agtgtacagg 60
agaatgtgca taggtgcata tgcaaacact atgccccccc caccgccccc cacctgtttt 120
ttgagacaga gtctcactct gtcacccagg ctggagtgca atggtgtgat ctcggctcac 180

09502-0053US1 - 09502-0053US1

tgcaaccttc acctccaggg ttcaagcagt tctcctgcct tagcctctca agaagctggg 240
actacaggcg tgtcccacta tgcctggcta attttattgt atttttagta gagacagggt 300
tttgccgtgt tggccaggct ggtctcaaac tcctgacctc aagtgatctg cctgcctcgg 360
cctgccaaag tgctggagat tacaggcatg aaccactgcg cctggcccta acactgtgcc 420
actttatatc aaggacttgc acatccgtgg atttttatat ctgcagggac ctggaaagaa 480
tcccccacgg acactgaggg atgaccgttg gggcactgcc atctcccatt tgcagatgtg 540
ggctggaggc tagggaggtt aaggaacagc taggagctct agaactggaa agtggcagag 600
gctggacatg caccagggac tgtgcccccc gagctgtcct ggttagaagg aggggagcct 660
agccacactg atcttacttg aatccccagg actcgatgcc tgangtccgg cagagctcct 720
ttgccctnct gggagaccta ccaaagcctg cttcatncat gtaagccctg tat 773

<210> 1506
<211> 844
<212> DNA
<213> Homo sapiens

<400> 1506
tactttataa aagtatcagt ctgcaacata gtggaagttt tgttgttttt tgttggtttt 60
tttttgagat ggagttttgc tctgtcgccc aggctggagt tgcagtgagc cgagattgcg 120
ccattgcact ccagcctggg tgacagagcg agactctgtc tcaaaaaaaa aaaaagaaag 180
aaaaatacag gaataatgca taacaatata ttatcctaca aaacatgaga tatctgcagt 240
gtgaaaacta cacaaatttc tgatgctttt actggaaaaa caattttatg aagtttaaga 300
acagtcagag aaaaacaaca caataattaa gatgtggatg atataatggc tgtggtggtg 360
acagaaattt tcaatgtagt cagatgctta tgttaaattt ctagtccccg tcattgtttg 420
tccttaagca agttacttaa tttctgttag tctctgtttc cttgtctata aaattaggaa 480
gggtggacta ggtgaccagt aatgtcccat ataaaatcta aaatttttat agtaatgata 540
tatggccggg tgtggtggct cacacctgta atcccagcac tttgggaggt ggaggcaggt 600
agatcacctg aggtcaggag tttgagacca gcctgcgaac atggttaaaa ccccgcctct 660
actcaaaata taaaaattag ccaggcatgg tggcacatgc ctgtaatccc agctacccag 720
gaggctgaag caggagaatc acaccaacct gggaggcana ngttgcagtg agctgagatt 780
gtgccactgg acttcagact gagaaacaga gcgagacttc atcttnaaaa aaaaaaaaaa 840
aagg 844

<210> 1507
<211> 708
<212> DNA
<213> Homo sapiens

<400> 1507
agtaaaagaa cttggctcct acatcaaagc caagtctttg ggcaatgctg gcagtttctc 60
ctggaagtaa tgagaaatgt tgtgaaagaa ctcagcgcat tggccagaaa tgattgaaaa 120
accatcaaat ttggggcagc aggaggtgta aatacaagtg agaaaaggga ttctagagcc 180
acctatgaaa taccacaatc tccttgaggt ggggaacatt ccttgatgtt ccaaaactga 240
gaaaagcaca cccagggcca gtctttgtag agtttgttgc tgttaagagc ccacccaggc 300
agatcacaag gtcaggagtt tgagaccagc ctgaccaaca tggtgaaacc ccatctctac 360
taaaaataca aaaacttgcc cggtatggtg gcatgtgcct ataatcccag ctactcagga 420
ggctgaagca ggagaatcac ttgaacccag gaggcagagg ttgcagtggg ccaagattgc 480
aacactgcac tccagcctgg gcaagagcga gactccatct caacaaaaaa agagcacaca 540

0356203-0702000

catctcaaca aaaaaagagg ctactggtgt tgagggtaga gcttgctgct aatgaaccaa 600
gaggcacatc cttttccatg gagaatagga agccccgaga atggggaggt gtgtgacagc 660
catgctggac tcanaggcag gtgtcatnaa ctggccangt tctaatct 708

<210> 1508
<211> 809
<212> DNA
<213> Homo sapiens

<400> 1508
ttgctcagtc actggggcaa ctacttttca cccaatgtcc tctggaaaag aaagatctgg 60
agggtctttt tcttcaaaat aataaggagg gggtgcagaa gggtagggat gaacctctcc 120
ctcctttgcc gcttgagctt tagctggcaa attggcaaat aaacctgctc tgtaacctct 180
tctgttactt cgttttactc tccttcctcc tcatcatcag tgtgaaaaag ttccaaggga 240
gaacgcacca gaccccacat ttgtcccact gttaccctga tgcttctgag ctccccttac 300
tcaccacagg gatggcttta agagtacttg ggtgtcctcc agcttagttc cacattctcc 360
gttgctccag tgacccttca acctggattc gagcccccac aatggacgtc acttgccgag 420
accagttcag tcagggagac cctaacccag cagcactaga ggaattaaag acatacacac 480
agaaatatag aggtgtgagg tggaaaatca ggggtctcac agccttcaga gctgagagcc 540
ccaaccggag atttacccat gtatttatta acagcaagcc agtcattagc attgtttcta 600
tagttattaa attaactaaa agtatccctt atgagaaatg aagggatggg ccaagttaaa 660
ggaataggtt gggctagtta actgcagcag gagcatgtcc ttaaggcaca gatcgctcat 720
gctattggtt gtggttaaaa atgcctttaa cggntttccc cctggtgggc caggtnttcc 780
tggccttatt ctggaanctg gaaccttca 809

<210> 1509
<211> 744
<212> DNA
<213> Homo sapiens

<400> 1509
tctcttgctt gtattatttg ggaacatcat ttaaaaggac tgtataatat tccattaagt 60
agatggacca tcatttattt aacatgcttt ggtctttacc ccttgaaggc aaggcatatc 120
ctcctttccc tattaaccca ttatggttca gtcatccgtg aagttggcta agcttttgaa 180
tttaaatttt ctgtctgcac tgtctctttg aggtaatggt atgccagttg ctgtgtgaaa 240
tgaaacttct ttttatttgc tttaaacttt attaattcaa gctttagcta ggcatcttgt 300
tcttattcgg ctttagtttg ataaaaaaaa aaagttgtgt ttatcttccc ctgcctggtc 360
ttgcagcttt ggtcctaggg cctcccttcc ttctttcgaa acagatgcca ctgtggatgg 420
taggttccac aagcatggcc ctgtccactc atcacagatg tgactcgagc agcttctgga 480
gctgcgctct agagggcatt caggtggatg tttccccacc tgcaaggtgg gatgtttgct 540
ggacagataa caagatttgc ctgtttttt ccccttccca tcacatctat ttccttatcc 600
ctttggtgac ccagggtgcc ctgttggctg gatcttagga actggttgnc tcacactttc 660
acctgccccc tgcctgngct ttccccttcc tgacttctgg tgacctcctg gtcccactct 720
actggnctct tccttacagt gctg 744

<210> 1510
<211> 799
<212> DNA

0030050.0020

<213> Homo sapiens

<400> 1510
atcagagtat tttatgtatt aaggagattc acattttgtg taaattgtag atacttcaca 60
ttttgttatt ttgcttatgg tatttttttc agtgtcagat tttgaaaata cagtttaatt 120
tctcaatttc tccttttatg gcttttagat ttcatggttt aaaaagtctt taaaagccag 180
gcgcagtggc tcacacctgt aattccagca ctttgggagg ccaaggcggg tggatcactt 240
gaggtcagga gttcgagacc agcctggcca acatggtgaa atcccatccc cactaaaaat 300
acaaaaaatt agccaggcgt ggtggcacgc acttgtaatc ccagctactt gggaggctca 360
ggcagcagaa tcgcttgaac ccaggaggtg gaggttgcag tgagccaaga tcgcaccact 420
gcattccagc ctaggtgaca gagcaagatg ctgtctaaaa aaaaaaaaaa aaaaaaaaaa 480
gtttttaaca ctcctagata attttttaac tccttatttt ttagaagatt tttatggttt 540
cattttttcta tttaaatctt tgattcatgt gaaatttatc ttgatttatg gtgagttata 600
gatttaattt tttttcctag ctgttccaac aacatttatt aactaatcaa tttttcccca 660
ctggtttttg atgtcacttc tatcatacat tcaattccta aatgtatttg gtttatttct 720
ggatttcttg tccagtccat tatgctggtg atctgttcac acacnggagt taatttttca 780
gggtttaaat ttcngggan 799

<210> 1511
<211> 853
<212> DNA
<213> Homo sapiens

<400> 1511
tgatgctcag ccacaatggt ggtagagtgt ggatcttctc tactcagtcc actgattcaa 60
atgccactct tttccataaa catcctcacg gatgcaccca gaaataatgc tttagaaata 120
atgctttatc agctatctgg atatctctta acctggtcaa gctgatacct aaaattaacc 180
accacaggct acagtgaaaa agatagttcc aactgtgagt gaggatgcgg agaaactgaa 240
ccatcataca ttaatggtgg gaatgtaaat tttagtacat ctggatcaac atgttagaaa 300
cattttgaaa aacagtttga taatttttac aaaatgttaa atatatactt tccatacaac 360
ccagcaattc tactcctagg tgttacttaa aataaatgaa aacacatatc ctcacaagga 420
cttcattaca gcataatgct gtttttataa ataatttata aaagccaaaa tatggaaata 480
tcccaaatat gaattaacag gtgaataaac aaaatgccat atagctataa actacgatac 540
cacacagcaa taaaaaggag caaactactg ttatgtgcaa tggtgtagat aaacatcaaa 600
aacattatgc tgagtgaaat aagccagaca caaactgcat attgtaaaat tcaatttata 660
tgaaatttct ataagaagca aaactatagg ggcagaagac aaatattggt tgcctgaggc 720
tggagatgaa gcagggattg ctgcaaatgg gcataagggg acttcttggg gtaatggaag 780
tgttctaaaa ttggactgng acaaaattct cagcttttg gctaaagatc aagtgtaaat 840
tggattgngg gga 853

<210> 1512
<211> 827
<212> DNA
<213> Homo sapiens

<400> 1512
ataacaagcc ctaaataaaa atagaggtgg actttgctca tggagtgtta catcagttct 60
cccaaaacta attgataatt tcagtgcaat ctctggtaat tatagcagat ttttttttt 120

03052006

gtggaaattg agaagctgaa tctaaaaccg atatggaaat acaaatgagt aagagtagcc 180
aaaacagtaa gttactcatc ccagtattaa gactgtgcag ctacagtgat gagagtgtag 240
tgctggtaag aggactggca cgcaggccag tggggtggaa tggagcccgg aaagtgaacc 300
acaaactttt ggttcacaga ggtaccagga taattcaagg gggaggaatt gtcttatcta 360
caggtggttc tggcaacaga gtattcacag gaaaaatggt gaacgttaac ccttgcatca 420
tatgcaaaaa attatttgaa acaggtcata agaactaaaa ccatcaaact tctaggagaa 480
aatacaggga aaaatctctg tggccttgac catgcaaaaa tttcttggga cacaaaaagc 540
atgagccaca aaagaaaacg ttgataggtg ggatctcatc aaaatttcaa actctctttc 600
tttgaaagac agttaagaaa ataaaaaggc aagccacgcc ctccaaaaat acatgcagta 660
catatacagg acaaaggact tatttctaga acctgtaaag aactcttaga actcaataat 720
aagaaaacaa cccagtaaaa caatgggcga aagatttaaa catgcatttn ccaagaaggt 780
ntatgaattg ggccnttaag cacaccacag ggtatcatta tttatca 827

<210> 1513
<211> 642
<212> DNA
<213> Homo sapiens

<400> 1513
tttatatacg gtatggctgg aaaagttttg gattttaaaa cagggtccct ctccttgaat 60
ctgggtggac ttgtcaatgc cctgaccaat agagatgacg aaagtacgtg tcaccggact 120
gacttctagg gccagtcaca gaaagccatg cagttcctgt cttgttggaa ggaacactgc 180
tcttcaagcc ctgagctccg cttcgtaagt ccaactcccc taaggccatc atggcaggag 240
aggccatatc tgggcgcttc agtggatgtt cttatctgga cccagccttc cagctatccc 300
cactgacatg caaaccaagc ctctagacca gcccgtccac cggccgaatg ctgcctgtga 360
ccgacctctg ccattgccac atggaacaga agcacctccc agctgctcct tgcccaaatt 420
cttgacccac aaaatgtgag acaccattaa aacttgtttc agatgacccc taaaaaataa 480
aatcaacctc ttcatctggt gctcttataa aaacttacta cggaagcttc ttgagagaca 540
gttcgttggt cttcctgaat aatttttttt tttcttttt gagacaatgt cttgctctga 600
caccccagc tggaatgcan ngggngcgat cttggctcac tg 642

<210> 1514
<211> 788
<212> DNA
<213> Homo sapiens

<400> 1514
taagaagccc ttgcatgtgc agttcacaac agggttcatg ctcctataaa aatatagtcc 60
tgtcactgat ctgacaggag atggtgtgca ggcagtaatg cttgcttgcc cagtgctcac 120
ttgctgtgcg gcctggttcc tagcaggcca tgggccagta ccagtctgca gcctggggtt 180
aaagggccaa aggtgtctgc ctctctgctg gcctaacagc acaggaaagg gagacagcac 240
tgtcttacca ttccctaacc tctgcccaac aatatactag agagaaatac atcaaattgc 300
cgttctatgt tggtatcaga gagttaaatc agaactgtac tgtcctggtt ctgtcactag 360
ccctgagacc ttacctctgg gttccatgag tgggacagaa ggagagagga tgctagcagt 420
gctggctaca gtttgctttc ttgctcacct ggtagaaccg aggtagggcc agaatacagt 480
ccatcagctt gtggcggccc aagttgatga gcattgtgtt ctggccagtg ttcagaaagt 540
gaatctgcag agttatcaac ttggtgagcc gctgacagtg ctgggcctgt cgcacacagg 600
agtcctgagg aacaagggtg gagaggcaca gtagagaaag acctagttgt cacctnctgt 660

0050294805.0070000

gtgaaccctt acaacggtat tcacccctte tggtcctggg ttggcctatg atgcccttcc 720
gctttacctg gaaagagccc aaggaccaaa gaaaataatt ttactgnana cagcaagtcc 780
caaggnca 788

<210> 1515
<211> 809
<212> DNA
<213> Homo sapiens

<400> 1515
gaattttaaa ctttggtttg gttctattgt tttctctgct ttcttttctg acaaaatttt 60
taagtggttt ttggactgat ttggtgaaag ggaactctgc aagaaatgtt catgaccgcg 120
atctcagccg tgcacacagt ggtgggagtt cagctttaag actgttttct gcctgacagg 180
gcaggacccc cagacaaatc actggctggc tctgtggtag ttggcagcca ttcaagactg 240
gtcttgtgcc aggagtatta ctagatagcc agacagatca attcactttt atattcccgc 300
cattatttat agcccactgt atatctactc ttgcttatga agtaatgatt agcaaataca 360
gtacacataa aacatgggca tttgttctgg aaagggcttt ctcctgctga tattgcagat 420
agtttcacag gtcacagaac cttaaaaagg atttaaaggg catgtcttgt gtagcatttg 480
ttcctttgaa aatgatgctc ctttcccatt ttttagtaat tgaagaggat agaaaggttt 540
tctcattgct tacgtttcac tgaattctct gcagcccctt ttcccacaga tgtttcagcc 600
aaacctgtat ggagggaggt gacatggcat ggcttgctgt ttaaaacagc tacggtattt 660
tgtgcttccc ttttgagtgt gtcaaggtga acaaaaggag agcctctaga acgcatggga 720
nggaatttgg gacaggacct tttacatgct gggggaaact gacaggactc atgaggaaag 780
actttggttg ggtnncttcc tctctttct 809

<210> 1516
<211> 845
<212> DNA
<213> Homo sapiens

<400> 1516
aaatgcatat atacataatg atatatagag ataattaact ttaagtttat taaactgtat 60
ttactctata aactatgact tcatttttg ttttgttttg ttttttgtt tttttgagat 120
ggagtctcac tctgtcactc aggttggagt gcagtggcgc catctcagct cactgcaacc 180
tccgcctcct gggttcaagc aattctcctg ccgcagcctc ccaagtagct gggactacag 240
gcacctgcca ccaagcccgg gtaatttttg tatttttagt agagacgggg tttcaccatg 300
ttggccaggc tggtctcaaa ctcctgacct tgatccacct gcctcagcct ccccgagtgc 360
tgggattaca ggcatgagcc acctcgcctg gcctataaac tacgactctg atgaccgcat 420
agtatttaag caagaaaaca accaaaatgt tctagctaaa gtggagacca cttaacctaa 480
cccaattaaa ctttaagttg aacacaagag tagtagatgc agttcagctc catgacattg 540
ggtgagttgt ctaaatgctc tgtgctttgg tgtccttgtc tgcgtgtgac atgaagccgc 600
agatctcaaa gatctctttc attccgtgaa agcgctctca atgtgtgaag ttgactgctt 660
ctcctgctgt ttaccaagag aataatctta accctacatt gnggagatcg gatttggtct 720
cacttgacag aaagccagtc ccacgagcag cttggtaccc aaataccagt ctgtttagtg 780
ctcattagag atgaagaacc atattcataa gtcaagctga nacggatgca tcttcanaca 840
gaatc 845

<210> 1517

0956250.0020000

0205205.0015000

<211> 749
<212> DNA
<213> Homo sapiens

<400> 1517
agctcctggg ctcaatgatc ctcctcctcg gcctaccaaa gtgctgggat tataggcatg 60
agccactgtg cccagccaat ttcatgtttt tgaaaaattt gtcaattgtg gaataagtgg 120
gtaaaaatcc tattacaaca aattgtacca agtcttagac taactagaat aggaccattt 180
ctgagcccca ggaagggctg tcggaggtgc tgccccacat ccaggaggct ctgtggtctg 240
ggccacacct tcaggaggat gtgcacctac tgggagcccc aggccatctc taatctcaca 300
ctagattctc ccacccacag atatgtggtc tccctgatga aggctggatt tagtccttgt 360
tctcagcgag gtgggtattg gccccacaat ggccacagta cactgacccc gtaacagagg 420
aaatctatag ctcgtataat tcattttcat ggcaagtggc tgcatttgtt tttggcctca 480
cttggtctgc ttcccagaat ccctaagaag ggaccaaact gccaaggtgg gaggatcact 540
taagcccagg agtttgagac cagtgtgggc aacacagcaa gacctcgtct ctatatttat 600
ttaaaaataa aaaagccagg cgcggtggct cacacctgta atccagcact ttgggaagcc 660
gangcaggca gatcacaagg gcaggagatc gagaccatnc tggctaacat ggggnaaccc 720
catctttact aaaaatcaaa aaaattacc 749

<210> 1518
<211> 825
<212> DNA
<213> Homo sapiens

<400> 1518
aaaaaccaca ctcctatgac agctctttgc ctgctccttg cttgatgttt tctggaagtg 60
tgtgtggggt caaggatggt gtggggcacc tgtatctact cctaatgttt ttgaccctgc 120
tgtgttcaat cttcttacac ttcagtttct tcattttaaa aaggaaaagg taatttcttc 180
acagtctcct atgagttgga cagaaagtca tggatgtgta aaggacttct tgatgataag 240
ccccaccttc atttttccac ggcaccaaac agccctgtga catctgcatt caccccactc 300
gtttttattt ttgctgcagt gaacagcttg agttgtctct taagagtcat ctcatccctt 360
gctattcgag atgacccaca gatggcagct gttcagcatc acctgggagt tcattggaaa 420
tacagaatct caggccccac ccctgaatgt cgaatactgt gtgtactgct ctagcttctc 480
cagagtaaaa gatagtctct ataggatgcc gtctgctctg gcaccaggcc ccctgagccc 540
atgcctttta tctgacgttt gttttgcaac ccattacatc acttgccccc gggcatcctt 600
taaatttcat ccttggctaa ttctcattgt aaccggttcc agcttgcttt aaatgattgg 660
gtggatggaa ttctccccat tgacaattga caggtggcaa ttaattggtc atgcctcant 720
gggatgaatc cattacatct ctttnctggc taatattttt atctaccttc cgacttttt 780
gtagggactt tggtggatat cctcatgaaa ggnccatctn ttcct 825

<210> 1519
<211> 788
<212> DNA
<213> Homo sapiens

<400> 1519
gtgtgaggca agggtagaga ttcatttatt tctgtagaga gatacctagt tgttccagaa 60
ctacttctta aagaattttc ttttcccatt ggcaccttgt caagaaccaa atggccatgg 120

tatgcatctg tttgggagtt ctctatttat tccattgact tacttgttta tctttatccc 180
agtacctcca gtaaagtttt gatttctgta acttcagaat aagtcttaag tccagtagtg 240
taagtgcccc acctttatta tccctttcca aggttgtctt ggatatttta agtcctttgc 300
tttttcatat aaaatttaga atcctatgaa taaacctgat gggttttaaa atttttaaaa 360
tttttgtttt atcaaatatg ttttctgggc caggtgcagt ggctcacttg taatcctggt 420
actttgggag gctgaggcag gcagatcgcc tgaggtcaga agttcgagac cagcctggcc 480
aacatggtga aaccctgtct ctactaaaaa tacaaaaatt agccaggtat ggtgatggat 540
gcctgtaatt ccagctactc agaaggctga gggaggagaa ttgcttgaac ctgggaggtg 600
gagattgcag tgagccgaga ttgtgccact gaactccagc ttgggcaaca gantgagact 660
gtctcaaaaa aaaaaagatt ttctgaatat attgaaatga gttttctcat cttgncatga 720
gatgaaaatt ttttctttgc tctacggntg tggcnaatgt gctctattat ggattggagc 780
tatctcta 788

<210> 1520
<211> 331
<212> DNA
<213> Homo sapiens

<400> 1520
attttatttt attattatta ctttttttga gattgagtct tgctgtgtag cccaggctgg 60
agtgcagtgg cacgacttgg ctcactgcaa tctccgcccc ctgggttcaa gcgattctcc 120
tacctcggcc tcctgagtag ctgggatcgc gggcgtgtgc caccacaccc agctattttt 180
ttttttttg tagtgttagt agagacagga tttcaccatg ttggccaggc tggncttgaa 240
ctcctgacct caggtgatcc acctgcctcg gnctcccaga gagctgggat ttagaagcgt 300
gagccaccac tcccggccaa tatatttgna t 331

<210> 1521
<211> 692
<212> DNA
<213> Homo sapiens

<400> 1521
tgattctaca aatatttaat tagtccccca acatttgagg aaactactaa tgtctacttc 60
ccatgctgtg ggaccagagg gggctctaca gcagtaatgg ctgaagttat tatgaagttt 120
taggtagaaa caagcaatct gtgcttctca ttactttatg cgatttagtg atgtaattac 180
ttctgatgca agtttgtgta tgatcacttt ttgtatatat caaatggaac agagcagtca 240
tgcagtatat ataccatatt gatcaaagat gaattacaga acactgagaa ggggaaagaa 300
atcattgatc tctcagctga ttgtattgct tcaagtcaag aagataaaaa tgtgctgaaa 360
caaattcaca gatgaaccaa atacagtcgc aaggagaagg cagtgttttc ctggagcttc 420
cttggagtgg tctgtagcat agcattttct tttctttttt ttttttttga ggcggagtct 480
cgccctgtcg cccaggctgg agtgcaatgg cctgatctca gctcactgca gcctccacct 540
nccgggtcca aatgattctc ctgcctcagc ctcccgagta gctgggatta taggtgcctg 600
ccaccacgcc catctaattt ttgnattttt agtacagatg aggtttcacc atgttggcca 660
ngctgatctc aaacttctga ccttgngatc tg 692

<210> 1522
<211> 836
<212> DNA

US 2005/0059030 A1 Mar. 17, 2005

<213> Homo sapiens

<400> 1522
gaaaaataga gatgagggct cactatgttg ccaggctggt cttgaaatcc tgacctgaag 60
tgatcctcct gccttggctt cccaaagtga tgggattaca gatacaagcc atcacaactg 120
gccctcccta aattttctaa cagcaacctt atctttaaag aaattgtccg tgtgtgctct 180
gcccatgttt ctaatgacat gcatgtgttt tttcagcacc gtatgtgccc tgaaattgcc 240
cgccttttga ccccccacat ttaccaggat ctggagaatc atccatctgt tcttaagtat 300
gagaagatta aggtgagtct gtcttacccg atctttcttg gatggtgtca gcaacctaaa 360
aaggctataa tttcctcaag ataaaaaagc ttttcagcgg ccaggcgcgg tggctcacac 420
ctgtaatccc agcactttgg gaagctgagg tgggcagatc acttgaggtc agagttcgag 480
accagcctaa ctaacatggt gaaaccctgt ctctactaaa atacaaaaac tagctgagca 540
tggtggcaag cacctgtaat cccagctact cagaaggctg aggtgggaga attgcttgaa 600
cccaggaggt ggaggttgca gtgagctgag atcgtgccat gctactgcac tccaggctgg 660
gcagcggaga gagactcctg tcaaaaaaaa aaagaaagcc ttcagaaggg agtagagcca 720
gctttttaaa actggttact gggagaaaat tgaaatcaga ccagggtttt taatccaatc 780
tgctgtacct gtaccttaac aggtatttaa gaatctggca gcgcgtgnta ccctga 836

<210> 1523
<211> 724
<212> DNA
<213> Homo sapiens

<400> 1523
cttgcgcacg cgcagcccgc ccctgcggca gagtggcgcc cgcgcgtgac tccccctgc 60
cggctgcgga ggtgggggg ggacggcgcc cccgccgtgt gcgtggggcg gggatggagc 120
acgcgccctg gagccccggg gccagctcta gggcccgtgc aggccacacc atgaacacct 180
ccccaggcac ggtgggcagt gacccggtca tcctggccac tgcaggctac gaccacaccg 240
tgcgcttctg gcaggcccac agcggcatct gcacccggac ggtgcagcac caggactccc 300
aggtgaatgc cttggaggtc acaccggacc gnagcgtgat tgctgctgca ggttaccagc 360
acattcgnat gtatgatctc aactccaata accctaaccc catnatcagc tacgacggcg 420
tcaacaagaa catcgcgtct gtgggcttcc acgaagacgg ccgctggatg tacacgggcg 480
gcgaggactg cacagccagg atctgggacc tcaggtcccg gaacctgcag tgccagcgga 540
tcttccaggt gaacgcaccc attaactgcg tgtgcctgna ccccaaccag gcagagctca 600
tcgtgggtga ccagaacggg gctatccaca tctgggactt gaaaacagac cacaacgagc 660
agntgatccc tgagcccgan gtcttcatca cgtccgccac attgattccg acgncactac 720
atgg 724

<210> 1524
<211> 710
<212> DNA
<213> Homo sapiens

<400> 1524
gatgccaaaa ttacttttt ccttccaaat atcaccttct gactgtttcc accatggtta 60
agagggctga ataagatgat cattctttag atgacgaatt aacccttgct tcttcgaaag 120
gttttaggga aattaacaaa aaaattccca gatgccaaca gccaccattc aaaagaccac 180
caatctattg catcatacca gatgccactc tctcttccta gtagggattt ctctcctcgg 240

US 09/513,300

tcctgatcaa ggtgttataa tagagacatt ttcattatag acagtgtcct gaagggattc 300
cagctcaaat ataggaattc ttaaacctag ctgaaactcc caaagtgatt tcattgctgg 360
gcatatttta acatacttag gggaaagcaa atctttaaac aaagcaaaac accaaactac 420
agttttaaaa agaagaaagg agagcgtatt ttagtttcaa aattacatta cattttaatt 480
taattttcct tctaattttc ctgtcagcat tttatttaca aaaactgtgc agcaaacgag 540
ggaaaatctt ccaacacaaa caactctgta atgactaaat tggttttatt catatatttt 600
agacatttgg ttaacttgga tctttttcat aagttctttg ngatgctttg taanggtagt 660
gnaactgaag tggttggtga gtttgatttg gtcccacagt gcttaattca 710

<210> 1525
<211> 813
<212> DNA
<213> Homo sapiens

<400> 1525
caaaacaaaa acaaacaaac aaaaaaacct gtatcccttg gttttagttt gtaaatgaac 60
caattgtgaa ttcaataatt tggggtttaa ttttgtaaac tataatagct ccctttttgtt 120
gattgctgtt tgccatgctc tttggaaggc ttcatgcacc gcgttacatt tagctctcat 180
gacgacctta catttgtaag agtgtgagac agagcagtgc aaggtcctgc ccaaggcccc 240
tccactggaa gtgacagagc tgggatggga tctgggtctg cgtggctctg aactcctcag 300
ctataccatc tcctgcttcc aacattgtgc cagataatga tggctatggc cctaatttct 360
gaaacaaagt cttatttgag aacttcttag ttagcgagat ttctacctta gtcttttcac 420
taggtatcca gaaacttact aaaaaattta aaaatcttgt agttttgaac ccttttaaca 480
aagaaaagca gtaagggcct agttattata agtacaaata ggaaaaatgt ataaactaca 540
gcttatcttc taaatggaaa tacttaaaag acagatttc aatctcttta gggggttgag 600
gaaaaaataa cattcagatt ttttgnttgn ttggtttagc agaaaaagtt tgatcatcgc 660
tttaacaatt cagctttcac attttctctc atctttcttc ccattgttgg caagactgta 720
tnactgcctt ttgaaaaaac ctttgggtaa tcactggcat tttgaattaa cntttggtat 780
atgccttggc taaaaatagg gacatttttn tcc 813

<210> 1526
<211> 724
<212> DNA
<213> Homo sapiens

<400> 1526
aggtttgtga tcttgatgta gcaaagcgat tcttttcatc ttcggcgagc ccaggggatg 60
gactcatcct agtgctcatg gtctgaacct gccgtgttct tggcttttcg tgggaggctg 120
cattgcggat tgagggagag tgtccaaccg tggcaatgga agggactggg tacttgctgg 180
atttttggt gccacccttt agaagcaggt attattggct ctgctttgca gatgaaaaaa 240
actgaggttg aggtgggcta agtgtatcca tcaggccgga cagaaaacat gacccatcaa 300
tgtggcccca accttggtga caccttagaa tagcagtgat tcatttggtc tcagatcttg 360
atgtgtgact agctgcagcc acccgcacct tcacagacat aaaaaccgcc agacccctga 420
cacgcccatg aagacacacc caaagatgtc tttggagatc cccgggcaac agggacactg 480
gcatttcttt gcatctccgt gccccaatcc tggacctgtt ctggtgcaca ggaagctggt 540
tacgaaggga tgcagtggan atggtttgca gaaagaacac caagtttgcc ggactccgtg 600
ttatggagat attttgactt ctggggatgg agctggagca tgcccaggag acccatagtc 660
atgagcattc acaattaccc agcanttaac atgtgctggg aaccctgccc antgagagct 720

US20050130300A1

naca 724

<210> 1527
<211> 605
<212> DNA
<213> Homo sapiens

<400> 1527
gacaacacgc tgactaggaa aaggaggagg cggggcagtg gggccttcgg cggcgactat 60
ggaaggagcc ggctacaggg tggtgtttga gaagggcgga gtgtacctgc acaccagcgc 120
taagaagtat caggaccgag actctctcat cgctggtgtc atccgtgtcg tggaaaagga 180
caatgacgtc ctcctgcact gggctcctgt agaggaggct ggagattcca cccaaatcct 240
cttctccaag aaggactcca gtgggggtga ctcatgtgct tctgaggagg aaccaacctt 300
tgaccccggc tatgaacctg actgggctgt catcagcact gtgcggccac agccctgcca 360
ctcagagccc acgagaggtg cagagcccag ctgcccccag ggctcctggg ccttctcagt 420
gagtctgggg gagctaaagt ccatccgccg tccaagccag gcctcagctg ggcctacctg 480
gttctggtga cccaggctgg aggttccctg cccgcactgc acttccaccg cgggggcacc 540
cgcgccctgc tccgcgtcct cagccgctac ctgctgntgg ccagcttccc gcaggactnc 600
cgnct 605

<210> 1528
<211> 764
<212> DNA
<213> Homo sapiens

<400> 1528
ttntattcct cgcattcagc accttccaaa aaacaagtga catttctaat attcaggttt 60
cctcctctcc cctttaaagt tgtccatgta gaaatttcat atattaagga actaagattt 120
ctttgataag caaatgtttt tcttcggaat gcgatttcat cactgtgtct aggggaggga 180
gtgttatttt tagaaaggga gggactaacg cttggtagtt acagtaatta gagagaatta 240
tactttagca gcaatgagat tacttcatct gccttatatt tgagagctaa tttgtacaag 300
tagctcctgg ggctgtgaag ggcttgccaa gagtaaaagg ttcaaggagt gaaatagtta 360
atgagattcg tgatagaaat gggaatatga ttgtccacaa aagggaacat cttccttttg 420
gagggtgttt tttagtatat caactagtat tgtttgcctt tcagcctaaa atccttcctc 480
ttaaagattg tgcttgcttg gctggatttt tgctgatgct gtttaatttt aagctctttt 540
ccacatggag ctattccagc tcatttttaa aaatttattt aatgcttcca aaaaatatcc 600
tgagttatta ctggcctttc ttccttactg tatacccggt gcctggcaaa aagtaggtgc 660
tcaacaaaga gaggaaggca gggaggggaa aggtgagcga gaatgagaag gcgtcactct 720
tcagacattt ggggaatgcg atgatnaggn ctcantaaga tctg 764

<210> 1529
<211> 860
<212> DNA
<213> Homo sapiens

<400> 1529
tgttccatgc tctctaggtg tgcctctttc aatatttcct gtcctttcg ccactgctca 60
taaatggttt ctaatcattc ttataattgt accttcttgg agccttgaga gacaggcaca 120

0050450:0050800

ggttctctta cataggctat tattgatatt ggttgctttt attttccctc caacccccac 180
tccagataac aactgttgag tgcgtaccat gtggcaaaca atgggaatga agagattaat 240
gagccctcaa agaattcatg atttacgtag cacatacttc tagctaactg ttctagctac 300
accagccagt tctagagagg tacccatgga ggttttggat atgtgcttaa ctccttgaag 360
attcttctgg aatgatgcct aaagtaattg tcaagagaag ctatgctaat cttcctcttc 420
agaatattcc catttctttc ttagttatag gtatgaggag tctaaaatat gctttaacat 480
agtaagctta ttgttataac tggaaccatg caaaatctta atttcctata atataatttc 540
ttgctcctcc aaagtcattc aaatattaaa ttggacttat tctatatgtt gcttagtgga 600
aaggtatcac aaataaaaag tgggccacaa tgagtaggtc aattaaataa atgcaaaaaa 660
tatattgatt tattaattac aatataatac tgtgctaaat gcttaacttg cattatctca 720
tttaattctt accaaaactc tttgaggtga ttattggatc actcccattt acagatgaaa 780
aactgagggt taaggaaaag atgtgtatgc cccaatttct taatgactaa atggcancag 840
ancaaggact gtcttgactc 860

<210> 1530
<211> 862
<212> DNA
<213> Homo sapiens

<400> 1530
tgttttatca gcaaggtctt tgtgacttgt atcttgtgct gaccttgtat ctcatcctgt 60
gactcagaat gcccaacctc ctgggaatgc agcccagcag gtctcagcct tattttaccc 120
agctcctatt caagatggag ttgctctggc tcaaatgcct ctgacaccaa cactcattat 180
tttctgtttt ttgttttgtt ttacagtagt cattctgatg ggtatgaggt gatgaccaat 240
tgatttttga cagaggtgca aaagtaattc aaaggagaaa ggacagtctt tccaaaacca 300
gtgttgggat aattagtcat cctgcaaaaa aatgaacctt gacctaaatt tcaccttata 360
cacagactag ctaaaaattg attttacacg taaatgttaa aattcaaagc ataatattta 420
aaaaagaaaa cagaagaaaa ttttcatgaa ctgaagttag acaaaaagtt cttagatatg 480
atgtcaaatg cctgatccac taaaaaacat gacaaattgg attcataaaa tttaaaaccc 540
atgctctgca aaatacactg tgaagagaat aaaaatacac accacagact tggagaaaat 600
gttgagaaat cacttatctg acaaagacta gtattcagag tatataaaga cctctcaaaa 660
ctcaacagaa ggaaaacaga gtttaagtaa aaaatgggta aaagacttga gcagatactt 720
catcaaagaa gttatatcga tggaaaataa gcacaagaaa atattttcaa catcattagc 780
tatcaggaag tgcaaattaa aaccatantg aggcttgggg acagtggctc atgcctgtaa 840
tgncngcatt ttgggaagct ga 862

<210> 1531
<211> 691
<212> DNA
<213> Homo sapiens

<400> 1531
gcggccgcgg cgggaacatg gaggagctgc tgaggcgcga gctgggctgc agctctgtca 60
gggccacggg ccactcgggg ggcgggtgca tcagccaggg ccggagctac gacacggatc 120
aaggacgagt gttcgtgaaa gtgaacccca aggcggaggc cagaagaatg tttgaaggtg 180
agatggcaag tttaactgcc atcctgaaaa caaacacggt gaaagtgccc aagcccatca 240
aggttctgga tgccccaggc ggcgggagcg tgctggtgat ggagcacatg gacatgaggc 300
atctgagcag tcatgctgca aagcttggag cccagctggc cgatttacac cttgataaca 360

0952945-032800

agaagcttgg agagatgcgc ctgaaggagg cgggcacagt ggggagagga ggtgggcagg 420
aggaacggcc ctttgtggcc cggtttggat ttgacgtggt gacgtgctgt ggatacctcc 480
cccaggtgaa tgactggcag gaggactggg tcgtgttcta tgcccggcag cgcattcagc 540
cccagatgga catggtggag aaggagtctg gggacaggga ggccctccag ctttggtctg 600
ctctgcagtt aaagatccct gacctgttcc gtgacctgga gatcattcca gccttacttc 660
acggggacct ntggggtgga aacgtancan a 691

<210> 1532
<211> 728
<212> DNA
<213> Homo sapiens

<400> 1532
gctgatgctg ccgtgcggta cttgtcatgg agctggcact gcggcgctct cccgtcccgc 60
ggtggttgct gctgctgccg ctgctgctgg gcctgaacgc aggagctgtc attgactggc 120
ccacagagga gggcaaggaa gtatgggatt atgtgacggt ccgcaaggat gcctacatgt 180
tctggtggct ctattatgcc accaactcct gcaagaactt ctcagaactg cccctggtca 240
tgtggcttca gggcggtcca ggcggttcta gcactggatt tggaaacttt gaggaaattg 300
ggccccttga cagtgatctc aaaccacgga aaaccacctg gctccaggct gccagtctcc 360
tatttgtgga taatcccgtg ggcactgggt tcagttatgt gaatggtagt ggtgcctatg 420
ccaaggacct ggctatggtg gcttcagaca tgatggttct cctgaagacc ttcttcagtt 480
gccacaaaga attccagaca gttccattct acattttctc agagtcctat ggaggaaaaa 540
tggcagctgg cattggtcta gagctttata aggccattca gcgagggacc atcaagtgca 600
actttgcggg ggttgccttg ggtgattcct ggatctcccc tgttgattcg gtgctctcct 660
ggggacctta cctgtacagc atgtctcttc tcgaagacaa aggtctggca naagtgtcta 720
angntgca 728

<210> 1533
<211> 644
<212> DNA
<213> Homo sapiens

<400> 1533
agcgcgagcc ccgccgccgc cgagcatgga cgaccccgac tgcgactcca cctgggagga 60
ggacgaggag gatgcggagg acgcggagga cgaggactgc gaggacggcg aggccgccgg 120
cgcgagggac gcggacgcag gggacgagga cgaggagtcg gaggagccgc gggcggcgcg 180
gcccagctcg ttccagtcca gaatgacagg gtccagaaac tggcgagcca cgagggacat 240
gtgtaggtat cggcacaact atccggatct ggtggaacga gactgcaatg gggacacgcc 300
aaacctgagt ttctacagaa atgagatccg cttcctgccc aacggctgtt tcattgagga 360
cattcttcag aactggacgg acaactatga cctccttgag gacaatcact cctacatcca 420
gtggctgttt cctctgcgag aaccaggagt gaactggcat gccaagcccc tcacgctcag 480
ggaggtcgag gtgtttaaaa gctcccagga gatccaggag cggcttgtcc gggcctacga 540
gctcatgctg ggcttctacg ggatccggct ggaggaccga ngcacgggca cngtgggccg 600
agcacagaac taccagaagc gcttncagaa cctgaactgg cgca 644

<210> 1534
<211> 830
<212> DNA

D0502-0050-0000-0

<213> Homo sapiens

<400> 1534
cttggagact atttattaca tgtattttta agactttaga taaatatccc caaattgcct 60
tccaaaaact ttacagttct ataaatgata tatgagacta ctgtttcttc acatattcac 120
caacacaata ctttttttatt tttgctattt tgatggggag aaaagtttct cattttaatt 180
ttaatccaca ttgtaaattg tgtagtgaaa cattttttaca cataattatt aataatttgg 240
aagtttcttt tgagaattac ctgcttataa tggcacattc atcttttata cctgagagtt 300
cttgagtttt taaaaacttt gcatttagtc cccttccaaa aataatctaa taatatttac 360
cataaatggg ccgggtgcag tggctcacgc ctgtaatccc agccctttga gaggccgagg 420
caggtgaatc acctgaggtc aggagttcga caccagcctg gccaatgtgg ggaaaccctg 480
cctctactaa aaatataaaa attagccggg cgtggtggtg ggtgcctgta gtcccagcta 540
cttgggaggc tgaggcagaa ttgcttgaac ccannaggcg gaggttgcag tgagctgaga 600
tcatgccatt gcactccagc ctggatgaca agagcaaaaa actctgtctc aaaaaaaaaa 660
aatttaccat aaatgacata caaaataaaa agtaataatc tagaaatagt caaaaactca 720
aaacgatgga aaaggaaggc cgcattaaat agagctctca taaataagca tcaaatctga 780
ctgtccacaa aaangggaag ccctgtaagn natataattt taatcattaa 830

<210> 1535
<211> 862
<212> DNA
<213> Homo sapiens

<400> 1535
atctttactt tgtgttggga gcattccagt tcttctcttc taggtatttt gaaatataca 60
ataaattatt actaacggta aacaccctac cttaagtttt cttctttaac atcttaatgt 120
agtcaattat ataaatatat tctatttttta aacttgggtg agttaaaaac atatttgtct 180
caaaattctc ttttgctgtc tgaaatatcc agattcatat ctcgcgttgt tgtctttgtg 240
ctaaccagct tctcagaaat attatttcac aacttcatgg ctttgcttag ttggaggaat 300
tttggcacct ggcttcttcc ttgctcagat ccagagggca ggtagtgttt aagaaaacag 360
gatttgcaat taggaagacc tcagtttgga ttaggttcat ccatttgata gttggtgacc 420
gtggaccaag ttacttctct gaatttcttt tgcacagcta taaatcaagg attataatcc 480
ttcacaaaat cataagaatc aaagccaaat aatgcatcta aaggtccagc ccagggctta 540
gcacactggt ataacacaaa ctagctgttg ttattataag tgtaaatcct gtggtatgcc 600
cctttatgac ctgcagatga cattttccac ttctactatt gatcataggt accttcatgg 660
ttaagaacat gcatttttttg cattgcaatt ttattcccaa atctattcat gtattcagca 720
gtgaacccga atacccggta tatgccagat ccttgctagg ctgggctgtg ggtgatacct 780
gttncacaag acaaatgtgg ctcaaagaga catgctcttg gccttgtaaa gcttgcaggg 840
aagatagcaa ttgagtattt gg 862

<210> 1536
<211> 795
<212> DNA
<213> Homo sapiens

<400> 1536
agaaagaggc ttctccaacc cggcccggcc cttccttccc ctttcccgca gtcgttgcct 60
cctcctcccc tgcctcctcc tccccttcct cctcctggcc gcttagtctc acacccgccg 120

09/09/2004 09:36:56

ggccgttgtt cccgagacgt tgttgagtcc cctgtgtcct cttctgggtg gaggaactgc 180
aatgtctggt ggagaacaga aaccagagag gtactatgtg ggtgtggacg ttggaacagg 240
cagtgtccgt gcagctctgg tggaccagag tggggtcctg ttggcttttg cagaccagcc 300
aattaagaat tgggagcccc agttcaacca ccatgagcag tcctccgagg acatctgggc 360
tgcgtgctgt gttgtcacaa aggggattcc catcgaaacg tcatcatgtg gctggaccat 420
cgagcagtca gtcaagttaa caggatcaat gagaccaagc acagtgtcct ccagtacgtc 480
ggggggggtga tgtctgtgga aatgcaggcc ccgaaacttc tgtggctgaa agagaacttg 540
agagagattt gctgggataa ggcgggacat ttctttgatc tcccggactt cttatcgtgg 600
aaggcaacag gtgtcacagc acgggctctc tgctccctgg tgtgtaaagt ggacatattc 660
agcagagaaa ggctgggacg acagtttctg gaaaatgatt ggnttggaag actttggtgc 720
agataattca gcaaaatagg aaaccaagtg ctaccttctg gagcttctct tggaaatggg 780
ctnacaccag angca 795

<210> 1537
<211> 718
<212> DNA
<213> Homo sapiens

<400> 1537
ttattattgt gaacttagtg acaagtgtgg cactattacc catttccttg tctgccccca 60
accctggggt cttgggcaga gaacaggagt tcttgccatt ttctcccagc tcccaccttg 120
tgctggcttg cgggtgctga ggtcatattt gctgggtgag agggtgcagg ccagatatga 180
gccaggcctg gcagagaggg ttttggtcag cagtgatacc tgcagtgttc tctgcagttg 240
gtttgggctg gccctgctcc tgagaactcc tgggttgtcc cttcaggcaa ccagggaagg 300
ctccttggag cagcagcatc tccccttacc actcgccgac accagcttcc gcctgaccca 360
gagaaggagt ttggggacag ccacagcacg tccagggctc ccaaggcagc tggcagagcc 420
aatgaggaga ccccaacacc catccgacgg ctgcagctct ccctgacgtg tgtcacccgc 480
agccctggtc ccagccgctg tgcttctcag ggcctgcctg cccagcccgg gtggatatgg 540
tgcccaggcg ggccccgggg acacaatgag ggccattctc agagccaggc agagcgtgtg 600
gggcagtcct gtcagtccta tgtgcaacag ctgggatatt ggttanggag tgctggcatc 660
angctggggc ttttncttct ctggcccttg ccctttgggg atgagcaaag cccccaaa 718

<210> 1538
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1538
aaagaaacaa accaagctct tgcaagaatt ttccatatca atgaaggcat tgagtaggcc 60
atttgggcta gctggctggt aaacagatgg ttgtgatact gtactaaact ctcaacaggt 120
gttgtggaag agttcagtat tgtcaacaat atttttgatc tgcagttggt tgaatctgca 180
gatgcaaaac cagtggatac ggaggcctgg ctgtatggta ttacacagga agagtttact 240
gagtgagaaa tgaggtcaag gatattctag gtggtcttag aaaagcagtc agcaaagggt 300
tttgagaaaa gaagaaaatg tttcttgaga agattaagag taacatatta aacgctgcag 360
tgtatttaag gctttggcat tctttccaac tcatagattg tcctcagcag tagataagat 420
tacttacctt aacctatatc atttctattc aagtctgtag aacttttttc atcttctttt 480
cttctttttt tttgcatgag tatcaattaa ggaaaaacaa caacaaccat gtttacaatt 540
tattaggttc cctgcagata tacgtggtat ctgatcagaa tagggaatac ttttaaagca 600

0956450.00700

agaagctaac aatttttttt cacacctgca atccttgata catagaagga aatctgattg 660
cgaagacctc tgttcataca gaataacctt aaagatatag gctagtctta tttcatacct 720
aagtgatatc aagtgtgtca ataatcattg atagtgaaat tttccatcaa cacagggtgc 780
ctatgagaat taagatgatc caattccnga gtntttgcn gtagaaacct g 831

<210> 1539
<211> 841
<212> DNA
<213> Homo sapiens

<400> 1539
gatcacgcca ctgcactcca gcctgggcaa cagagcgaga ctccatctca aaaaaaaaaa 60
gtcacgattc tgtgaatact cagttctgag ttcgaatctt acctctgtgc tcacactgct 120
agcagaatga ccgggtaaat ccctgtgcct ctgtttcctc ctcggtaaaa tgggcttgat 180
gctggccggg catggtggct cacacctgta atcccagcac tttgtgaggc cgaggtgggc 240
agatcacctg aggtcaggag ttcgagacca gcctggccag catgatgaaa ccctgtctct 300
actaaaaata caaaaattag ccaggaacga tgtcatgtgc atgtaatccc agctactcag 360
aaggctgaat gaggcaggag aatcgcttga acctgggagg cagaggttgc agtgagctgg 420
gattgcgcca ctgtactcca gcctgagcca cacagcaaga atccgtctca taaaaaaaag 480
ggctgatgct gtccacttcc aggccccatt atagagatgc agtagagatc aggtgtgtcc 540
tgtacctggc actgggtctg atgcttagga ggccttcatt cagtgacttg agagtgcttt 600
tttttggtgg ttatcaaata acaatagtga acattcatga agcagcagct acatgccagg 660
cttctatgtc tattgcctgg ctcantgccc ctaacaactc tgtgaggtag atcctaatat 720
ctncatttta cagctgagga cataaggcca gagaggttaa gtaacttatn caagggcaca 780
cagctggtaa gtcaagaagc agattccaac tttggcttcn gaatcttatt tgnaatcact 840
g 841

<210> 1540
<211> 851
<212> DNA
<213> Homo sapiens

<400> 1540
tagtaagttt ggaaattggg aagtgtgagt cctccaactt tgttcttttt caaggttgtt 60
ttggctactc tgtgtccttt gcatttccat gtgaatttca ggattcgttt gttaatctca 120
gattgaattt tgctagggat tgcattgaat ctgtatatca atttagagag tattgcctct 180
taacaatgtt aagtcttcca atccatgaac aggcatgcct ttatctaaat attctttcat 240
ttctttcagt gatattttgc agtttttcag catatgaacc ttgtacttat tttgttaaac 300
ttagttttta tactgttcta aactgaattg ttttcttaat ttctcttttg agttatagat 360
tactagtgta taaaaataca attgattttt tgcacattga tcttatatcc tgcagacttg 420
ctgggctcac ttatcagctc aattggtttt acaatctctt cttaatctgt atttctatcc 480
atatcagtct cctgagttcc agacctttac ttccaaccac gtttggatgt ttccacttag 540
ttgacctcat agagatatct ctaacttaat atgtccaaaa ttaaagtcat ccccttcacc 600
ccacttacaa caaacacaca agccaacctt ttcccttctg cagtttgcgt atctcaggta 660
ttatcatttg cctggttgcc caagcctcta atatgagaat catctttgat tcctcactgg 720
ttcaccctgt atagtcaggt agttctaact cctacgtaga tctcaattct atccctcttc 780
tggattggca ctaccctggc tcaggtttta tcattctctc ctagaatatt tcaataattn 840
cttactgggc t 851

0056203450.0020070

0050345 : 0070000

<210> 1541
<211> 838
<212> DNA
<213> Homo sapiens

<400> 1541
gatatatgga agatttaaac accattcatt ctttgttttt ccacaaagga ccgtcctcct 60
tctaatattt ggaagaaaat agatcaatcc agggactata aaaatggcaa tcaactcagg 120
gaatatcaac tggaagggct caactggctc ttgttcaatt ggtacaatag acgaaactgc 180
atcttagcag atgaaatggg tcttggcaaa actattcaat caattacatt cctctatgaa 240
atccttctga ctggtataag aggacctttc ctgattattg ctccactttc tactattgca 300
aactgggaga gagaatttcg tacgtggact gatattaacg ttgtggttta tcatgggagc 360
ctgattagca gacaaatgat acagcaatac gagatgtact tcagggattc acaggggcgt 420
atcattcgag gagcttacag attccaagcc atcatcacca cttttgaaat gattcttgga 480
ggctgtggag agcttaatgc aattgaatgg cgatgtgtga ttattgatga agcacatagg 540
ttaaaaaata aaaattgtaa actcttagag ggcctgaaac tcatgaatct ggaacacaag 600
gtgcttttga ctggcacccc tctccaaaat acagttgaag aactatttag tcttcttcac 660
tttcttgaac ccttaagggt tccttctgaa tcaacattta tgcaagaatt tggggatctg 720
gaaacagagg aacaggtaca gaaacttcag gctatcctga accaatgatg ttgagaccat 780
taaaaggaag atgtggnaaa anaagttggc accctaagga agaaaccatc nttgaagt 838

<210> 1542
<211> 806
<212> DNA
<213> Homo sapiens

<400> 1542
aggattgctt gaggccagga gtttgagacc accctgggca acatggcaag accctatctc 60
tacagaaaag aaaaaaatta gctgggtgtc atggcatgca cctgtggtac tagctgcttg 120
ggaggctggg cccaggagtt ttaggttgct gtgagctggg attgtgccac tgcgctccag 180
cctgggtgac agagcaagac cctatctcta aaaataaatc agttttttt tttttaaaag 240
aaaactaatt taatgaaata atagatgaaa acttctcaag tctaggaaga gatatagaca 300
gtcagataaa ggaagttcaa atgaaccaca ggaagataca atgataaaag atcttctgca 360
tggcacatta tactcagact gtctaaagtc aaagagaaaa tcttaaaagc agcaagagaa 420
aagcatctag tcacccataa aggaaattcc ttaagactaa caaatttctc agcagaaaca 480
ttacaggcca taagagaatg gggtggtata ttcaacatgc tgaaagaaaa aaaaacgctg 540
ccacccaaga atactatatc cagcaaaatt atctttcata aatgaaggag atataaagtc 600
accccggaca aacaaatggt gaggtaattc attactacta gaccagttct acaaatgctc 660
aagggagtcc taaacataga agctaaagga caacatttac cattatgaaa acccccaaaa 720
gtttaaaagt cactggcaaa gcagttnttc aaaggaggaa gtgaaagaac tcaaatgctc 780
cactncagaa atcnccaaag cacatg 806

<210> 1543
<211> 838
<212> DNA
<213> Homo sapiens

<400> 1543
aaatatgatt gtcccttcag tgggacatca tttgtggtct tctctctctt tttgatctgt 60
gcaatggctg gagatgtant ctacgctgac atcaaaactg ttcggacttc cccgttagaa 120
ctcgcgtttc cacttcagag atctggtnag ctggatttag ggtgcctttg agaattaaga 180
ttttactagt tatctccttt atttctttct tatgtatcta attgccaaac tgaaaagagg 240
agattggatt caaagcaaaa ttcattgaat gctaagaatg agagcgaatg tttttaatga 300
agcaaaatgt ctgttcataa aataaattgc cactttggtt ttaatatgta gaactttgct 360
tctgttttca tagcctttct atttcttgat ttctcgtgat gaatgtttac attcacacag 420
caacttctag cgggatcacg cctttctgct ccacagcttt gctcactctc aatcaaatct 480
gacctttaa cataatgtga taaattcatc tccactggga aaaatacctg tggcaattta 540
ctcatattgn tatttattct tttacaatat caataggata aaaatgtaaa cttaagaaaa 600
catgaaacgt tagatttaat tntataaagt ctagaattaa tgactaggta attgaatatt 660
tctggaatca gaggcgatna gcatatgcct aaacttaaca tggtgccttc atcaccaaac 720
cccctcaaaa aattatagat tttcatagnc agtgtctttt ctattctttg aagtattana 780
ggaaatttct ctggcttggt acatttccat tctctgctct angggtaaga atttttgg 838

<210> 1544
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1544
aaaaaacaat atcgtttgct gtcacttaaa tatcatccag ataaaggagg tgatgaggtt 60
atgttcatga ggatagcaaa agcttatgct gctttaacgg atgaagagtc ccggaaaaat 120
tgggaagaat ttggaaatcc agatgggcct caagccacaa gctttggaat tgccctgcca 180
gcttggatag ttgaccagaa aaattcaatt ctggttttac ttgtatatgg attggcattt 240
atggttatcc ttccagttgt tgtgggctct tggtggtatc gctcaatacg ctatagtgga 300
gaccagattc taatacgcac aacacagatt tatacatact ttgtttataa aacccgaaat 360
atggatatga aacgtcttat catggttttg gctggagctt ctgaatttga tcctcagtat 420
aataaagatg ccacaagcag accaacggat aatattctaa taccacagct aatcagagaa 480
attggcagca ttaatttaaa gaagaatgag cctccactta cctgcccata tagcctgaag 540
gccagagttc ttttactgtc tcatcttgct agaatgaaaa ttcctgagac ccttgaagaa 600
gatcagcaat tcatgctaaa aaagtgtcct gccctacttc aagaaatggt taatgtaatc 660
tgccaactaa tagtaatggc ccggaacccg tgaagaaagg gagtttcgtg ctccaacttt 720
ggcatcccta gaaaactgca tgaactttct nnatggccgt cagggcttaa caattaagct 780
ccttctgcag ctcctctatg aaaggncatc taaacggttc taacatagaa g 831

<210> 1545
<211> 850
<212> DNA
<213> Homo sapiens

<400> 1545
aatgcgcttg cgcacgtgct gtctaccagt tcctgagagg gacgcgtgcc gcggagccag 60
gcttactacg tgacccggac accaggcata cgctaggggc agtcagctgt gccttctctt 120
tcggagttgt tccgtgctcc cacgtgcttc cccttctcca ctggctggga tcccccgggc 180
tcggggcgca gtaataattt ttcaccatgc atcggaaaaa ggtggataac cgaatccgga 240
ttctcattga gaatggagta gctgagcggc aaagatctct ctttgttgta gttggggatc 300

09525045.020705

gaggaaaaga tcaggtggta atacttcatc acatgttatc caaagcaact gtgaaggctc 360
ggccttcagt gctgtggtgt tataagaaag agctggggtt tagcagtcac cggaagaaaa 420
gaatgcgaca gctgcagaag aaaataaaga atggaacact gaacataaag caggacgacc 480
cctttgaact cttcatagca gccacaaaca ttcgctactg ctactacaac gagacccaca 540
agatcctggg caataccttc ggcatgtgtg tgctgcagga ttttgaagcc ttaactccaa 600
acttgctggc caggactgta gaaacagtgg aaggtggtgg gctagtggtc atcctnctac 660
ggaccatgaa ctacttaagc aattgtacac agtgactatg gatgtgcatt ccangtacag 720
aactgagggc catcaggatg ttggtgggaa gatttaatga aagggttatt ctggctctgg 780
nctttttgtaa aaagtgntcg cattgatgac cagttnaaat tctggccatt tcttccacgt 840
tgccccatgg 850

<210> 1546
<211> 846
<212> DNA
<213> Homo sapiens

<400> 1546
cagttacagt ttcctggagg gagtggatat tttcctaagc acttgggcta tatcagagaa 60
cagaataata ccatacattc cagaaaatgt tgtcatcttc agcttaatac taaaaccctg 120
aacaaaaaaa gttttggcca ggcacggtag ctcacgcctg taatcccagc actttgggag 180
gccgaggcag gtgaatcacg aggtcaggag atcgagatca tcctggctac agtgaaaccc 240
catctgtact aaaaaatata aaaaattagc tgggcgtgat ggtgggtgcc tgtagtccca 300
gctacctggg aggctgaggc aggagaatgg cgtgaacccg ggaggcggag cttgcagtga 360
gctgagatcg cgccactgca ctccaacctg ggcaacagag cgagactcca tctcaaaaaa 420
acaaaaataa aaaaaataaa gtttttgctt cagaacacct tgtggagctc ttgaaacttc 480
tggcgagggc gtcacctgtg tgatgtgggg taagaagtct tcttcgttct atccgcagaa 540
accatagaat gtggctttca tcagttggtt gaccaggttg gcttangtgt tacagtgcca 600
gcaacatttc catgagcttc ttgctcagtg cctctctctg ccgnctgcac tttctgcatt 660
tctangctcc catcgttgca gacagatgga atcgcgggca cttctgtcca actcaccttc 720
cccaaaagcc aagccctatg aaggcagcca gaggaacttc actgacttgg ttccccactg 780
gcttgtccca aaagaagccc aaaggaccca ccccttcaac ttccaaagnt tcggaaatct 840
ggnant 846

<210> 1547
<211> 820
<212> DNA
<213> Homo sapiens

<400> 1547
tgtgatacag cacataaaca gaattaaaaa caaaagtcac atgattggag tgttggcaag 60
atggctgaat aggaacggct ctggtctgca gctcccagca agaccaatgc agaaggtgga 120
tgatttctgc atttccagct gaggtacctg gctcatcaca ctgagactgg ttagacagtg 180
ggtgcagcct atggagagca agtagaagca gggtagggcg ttgcctcacc caggaagtac 240
aaggggtgg ggaactccct cccctagtca agggaagcca tgagggactg tgctgtgagg 300
gactgtgtta tctggcccag atactatgct tttcctacag ttttcacaac ccacagacca 360
gaagattccc ttgggtgcct acaccatgag ggccctgggt ttcaagcaca aaactgggcg 420
gccatttggg cagacaccga ggtagctgca ggagttattt ttcttacctc agtggcgcct 480
ggaaccacag caagacaaaa ccgctcactt ccctggaaag ggggctgaag ccagggatct 540

0095/2009 09:45:50 PM

aagtggtcta actcagtgga tcctacttcc atggagccca gcaagctaag atccactggg 600
ttgaaattct tgctgccagc acagcagtct gaagtcaacc tgggatgctn cagcttggtg 660
gggggaaggg catttgccat tctgagcttg agtaggcgtt ttcccttaca atgtaaagaa 720
agccatgtgg gaagtcgact ggcanaccca ctgggtgcgg aaaaccttg tnccagctgc 780
ctttctagat cgccttttgg cagcatataa ggtcntaatc 820

<210> 1548
<211> 855
<212> DNA
<213> Homo sapiens

<400> 1548
gacactcttg attaatgtga tccagaacca ttgtgaatat ccacatttga aaatgccact 60
attacatgta ttttcaccta tgaaatgtaa acatgagaat gggtcacaaa ccttgctgag 120
atacagatgc taaagagcct gctagatgta ttcattaggt acaccattca catgcgtgca 180
caagcctcaa agcatgttat tcaaatttgt gccttagcaa aatgatgcct gctatacatc 240
atgggtattt ggagctccca caaagagtag aaattgtaaa cgttagatcc ctgaatgtca 300
gtgatctact atagatgtaa ctattgttgg tatgacactt cacacatcag ttagaataat 360
atcgcccaac tttaagatct aacaatggct tgctgtaata ttttattgat gatttttaaa 420
gtaagcatac tatagctgaa ttcttctaaa ttttatttta tattcaaata taaaataatt 480
actataaaaa acaaaatcac agaatggatc cacatatata ctgtcatata tgtgacaaaa 540
cattcacata tatactgtca attgattttt gacaaaagca ccaatgcaat tcaatgggga 600
aatggaactt caacaaatgg tactagaaca tctggatatc taaatgtggt gggagggaat 660
catgaatttt tttcacatag catacacaaa aattaatttg aaatgngtca ttgatctaaa 720
tttaaaaacc aaaactatcc acatttagac caaaacatct aagactatct ttgaaagctg 780
ggggtaaaga aagatttcta ggacatagaa ggcattntta gagaagacat tcccaatgga 840
cttntcaaaa tttaa 855

<210> 1549
<211> 772
<212> DNA
<213> Homo sapiens

<400> 1549
gaaaaatgat gctctcccca cttctctccc ttccgtaagt atttcctaag tgcctactat 60
gtaccagata ccattctagg tgcaggggac atgtctgtaa acaaaacaaa gtcctttctc 120
ttaaggaggt tactttctag tagagacaga caaataaatt aataaagaga ggctctatca 180
gaggtgaaag ttctctgcag aaaatcaaag caggggggca ggtgtggtgg ctcacgcctg 240
taattccaac actttgggag gccgaggtgg gcggatcatg aggtcaggag ttcaagacca 300
gcctgaccaa catggtgaag ccccgtctct gctaaaaata caaaaattag ccaggcatag 360
tggcatgtac ttgtaattcc agccactagg gaggctgagg caggggactc acttgaaccc 420
agcaggtgga ggttgcagtg agctgagatc gcgctactgc actccagcct gggaaacaga 480
gcaagactct gtctcaaaac aaaacaaaca aacaacaaac aaacaaacaa aaatcaaagc 540
aaagcaaggt aaggagatat gaagatctcc aggaaggaga agtggtcaga aacagaatga 600
gtcaggaaag gtcagggtaa taaggtgttg tctgagtaaa ggcctttgta gtgaaagggg 660
agcagataga tacctacgta aggaatgccc ctggcagaga aaagagcagg gacaaaggcc 720
ctgtgcagga agaattcaag gggccaantg cagaacccan ggangtggct ga 772

0960450.0200

0050204600

<210> 1550
<211> 818
<212> DNA
<213> Homo sapiens

<400> 1550
gatcacgcca ttgcactcct gcctgagcaa caagagcaaa actccgtctc aaaaaagaaa 60
aaaaaaaaat cagccgggca tagtggcggg tgtctgtaat cccagcaact cgggaggccg 120
aatcacttga acccgggagg tggaggttac agtgaaccga gatcgtgcca ctgcactcca 180
gccccggcaa cagagagaaa aaagaaaatg tggtcaggct ctgtgttcta ctgtcttccc 240
tcctgttttc tttccctttg tattattttt gattttcttt actatcatct tagagagatc 300
ctaagagaaa actgagacga acacatgtgt ttaggcctgc catgtggaaa tggcggtctc 360
tattcattct atttacacgg aaacatttaa caagcagctc ttgaggaggc cagagaggtg 420
caggcctagc cctgtcagca ccaccctcca cagatgccca aacagcccca gcgcatttct 480
ttaccttgat ttctttccta ctcatttcct ccagctgtgc aagggtaaag gcaaaagcac 540
aaagacctgg gttggaccct gcctccattt gccgcaccat gatcttacca catggattct 600
tagagcgtaa ctgctgcccc atggaccagg ttagctaaga gaggttccat gaaactgctg 660
ttgcagaaat gcttctaact ataaaatgcc aaacctggga aagaatgttt ggattctcat 720
agcctggatc agtaggacac tgccttggcg ttgctggtgc cccaccccaa cttanccang 780
ccaggggggaa ggtagagccc cagcccctga gacccttn 818

<210> 1551
<211> 851
<212> DNA
<213> Homo sapiens

<400> 1551
tagccaacaa tttacaaata ataaaatata cattgcttgt attataaatt ccatttagcc 60
agttgattct cagagactgc ttccattgat ttttgccgaa ttctggttcc ataaccagcc 120
gatggctgcc atgcatgaac agttgtcttt ccagcgtaaa tattgggtaa tatttttgcc 180
acagaaacaa caaagacata tgtcagaact tcattcactc accagggatg ggaacaactt 240
ccttgctaaa ttggaaaata attttcaaat actgaaagaa tatctcttca gttttgtatg 300
ctgttcacag tgtaatacct acagacacga aacactttta agttatacct gcagtattaa 360
tgctttctcc atcactttct taagcccaga aaatcaacag taaacccagc ccttgtttgt 420
agcatttgtc gatttccata tgggaatatc ccgccatggc caatttcaag ctgctcacgt 480
gacgtcactg aagacgggtt ggtaaaagag gggtccagta gccaccatga gatagtgctt 540
cccctgtgta gatagaacag atgtgagtaa ccctgaagca cagataatga caaaatatag 600
tgagatcatg aggaaggggc aatttgtgaa tattcattac ctttgntttt agtataattt 660
attcaattgt aagcttctat aatttaatgt ttaataaaga ctgtgtttaa caaccagctc 720
acaaaggttc tgaaaatgtt cacaatcagt tccgttaagc cagtgctggt cggctgcagc 780
gcaccactgn atattgggaa ttgnacgggt agaaggttgg ctttctcttg ggacaagcnc 840
ctttaagggg a 851

<210> 1552
<211> 414
<212> DNA
<213> Homo sapiens

<400> 1552
cttataatga gtttatcagg acataacccc atcatcagtc aaggtgctcc catagtatgg 60
aatggctgga agtggggggt agttaaaaag agccatgtgg gctgggcgcg atggctcacg 120
cctataatcc cagcactttg ggaggccgag gtgggcggat catctgaggt cgggagttcg 180
agaccaggct caccaacatg gagaaacccc gtctctacta aaaatacaaa aaaaaaaaaa 240
attanctggg catggtggcg catgcctgta attccagcta cccagctacc cagctacccg 300
gctgaggcag gagaactgct tgaacctggg aggcagaggc tgcggtgagc caagatcgcg 360
ccattgcact ccagcctggg caacgagcaa aactccgtct gaaaaaaaan nnaa 414

<210> 1553
<211> 243
<212> DNA
<213> Homo sapiens

<400> 1553
ttgctacatc aaagagagag atccttttgt ttgtttgttc gtttgttttt tgagactgag 60
tttcgctctt tcgcccaggc tggagtgcat tggcatgatc tcggctcact gcaacctctg 120
ccttctggtt tcgggcgact cttctgcctc ggcatcccga gtagctggga tgacaggtgc 180
cagccaccat gcccagctaa tttgagnatt tctagcggag atggggtntc accatgttgg 240
nca 243

<210> 1554
<211> 866
<212> DNA
<213> Homo sapiens

<400> 1554
caataaaatt gtctaattgt cattctaacc ctattatagc agtttctcaa actcttaaaa 60
aatggaaaag atgcctgtag tgtttaatgt tatgcctcaa accttacttt tcccccagtt 120
ttcttttaca tcagtgcaaa gcactcttta tgagcactaa atgtgggtaa aggtacaagt 180
cagagagcac ctgtttagta tatgtggcat tttaaattga gtccttttgg ggtactagtc 240
tatcaagaga gacacatttt cttatccatg tcaattttgc ttcctatttt cttatccatg 300
cctttcactt ggaatgacaa cagttgacat taaaaagctg ttggcaggta tggaataacc 360
ttattctgtt accaaatagc aaagaccaaa gtgcatgtga ggtgtctcac aggtttaata 420
aatcagcaat tacatctctc gagtgtgata tttataggtg gcatttagaa cttggggcgt 480
aacaatgcgt acaaagacat cattctatct gcacctaatg tccgaaattc ctactgctcc 540
agcaaaattt ctgacgtgtt agtttcagga gtagcacgca aactgtgttt tttaagttat 600
gcagacagca acctgtccta catgcaagtc acaatcactc atgaaaatta gtttatgttg 660
cttatagctt cgcagcttgt gagctttcac tagagccgag gaagacttca aagcgactag 720
atgttagcac ttctgccgaa nggatatttc ctggatttca ctccatgtgn tttatccctt 780
cttccatcta aggactctag ctnctaacct tcccggcctt aaggggttac cacaggcatt 840
tttaaccgca ttccctttt ccnttt 866

<210> 1555
<211> 859
<212> DNA
<213> Homo sapiens

0502450 : 0502000

<400> 1555
gagaaagaat aggtcagaag caatagtaaa agacataata acttgagaat cttccaaaac 60
taatacagac ttgcatattt gagaatcact gtagctctaa gcagaatcaa taccaaaaaa 120
caaaaataaa gggaaaagag aggaaaaatt gccaaaacaa agaaaatctt aaaatcagcc 180
aaaggaggaa aaagatacat taccttcaaa ggagcggcag taaagacgga cagtctactt 240
tgcaaagaaa tggaaatcaa aatacagtgg aacgatatct tcaaagtgtt gtaagaaaat 300
aactgccaac ctagaaatct gtatgaagca aaaatatctt tcaaaaatga agtgagaata 360
tagacatctt cagacagaca aaattagaat tcatcaccag cagatctaca ctagaggtac 420
tataaagaaa gttcttcagg taaaaggaaa attatcccag ctggaagcat ggagatgcag 480
gaaggagtaa agagcactgg aaaggataga tagacgaata catctaaaat aatgtgaact 540
gtgtaaaaca gtaaaaatat tgataggtgc agcaaaccac catggcacac gtttacctgt 600
gtaacctgca catcctgcgc atgtacctgg aacttaaaaa tttttaaagt aaaaataata 660
aatggcaaca gcaacacaga aagctggaag agagttctga tgggggaaaa acacaggtta 720
tttttcctcg gctctcactc tacaacagtg atcatcacag aggacttctt tgaccaaatg 780
tgtggatttc ttccccacgt gccaaggcaa ggccatcagt ttntgcaatg ggccnccaac 840
ttgggtcggg cttaacncc 859

<210> 1556
<211> 714
<212> DNA
<213> Homo sapiens

<400> 1556
cggccgtcag cttccaccag gtggacttca ccttcgaccg gcgcgtgctg gccgccgggc 60
tgctcgagtg ccgcgacctg ctgcaccagg ccgtgggtcc ccacctgacc gccaagtccc 120
acggccgcat caaccacgtg ttcggccacc tagccgactg cgacttcctg gctgcgctct 180
acggccccgc cgagccctac cgctcccacc tgcgcaggat ctgcgagggc ctgggccgga 240
tgctggacga gggcagcctc tgaaccccgg cgccgcccaa ccgcgcccct cgcgcctttt 300
ggggctctcc tgctgggcgc gggtggggtt tgtgggtttt tttccacctc ttttctccca 360
atcggactcc ggccaaactc ccctagacag atgggtgacc tgtctccttt gagaggatgc 420
tgaggcatct gtagcagctg tttcaaacac caatgtcacc tctcctcctg gcccccgccc 480
aatggggaga ggaatttggg gccctactct ggggaccacc tttcacccgt ttgtactttc 540
tgggccacgc cgacccctgg gtcgcttgat gtaaaagcca aaagctgctg cctnccactt 600
ggatcatgtc gcctgggatt ttcatccctc gacaaggact aggggttcac acggtgaact 660
gggggaangg aagtgttaag ggggcaagtc gnggnacccc ccctttcata aact 714

<210> 1557
<211> 803
<212> DNA
<213> Homo sapiens

<400> 1557
gctaggtcgg ctttaaaatc gatgcagagt aattgcagta catgggtagt tggatgacat 60
taacatgaga aatgtgctgt agtcgtcatc cttggaacaa acacgtccaa ttacagtgaa 120
attctgtgcc ccttacccgg ctaatttgaa cacagctcac cgccaaggcc tcctccagca 180
tggccagccc tgggcagaga tcgtcacgaa tggatttgac gggaatgggg ctggggactg 240
tcatgttgaa gcccggtgga gatgtgggac agggacctcg tttgttccag agcctgttcc 300
aaccctccct ggcttttgtg gcatgttttc tatgccgttt gctgcaagga tgcgttgggc 360

0305203-020000

atggagtaac attcccgaga ccgtcctgca gtactgcacg tgtgcgtgtc tgtgctttgg 420
tttgtctgtg tgtctacctt gttttagagt aaaaaagtga atctgaggcc agatcatcag 480
tctgcacctg cctctcctca gtataatatc aatacagaag aattatattc ctacctaaag 540
gaattcatcc acatactata tttcaggcat ctattggtga atcccagaga ccgccgagtt 600
gtgattatcg aatcggtatt atgtccttct cacttcagag agacactcac tcgtgttctt 660
ttcaaatatt ttgaggntcc atctgtcttg cttgcttcaa gtcatctaat ggctcttctg 720
acgcttggaa ttaattcttg ncatgggcct anattgggga tatagggaaa gcctggtgtt 780
acccatatnt gaaggaatcc caa 803

<210> 1558
<211> 698
<212> DNA
<213> Homo sapiens

<400> 1558
gaattttgtg gggacacaga tagtgagatt atagtggttg ttcatctctt ccctgccatg 60
ccatgcacac acgtggcacc ttgggtttgt ctgggggggag aatgatgttc ccgttatccc 120
gatggtgtcc agcttttgta tttgtcatgt cagctgctgg gcctgtctta gaagttgcta 180
ataacttcca ctttaatatt actcttattg atgcattggg ttttttttatt gaccaataaa 240
taatttaggc attggcaatg ttaagaccat aacataaacc ttttctaagt aatttttcca 300
tattgagctt attagcatct tttggtatct gctgggtttt tagctttaca acaggcactc 360
acatataaac atgtttatcc tatttagatt tgtagttcct gggagtcaga gttctgtgag 420
cagtcttaac ttataaagca tgttcagaca tgcttttcag atgattttgt ttcattttaa 480
aaggggaaat ggcattaacc taataggaat tctcctcctg aacctcagag gcagcagatg 540
gtacagctct ctttgaactt tactgcccag gtgaacgttc tctgcattta gatcttcagg 600
agttttacag actagtgtgg agtgggacat gtaagggnca agangaagag gcaggtttca 660
acttgagctc ttcttcctcc ttaaagcang gacaagtg 698

<210> 1559
<211> 694
<212> DNA
<213> Homo sapiens

<400> 1559
gaatattgtg catttaaaag agatgaggtt tcaccatctt gcccaggctg gtctcaaacc 60
cctgggttca agcgatcttc ctgcctcagc ctctcaaagt acagagatta caggcatgaa 120
ccaccgtgcc tggtcctatt tttaattttt tgaggaaact ccatactgtt tttccataat 180
ggttgtacta atttgtattc ccaccagcag tgtgcgaggg tttcctttcc tttacatcat 240
caccaacact tgttcattgt ttttatagta gccgttctaa cgagtgctag gtgatatctc 300
attttggttt gttttttatt tatctatttt tgatggagta tcactctgtc acccaggcta 360
gagtgcagtg gcatgatctc agctcactgc aacctcagcc tcccaaatag ctgggattag 420
aggtgtgcac tatcacggcc agaaaatttt tgtgtattta gtagagatgg ggtttcgcca 480
tgttgcccag gtaggtctcg agctcctgac ctcaagttca ggtgatctgc ccacctcagc 540
cttccaaagt attgggatta cagacatgag ccaccatgcc caccctaatt aacagtattt 600
gtcaaatttt aatgtgcatc anattcttag gtttcagctg gcatctgttt ccagctcttg 660
gtgctatttg caaccttgna tcttangatg aagc 694

<210> 1560

09/05/2005 09:50 FAX 0001/0001

<211> 770
<212> DNA
<213> Homo sapiens

<400> 1560
actagcgacc ggtgacctct ttttcccccct tgcctggctc ctgtggtggc aggctgggca 60
cgaggaccat gctgggccgg agcctccgag aagtttctgc ggcactgaaa caaggccaaa 120
ttacaccaac agagctctgt caaaaatgtc tctctcttat caagaagacc aagtttctaa 180
atgcctacat tactgtgtca gaagaggtgg ccttaaaaca agctgaagaa tcagaaaaga 240
gatataagaa tggacagtca cttggggatt tagatggaat tcctattgca gtaaaagaca 300
atttcagcac ttctggcatt gagacaacat gtgcatcaaa tatgctgaaa ggttatatac 360
caccttataa tgctacagta gttcagaagt tgttggatca gggagctcta ctaatgggaa 420
aaacaaattt agatgagttt gctatgggat ctgggagcac agatggtgta tttggaccag 480
ttaaaaaccc ctggagttat tcaaaacaat atagagaaaa gaggaagcag aatccccaca 540
gcgagaatga agattcagac tggctgataa ctggaggaag ctcaggtggg agtgcagctg 600
ctgtatcggc gttcacatgc tacgcggctt taggatcaga tacaggagga tcgaccagaa 660
atcctgctgc ccactgtggg cttggtggtt tcaaaccaag ctatggctta ntttcccgtc 720
atggnctcat tcccctggtg aattcnatgg atgtgccagg aatcttaacc 770

<210> 1561
<211> 693
<212> DNA
<213> Homo sapiens

<400> 1561
agctggaagg agggaggtta gagccaccca tgggttcaga agctgataag caggttattg 60
actctgaatt tgcctcatcg tatgtaaatt ggggacaaat ttggggattt aatgatataa 120
tgtaagaagc agacatgtca cagccctggt tatacagtca gtgtataata agtggtaagc 180
cgtcagagga ggcagccggt gagaatggga gcatctcagc agccctccgc cccctgctcc 240
tggttgcaga tgtacctgtt cttggctatt tgtgccccag ctccgtgtcc tccggtgtgt 300
gtgaggccaa gctcctgggg tggggacttg ggggtgtgtc tgcagctcct gaggccaaga 360
ccaaggctga ggccgaggct gaggctgagg ccaccttggt gaggaggaaa ttgcaggtgg 420
agaagctcgt tgaccgtgac cttgatctga ccgtaatttt gatggtgccg atgccgtcag 480
cacgcaggcc tcctgccctc gccacgactg gctcctgcag cccacctggc tgagaggtgt 540
gctggctctc gcaggttgca aaatggggac atcaccgtcc gcctgggcta cagcgtgctc 600
gccgattgca tttggggagg gactganggc tgattgtgtt gtggggatgt tgcagagaat 660
taganaaggc attccaaaaa ggccaacant tcg 693

<210> 1562
<211> 689
<212> DNA
<213> Homo sapiens

<400> 1562
tcatccatgt ggatacatgt agctatagct tattgatttt tccatgtgaa ccttttgaaa 60
tactggatat taattcaaga caagttcttt aaatttgagc ctaaaaccca gtagcactct 120
gtacattgaa aatttcagat tcataagaaa ccatcagtcc tgactggaac ttcataattt 180
gttcatttgt ctgtgttttg ggggaaaaaa ctttaaaacc tcaaccattt atcaaggaat 240

0503250.0003

ttgattaaaa aaaataatct atcaagtggc tgatctctta cattaaggga aaaaacaggc 300
aaagcattca tttgaaggag cctagccatt ttctctttct tatttaaaga cttggcttgg 360
aacttagcag ttacatatgc agggtagcga gttaaaaagc catgtttaat taacaggcgc 420
tttatacttc tgtatccttg ttatgatata gcaccttgtt cttcagtgta gaaagtgatt 480
tctgcatatt ttaaaggact ggcatcttta tggtaagaaa gccatataaa taaagatata 540
cttagatgaa aatcggaaca tgtttttaaa atagtgtgtg tctactttca tctctgttat 600
caaacttgct gcataagcca gagttgatgc tctgtgatta tgctaatgac caaaagaatc 660
gatgatgcga gactngatgn aatcagngg 689

<210> 1563
<211> 725
<212> DNA
<213> Homo sapiens

<400> 1563
ttttgaataa gaattggcgt taactcctcc ttgcaatgct gtgagcattg tagaaaaaac 60
ctgggcaggc actaggaaaa tgagctcttc tggtggttct gccactggct ggttgtgggg 120
acctgggtac atctgtcacc ttcttgggcc ttcttaatta ggaaatgctg ctttcagaat 180
ctcttagttt catttttttt gtgtgggttt tctcttttc ttttttcttt ttttttttt 240
ttcattttaa tcttctattt ccatggctgt gcctttccag aattaaatga aatgtttctt 300
gatgcanact gttataatct agtagggtgg tttggcaaaa aaaaaaaaaa aaaaaaaaaa 360
gtggagggaa aaggtaatga gtganatgtt ggcaaaaagg gctgtgtcca caattgctca 420
tcaaagctca tgtgttactc accccatntc agctgctgag ctccaaacac tggtgcagta 480
aaataaaaat gaaaatgcct cctgcctcct actgcttcct cctacataca ccttaaggaa 540
acaagatcca gattttctaa acaattttct tcattttact ttattttgat tggcaaaatg 600
tcataggaaa tgacttgtca gtgtatcaag tttacatatg tatttccatg accatacata 660
gaatgttggc acccatagat ttgaaatcag actttntgct gcatcattag nattcataan 720
ccggt 725

<210> 1564
<211> 763
<212> DNA
<213> Homo sapiens

<400> 1564
aattgcgagc gagagtgagt ggggccggga cccgcagagc cgagccgacc cttctctccc 60
gggctgcggc agggcagggc ggggagctcc gcgcaccaac agagccggtt ctcagggcgc 120
tttgctcctt gtttttccc cggttctgtt ttctcccctt ctccggaagg cttgtcaagg 180
ggtaggagaa agagacgcaa acacaaaagt ggaaaacagg taagaggctc tccagtgact 240
tacttgggcg ttattgtttt gtttcgaggc caaggaggct tcgggaagtg ctcggtttcg 300
gggactttga tccggagccc cacatcccca ccacttgcaa ctcagatggg accggaggcg 360
gtgttaaatg gggagacgat gtcctagtac gagctctggt gaccccagga ctctgcgctg 420
ctgcgcttgg ggcttgcccg acggtggaga ccggggagca tctctgggcg tggagacccg 480
ggcgcagtac cccgggctca gaggggtcgg gggttcccgg gcgtgctgag ggcgctgctg 540
ccgggtgggg agagctgcag gtccggcacc gagcgctgct ttgttcggag ggccctgagc 600
tggctagaaa cccttctggt tgcaggtcgg ccagtaccta cggagacaaa tgccagcact 660
tgagtcttca ctcggtctta agaaactggn ctggtctgac ctgggaattg gctatatgct 720
tccccgggac ttggaaccgg nacaattccc cggactgtgn aat 763

US 2005/0059005 A1

<210> 1565
<211> 713
<212> DNA
<213> Homo sapiens

<400> 1565
aaaatgagaa acccctacac agggctctat gtcccctcgc cctctccagt caaggccacc 60
acaagccaag ggaggtctgg gcgtgagagg tgagaccctg tgctcccct gccctgggtg 120
gaggaagggg gtgccctgcc accctgagaa caatggtgtg tgcagaagag aagggactga 180
aactctttga agatgttcca ggatttagca cccagggagc ggcggagact cagccccacc 240
agcctccggc acggagggag gaaagcgttc cccaggctgc tcaggagaac gtttgttgct 300
gtagtgggca gtcaccttcc aaccggggac agtcaccccc ctgctcgggg acagtcaccc 360
ccccgctcgg ggacagtcac ccccccgctc gggcacagtc acccccctgc tcggggacag 420
tcatcccccc gctcggggac agtcaccctc ccggaatggg gcttcctttc tcggggctgg 480
gaatcaccct ggatccctcc ccactcgggg tgctcttggg ccatctgagg gctcctgggt 540
cactcttggg ccttctcagg gttcctgggt cattcttggg ccatctgagg gttcctgagc 600
ccaatgacac ttctgcctaa gctcgcgctg cgggaaggna agaagccagg ccaaggtccc 660
ttccgtggcc ccggtgcaaa ccttggcctt tgggaaaaaa aggaancccc ccn 713

<210> 1566
<211> 666
<212> DNA
<213> Homo sapiens

<400> 1566
gaaaatgtgt atgtgtgtat atgtgtgcga gtgtgcgtgt gtgcgcgcgc tgtacctctc 60
cctgcgtggt gaagccatca gattgtgcgc tcactgatcc ctgttgttga gtctgataag 120
ggtgagctca gaagccatca gatcgtggcc tcactggtcc cagttgtgga gtccgatgag 180
ggtgagctca gatgctctgt ggtcactccc tgtgccgtgc ttcggggacg ctgagatgct 240
gcaccagcca ggcagggcgg ggtgggcccc acttccatcg agctcctgcg gatgatgagc 300
accacccagg agccacctgg ggggcagggc aggggctgaa tcccactggg ggtgactgtc 360
tctcacatga caggagtcca gggcatgcat ggaggctcct ccgtgtcatc tagcgccagc 420
tccttctgtc actcctctgt ggcctggagc ggcctgctgt ctcccggtca cgagccagcc 480
cgtgggcatc agcaccgcaa gagcagggtc cgtccatctt ttgaggcacc cccacccccg 540
ccacacagtg ccttctgttt cctctcattg ggcagaatcg tgtcatgtgg ccgcccagtt 600
gcaagggagc ccgggaaggg tgcctgggcc cttgtncaac aaaactggct ggttgggann 660
aatgcc 666

<210> 1567
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1567
ctggctggac cactggctac agcaccgcaa gcagatcggg ctgctcagct tcttctgcgc 60
cgccctgcac gccctctaca gcttctgctt gccgctgcgc cgcgcccacc gctacgacct 120
ggtcaacctg gcagtcaagc aggtcttggc caacaagagc cacctctggg tggaggagga 180

US 2005/0042600 A1

ggtctggcgg atggagatct acctctccct gggagtgctg gccctcggca cgttgtccct 240
gctggccgtg acctcactgc cgtccattgc aaactcgctc aactggaggg agttcagctt 300
cgttcagtcc tcactgggct ttgtggccct cgtgctgagc acactgcaca cgctcaccta 360
cggctggacc cgcgccttcg aggagagccg ctacaagttc tacctgcctc ccaccttcac 420
gctcacgctg ctggtgccct gcgtcgtcat cctggccaaa gccctgtttc tcctgccctg 480
catcagccgc agactcgcca ggatccggag aggctgggag agggagagca ccatcaagtt 540
cacgctgccc acagaccacg ccctgagccc gttaggtttt cttttcttgg tggtgcaaag 600
tggtataact gtgtgcaaat aggaggtttg aggtccaaat tcctgggact caaatgtatg 660
caagtactat tcagaatgat atacacacat atgtgtatat gtatttacat atattncaca 720
tatntacagg atttgcaant at 742

<210> 1568
<211> 762
<212> DNA
<213> Homo sapiens

<400> 1568
gattttgttt cattttaaaa ggggaaatgg cattaaccta ataggaattc tcctcctgaa 60
cctcagaggc agcagatggt acagctctct ttgaacttta ctgcccaggt gaacgttctc 120
tgcatttaga tcttcaggag ttttacagac tagtgtggag tggacatgta aggacaagag 180
gaagaggcag gtttcagctg agctcttctc ctccttagag caggacagtg ttgggatggg 240
ctgattgtga gtatggagtt ctttctggag gagctccagc aggagctggg caaatactgg 300
gagctttgac taaggggcat gcattgcaga tgaggtttga ccagaggttt tccaggatcc 360
ctgaagaact ctgcacttct aagcctgtaa ggccacaaca ggtgagatga agggggagtt 420
gaacttccag ctccttgtgt gtcccctagg gttccccttt tgggtccaca caaaggctct 480
tgagcccaat ctgaaggtct aaggctatgg atatctcctc catttctaag ttgggacaag 540
gttgtccagc aaaaagaaaa gcaaagactg gtccaatctt agagacgttt gttttggaag 600
cagagctggg ctattagctt tcctcaagaa ggaaaaagga gtgctacaaa agttaaatac 660
tgatttttaa aaaaaattgg cattcacaca atttctacta ccacagatga gacttctttt 720
tggtttctca aaaacttang ctctncnagg aatggtggag ct 762

<210> 1569
<211> 718
<212> DNA
<213> Homo sapiens

<400> 1569
tccagtggta cagttacagc ctttttctgc tgagttcaag ggattttccc aacgcagcat 60
cccaaagcgt tgggattaca ggcataaacc accacaccca gcttcatgtt ttgaatttta 120
taactccctt ttcagtgagc ctttcccttt ttctgatgag caagccaaaa ttatcagtat 180
aaaaaattta aaagagaagt ttttctccct tcctgctgct ttttctctgt ctttctctga 240
aggtgtgtgg aggtgggtgt gtatgtgtgt gtgtgtgtgt gagtgtgata ggatctcact 300
ttgttgccta ggctggagtg cagtggcatg aacttggctc actgccaagc aatcctgcct 360
cagcttccca agtacctgga accttaggca caagtcacca cacctagatt atttttaaa 420
aatttttgta gagatggggt ctcactgtat tgcccaggct ggtttcaaat tcctgagcac 480
aagcagtcct ctcatcttga cctctcaaag tgttgggatt acaggagtga gccactacac 540
ccagcccctg ctgctttctt gatcttgccg ttcagtttgc acccaatgct gacttgtggt 600
ttcaacgctg tatatgcgga gtctgacttc cagagcactt ttgtaatcca aatgccacgt 660

0005004-0005004

atttcttanc cctcttncaa ttgngatata agaggattcc gagacccttg ggatgaga 718

<210> 1570
<211> 591
<212> DNA
<213> Homo sapiens

<400> 1570
atttagatgt cgggggcggg ggagggtggt tggcggcggg agttgctgag agggccggcc 60
gcttatccct gtttggtccc acttttctcc cagcacctgc ccttgttcac cgcctcttca 120
tctacttgga tttggctcga ataaaccctc agctcccggc cagcgctgag agccctggcg 180
gaagagtggg tagcggtggc cttaagtatt aaatctgagc ctgcttcttg ggggagagac 240
tcgttgaaaa gggagtgtgt tgggggggtg ttgtgcgctg aggggagtta gaacttcccg 300
gtcggttacc cagtgggaag ctgcggggca caaagcccag aatttgctgc taatcgctgg 360
gtgccctgga gacagagggg gcgtgtcctc tgcggattcc attctcacct tcccctcccg 420
cttctgatct cgctgtttgc tccacccttg ctccccaccc actatcagct ccagcgggtg 480
ggggtgaagg gctgtcccca ggccaacacc tccttncagg ctttggggag tggggattct 540
ttccccggat gggcanagtt ccttctgcan tggcgctacc cgtccgtgct g 591

<210> 1571
<211> 845
<212> DNA
<213> Homo sapiens

<400> 1571
attgtgtagc tatacctagc aggaataaat actaagtctg tgtcagtatt cttccccttg 60
gtttcagtta tctattgctg tgtaaaaaac catcccaact ttgttgcttg aagcacccag 120
gattcattgt ttctcataag aattttctgc tggtctcatg cggacttgct cgtgtcctag 180
ctgggatggc tggattgttc atcttgcagt tggtgctgga caatggtggg ctctctctca 240
gtggctttca tgcacaagga ggctcacaca ggcttcttga tacagcagcc tcagagcatc 300
agaagggcaa gagtggatgc tgtctggtct ttgaagtctc actcagaagt cacctgttgt 360
cacttctgtg ttctattagt gcaactgagt cctgaggctt gcccaggttt gcactgagga 420
aatcgattcc acctcttgct gagaggagca gcaaagaatt tatcgccact tttaacccac 480
tacaacctca atttcaactg attgtctcta atgacttctt ctgtaagcat ccaaaacatc 540
ccttgattga aactatctca aggtgaccta tcttccttca acaatatttt gtggttcgaa 600
actatgtcat taagagagtg actttgaaaa cctatataag gacccagatg tgaggtgact 660
gcctagtctg aggaataatg actttaagtt atatttgtag agaagtggta aagccacgaa 720
gcagacccat ggagaaatgc aaatctgtca tcagccttga aggatgggac aaatttggtg 780
gtgccctggt taaggaggaa ccagccctgg ggcttgctgg caaagcctan gagactaatt 840
tgtaa 845

<210> 1572
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1572
gaaatgatgc ctccatttac tgaaaagagg aagaggtggt gggggtggag cagattttag 60

0305205.00000

aggctaatca ggcattgggg tttgaacagg ggatgtttga gatccctggt ggacatccga 120
gttcagcgag aacattgcag ctgagggacg cagggagaag gggcatttcc cgtggccttg 180
aaggagactc atatttggag atcagaggga gaacatgctc caggtagaaa aggtgtggca 240
ggcaaaggtg gtggggtggg aagcaggtca cagctctgct ggggctcggg gcagccctag 300
cagctctgtc ttccattggt ctgctctgga aaaggcagtc aggccactaa agcctggctg 360
aaatctggct gcttgggcgc ctgctgtctt aggcctggcc cctttccaca ctcccactgt 420
ctgtgtggac cttcgagaca tttgcatttg ggagctgtgg ttagagcaca gcgtgtgatg 480
aaggcaggca aggacaggcc atgcattcgg gggtctgggg tcaggcgagc tcctcacagg 540
tgctctggac cacgctagca gccgctaagc ccgtgcaggt ggacaaccac tgtggctgta 600
gagcgacaat cgcccagaat tggtgtcatc tcaacgcctt cactgtgtcc caagtcatct 660
cggatgccct acccttcgcc tgctgctctt taacctgccg nttctnctgc cgacagcctg 720
tgattgactc tgcatccttn ct 742

<210> 1573
<211> 733
<212> DNA
<213> Homo sapiens

<400> 1573
acaggcgggc actctctgcg ggtcccgcgg ctcccgcggc ttccggccca ctcagcgcct 60
ccagaggcct caggtgaggg tcacccccgg cagcttgggg tcactccct gagcccccgg 120
atcttcccat gggtcctttg gaggcctggg ttttggagtt tgtccttcgt taagtgccgc 180
ccgccgggcg cggctgctcc aggaccacag acgagtctcg ctctgttgcc caggatggag 240
tgcagtggcg cgatctcggc tcgctgcaag ctccgcctca gcctccggag tagctgggac 300
tacaggagcc cgccaccacg cccagctaat ttttttgtat ttttagtaga gacggggttt 360
caccgtgtta gccaggatgg tctcgatctc ctgaccttgt gatccgcctg cctcggcctc 420
ccaaagtgct gggattacag gcatttcgct ggggatgcta cttgatctct cttcagcctc 480
agtttcctca cctggacagt ggagctgaac ccacccccca ctatctgacc ctgctctctg 540
ggctgtcttt tgggaacccg ccctgctgag gcctgctccc caccctccat ggctgtcagc 600
cccccaggag aagaatgtct gccatatgga ggctgctggc agcaaaggga gatgaacaag 660
ccaaggttgc ccggcctgca tgccggccca nggctgctgc tgngtcttgc catnaaccct 720
tcccttgaac cca 733

<210> 1574
<211> 724
<212> DNA
<213> Homo sapiens

<400> 1574
atttttcag acgttgcatt tttcagttcg agaatttcca ttgggttctt tatgtttttt 60
ttttttctac tgaggagaga gggtgaaagc acaaatgcaa gagcattgac aaagaaattg 120
tagaatgtta gagcagcact gaactcaatt gaggttaaat atcttaaacc ctgctggacg 180
cagtgactca cacctgtaat cccagcattt tgagaggctg agggggggtgg aacacctgag 240
gtcaggagtt tgagaccagc cttaccaaca tggtgaaacc ctgtctctac taaaaaatac 300
aaaaattagc tgggcatggt ggcgggcacc tgtaatccca gctgcttggg aggctgaggc 360
aggagaatcg cttgaaccag ggaggcagag gttgtagtga gccaagatca cgtcattgca 420
ctccagcctg ggtgacggag caagactccg tcaaaaaaaa aaagatatta aatccaggag 480
gtcgactact tttgtccagc agcactgata agaaagatag ctggtctggg cacagtagct 540

0050450 2005-02-10

catgcctatg atcccagcac cctgggagac tgaggtggaa ggatttcctg agtccaggaa 600
tttgaggctg cagtgagcta tgattgccaa ttgcattcca cctgggtgac agagcatgac 660
cctgtctcaa aaaaaaaaaa nnngaaaaaa aaaagacctg gcgcaatggc ttacacctat 720
aatt 724

<210> 1575
<211> 711
<212> DNA
<213> Homo sapiens

<400> 1575
actagcagca gcggcagcag ccctagtccc gcggtgcggt cgaattggtc cccagccctc 60
cgggagcgca ccacaaagca gccccaacgc ctctccctgc gtccgcggct cctcagcgct 120
cggctccgtg gtcaacttcc cctcgctggg ctcggctggc gggcgcggag ggcagcggcg 180
gaacggcggg ctgtctgctc gcgctccccg cgcacaacac ttcaccctct cgcctcgggt 240
ctcgggggcc gctctgggat cccggccacc agcaattgtc cggaaataat gcaaaaggtg 300
tcccaaggct cctgaccagt gaacaaagat ttgagaaaga cagccaagct catgttttct 360
cctgatcaag aaaatcatcc atctaaagca ccagtaaaat atggtgaact cattgtctta 420
gggtataatg ggtctctccc aaatggcgat agaggaagga ggaaaagtag gtttgctttg 480
tttaaaagac ctaaggcaaa tggggtgaag cccagcactg tgcatattgc ttgtactcct 540
caggctgcaa aggtaaaaaa aaaaaaaaaa aagctacata aattaacttg gagaatttga 600
aagactttta tgtgttggtt gnattctcta gcattcccct tacatttcta tttcanaaat 660
tgccttttgg ttggattgga naaaagactt ttggagacat gggattttga a 711

<210> 1576
<211> 748
<212> DNA
<213> Homo sapiens

<400> 1576
gttttgtatg tgcctaccac tttatattca ttgtatattc accccgtatt tatgtattcc 60
ttgcatctgc cctgagaggc agagtcatgg atggaaaacc aaggcctggc ttaagaccct 120
gcccaggtat agctggtaac gtgagagtca ttctcaagac tgcctgcctc cagtgcccat 180
acccttccg ccacaccaca ccttggggct tgctgttgta gcctgtgtgg tcactaggca 240
tgtctgggct aaggacgggc aagtcccaca agtggctgtt tcgtgtctcc tgcagtctcc 300
tggctgatac ttctctgtat aagctggtga ttcttgggct ctttcctcat ctccaaaacc 360
gttgttggga tggctgggtg gatggatggg tgggtaggta gatggaattc ccaaagtaac 420
acaaggggca ttgggccatt tgaggaagct gcagacagag cactggccac caccaaagcc 480
actggagctt gggagtcagg cggccctggg gggtccttgc tgttgctgcg tctcccacac 540
cttaatcaga gcatcgccaa tgcaataaag ttaatggagc cagtcatcct atgaaggagc 600
caattccgtg caaagatgat acatctttga agttgatgag gcctattaat tgagcttatg 660
ccccttaaaa tgaattanat tcttgaaatt accacacaga gtacatccat tagtggttct 720
ggcnccgagg aatgaggacc cccagnca 748

<210> 1577
<211> 835
<212> DNA
<213> Homo sapiens

WO 2005/003300 PCT/US2004/020900

<400> 1577
gtgtcccgcc gggtccccga gcgtcccgcg ccctcgcccc gccatgctcc tgctgctggg 60
gctgtgcctg gggctgtccc tgtgtgtggg gtcgcaggaa gaggcgcaga gctggggcca 120
ctcttcggag caggatggac tcagggtccc gaggcaagtc agactgttgc agaggctgaa 180
aaccaaacct ttgatgacag aattctcagt gaagtctacc atcatttccc gttatgcctt 240
cactacggtt tcctgcagaa tgctgaacag agcttctgaa gaccaggaca ttgagttcca 300
gatgcagatt ccagctgcag ctttcatcac caacttcact atgcttattg gagacaaggt 360
gtatcagggc gaaattacag agagagaaaa gaagagtggt gatagggtaa aagagaaaag 420
gaataaaacc acagaagaaa atggagagaa ggggactgaa atattcagag cttctgcagt 480
gattcccagc aaggacaaag ccgccttttt cctgagttat gaggagcttc tgcagaggcg 540
cctgggcaag tacgagcaca gcatcagcgt gcggccccag cagctgtccg ggaggctgac 600
gtgggcgtga atatcctgga gagcgcgggc atcgcatncc ctggaggtgc tgccgcttac 660
aacagcaggc anaaggggca gtgggccccg gggaagatga ttctgggcct tccccatcta 720
ctgncattaa ccaaaatgaa catttgncac ataattttaa acctactgta gtacaacaag 780
ccaggattgc ccanaatgga attttgggag acttatcatt aganatgacg tcatt 835

<210> 1578
<211> 812
<212> DNA
<213> Homo sapiens

<400> 1578
cattgtgtcc aaagtacccc ttttacctac tttacagtag ttgtaacttg ttgcaaagct 60
taaaaaataa tttaaaatac aaaagtatgt gatagtataa gtttatgttc atctagtatt 120
tctttagtta ttcaaattgt gaggttaaga aaggaactcc taagtgtagc tactgcttct 180
tctgtccatc atgggactat gtagtttggg agaaggaaag ggaactctaa ctagtgcctc 240
atgagaaact atggagcttc tgtctctttg tcctttgtat tcctcattgt gaactacatc 300
ttgaacccag agcaatagct gggcaagtga agagtcataa aggtgaaatg tgactgagaa 360
ggattacaaa ccctgtaatt aacagaggca atctattagc tgtagcctcc tagttaggag 420
aaggatgggg acagtgggtg cagttgaaca cacaacctaa ctctgaactg ggtccttgat 480
gtgctatagc ttatgaactt atggaactta gatttggaga cactggcttc aattattacg 540
tgcaactttt cagctgtgcg atgttggaca agtctaggaa ttataaaaac taagacatac 600
tagccaaaat actttgaatt ctgaaattcc attgtaatgg tattaatttt gtgggtagct 660
ctccataaag atgtttattt aaatnaaaac agttaagata aacattactg gtattgggaa 720
catattaatg gtagccatac ctacgccatt tgggtttaag aatcttggga ttatggctat 780
taaaataatg gatttttacc ncgattagnc nt 812

<210> 1579
<211> 809
<212> DNA
<213> Homo sapiens

<400> 1579
ctcatatgct ttttttaaaa aaagaaataa ttgctcataa gaagaaaaaa tacagaatta 60
ttgaaaacaa aagtacctca accttcagtt ctcagatata gtactataaa taattagttt 120
tcaatcttgg caggcttttt acgtagtcac atatgatttg agcatttttt tcctcttttt 180
tacacagata agattatatg tatggctata tgactttact caaaaataag tcttgaagat 240

0050050.00000

ctgtccatac caataaagat ctgtgtaaga ttttaagagc tgcaggagat tgttattgat 300
tttgattaga ttgcactaca gcctatacag tcttctattt agattttgag gttttacttg 360
tggtctagaa ttgattgttt tgtacaaaat tcaatgtact cattcagcaa atacttactg 420
aatgtctgct gtgttgcagg cactgaccta ggtttcaggg atatggtggc aaacaagaaa 480
gatgtgaaag acagtcccag ccttcccagg ccttataatc aatggcattt gaaactaaca 540
ggtctgctac atttgttctg tatacgcaca cgtgcgtgca cacaagcaca ctcgcacgcg 600
cacacacact gaatcttgcc agttgtgtcc atctagtcca gggttctgca aacttttct 660
gaaagagcca gatattaagt attttaggct ttgtaggcta cagatggtct ctgncacata 720
ttcttctttg gtttgggttt gggtaaacat gtaaaaatgg naaaactatt cttaacttgg 780
gggcagtccc agacagacca ttggncaga 809

<210> 1580
<211> 765
<212> DNA
<213> Homo sapiens

<400> 1580
catgcacagg tatgttcatt gcagcactac tcgcaatagc aaagacttgg aaccaaccga 60
aatgtccatc aatgatagag tggataaaga aaatgtggca catatacacc atggaatact 120
atgcagtcat aaaaaggatg agttcatgtc ctttgcaggg acatggatga agctggaaac 180
catcattctc agcaagctat cacaaactat cgtaggaaca gaaaaccaaa caccacatgt 240
tctcacttat aaatgggagt tgaacaagaa cacatggaca cagggaaggg aactcacaca 300
cccgggcctg ttagggggtg ggggcctaag gaagggataa cattaggaga aatacctaat 360
gtaggtgaca ggttgatggg tgcagcaaac gaccatggca tgtgcatacc tatgtaacaa 420
aactgcacgt tctgcacatg taccgcagaa cttaaagtat aataaataaa tatataaata 480
tttataaata aataataaat acataaatat cagaaagtaa aagaggaaaa aaactgaacc 540
ttgaattttt ttcttttaga atatttataa tatttaacgt atttgaaggt gaaggccatc 600
ctacatggac atctgaagct ttagctaagt attatctttt ctgtaatgtg actattggtt 660
tgcaagttcg gttcttcttt tcgaatagta tgagattaat tttctcagta cttaaatcac 720
ttctcaatta agttggatgt tcatggagga acattctttn cntna 765

<210> 1581
<211> 778
<212> DNA
<213> Homo sapiens

<400> 1581
aaaaaatgaa tgaagaaaat atggcaaaac ttaataaatt cacattaagc aggagaaaga 60
cctaactaaa ttagtaatct gaattgtaga atatttttaa aaaattaata gtaacttaat 120
tactgtcaga ttcatggagt tccttggaga aattgctttg gcaaatagat agggaaaatt 180
tacaaatagc acaaaacttg gtaaataaag caatttctaa agaatccgcc atggactagt 240
atttttaagt tattttctcc ataaagtgca tgtatgttat caatttgcct tgcaaaatca 300
tttttataag aaagagagct atttctgttt ttaccaatta tttgtggtat ttgaaagtca 360
ttcatttaca aaaacataag aatgatatcc atttactcat tcactcattc attgagcaaa 420
tatatattgg aggtcactgt gctgggtaca tagtggtgag ttcaataaag tccttgcctt 480
ttctagcatg ggggatggga gttaactaaa aaataaaata aatgaataaa tattttgtaa 540
tacattatga taagagcata atcaaggtgc tgaataattt ctttgggaag atgacatttg 600
gctgagtact gaaggatgca aagaagtcat tcatgcagag aagggaggaa agagccccca 660

0050204500 - 0050204500

ggcagaaggg agctatgcgg acaaagcaaa aggctgggag atgtttagca tgggccagaa 720
actagaaggt agtcagtgtg gctacaggtg ntgagtggta tgggaaagaa atcnnaga 778

<210> 1582
<211> 790
<212> DNA
<213> Homo sapiens

<400> 1582
gaaaaatatg aataagggct accaattgtt ttagttttaa tcaaaactaa aaatatacat 60
ctatgtcttt actgatttaa actcacataa aactgccttc caaaataaat gcagaattgg 120
gcacttattt gttctcatgt ctgtcctctc agagccaata agctgtaaaa aactctcaaa 180
ataaaactct gttttatttt ctgttttgcc ccggtttcta tcacataagt gctcaataat 240
atatgcttta cataaatgct gaatgaggaa catatatatc tatataaact ggggagcaat 300
gcaagactgg aagaatgtct tgatgtgttg gagaagttga agaagagatt gtgggatagc 360
tatgacacat agattgagct acaccacgaa tctctccatg taacccagga acccaaggat 420
atgtgatgag atgtttgtgg aagcaggaat taaaaggaag atttctttta ataatgcctt 480
gcagttgcgc agtgatttag accttccaaa aacactttta attatattat ctcatttgat 540
cctcaaaaca atcgtgggaa ataggcaccc cagtcattat tatccccatt ttgcagatga 600
agaaactgag atagagcttt aagtatcttg cccaaggtta aataagtaat tagtgagctg 660
agacaaaccc cccactattt ctgcctctta ctcagtctca ctncactgta cctttgtgca 720
acaatgtgaa gcacatncaa gatgatattt agtgtggggg acccttgcgt anagggacac 780
cagtttcttg 790

<210> 1583
<211> 793
<212> DNA
<213> Homo sapiens

<400> 1583
aaaattttta attaactttt tttaaattaa aaaaaattat taattatttt taatagacag 60
gatcttgcta tgctgtccag gctggtcttg aactcctggt ctcaagtgat cctcctgcct 120
tggcctccca aagcgctggt attacaggtg tgagtcactg cacctggcca agtttatttt 180
ttctgtatac atttcttcag ccacttcaat caaacattta attaacatgc tataatgaat 240
gacttttctt actaggctaa caaatgaggc acttggaaac ttactttagt tacagcctca 300
ctttcttttt ttgtgaggaa attctgtgtt gacatactct ttaatttctt tttacctttt 360
ctgactgatt ttctgtaatt tgggaatatt gtgatgactg cttattctaa taatattaac 420
atatagcatt cttttagcac ataaatagtt tcatttgcat agtaagcgcc aggctttgcc 480
atcgaatttg ataaaataat ccatgcttca tggtacctta gagatgggat attttaagtc 540
caattctctc tctctctctc tctcattttt ttctttttgg agacagggcc tggagttacc 600
catgctggag tgcagtggtg tgactgtagc tccctgcagc ctcgaactcc ttggcctcaa 660
ttgatcctgc caccttacct tctgagtact gggactacag gggggtcac cacacccttt 720
tttttttga catgaaggga tataatgccg ggaaatnaaa aattaaaant tttgggggta 780
ttgggnaata ggc 793

<210> 1584
<211> 722
<212> DNA

0 5 0 5 0 5 4 5 0 3 0 0 2 0 0 2 0 0 3 0 0 0

0050050.000200

<213> Homo sapiens

<400> 1584
cataaaagaa tacttgaaac tgggcagttt ataaagaaaa aaaagtttat ttggattatg 60
attccaccag ctgtacaaga agcatggcgt cagcatctgc ttctggtgag ggcttccagg 120
agcttccaaa cattgtgcaa gtggaagggg agctggtgtg tcacatggtg agagaggaag 180
caagagacga ggaggtgcca tgctctttta aacaaccagt tctcacgtga actcactcat 240
tacctcgaag gaggacagca agcctttcgt gagggatccg cccctatgac ccaaacacct 300
cccactaggc cccacctcca acgtgggaga tcaaatatca atatgagatt tggaggggac 360
aaatatccaa accatatcac taggtttaag aggagaggag ccatttttgc ttctaccccct 420
tgatggctag tcctgtgtat tctggctggg gaagaaatag aactgatgca gcttgtattc 480
tttgtcccga aagagtccaa cttgtcaaga tgtcatctcc caactggctc catggggaat 540
gttgggctaa caaatggtgc tttttaaaac aaagtacaga atttttgcaa atacagtagt 600
ggctaaggtt cttttgactt taacactgca ttgcatggtg aatcagtggt ttaaaaattg 660
cattggangg gagcctattt tttttttctt acctntnctt gagtgcttta aagtgggcat 720
ta 722

<210> 1585
<211> 705
<212> DNA
<213> Homo sapiens

<400> 1585
ttagtaacgg atatacattt gtaaaattac agactggggt taggagtgca gactgttatt 60
gtattgtgtt cttgtgcaaa aaaaccccag gtgtatcatg ggaatacatc tttgaccttg 120
gacttccttg tgtcctgctg gcagaggtca ctagttttga cacctggtga gagatgtgaa 180
gtgttccttt atttacttat atttatttat ttatttattt gaggcagggt cttgctctgt 240
cacctgggct ggagtgcagt ggtgtgaaca tggctcactt taccctccaa ctcctgggct 300
taagcagtcc tcctacctca gcctcctgag taggtaggac tacagacgag cagcaccatg 360
cccagccaat ttttttattt ttaatttttt gtagagagag gatctcacta tgttgctcag 420
gctggtctcg aattcctgga ctcaagcagt cctcctgcct cccaaagtgt tgggattatt 480
ggtgtgagct gctgtgccca gccaatgctt cttttatata tttatttaga tttggtgttt 540
gatttttttg ttaataaggg accttctcaa agatactttt aaatgaaaag acaaagggtc 600
agaaaatact ggtttttttt tttttggaaa cagtctcatt ctgtgaccca gactggagtg 660
caatggcgtt gatcttggct nacaagtgac ctncgnttttc ctggg 705

<210> 1586
<211> 786
<212> DNA
<213> Homo sapiens

<400> 1586
gatttgggag atgcagcatg catcctcatt gactggacat agggagggga agaaaggcct 60
cacttgactt ccagtttctt tttggctaag tggatagcca ttcatggaga tgaggaagac 120
aacaggatga gtaggtttga ctggtagagg tttacttgag ttatgtttta aatgcattga 180
gtctgggatg cctagtgaga catcctagtt gaaatatcct ataggcagtt ggaagaaatg 240
tctgaactgg aaatgtagat gccctttga gagcagaaac tgctccttcc tcttttcttc 300
attattgatg gtgtctccca gtctttttca agtcttcctc atcctttggt gcctctcagg 360

ctgatagcct tctccctctc ttcttaagga atacactcac ttttggtgaa gccgttgcta 420
caattgctgt ctgtctgcca aggtttcagt gtaatgccat aaggcaaata acctaaaccc 480
attaaaatta attcagaatt taaaaggcca gataatttaa tctacttttt aaaagactca 540
taaatattaa attaccaaaa aaaaagacaa ctcctcaaac agaatagatt tatcctaagc 600
cgaggaaatt gtgataagtg gacagagtta tttaaaggca tattaaaagt tagatttctc 660
acgcctgtaa tcccagcact gtgggaggcc gaggcaggca gatcacttga ggtcaggagt 720
tcgaaaccag cctggncaac atggtgaaaa ccccgtctnt actaaaaatt taaaaattan 780
cccacc 786

<210> 1587
<211> 798
<212> DNA
<213> Homo sapiens

<400> 1587
aaaaactgga gagtaattgt tttataacat tagaaccctg aatggcaatt tgatgaactg 60
gagaagaaaa agatgtctgc aataaatcag aaacaaaccc ttcagcttca gcagtagtgc 120
tcattatttt ttttaaaaaa atagagcctc taggatcaaa catattatac aaagtagcat 180
gtatcattaa aagtataaat tggtatcctt tttaagggga gtataaagaa gtatgtagga 240
gtcagtgtgg tctgaaaaat ggaaaggtta ttttgctgct aaaatatagg ttttttttaca 300
gtgtaagtgc actgctcaga acatatcttc ttccacgctt caaaagagtt tgggtaaggg 360
aacagcctga aaaacacctg aaagagagaa ttctggctta tggattagag agcatctata 420
aacagaacaa attggtgaat aagagttcac aaaaattttg tctaagaaat ttccccacat 480
gcattcagag gttaataatt aaatttttttg aagttcattt taaaacattg cttattttaa 540
catgtaaacg tatgttgggt gggaaaagtc aaatgggaga ttgaaactgt tttaatcatg 600
taaatgatca gccctacaat ttttgntttt ttaataatct ggaatgctta ttttatatgc 660
tgggatgcta gttggttttt ctattaatac acttaacttg cattctagct tcgncattca 720
gagacaggca tcgtgtggng ggttgtgtgc agtgctggca atagtgaaga ccaatngtgc 780
ccgagacact taacccat 798

<210> 1588
<211> 837
<212> DNA
<213> Homo sapiens

<400> 1588
aagcaaagca gctcttattt gaaaaaccac tgggttccga gttcattact acaggaaaaa 60
ctgttctctt ctgtggcaca gagaaccctg cttcaaagca gaagtagcag ttccggagtc 120
cagctggcta aaactcatcc cagaggataa tggcaaccca tgccttagaa atcgctgggc 180
tgtttcttgg tggtgttgga atggtgggca cagtggctgt cactgtcatg cctcagtgga 240
gagtgtcggc cttcattgaa aacaacatcg tggtttttga aaacttctgg gaaggactgt 300
ggatgaattg cgtgaggcag gctaacatca ggatgcagtg caaaatctat gattccctgc 360
tggctctttc tccggaccta caggcagcca gaggactgat gtgtgctgct tccgtgatgc 420
ccttcttggc tttcatgatg gccatccttg gcatgaaatg caccaggtgc acgggggaca 480
atgagaaggt gaaggctcac attctgctga cggctggaat catcttcatc atcacgggca 540
tggtggtgct catccctgtg agctgggttg ccaatgccat catcagagat ttctataacc 600
caatagtgaa tgttgcccaa aaacgtgagc ttggagaagc tctctactta ggatggacca 660
cggcactggt gctgattgtt ggaggagctc tgttctgctg cgtttttttgt tgcaacgaaa 720

US 2003/0044800 A1

agagcagtag ctacagatac tcgatacctt cccatcgcac aacccaaaaa agttatcaca 780
ccggaaagaa gtcacccgac cgtntacttc agaagtcagt atgtgtantt gggnatg 837

<210> 1589
<211> 846
<212> DNA
<213> Homo sapiens

<400> 1589
tttgttacaa aactggatgc tgttaaaatc ctctggaaaa tatttttggt tttttggttt 60
cactttagcg ggcagttaac ctggttaggt tcagactgcc tctgtgggct gtggatccag 120
tttgaactta cttttcaaaa ccttcgtatt gctgttcagg tcccaggtgt gccatccatg 180
ccattgtgca gttctcaacg cctttcctct gccgccttgg gtcagttcac acatgggcat 240
gttggtggta aacttgagat tgtatacaca aatttagagg acgtttcttc tctccgtgac 300
ttcccttgta cacaagctcc caagagtttc ttttcgtggt tctttggtga gaaaactgga 360
attttagctt ctttgtgctt ttcatacgtt ttctgtagag gggctcattt cctgaacaaa 420
atggagagag agaaaagtta gagaaaaaaa taaaatgaat tccctcttcc atactcttcc 480
gatcatcgtc tttttcctag ttcttttgtc agaagaactc tcttttagag tttaggagac 540
agctaccagc cacaggtgtg cagactcagg attggggctt gctttgaggc agagctgaga 600
gagaagaaaa attaccagat atccaccccc ccccattgtc cctctcccat tcatcatctt 660
ttctagttct ctagccagaa ggagtttctc ttggaacttt tctctgtctt cactcactgc 720
acagttaatg agatttgggc tgtcctcaag tctaagctga catatgtggg agaaaaaaac 780
caggaaactc actactggtt tgagttttga tttctcttcg ccagtctgct tgcttcaaat 840
actttt 846

<210> 1590
<211> 853
<212> DNA
<213> Homo sapiens

<400> 1590
gcattaagct gggcacagtg gctcacgcct gtaatcccag cactttggga ggccaaggcc 60
ggcggatcac gaggtcagga gatcgagacc atcctggcta acacggtgaa accccatctc 120
tactaaaaat agaaaaaaat cagccgggtg tggtggcggg cgcctgtagt cctagctact 180
caggaggctg aggcaggaga atggtgtaaa cccgtgaggc tgagcttgca gtcagccaag 240
attgtgccac tacactccag cctgggtgac aaagcgagac tccatctcaa aaaaaaaaaa 300
aagaaagaaa aaagaaaatg agcacattac tgtgatttta cagcaattaa agtgattata 360
agataatacc acaaacatag gtacaccagc aaattgaata accaaatgaa atggcaaatc 420
tctagaaaca caaagcctac caagactgaa tcacaaacaa agaaaaaata tgggtaaacc 480
agctgggcat ggtggctccc gcctgtaatc ccagcacttt cggagtgcac tccattgcac 540
tccagcctgg gggacaagag cgagacttct caaaaaaata gaaagtaggg gtaaacctat 600
aactagtaag aacattaaat tactaattaa aatcctttca acaaagaaat acccctgact 660
ggatggtttt accagtcagt tctaccagac atttaacgaa aattaatgcc aatcctttgc 720
aaactctttc aaaaacttga agaggaggaa atctttctna ctcggtctat gaaggncagc 780
attgccttga tgctagggtc agaccaaaga ccttcaggaa aacaactggn ccatattgct 840
tatgaacatt ggt 853

<210> 1591

09/05/2005 15:03:09

<211> 815
<212> DNA
<213> Homo sapiens

<400> 1591
caggatgctg aggcagaaga attgcttgaa cccaggaggc agaggttgca gtgagccaag 60
atcatgccac cgcactccag cccacacgac aaagtgagac tgtctcaaaa aaaaaaaaaa 120
aaaaaatcgc agcttagctg aattcttgat agaaggtggt gacttagatg ccttctcttc 180
tggtttgtct gctgtgtctg tgtgcacctg gacccattgt gctctggaaa gcaggcacac 240
tggagtcctg gagtgcaggc tggctggcgc cttgcagtgc ctggtgatgg ctggggtttg 300
gtccctggtc tgtcccctgg ggttcccatg tctattggtg aggcagcagt gtgtgctcgt 360
aggagaccct ctgtcaagag gctctgtcgg gagccagcct gctgccctgc ctttgaggct 420
gatccttcac cctaggaggg caggcactga gggccagcac tctggtcacg ccaaggatgc 480
tatggcgacc cactgaagaa tgagctatta ccctgcccac ccctgcctgc tgtgccccca 540
agcacccctt gggggttact cacttgcctt cctggtatca ggttaagagg ttattagacc 600
ttccatttat tcactcaatt cttttccctg ctctcctgag taatagctca ggaacccgtg 660
ccccagccat gctgggaaca tgcttagaaa gtaaggggaa acctttgggc cagcacccac 720
gtggttttga atcactcaag gacaatctgn ctaagtcact ggcttggtgg ccgtggccaa 780
caaggagtca ttcagtancg nctttgccct cactg 815

<210> 1592
<211> 690
<212> DNA
<213> Homo sapiens

<400> 1592
agagtgtgca aatcctgcag cagcaactga catatccagg ttctatgatc aggactgact 60
aggtggttgc cgtgacccat agagaacaag gaaagatggg ctggtggatt ggcccacctg 120
ggagccacat ggggcaaggg gagccctcac cctcagccag ccaagggagg cagtgagtga 180
gcatgctacc cagcctggga aactgctttt tccatggatc tttgcaatcc acagatcaga 240
agatcccact catgagacca caccacgagg gccttgggtg ccaaccacag agccatgcag 300
attctcaaca gccactcagc tggagtctgc ctaaaactac cgagttccca agttggggag 360
gggtggtcat catcactgtg gctgcctgct gcctaaaccc tctgagttcc ctgggggagg 420
gggagcaatc atcactgtgg ttgctggctg cctaagacaa ctgagcttcc caggagaggg 480
gcagtcatca tcactgcagc tgcctgctgc ctgaggaaac tgagctccct aagaagggac 540
agcagccatc actgtggctg ctagctgcct aagacactga actcctgggg aggaagggcg 600
gcagccattt ctacagatcc aggctgctgn ttttcctttg ctgatgccag gaagactgga 660
cggcttggtc ccaagangta ttncccacag 690

<210> 1593
<211> 849
<212> DNA
<213> Homo sapiens

<400> 1593
gttcatttat gtctcccgta acagtctgtg ctgtccagag acccagtatc cttaggatat 60
tattctcatc ctcatggttg aagctgggtc actgccatgt ccataatcca ccctgaggaa 120
agagcatgga gagccagcag cttcatttct aaggacagga agccaaatct gcacttttca 180

US20050203300

cttccactca taatccaccc tgcattccac tcatcagctt cacaagtagg ttttcacctg 240
gtcatagcta tgcctaacta cagggagtgc tggggaagtg tgatcttttg ttgggggcac 300
actgggagag tgggtctgtc cactgcctcc cagcctcaga gcagctcacc acaggagcag 360
gagagtgaac tcgtggctgt ggctgtcagg cagggccttt cttgagagcc agcgcaggcc 420
tgggctcctc agaggcttct ggagtgagag atggcacctc agcctggccc atggaggcat 480
gttcagggat cagcactact gtgcttcttg gaggaggtgg gacttgagct ggacccatgg 540
gaggctggaa atttagatga gtgaaaagga ggaaaggcga agtagagcca cattacagag 600
ggcctcagag tccagataaa gcagttaaca tgtagtggct ccaggaggga agcctgtctg 660
tgcaccacat acccaggatg tttgtgggaa ggaaggagat gtgcggaagg gacccaggag 720
acctgcagga ggcaagggct gcaacagacc cctttggaag ttacaggang tgaatgtgag 780
tcattagaga cattcagttc tgtaggaact aacgacttcc aagaggcagt aaacttaaaa 840
ctcancngt 849

<210> 1594
<211> 847
<212> DNA
<213> Homo sapiens

<400> 1594
ctgagtgtta ataatagcta atacacattg taattacctg gtattataga ttatcatgct 60
taagtgtacc tcaatcacca tgagtctgta tcttctaata tcttttactg actgatatgg 120
tttggttctg tgtctccacc caaatctcat cttgaattgt acttccataa ttcccatgtg 180
ggagggaccc agtgggagat aattgaatca tgggggcagt ttcccgcgta ctgttcttgc 240
agtagtgaat aagtcttatg acatctgatg attttatcag gggtttccgc ttttgcatct 300
tcctcattct ctctctgcct gctgccatcc atgtaagatg ggagttgctc ctccttgcct 360
tccaccatga ttgtgaggct tccccagcca cgtggagctg taagtccaat taaacctctt 420
tcttttgtaa actgcccagt ctctggcaac ttatcagcag catgaatgga ctaatacact 480
gacccataag gaagtgtctt tgtttggact aatgacatta ttttcctacc tatttggaac 540
aattcattta aaacttctca atattaagaa ttgtgacaag gattcttctt tagttttaca 600
taatttcaca ttatcttttt ggataaataa tttgagtctt tatttcctcg tagtaccttg 660
gtctcttatc acctttttctt cttttggtca gccatatnca gtcttttcat aacattattt 720
agcaatactt ttaaagcacc tactctgtgt caaggactat gctagttgct ggattattac 780
ngagaataaa atagacattt ctgtctcaca acgnttagag tctagcaggg gaaaatcctg 840
taatatc 847

<210> 1595
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1595
catttctgct aaccaaagaa ggaaaatgag attgtacccc tttagagctg gagtccaaaa 60
tagtatggca tacttaacgt ttatctaaca tcttaggtgt tcatttcaaa attcatataa 120
atgtctcatt ttcctccata ctctgttttt atataaaata atggtatctc tctcctcaaa 180
ttatttttca cacagattta ctctcctgaa ttttccagaa atgtagatac ttttaaatca 240
aaggaaggct gtattttgtt ttgttcagaa cttttctatt ccagaaaatc atgtcaattg 300
acagcaaagc cacttgtggt cattgagcct cctgtgtaaa gcaccgacgt cattctgtag 360
ttgtcatcac tgtattcagg gtgattctac acgtaggagt gagcatttga cagcttccat 420

US 2005/0260686 A1

gtcttctagt gcggctgaga atttacatat taagatacac attatttatt atcaattact 480
ttcctgtttc aatgtccatt tagagcacta aaaatatctt tgtaggtagt tgatattact 540
tatgaatttt atttcaggag agcaaaggaa aatacaagat agttgtatga aaaggggca 600
ccgggtgtgc tagagtggct caccaccgnc ctacacagtg ggctaattgg ctggagagta 660
gagctgactc tgcacagttg catgctgacc ctctgaagaa tttttttaca aaagccgtga 720
cgtcgcgtga agaccttggc nggaattagc caagccggtt ganatgcata cctttgggag 780
tcagaacgga cttccaattc acatctttgg ctttttatac ttacagctgg n 831

<210> 1596
<211> 805
<212> DNA
<213> Homo sapiens

<400> 1596
tagcagttta gtccttaatc tgtggcttct taagacctct gagttccatg ttagaatatt 60
ttaatgtatt agtttctagg aaataggagt agctgaaagg agaggaggag tgaacattct 120
taagcatgga gttatgttct aggctgcgat tgacatatgc agtctaccac tatgcaagga 180
cgaatgaggt cagtgttgta ggaacatctg gtggagtaaa ggcatcccat catctgtgaa 240
gtggagtccg cctgcctacc cagaggttgc tgtgaggatt aagaaattac atatggaaag 300
caactggcaa agtgttttgc ttatagaaag ctctaatatg ctaattgcct tccccgtttc 360
tttatataat ttataaggaa actaaaaacc agcgattaaa accttagctt tggtttctat 420
atgtgtaaaa tatagttctt atgtttgtct ctcattaacc tgtaagtttc ttcaaatctg 480
ggagcatgtc taattgctgt gtatatatct tcagtcctga agatgatagt agaaaacagt 540
tcttctttga aggtttgtta catggatgga tggatgatta acttgtgcca gaacacacag 600
gagtcaacag tgaaactggg ccaaggaccc atgtctctta ctcttaacac agtgtttctt 660
tctagtcctg tgtttttctg tctatgtacc tactatggat catgccctgt gttttgcaat 720
gaagacctct aactttattt ccattccagg anaaggaggn ttcancacac ttctggaaca 780
accagctttc ttttcccttt cgcta 805

<210> 1597
<211> 845
<212> DNA
<213> Homo sapiens

<400> 1597
agaaatcacc aaagacatga gcgtaagcca ccatgagcac tgtcaacaga aacaataatc 60
tgtagattca tcccacaaat actataaata ttagaaactg ttgagctata gactgggtat 120
ggtggctcat acctgtagcc ccagcacttt gggaagccaa ggtgggagga ttgcttgagc 180
ccaggagttc gagactagca tgggcaatat ggtgagaccc cacctctatt ttgtcaacat 240
tgccactatt tttgaatcag agaatttctt tttgcctggg attaaatgga atggaatact 300
tggcctagct tatgccacac ttgccaagcc atcaagttct ctggagacct tcttcgactc 360
cctggtgaca caagcaaaca tccccaacgt tttctccatg cagatgtgtg gagccggctt 420
gcccgttgct ggatctggga ccaacggagg tagtcttgtc ttgggtggaa ttgaaccaag 480
tttgtataaa ggagacatct ggtatacccc tattaaggaa gagtggtact accagataga 540
aattctgaaa ttggaaattg gaggccaaag ccttaatctg gactgcagag agtataacgc 600
agacaaggcc atcgtggaca gtggcaccac gctgctgcgc ctgccccaga aggtgtttga 660
tgcggtggtg gaagctgtgg cccgcgcatc tctgattcca gaattctctg atggtttctg 720
gactgggtcc caactgcgtg ctggacgaat tcggaaacac cttggtctta cttccctaaa 780

US 2003-0082576 A1

atctncatct acctgagaga cgagacttca caggtcattc gtatcacaat cctggcttan 840
cttta 845

<210> 1598
<211> 851
<212> DNA
<213> Homo sapiens

<400> 1598
tacttactac tggaccctgt tttctctgag cagtttaata tggtttcttt actattaatc 60
taaatttggg ctaattttat atatttttca aaaggcattg attttctaaa gagtttttta 120
atcattaatt cactctggta atataagtaa tacctttata tagtcatcta aactttccaa 180
agcactttta cctattattc tcagaacagt ccaggaagta ggcaaaacag acattatcac 240
cattttatga ggtattggat gctaaatgac ttgctcagcg tctcataact ggtaagtagc 300
aggatcaggt ctgaaatcca tttcacctgg ccttagatcc atctttgagg gtctctttat 360
ctgataggct tctcgtcttg gataggcaaa ggaaggatga actggagcag aggatgtcgg 420
ccctgcagga gagcaggcgg gagctgatgg tccagctgga agagctgatg aagttgctga 480
aggctcaggc cacagggtca ccacatacat cgcccaccca tggaggcggc cggccaatgc 540
ccatgccagt gcgctccacg tctgccggct ccacccccac ccactgtccg caggactcgc 600
tgagcggagt cgggggagac gtgcaggagg ccttcgcaca agcagaggaa ggtgcagagg 660
aagaagaaga gaagatgcag aatgggaaag acagaggtaa aggcagctca gcaggactgc 720
tcgtttaaat ggggagcccg agctcatgga tcagcccgcc ccccactttg gttctgcatt 780
ccttcctgcc accacctttn ccagagcttt cggacccgan gtccctgacc tacttttcca 840
tctgacaggc n 851

<210> 1599
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1599
tgtttatagt acctgacagt gctgtgtttc actaatattt gttgactgaa tagtgctgag 60
gggtgtcctg ttctctgacc tcagtaccat aaggtcatat ttcttggaca acaaagtcca 120
gtagcagatt tctttggtgg ctgctagagc catttcatta acagtattga aagcttttgt 180
gatattagag aaacatctct gtggtcctgt tactgttggc tgtgcatcct tctgcatctg 240
acaggtagaa agggatggtg gcagctctag tcactgccat gttgtgattt aggaagtaga 300
tggttgtgtt cagatgctct ggaaatgagc tggcagagat tgctagaaga gatggctgtg 360
gtatctagag cagccagctc tcttcttcat gagaggggta tatgtctttg atgcattgtt 420
tgatgtcttc catcagttta catgctgaaa gtattggtgc agatatctga gatgtatgct 480
tctcctccac ctggatagtc caggaggtag gtcagccaga cacatctact tgggcgttgn 540
ttttctaact tccctgactg catgcacaat ttgaaagatc agcagctgga atgagaactg 600
caggctgtgg ctgaggaaca gangccccat gctctctttg ctgcaacaga gacatcttcc 660
aagtcccctg gaccctgtgt tgctgantca ngcttgccct ggtatgctag tcttgctgct 720
tggaccctgg ngagccccat ca 742

<210> 1600
<211> 785
<212> DNA

US 2005/0260186 A1

<213> Homo sapiens

<400> 1600
gggccatcgt gttgctctcc gtgctctgca atggactggt gctgctgacc gtgttcgctg 60
gcgggcctgt ccccctgccc ccggtcaagt ttgtggtagg tgcgattgca ggcgccaaca 120
ccttgactgg catttcctgt ggccttctag cctcagtcga tgccctgacc tttggtcagt 180
tctctgagta cggagcccgc tgggagacgg ggctaggctg ccgggccact ggcttcctgg 240
cagtacttgg gtcggaggca tcggtgctgc tgctcactct ggccgcagtg cagtgcagcg 300
tctccgtctc ctgtgtccgg gcctatggga agtccccctc cctgggcagc gttcgagcag 360
gggtcctagg ctgcctggca ctggcagggc tggccgccgc gctgcccctg gcctcagtgg 420
gagaatacgg ggcctcccca ctctgcctgc cctacgcgcc acctgagggt cagccagcag 480
ccctgggctt caccgtggcc ctggtgatga tgaactcctt ctgtttcctg gtcgtggccg 540
gtgcctacat caaactgtac tgtgacctgc cgcggggcga ctttgaggcc gtgcgggact 600
gcgccatggt gaggcacgtg gcctggctca tcttcgcaga cgggctcctc tactgtcccg 660
tggccttnct caactttgcc ttcatgctgg gcctcttccc tgtcacgccc gangccgnca 720
aagtctgtcc tgcttggtgg tgcttgccct tgcctggctg gccttaaacc caatggttgn 780
acctg 785

<210> 1601
<211> 768
<212> DNA
<213> Homo sapiens

<400> 1601
aantaatttg attgattgca attttacagt tgccttattc attcattcac cttcttggaa 60
agtccctagt tatataagtt tttggctact tccaattggt tgagcttaag ttttgttttt 120
ctttaataca ggcatttaca agaaatggct caacataagt ttcccttgtg tttgtaaatc 180
aaggttgagg tcacttatga ggcctaactg gtttcgtctg ctcagagatt cttcaggcct 240
ggtctccatt ttaatttact tcaacatatg tctgaggtta tgctggctgt tggctgggat 300
ctcggctagg attgtcagca ggaacaccta cgtggtttct ccatgaggtt gctctgcttc 360
ctcatatcca aggtggctgg attctgagtg actcctaaga caatcaagtg gaagatgtat 420
aacctttttt gaccttgcat cacttccacc ttacctacag gcccacccaa gttcaagagg 480
aaggaataca gactccacct cttaatggga ggagtgtcac actaaagaag agcatgtggt 540
gtggaatatc ttgttacaac tctcttgaaa aaagtacaac ctggctgggc gccatagctc 600
acgcctgtaa tcccagcact ttgggaggcc gaggcaggcg gatcacctga ggtcaggagt 660
tcaagaccag cctgaccaac atggagaaac cccatctcta ctaaaaatac aaaattagct 720
gggtgtggtg gcgcaactna cgtggcttcc anctacttgg gangctga 768

<210> 1602
<211> 756
<212> DNA
<213> Homo sapiens

<400> 1602
tatgcttttc tgtacactgc taagttacag catttgggtt tggaattttc agtagatgtt 60
tgtttgtccc tggattggtt ttttttcct tctgtttagt gaacagaaac agattccatg 120
ccctcagggt atggtagcac cagccactat taagaagccc aaaggacaga acctgaagct 180
ttgacaatgt accctagggc tgggggggagt tcaaaggcca aagacgttca gcaccaggga 240

0005205-0005205

agctggaagg agccagcagg gtgggaccac ggtgatgagg aagtgcctgg ggagggaaat 300
tttggtgtat acagcattct actaacagtc tttccaccct tccccctttt tccaggtttg 360
gacagtgcca ataggtatgt ctaggctttg tgacttttac gttttccctc ttgaaatgcc 420
ctgcaaggat gttaccgaga aatgccctga atttctgaat catcttatgg ggcagaagaa 480
ttggccattt ggaggatgtt gttttatttt gggtgttttg tcttgttctc ctattgtaat 540
atgacacacg ggttctatct ctggttgctg tcagtattga gactggaaaa ctcagtgttg 600
ccacctttca cagtatctac acagtctctt ctctggttag catcctgagg aagaacactg 660
ctctgagaag gccgccttnc tcattccagg gcggaatctg gtcactcatc cagcccagac 720
ccagcaggag ccttttttnct gngtgtgaag ctcggc 756

<210> 1603
<211> 832
<212> DNA
<213> Homo sapiens

<400> 1603
atatcggtga aagaccagag gaaggctatc aaggccctgt tggcgtgggt gcagaggaaa 60
acgagaaagt atggcgtggc ggtgcaggac tttgcgggca gttggaggag tgggctggct 120
ttcctggcgg tgatcaaggc cattgacccc agcctggtgg acatgaaaca ggccctggaa 180
aattccacac gagaaaatct agagaaggct ttcagcatcg cacaggatgc cctgcacatc 240
cccaggctcc tggagccaga agacatcatg gttgacacac cagacgagca gtctatcatg 300
acttacgtgg cacagtttct agaacgtttt ccggagttgg aagccgaaga tattttcgat 360
tcagataaag aagttcctat cgaatccact tttgttcgca tcaaagaaac tccttctgaa 420
caggagagca aagtcttcgt tctgactgaa aatggggagc gtacctacac tgttaaccat 480
gaaaccagcc acccaccacc ctccaaagtc tttgtctgtg acaagcccga gagcatgaag 540
gaattccgcc tggatggtgt ttccagccat gcgctgtcag acagctccac cgagttcatg 600
caccagatta ttgaccaggt cctgcaaggg ggcccaggta agaccagcga catcagtgag 660
ccatctncag aatcctncat tttatcatcc agaaaggaga acgggaggtc caactctttg 720
ncgatcaaga aacagttcac tttgaggctt acacctacaa ggatcctttc tgcagtaaga 780
cctgtccttt gctttgaagg acccaaantg gcaaaggaat cattaggcng gn 832

<210> 1604
<211> 801
<212> DNA
<213> Homo sapiens

<400> 1604
gtcaagtcct atcaattttg ttgaaaacat agcttttctg tttgttgttt tctttttatt 60
tccactgata gccctctagt tcatggtttg actttctcct accttattta atgcaataat 120
ttcctaacag gtctctctgc tttcagtctt accctactga gctgcaactt atacctgaca 180
cactgctgta catcagtctt tctgaagcac acgtctaagc tgggcatttt cctgcccaaa 240
tactttcaag ggccacccaa tgcctaaagc ttacacaatg tatttaggga cctgctatgg 300
tctgaatgtt tgagtactgg tgaaattcat atgttgaaac aatcaccaat atgatagtat 360
taagaggtgg gggcttttgg gggcgattaa gccatgaggg cagagccttc gtgaatagga 420
tctgtgccct tataaaatag gcttaaggga ggctgttggc ttttccacca aatgaggact 480
cacagaaggt gccatctata aggaataggc cctcaccaga cactggatct gccagtacct 540
tgatcttgga cttcccagcc tncaaactgt gagaaataaa tttatattgg ttataaatta 600
ccaaatctaa gatattttgg tatagcagcc tgaatggacc aagacaggtt ctctacctct 660

0050050-0050800

gtccccaaat gacccttnca attttatttc tcaagagttt ttggttctca ctncagtctt 720
tacttaagct accaccacat aatcccatgc tatattttta tatctaaaga ccgcangtac 780
caaaaatcct ntactcaagg g 801

<210> 1605
<211> 750
<212> DNA
<213> Homo sapiens

<400> 1605
gtagtggggc tggagcagag cctgccgcga acccccggag cccacgatcc ctcgtgccat 60
ccctcgaatc caccagcacg agcgtcccac ccgcgcctgg gaccatggcc actgactcat 120
gggccctggc ggtggacgag caggaagctg cggctgagtc gttgagcaac ttgcatctta 180
aggaagagaa aatcaaacca gataccaatg gtgctgttgt caagaccaat gccaatgcan 240
agaagacaga tgaagaagag aaagaggaca gagctgccca gtccttactc aacaagctga 300
tcagaagcaa ccttgttgat aacacaaacc aagtggaagt cctgcagcgg gatccaaact 360
cccctctgta ctcggtgaag tcttttgaag agcttcggct gaaaccacag cttctncaag 420
gagtctatgc catgggtttc aatcgtccat ccaagataca agagaacgca ttgccactga 480
tgcttgctga gcccccacag aacttaattg cccaatctca gtctggtact ggtaaaacag 540
ctgccttngt gctggccatg cttagccaag tagaacctgc aaacaaatac ccccagtgtc 600
tatgtctctc cccaacgtat gagctcgcct tnaaacagga aaagtgattg aacaaatggg 660
caaatttac cctgaactgg aagctagctt atgctggtcg aggcaataaa ttgggaaaga 720
ggccngaaan atcantgagc cagattggca 750

<210> 1606
<211> 767
<212> DNA
<213> Homo sapiens

<400> 1606
gtattaagcc agtttgccgg gcaggtctga cacatgtggg aaccaccttt gacttcctgg 60
ggtaccttga ctcaatcatt ttggacctca gttttttca atctgtagat gttggggttg 120
tagttaatgg tctccaatgc cattttggcc ttttagaaaa gtgtgtttgt gtgtgtatgt 180
gtatttgcaa tttgacacat ctttttctg acatacctgt tttcaacaag tatttttaga 240
aaaatttgtg aatgtgttta gaagaattca tgtcaagata catatatcaa ttgtaagttt 300
tagaaatctt tccttcaact gagaaaattg taaaaattaa gcttctcaat ggaaaagaaa 360
ggtaatttta agctcctctc cttcaaaaaa gttcttactt gctaatagtg tgtatcaggg 420
aagggtcaaa tccattaaaa ctctcccaag tggaacaagt gacctgaatt acttgnttgc 480
ttaagtcaaa caggaaagtt cttcttcctt tgaactgaaa taattccagg aaatgcanta 540
aagaagctga gggagaaaga atgcatcgag gagagactgc ttttncagcc caacctgtca 600
cctacagtct tcacagctcc caagctntgg cagtacctgt tacgtacagt ttatgtgctt 660
gataatattc agggtgntaa atcattcacg tctatacctt gatggcttct acaaactggc 720
gtttttaat ttttatgntg gaaactttac ttttaacatn gcccctg 767

<210> 1607
<211> 730
<212> DNA
<213> Homo sapiens

EFS-Web 2.0.1.0 - 20050630

0062040.0062040

<400> 1607
ctctttggcc aagccctgcc tctgtacagc ctcgagtgga cagccagagg ctgcagctgg 60
agcccagagc ccaagatgga gccccagctg gggcctgagg ctgccgccct ccgccctggc 120
tggctggccc tgctgctgtg ggtctcagcc ctgagctgtt ctttctcctt gccagcttct 180
tccctttctt ctctggtgcc ccaagtcaga accagctaca attttggaag gactttcctc 240
ggtcttgata aatgcaatgc ctgcatcggg acatctattt gcaagaagtt ctttaaagaa 300
gaaataagat ctgacaactg gctggcttcc caccttggac tgcctcccga ttccttgctt 360
tcttatcctg caaattactc agatgattcc aaaatctggc gccctgtgga gatctttaga 420
ctggtcagca aatatcaaaa cgagatctca gacaggaaaa tctgtgcctc tgcatcagcc 480
ccaaagacct gcagcattga gcgtgtcctg cggaaaacag agaggttcca gaaatggctg 540
caggccaagc gcctnacgcc ggacctggtg caggactgtc accagggcca gagagaacta 600
aagttcctgt gtatgctgag ataacaccag tgaaaaacct ggcatggagc ccagcactga 660
gaactttcag aaagtggtag ccttcttcca actgggtata cccacccatt ttcnaatagn 720
aatcattnaa 730

<210> 1608
<211> 703
<212> DNA
<213> Homo sapiens

<400> 1608
tattgagtaa taacagcaaa aataaaaaaa accgtggtaa aatgtcttac agttgggaag 60
tgcctaatga agtatgattt atccatacta tgtaatatta cataaccatc aaaaatcata 120
tttaaagata atgacatggg gaaatgctta ctatctatga aaaaagtaaa atatgaaact 180
gcatatattg tctcagtctt atatgtttgg agctatttta aatagtgttg ctttgaacat 240
tcttatacat gtcttgtggt aagcatatat atgcctttct gttggggaaa tatctaggaa 300
aggaattgct gggtcgtata gatacacatt tgtccagcct tagtagctat tgccaattag 360
ttttctagtt ttaccagttt gcccattcct agcgcatgaa ctcccattgc tgcatatcat 420
tatcgatgct tgacatgtct gttttgtgtt ttcattttag ccattctggt ggatggcaga 480
gacactcttt gtggntataa tttgcatttc cctgacaagt aattaacttg aacacttttc 540
tatatgttta ttggttattt gactgncttc tttggtaaaa tgctttgaag aggaacattt 600
tcaattatca gaagaaaaac attttatttt tctaataaca ttccaaacaa ttatgatgac 660
gcttttctaa gggccatact ttgantagtg angctttatt ggn 703

<210> 1609
<211> 704
<212> DNA
<213> Homo sapiens

<400> 1609
ctcaagatga gtaaaaagcc cccaaatcgc cctggaatca cttttgagat tggtgctcgt 60
ttggaggcac tggactactt acaaaaatgg tatccatcac gaattgaaaa aattgactat 120
gaggagggca agatgttggt ccattttgag cgctggagtc atcgttatga tgagtggatt 180
tactgggata gcaatagatt gcgacccctt gagagaccag cactaagaaa agaagggcta 240
aaagatgagg aagatttctt tgattttaaa gctggagaag aagttctggc tcgttggaca 300
gactgtcgct attaccctgc caagattgaa gcaattaaca aagaaggaac atttacagtt 360
cagttttatg atggagtaat tcgttgttta aaaagaatgc acattaaagc catgcccgag 420

gatgctaagg ggcaggattg gatagcttta gtcaaagcag ctgctgcagc tgcagccaag 480
aacaaaacag ggagtaaacc tcgaaccagc gctaacagca ataaagataa ggataaagat 540
gagagaaagt ggtttaaagt accttcaaag aaggaggaaa cttcaacttg tatagccaca 600
ccagacgtag agaagaagga agatctgcct acatctagtg aaacatttgg acttcatgta 660
nagaacgttn caaagatggn cttttcacag ccagagagcc catt 704

<210> 1610
<211> 782
<212> DNA
<213> Homo sapiens

<400> 1610
aaaccccaga gctaatagaa gacaagacaa aaacaagctc agagcagaac taaaggagac 60
agagacacaa agagcccttc aaaaaaaatc aatgaatcca ggagctgttt ttttgaaaaa 120
aatcaacaaa atagatagac caccagcaag actaacaaag aagaaaaaag aagattcaaa 180
taaacacaat aagaaatgat aaggggata ccatcactga tcccacacaa atacaaacaa 240
ccattagaga atactataaa cacctctatg caaataaact ggaaaatcta gaaggaatgg 300
ataaattcct agataaatac acacttccaa gactgaatca ggaagaagtt gaatccctga 360
atagagcaat aacaagttct aaaattgaag cagtaataaa tatcctacca atcaaaaaaa 420
gtccaagtcc agatggattt acagctgaat tttaccagag gtacaaagag aagctggttc 480
catttattcc gacactattt caaacaactg aaaaggagga acttctccct aactcatgct 540
atggggccat catcatcctg ataccaaaac ctggcataga tactacaaga aaagaaaact 600
tcaggacaat atccctgatg aacatcgatg caaaaattct caacaaaata ttggcaaccc 660
acattccaat agcaccaacc aaaaggattt atcccgnccg gcccgggcgc cggtgggctt 720
cacgcctggt aaatncccaa cacttttga aaaaggnccc aaggccgggc ccggaatcaa 780
cg 782

<210> 1611
<211> 327
<212> DNA
<213> Homo sapiens

<400> 1611
tctgagagag gagccttagc cctggattcc aaggcctatc cacttggtga tcagcactga 60
gcaccgagga ttcaccatgg aactggggct ccgctgggtt ttccttgttg ctttttaga 120
aggtgtccag tgtgaggtgc aactggtgga gtctgggggg ggcctggtca agccgggggg 180
gtccctgana ctctcctgng cagcctctgg attaagcttc agnacctatg ccatgaactg 240
ggtccgccag gctccaggga aggggctgga atgggtctca agtattagta gtagaagtga 300
ttacntatac tataganact cagngaa 327

<210> 1612
<211> 711
<212> DNA
<213> Homo sapiens

<400> 1612
tgcttgattt aaaaatttca gtcttgttaa atttatctca taggattctg acttcctcct 60
ctgttatctt gaatttcatt gggcttgctc aaaacaggta ttttgaattc tctgaaaggt 120

US05750500-20180000

caagtatctg tatcactctg ggattgtcac tggtgcctta tttagtttat ttggtgaggt 180
catgtttctc gggatggtct cgatgctttg gatgtttgtt gatgtccgag cattgaacgg 240
ttagatattt gttgtggtct tcacagtctt ggcttgtttg tacccatctt tcttgagaag 300
gctttctagg tattccaagt gtgttgtgtg ttgtaatcta agtctttggt tactgcagct 360
gcatctgcat taggggggcac ctcaagccga gtaatgctgt gactcttggc agatgcgtgg 420
aagcactgtc ttggtgatct ggggtaagat ccaagagaat tccctgcatt accaggcaga 480
gactcttttc cccttctctt gccttcctgc aaacaaatgg agtctctctc catactgagc 540
tccctggatc ctggggcang ggtgacacaa gagcccatat ggccaccacc actgggactg 600
cactggatca gacctaaagc cagggcaaca ctgggtcttg cctaaagccc acagtgacca 660
ctggctgcta ttgctgatgt tcacccaagg cccangggct gntcaatcan c 711

<210> 1613
<211> 726
<212> DNA
<213> Homo sapiens

<400> 1613
gtgatgcgga tgactctgaa cgtaatgacc tggcggcgga gggagatggt gcgctggctg 60
gtcagctgtg ccacagagat tggcccgcaa gccctgatga atatcatgca gaactggtat 120
tccttattca caccagtgga ggcggctacc atcgtggcag tgacgggcac cacacacgcc 180
actctgctgc gactgcagct ggacacatcg cggagggagg agctctgggc ctgcgcccgc 240
accctggcct tgcagtgcgc gatgaaggac cctcagaact gcgccttgcc tgccctgacc 300
ctgtgcgaga agaaccactc ggccttcgag gcggcctacc agatcgtgct ggacgcggcg 360
gccggcggcc tgggccacgc ccacctcttc actgtggccc gctatatgga gcaccgcggg 420
ctgccgctcc gggcctacaa gctggcgacg ctggccctgg cgcagctcag catcgccttc 480
aaccaggaca gccaccctgc cgtcaacgac gtgctttggg cctgctctct cagccactcc 540
ctgggccggc acgagctctc tgccatcgtc cccctcatca ttcgcagcat ccactgtgcc 600
ccaatgctgt ccgatattct gcgccgctgg actctctngg cgcccggtct gggcccctta 660
ngggcacgcc gggcccggca agccactggg tgccgaccgg gcgccgntct gccagcttct 720
ggacgc 726

<210> 1614
<211> 846
<212> DNA
<213> Homo sapiens

<400> 1614
gaggtgaaat tcatcataga aaaggattcc ctatttaata aatggtgctg ggaaaactgg 60
ctagccatat gtaatagacc aatggaacag aacagagccc tcagaaataa caccacacac 120
ctacaaccat ctgatctttg acaaacctgg caaaaacaat aactgggaaa aggattccct 180
atttaataaa tggtgctggg aaaactggct agccatatgt aatagaccaa tggaacagaa 240
cagagccctc agaaataaca ccacacacct acaaccatct gatctttgac aaacctggca 300
aaaacaataa ctgggaaaag gattccctat ttaataaatg gtgctgggaa aactggctag 360
ccatatgtaa tagaccaatg gaacagaaca gagccctcag aaataacacc acacacctac 420
aaccatctga tctttgacaa acctggcaaa aacaataact gggaaaagga ttccctattt 480
aataaatggt gctgggaaaa ctggctagcc atatgtaata gaccaatgga acagaacaga 540
gccctcagaa ataacaccac acacctacaa ccatctgatc tttgacaaac ctggcaaaaa 600
caataactgg gaaaaggatt ccctatttaa taaatggtgc tgggaaaact ggctagccat 660

0095245 0095245

atgtaataga ccaatggaac agaacagagc cctcagaaat acaccacaca cctacaccat 720
ctgatctttg acaaacctgg caaaaacaat actgggaaaa ggattcccta tttaataaat 780
ggtgctggga aaactggcta gccatatgta atagacccat ggacagacag agccctnaga 840
ataccc 846

<210> 1615
<211> 846
<212> DNA
<213> Homo sapiens

<400> 1615
ttttccccgg cgtggtctca ctcgcgattt aaggcatagg tgtcgccgag ccgggaggct 60
gggagtcgcc aggcgtgcgg gggagaggcc tgggccgcgc cgcggcgggg ggtggaggaa 120
gagggcaggc gaggcgggaa ggtgggctct ggccgccggg agccggggac ggagccgccg 180
ccgttgcccc tagcggggag cagccgggag gaggggccg cagtcgggag aggggacccc 240
accatgccca aagtcttcct ggtgaagagg aggagcctgg gggtctcggt ccgcagctgg 300
gatgagctcc cggatgagaa aagggcagac acctacatcc cagtgggcct aggccgcctg 360
ctccacgacc cccccgagga ctgccgcagc gacggcggca gcagcagcgg cagcggcagc 420
agcagcgcgg gggagcctgg aggagcagag agcagctcgt ccccgcacgc ccccgagagc 480
gaaacccccg agcccggcga cgccgagggc cccgatggac acctggcgac caagcagcgc 540
ccggtcgcca gatcgaaaat caagttcacc acaggcacgt gcagcgactc ggtggttcac 600
agctgtgacc tgtgtggcaa gggcttccgt ctgcagcgca tgctgaaccg tcacctcaag 660
tgccacaacc aggtgaaaag acacctgtgc acctttttgc ggcaagggct tcaacgacac 720
cttcgacctg aaaaggcacg ttcgacacac acaggcattc gtccctacaa atgcaacgtt 780
ttgcaataag ccttnaccan cgcttgtttt tggagtncca cctgaagaaa ttcattgggt 840
caacac 846

<210> 1616
<211> 785
<212> DNA
<213> Homo sapiens

<400> 1616
gtgttgatat gtgagaatgt gtgtgtatgt cactgtgggg aggtggctcc aggcttcctg 60
gtgtgcccgg ggtggccaca gtaaggaggc tgcactcagg ccctgcccgt actcctgccc 120
tccccgggtg gcccaacctt gtgtgactgc aagtgactgg aggaggccag ggggttggag 180
gacgtgtcca ggtcctatgt cacaggccag gggcacatcc acacacctgc gcccctggct 240
gagctgtgtt gtcagggacc ctcagcacct gggaaggtgt ggggaggcca agaggccagg 300
tcctaggaag gcttgtagtg gacccttcat ctgcccaggg gatccatttg tggggtcaag 360
ggaggtcctc cagccaggcc caccccgacc ccggccagag catcttcccc acccctgggc 420
tcccacccag ctgcccactg gcccacgtcc ctacctgtcc ccggttcttg ccgctccctg 480
tcctgggagg caggttggga tctggcctta cttccagtaa aatgacttct ctttcatatt 540
aggccaaggc gagagagcgg agacatttat gaaactttgt ttaatgtact gaaaagccat 600
cggccagaac atttaggaaa ttgattttcc tggcattgat gaactcgttt tattttaccc 660
cagtattaat tacttttttt taaaacaaat taatttaaga gtcgtaaaac ctaacaagtg 720
agccaaacgt ccatagatcg tgtcctgntt ccgncccttc ccanaattga ccccccttcct 780
tttat 785

09650f05.SQ.SUBCD

<210> 1617
<211> 841
<212> DNA
<213> Homo sapiens

<400> 1617
atggcatgaa cccgggaggt ggaggttgca gtgagtcaag atcgtgccac tgcactccag 60
cctgggtgac agagcgagac tccgtctaaa aaaaaaaaaa agaaagtcac ctgttaaaga 120
ttacacagca aactgccagc atccaaagcc tgtcctcttc cctcttccat ttgaataggc 180
tccttccagc caacattcat gtatattcta tccaggctcc accttccct tggaaactgc 240
agctgtgttt gctgaaaagg caagtgggga cagcttgttt cctcccaacc tcaggtacct 300
tcctctccaa ctgctgctcc taaatctcag aatatatggt gttgcttgct tctcctccga 360
accgcccccc cccctcaggg tggggatagg gcatggaaat ggcctttgga agttaatggg 420
attcttgggg tcagattgga ttctccagaa ccttggggaa aggaaagtca ggtttctagt 480
aaataaataa catcctggaa tggccctagc ataggctatt tgtaggagga aaggagagaa 540
gtagagaagc aaatcttgac tatttccccc aagaagtgcc aagtggtttt ggaacttttt 600
tttttcggtt ttgaacattt ttaagggaaa gtttatccta ctctaccata tttaaatagc 660
atacgctcaa agaacgactt gatttccttt aggccaaaga gaagagatgg ccttggttgt 720
tttcctagtg ataagagtcn aggattaatt ggtaaatctc tttttgaaac tgagagatgc 780
cagggcaagg tggctcatgc ctatacccca gttactcgga agcttaggca ggaaaattgt 840
t 841

<210> 1618
<211> 702
<212> DNA
<213> Homo sapiens

<400> 1618
gatgttattg tcagcactat agagtggcag ggtggagtct taccctgttg tgaaacacct 60
ccctccctct ctaggtgttc tccccaactg cctgctaggg agggtactcc cctcaggtag 120
aattaagagg gctgagggtc aggggccatg ggccaaggag gtcagtcaga tctccttgga 180
tctggaggct ctggctttca gccagaggca gggggagaaa gatgatgtct catgatgcca 240
gcgcttcctc ttcactggcg tctgacccag gagcagtcca gaatcagctt ctctgacctc 300
actccaactc acgtgtcttt gacactttaa gggacttcct gttttagggt cttctggctg 360
ggtgtcattg aatgggcagt gattctctaa ctttagactg atgttcccca gcctttgttt 420
ggggactcgg aggcagagta gacagttacc cttacccctg ggttggggag ggtcatattc 480
ctggtatccc caggaggtca acaggggctt catttttctg agggactaga gggtcttgtg 540
gagctcctgg gacagagatc tagatccaga gagaacattc gtccttccga tctcagctca 600
gctctgagag cccttccana gagcancttc cgagggcttc agaacccttc gaaaagccct 660
tccagagagc aacccccccaa cttcccaagc tggctggnac tt 702

<210> 1619
<211> 806
<212> DNA
<213> Homo sapiens

<400> 1619
aaagataaaa ggtttctaaa acatgacgga ggttgagatg aagcttcttc atggagtaaa 60

0050205.00000

aaatgtattt aaaagaaaat tgagagaaag gactacagag ccccgaatta ataccaatag 120
aagggcaatg cttttagatt aaaatgaagg tgacttgcac tgagcgggac ctgcgagcag 180
cgcgggcggc agcccggggg aagcggtgag tcgcgggcgg caggcccagc cagtccggga 240
ccatgtctgg agaactacca ccaaacatta acatcaagga acctcgatgg gatcaaagca 300
ctttcattgg acgagccaat catttcttca ctgtaactga ccccaggaac attctgttaa 360
ccaacgaaca actcgagagt gcgagaaaaa tagtacatga ttacagaaaa tgaattgtgg 420
agagcaaagt acatctatga ttcagctttt catcctgaca ctggtgagaa gatgattttg 480
ataggaagaa tgtcagccca ggttcccatg aacatgacca tcacaggttg tatgatgacg 540
ttttacagga ctacgccggc tgtgctgttc tggcagtgga ttaaccagtc cttcaatgcc 600
gtcgtcaatt acaccaacag aagtggagac gcacccctna ctgcaatgag ttgggaacag 660
cttacgtttc tgcaacaact ggtgccgtag caacagctct aggactcaat gcattgccaa 720
gcatgtctta ccacttgata ggacntttg gtcctttgc ttgccgnaac tgnttgctaa 780
ttgcattaaa attccattaa tgaggc 806

<210> 1620
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1620
acttacatct ttaccaccgc gtctattcct ctctcacccc gcccccatgg cccaagtctt 60
tagcctggca ttcacgtacc ctcactggca atcttgggga aagcctcaga aaatggtaca 120
gcagaaagcc cagcgtggag gagccagttg ggagactcag catgtgggca ccctgcttct 180
ctgcgcagag cctcctctgt cataggtaga tccagcccat ctcaggttac actacagtct 240
gtaaccccta gcctctccct cctcgcgccc ctctggcctc catcactgtc gtgccggtcg 300
tggggacaga tgggagggaa ttacggtatt tacagctgct cttcgccggc tcttgctccc 360
ccgcgtgtcg acaaccgaaa ctgcagcgag gcccagaggc ctctgcccac tcccctcgga 420
gttccaggag gacgctaagc gcgagaagcc aggctcaggg aaactgaacg cccatacgct 480
cctagtccct ctcacctgga tcctctgcgt caggttacgt gcttgcgcta tttttccttt 540
tgtttcttta aatttttttt tgtagagaca gtgagccgtg tgtgtggggg gggttggaag 600
gnaggtctca ccattttgcc caggccggtc tcgaactcgt gggctcaagc cttaccacct 660
gccttagcct ccaaagtgct gggactacag gtgtgagcca ccacgcccag cctgnttgcg 720
ctgnttttga ggctttccgc caaatgnttt ctttcttggc aagaaagtca ccccctaaaa 780
t 781

<210> 1621
<211> 826
<212> DNA
<213> Homo sapiens

<400> 1621
gtgggcttat ctacctttga tttttgaggt tgctgacctt tgagtgaggt ttttgtgggg 60
tctttttgt tgatattgtt gtagttttct gtttgttttt ctttttaaca atcaggccac 120
tctatctatc gtaggactgc tgtggtttgc tgggggtcca atccagaccc cagttgcctc 180
agtttttcct gtacctggag gtatcaccag tgtaggctga gaaaaagcaa aggtggcagc 240
tagctccttc cactggaagc tccatcctag ggggatactg acctttttgcc agcccacaca 300
cacctgtagg aggtggctga agacccacat tgggaattgt cacccagtca ggaggaacgg 360
gatgagggac ccacccaaag aagcagtctg gctgcttttt ggtagagcag gtatgctgtg 420

US 2005/0260686 A1

ttggaggagg tcccttcctt gtttggacca cctatattct ccatagctgg cagactagag 480
cagctgactt gactgaacca tagaggtggt ggctgcctct ccccccccagg aactcagagt 540
tgtctctgat ggactctaat ccactgccat tggctggctg ggattccacg ccagtcggtc 600
ttaacttgtg aggtgctgtg gaagtggggc ccacagaacg tcgctgcttg actncctgga 660
ttcagcttcc ttcctangga tatatncaga tggatttccc acctttctgg gaatcctggg 720
gctggtgtat ttaaaactcc gggtctctgc atgacctaag tggctacttt gccgggactc 780
ccatacttgg tatnaaccaa gcctgtgcat ggcnataagg gacttc 826

<210> 1622
<211> 783
<212> DNA
<213> Homo sapiens

<400> 1622
gttaacagta gttacaatat tatttcttga agtcccgaat tctaagaccg atgctgatga 60
tccttctctc ctttcccctc agcttgatat atggtccaaa tccaactatc aagtattcca 120
gaaggtaagt tttacttttt gcttcttact caagcggcat taggaaaacg tgaatgcttt 180
gaggtttaaa cattggtctc aaatcagagg cttttgaaaa agtgaaaaaa gccagacaga 240
aaaggatgct cactgtctga ttccatatgt atgacattct ggaaaaaaac tgtattctga 300
aaacctagtt ttaaaactcg gtttctcaga gccctagcgg tctccactgg tgcccaaggg 360
atgggccaag ggaagcaggc tggcactccc tcaccctgcc ccttccccac tttgtgctct 420
ggggacactg tatctttttc agatattggg cttccttatg aaaaactgtt atgggaaatg 480
tcagacgaaa tgaaaagtga ccagagaaaa ttcatttccc cagctcctga cagtgcaggg 540
ccccttccct ggactaactc gggccctgtg gctgatgagg attctgtccc caccggcaca 600
cccccaccan tccccacagt actcagggcc agctccctgc agggcagcag ccggcttctt 660
atgttctcat ccatcttctg nctctggtct catccagtag tgaaataaga gagttggcca 720
tcatctcatt cggtccctca tncagctnaa caacaggtgt ccacttccca acactttggg 780
ang 783

<210> 1623
<211> 462
<212> DNA
<213> Homo sapiens

<400> 1623
ttccttgggc aaggccaaat tcttcacact ttctattcct agtcagctga attttgcttt 60
tttgttttgt tttgttttgc tttgttttgt tttgttttgt ttgagacaga gtgctgctct 120
gttgcccaga ctggagtgca gtagtgcaat aatagctcac tgcagacttg acctcctggg 180
ctcaagcaat cgtcccatct tagcccccag agtagctggg actatagact tacaccacca 240
cacactgtta atttaaaaaa atttttttgg tagagatgag atctcactac attgcccagg 300
ctggtcttga actccttgtc ttaagtgatc cttccacctc ggcctcccaa agtgctggga 360
ttacaggtgc gagccactgc ctggccagct gaatgttttt acatgtttaa tatttcttat 420
ctgaaatgct tgggaccaga agtgttnngg atttcanact tt 462

<210> 1624
<211> 797
<212> DNA
<213> Homo sapiens

0050-5450-0-SEQ-000

0050450 :0N0000

<400> 1624
ggagctccaa atgtcgttgg gtggggaagc aaaatgtaga gaaacattta aagcacactg 60
taataataaa tgcaattata aactatatgg aggagggtgc agaggaggga atgtgtctgg 120
tgtgtgatgt gtgtgtgtgc agtgggggta tcacagagag tatgacatct gagttgaggg 180
tagcaggtgc ctggagtctc aggtggctgc tcacccatct gtgcaggtgt ctctggggct 240
gctggtctca cctgtggtct gcagtagaca caattggctg agcaggatat gtgatactgt 300
gtggttggtg tggagttttg aagaaggggc tgtgtttggg ccacgtaggc tctactcaga 360
gacctgaaac cacttcagaa tggtgcatat gtcgaaagag ctggctgggg gccttgccca 420
aaccaactga ggtcttaaag tccggggaaa aaaagtctgg gttccaacta gaattctaga 480
aatatttcta gaacacacag agagggaata agtccctcta tcacccttat taccaagcct 540
tgtggttccc tgtgatttta gataatgtct gatatttttc tggctatttg cctagtagga 600
tttaaaaaat attttcaaag tgaagctgan agagaatctt ggaaacacac atacctgttg 660
atcatgggcc ctgcanaatt ggcccttggg ggctttattt ggtatgngtg cctgggtggc 720
tttaccactt anactctatc atgggccccc atgaagctcc attctcaata ctgaataata 780
ttacttncct tggtgag 797

<210> 1625
<211> 780
<212> DNA
<213> Homo sapiens

<400> 1625
tctgagcatc cgaagcgcgg ccaggtatgc atctagggca ccggggtcct ggtggcgcgc 60
cagtgggccc cctccctcca cccctgtgac taaaccaccc tccctacacg gttgaatgac 120
aagttcaacc ttccctaaaa cccccggtga cgagtccagc cgcgcgccca ttcttcacgc 180
aggggcggga cggactttca aagacttgga gttcccacgg gtgtgggttc gagaccttcc 240
tctgccagtt cccagctccg ctaccctgag caaatgactt acgctccatt ggattttccg 300
caatgtggct gaaggtgggg ggcctacttc gggggaccgg tggacagctg ggccagactg 360
ttggttggcc ttgtggggcc ctggggcctg ggccccaccg ctggggacca tgtggaggtt 420
cttgggccca aaagttttac caggatgggc ctgggagagg cctgggtgag gaggacattc 480
gcagggcacg ggaggcccgt cccaggaaga caccccggcc ccagctgagt gaccgctctc 540
gagaacgcaa ggtgcctgcc tcccgcatca gccgcttggc caactttggg ggactggctg 600
tgggcttggg gctaggagta ctggccgaga tggctaagaa gtccatgcca ggangtcgtc 660
tgcagtcaga agggtgggtc tgggctggac ttcaacccct ttcttgtcgg aagccaatgc 720
ccaaccggat tgtgcanacc ttatgtacag ttcganggga ccgcccttaa ggttgggcna 780

<210> 1626
<211> 695
<212> DNA
<213> Homo sapiens

<400> 1626
aggcaggcgg atcacttgag gccaggagtt cgagaccagc ctggccaaca tggtgatacc 60
cgtctctact aaaaacacaa aaattagcca ggcatggtgg cacacgcctg taatcccagg 120
tacttggaag gctgaggcag gagaatcatc tgaacccagg agacaggttg cagtgagccg 180
agatcatgcc actgcactcc agcctgggca tgagactctg tctcaaataa atagataaat 240
aaatgatttt aaaaaaataa aagctgagga gtgacttggt tagatccgta gtttaaagaa 300

gtcattttgg ggccaggcac ggtggctcac gcctataatc ccagcacttt gggaggctga 360
ggcaggtgga tcgcctgagg tcaggagttt gagaccagcc tggccaacat ggtgaagctc 420
cgtctctact aaaaatacaa aaaattaccc agccgtggtg gcttacacct gtaatcccag 480
ctactcagga gggtgaggca ggagatttgc ttgaacctgg gaggtggagg ttgcagcgag 540
ccaagatcat gccactgcac tgcagcccgg gcgacagaga gactcaaaaa aaaaaaaaaa 600
gtcgttttgg gaaccagtca ccgnttcttt ttgatagccc ctggttttgn taggggaagc 660
aaggggttca ncaaaatgaa tatacttcct ggctt 695

<210> 1627
<211> 661
<212> DNA
<213> Homo sapiens

<400> 1627
agaccagttg agggctgaga ggtttcagac atgacgcccc cgtgccccaa gttcatccgt 60
gtacagtgcc caagggcaga gacatgttcc tctagaacca tcgttcattc gtcagctctc 120
ggaaacaaag cactggtact gtgctgagca ctgtggcacc ggctctgctg ggctcctgga 180
tgctccaagg ccctgctccc tggctgactg cccattttct gtcctcctcc cggcttcagg 240
tgcgagacaa gaagcttctc aatgacctga atggagccgt ggaggatgca aagacggccc 300
ggctgttcaa catcaccagt tctgccctgg cagcctcctg catcatcctc gtcttcatct 360
tcctgcggta ccccctcacc gactactaag gcccgccagg cacggctgct ggcggagaca 420
agcactgaga catgtttatt ctcatggtcc ctgaaacgca ggatcccatg aggttggggc 480
agggcagggc ttcttgtcct ggggccccct tgagctgtga actgggcagc aaggccatca 540
gaagctgagt acagcaaggg ggcagtgagc ttggccctca gtccaccccc tncgctnctg 600
gcctncgcct gctgtgtctg gggcctgggg gcttctccct cgctgctgac cctggctttc 660
a 661

<210> 1628
<211> 802
<212> DNA
<213> Homo sapiens

<400> 1628
cccggcgctc ggagcccgag tccgcgggaa gatggcggcg ccgctcatcc ccctctccca 60
gcagattccc actggaaatt cgttgtatga atcttattac aagcaggtcg atccggcata 120
cacagggagg gtgggggcga gtgaagctgc gctttttcta aagaagtctg gcctctcgga 180
cattatcctt gggaagatat gggacttggc cgatccagaa ggtaaagggt tcttggacaa 240
acagggtttc tatgttgcac tgagactggt ggcctgtgca cagagtggcc atgaagttac 300
cttgagcaat ctgaatttga gcatgccacc gcctaaattt cacgacacca gcagccctct 360
gatggtcaca ccgccttctg cagaggccca ctgggctgtg agggtggaag aaaaggccaa 420
atttgatggg atttttgaaa gcctcttgcc catcaatggt ttgctctctg gagacaaagt 480
caagccagtc ctcatgaact caaagctgcc tcttgatgtc ctgggcaggg tctgggacct 540
cagtgacatt gacaaggatg ggcacttgga tcgagatgag ttcgccgtgg ccatgcactt 600
ggtgtaccga gccctggaga aggagcccgt gcccttcggc ctgccccgtc cctcatccac 660
ccttcaagag aaagaagact gtgttccctg cgccgtcccc gtcctgctgn cagccccacc 720
aaaagacagc ttcgttcacg ccgtcccacg gnaacgtanc agccttaaca gacaggagct 780
gtccccaaca cagcttaaca ac 802

US 2005/0260186 A1 Nov 24 2005

<210> 1629
<211> 751
<212> DNA
<213> Homo sapiens

<400> 1629
gcatgcgcat agctaaccgc acccggttca gctcgccttt cttggccaga ggcgccggtt 60
ggactcacgg gcggggcatg atggtggtgg gtacgggcac ctcgctggcg ctctcctccc 120
tcctgtccct gctgctcttt gctgggatgc agatgtacag ccgtcagctg gcctccaccg 180
agtggctcac catccagggc ggcctgcttg gttcgggtct cttcgtgttc tcgctcactg 240
tatcctccct gcagttggag ggggcgggcc acgtaggcat gtgcccttcc ccttccccac 300
acagctctgt ccccgttgca caccctactc cttaactccc tcaaccaggc cttcaataat 360
ctggagaatc ttgtctttgg caaaggattc caagcaaaga tcttccctga gaatgcttag 420
gtgaaaggtt gttaaggaga aatatattta ctgaagctgt ctgaagacag atgacgcttt 480
tcgattctgc accttgtata gctcctggag ttggagctgg aagagaaggc ctttgaaagc 540
aagaaacttt ggtaccttct ggccagctcc cagggaaggt ttgaggggaa caggcaaatt 600
tgggctgatg ttttgcatct attcctggga agcggtcctt gntccaccag aagaacagca 660
ggaccaagtt cactatggag ttctgatgtg aaagttaact caatattaga gaatctactt 720
atttgaggga attgggaana anctaaatnc t 751

<210> 1630
<211> 764
<212> DNA
<213> Homo sapiens

<400> 1630
agctcaaaag cagtcataga tgatacatat acagtggatg tggctgtgtt caattaaaac 60
ttttttgtt gtttttaag acacggttgt ctcactttat tgcccaggct ggagtgcagt 120
ggcatgatta tagctcattg cctccttgaa ttcttggact cgagcaatcc tcttgcttca 180
gcctcctgag tagctgagac tgcaggcatg tgctgttagc acacccagct agttttaaa 240
tgttttgtag acatagggtc tcaccatctt gctaaggctg gtctcaagtg atcctcccac 300
ctctgcctcc cagagtgctg caattacagg tgtgaaccac cacaggccct cattaaaact 360
ttatttgcaa aaacagatgg tggatagtaa ttgtttgttc acccctgctc aaacacacct 420
tgttaaagca cacacatacc accgaccttt gttcattgct gatgctctta ctgataaccc 480
accctcccag tgaagttgct tactagagta agctcacaga gggcagactc tttggttttg 540
catctatacc ctgagctggt gagtagtatt ttttttttcat accctgagct ggtgagtagt 600
attttttttt caatcaactt ggaattaaga acttgtggaa aactggacat ttcgctatag 660
gaagcattgn gatagggagg tattatgtan aaagtctgct ctaggaaatg gaacattaac 720
ttttcatttg agtggcataa cttaatntaa gtttggatgg aaag 764

<210> 1631
<211> 816
<212> DNA
<213> Homo sapiens

<400> 1631
taggcagcag tgtgcctggg agacaagcag agatctcacg gattccttta tttttcctgc 60
catagcagca aattttcctt ggagcactat ttgaaaatta acattactga aaaaattaag 120

09695450.020600

cccacttaaa gggactctag tttttatcta aattataaaa ggtgagaaga cagttctgaa 180
aaaaatgtat caccttgaaa ctagaatgct ttagttaatg gggtaagcta gaagtaagct 240
gcctttgata actcatgtaa gagcagcata tgaatggatg ataactgtct ttcttccatt 300
taattcagct acttcctatt caatctcaaa tctcagttgg aaagcaattt ccctcacttg 360
acccattttt cttctgcatt atatctttct tctggttctt caacacaaaa agtttgaaaa 420
gacttgtaag cagattcaga cacctggttt gggctaagcg tatttcatta tttggctttc 480
cagttggaag gataacagtt ttacttcttt acattttgtt ttgtttcttg gttctttttg 540
agacaggttc tcgctctgtt gcccaggctg gagtgcagtg gtacagtcac agctcatcgc 600
agcctcagcc tctcaggctc gggcggtcct cccgcttcgg cctccagagt agctgggacc 660
acaggcatgc actatcatgc ctggctaatt tttaaaattg gttttgtaga gacagggtct 720
tcctatgntg ctggggattg caagtgtgag caacctnnct gctgctgctt tactttgata 780
tcacactttc angagagata tatgttaaat gactga 816

<210> 1632
<211> 860
<212> DNA
<213> Homo sapiens

<400> 1632
cagtaaatgc tccccccatc ctctccaggc ccaaaccact ggaattgtcc tttactcctc 60
tttctgtctt atattcatgt ctgtcagcta atatacctga ccacttctcc ccaccttcac 120
tcctgtccac ccttatctcc ttcacagacc attatggcag gctcctcagt gatctctctg 180
ctctcacccc tgcccccaga gtgttcctta catgcagctg gagggatgct gtgagcacct 240
gtatcaggtc atatccctcc cctgctcaga acacttccaa ggctacatct tgctcggggt 300
aaaacccaga gtcctctgca aggccctgca ttgtctgccc tcatcacctc tctgacatca 360
tctactcttc ttactccctg tgctccagcc acactggccc gagggccttt gtgcttgctc 420
ttttctttgc ctaaagaact catctatcaa atagcccaga cttgttcctt cctctttagg 480
tctcccctga gatgtcactg ccttcctgag atcttccctc accacccttc taaatttgtg 540
acttatagtc acatctatct ttgcttcttt aactttatcc ttagcattaa tcatattact 600
gtttaacact ctgtagaatt tatctgtgtt tatggtctgt ctcccctgac ccttacctct 660
aggagactgt tgacttcatc agggaagggg cttttgctac ttcctccgtt atctncaaca 720
catagaaaag tgcttggcac acagttaggg ctcagtaact acttatcaaa taaactattg 780
aagagcacat atctgggatc ccagcatggc aagggactnt ggcgatccct ttntacagaa 840
ctccaaggag ctggcttaaa 860

<210> 1633
<211> 727
<212> DNA
<213> Homo sapiens

<400> 1633
tattgtttaa tgtagtagac tacatgggaa aataactcta ctttgaactt tttaatttaa 60
tataaacatc cccttgttgc tggacaacaa gttttgttta cactgccact aacagaatat 120
cataatatga aacatgatat tcatttgaat atttgagggg tacttcatta taagggagtg 180
ggattccttt tctagctttc ttaggcagag tctctcccat ctacaacaat aaggccatgc 240
tcaagtctcc agaacaatga tcatactgta ttactatttt tcactatgtt tccagacaga 300
ctggtaaatt ccttttttgtt tgtttctttt tgttaattct aacgttaatt gaaaacagtg 360
gtttttgttg ttgttgtttt tgtttttgtt ttgagacaga gtctctctct gtcacccagg 420

09529900.0

ctggagtgca gtgacgcgat ctcggctcac tgcaagctcc gcctcccagg ttcacgccgt 480
tttcctgcct cagcctccca agtagctggg actacaggca cccgccacca cgcccggcta 540
atttttgtg tctttagtag agatggtgtt tcaccgtgtt agctaggatg gnctcgatct 600
cctgacctgg tgatccgtct gcctcggcct nccaaagtgc tgggattaca ggcatgagcc 660
accatgcctg gctgaaaaca gtntttaag agcaatgntc tgagctcttt ttgagcttta 720
ctcatgg 727

<210> 1634
<211> 755
<212> DNA
<213> Homo sapiens

<400> 1634
tgaaaatgta accagcagat gacgtttctt ccatctccct tgcaggcaca gggccatggg 60
tgaccacggt ggccgccggg aaccagccca ccctgatcgc acactcctat ggagtggccc 120
agcctcccac cttcagcccg gctgtgaacg tccaggcccc ggtcattggg gtgacccccc 180
cactgcctcc ccacgtgggg ccccagctcc cgctgatgcc aggccactac tcgctccctc 240
agccgccctc tcagccactg agcagcgtgg tggtcaacat gcctgcccag gccctgtatg 300
ccagccctca gcccctggcc gtgtccacac tgcccggtgt ggggcaggtg gcccgcccag 360
gacccaccgc tgtgggcaac ggccacatgg cagggccccc gctgcctcca ccgccgccag 420
cccagccgtc cgccactctc cccagtggtg cccctgccac caatgggccc cccacaaccg 480
actcggccca cgggctgcag atgctgcgga ccattggcgt ggggaagtat gagttcaccg 540
acccggggca ccccagaggt aagtcctgct gcacgtgcct ccccacgggc ctgcgtctgc 600
acctccctgc gcggtcactg caacaccacc gggacagggg gtgcttcatg ccagctcctt 660
cactggcctt cccaacccaa aggcttgcan tggaagcctt cacctgccca aagacaactg 720
gcctgaaaat ggggggaagg gaaggngggn aaggt 755

<210> 1635
<211> 800
<212> DNA
<213> Homo sapiens

<400> 1635
tgctttagct attcagcaat attgagaaaa aacatgaaca catttatgac tttgccttga 60
ccattgactt ttctaaaatg tgcttccttt tcctttattt ccctttttt atacaaagaa 120
aatagcccaa atttctcctc ttaggtcatt ccttaacctc tcagagaacc agtttcccca 180
tgaattggga ataatgctct atttacaggg ctgtttggat taaataagat gctgtttata 240
aagtgtctgt gccagggcaa agcatgtggt aggtgcttgg tgacagcatg atccctgtca 300
ccactctgtc aagtccagtg ttgctgagat gtcacacctg acaccctcta aggctaccct 360
gattgccagg agtggcccag ggcccttctg cagtctccgg gtgcctttag ttataacctc 420
ttgtctgggt cagaccatta gctttcatgt ctgcttctag ctacaactgt agcctccctt 480
ccttttgcct tcaaatctgc cacagctgcc cggcaacaaa aaagattcct aagcatctcg 540
aggtcctgtt taaatgggtt agggtccaag caagccctga gacatcaagt ggttgggtct 600
tttatacctt tttcatctct acagccctgt tctcttccta aggccaggcc cacaggggat 660
actgaggaac caccagcccc ttcaggcggn acagcagacc ctgaagagaa ctgctctaac 720
ttaagtacct tctgacttac catttttcca gcctctgggt gtggntctga tgaaccttaa 780
acttgaaang ccaggccana 800

0050450.0002

<210> 1636
<211> 845
<212> DNA
<213> Homo sapiens

<400> 1636
ctgacaatat gactttctga tgtactaagt acattttagt ggtcaatgtt ctctacatta 60
aatggctttt gttttggtaa acccatatgt ttggagtatt aatggttgta tttctaattt 120
gttaccctgg cccaaatgat gaagtaatag aatgttgcat atttccttcc acttaacatt 180
taatttgtgt taatgaaacc aaatgtcact tttaactctg gaacttctaa aatgaactac 240
accgggaagc cctctgtatt ctttgtggtt tcccatgttc catgagccag caaccgggtg 300
ttcacttgca gtgactctgg tttactcagc ccctggggat gcattactgc tcggaaatgg 360
gaagggagag tagcaggtgg tgcgtaattg agagctgtgt ttgattggga ctgacctggt 420
gccccttcc tctgccgggt tgaatgagag tttaaaggag gaactgctgc tgctaagaac 480
aaaatgaacc cgagtgcctc ttactgtttg tcccgactgt cagtgcatag ggattaacta 540
acatccagga acttttagct ggcctctgct ttgttcttca acattcggac cttcagtgag 600
ctctagacct gcacaaacga cctgcagcaa atggcagctt tcatttgggc tgaggaagag 660
gaatattgga gagaatgagg agaaggaaat aaatatcttt ccttttggc ccttcctgct 720
ttatctttct ccatctttat gcctttatta atgaggattt tncaaatatc gggcttcaaa 780
aatgccataa gaagacttca tttctgnggg tttaatgtca taaaaatctc cttatgggaa 840
aaacn 845

<210> 1637
<211> 828
<212> DNA
<213> Homo sapiens

<400> 1637
agagtgtgac agaaatctaa aagatcaact tcatcgtgca ggaaggagca tagaaaaata 60
gagaaaagaa gaaaacagca aaccattctg agtaccgtgg aaacaaacta aaagtgggct 120
tagaaggaaa acagaggaag aaggtctgag tagtcccagg gacgccagag gccaagatgg 180
gaaagccacc caggcgagac aggggagatg gaagccacag ggaatcacta tcacatacct 240
ctgctggacc tgaatggtcc tggcgccagc tagagccatc tggtcgacct tagacatgtc 300
aaggcaggag ccatctgatc gaccttagac ttggcaagct ggtggctaag tccagtgctc 360
actgccgaca tctgtctcaa aataaacaaa aagtccaaca gtgaatattt aacaataaca 420
aaaatataat accaaacaat attaaagacc aataaataag tgggagtgaa caaaggtaaa 480
aggtaactaa tatcacaatt aaaatattct gctatctctc actctctctc ttccccttc 540
catttgtcac acccaggctg gaatgtgaca aaaaaatata aaaggtcaat ttcatcatgc 600
aggaatgagt gtagaaaaag ggagaaaaga acaaagaaga aaaacaacag caagtctctc 660
taaaacttca gttagtttca ctgtagaaaa aaaaattgaa agtggggtta ggaaaaaaag 720
gaaggaggag gataagttca ngtagcctga nggactaggg aagcccagat gggaagacca 780
cctgggtgac ctgggaagat cgaggaccnc agtgaatcat gatcacat 828

<210> 1638
<211> 849
<212> DNA
<213> Homo sapiens

0050306-0020000

0956230 2005-05-06

<400> 1638
tttaccattt tttctttatg tcatccctca tagagacaat ttttggagta gatttcattt 60
aaaagaatac attgggctgg gtgccgatag ctcacgccta taagcacttt gggatgctga 120
ggcaggagga ttgcctgggc ccaggagttt gagaccaatc tgggcaacat agggacaccc 180
tgtctctacc aaaaaaaaaa aaaaaaattt aaattagcca agcatggtgg cacacacctg 240
tcctagatac tcaggaggct aaggtgggag gatcacttaa gcccaggagg ttgaggcagc 300
tgcgagccat gattgcactg ctgcacacca gccttgggga cagagcgagc tctgtccaaa 360
aaaaaaaaaa aaaaaaaaaa aaagaggcta tgaggctaca tacttccaac agtgcaaagc 420
aaggggcttt ganatgtttc ttgacatggt cccagtaaag tgttggacct aaaattcaaa 480
ccaaattaga tttctttata actggtgaga agtcttaata aaatagtttt ccttaataaa 540
atttaactat ttcagtatgt ctgcttactg aagtttggaa atgaaaattt cccatttgtt 600
ttctctggca catgagttta tcagcctgct ttgcaagtgc tttaaggcaa ataaatgtta 660
atttgattgc tttttgttga tttgatagct tggatgcttg ggccacctgt tagtaatttt 720
cttttacttg naacacttgc ctgctgctga atactaggca gtgagtctta ttgagttgat 780
gatccagggg gttttatttg ggaaattcct ctggtggaca tggntcaggt taagacaaga 840
attgtttta 849

<210> 1639
<211> 770
<212> DNA
<213> Homo sapiens

<400> 1639
tgtaagaaca gccaaggaca gagagtcatg gttgagcaga gtgaaaaact gaatggtgtc 60
cttgaagcga gccgcctctg ggataacatg cggaagctgg gggagtgcac agaagaggcg 120
caccagatga ctcatgacgg ctacttgaaa ctctggcagc tgagcaagcc ttcgctggcc 180
tcttttgacg ccatctttgt ggatgaggcc caggactgca caccagctat catgaacata 240
gttctgtctc agccatgtgg gaaaatcttt gtaggggacc cgcaccagca gatctatacc 300
ttccggggtg cggtcaacgc cctgttcaca gtgccccaca cccacgtctt ctatctcacg 360
cagagttttc ggtttggtgt ggaaatagct tatgtgggag ctactatctt ggatgtttgc 420
aagagagtca ggaaaaagac tttggttgga ggaaaccatc agagtggcat tagaggtgac 480
gcaaaggggc aagtggcctt gttgtcccgg accaacgcca acgtgtttga tgaggccgta 540
cgggtgacgg aaggggaatt cccttcaagg atacatttga ttgggggggat taaatcattt 600
ggattggaca gaatcattga tatttggatc cttcttcagc cagaggaaga acggaggaaa 660
caaaacctcg tcattaaaga caaatttatc agaagatggg tgcacaaaga aggctttagt 720
ggcttcaaga ngtatgtgac cgntgccgan gacaaggagc ttgaagccaa 770

<210> 1640
<211> 704
<212> DNA
<213> Homo sapiens

<400> 1640
atagtggagg aagcagtgca ggagctgaac tctttcctcg cacaggagaa tatgaggcta 60
caggaattga cagatcttct tcaggaaaag catcgcacca tgtctcagga gttctccaag 120
ttgcagagta aagtggagac agccgaatca cgagtgtctg tcctggagtc catgattgat 180
gacctgcagt gggatattga caaaattcga aagagggaac agcgactcaa ccgacactta 240
gcagaagtcc tagaacgggt gaattccaaa ggttataagg tgtatggagc ggggagcagt 300

ctgtatggcg gcacaatcac tatcaatgct cggaagtttg aggaaatgaa tgcagagctt 360
gaggagaaca aagagttggc tcagaaccgt ctctgtgagc tggagaaact tcggcaagac 420
tttgaggagg tcactacaca aaatgaaaag ctgaaggtgg aattgcggag tgcagtggag 480
caagtcgtta aggaaactcc agaatatcgc tgcatgcagt cacagttctc cgtcttgtat 540
aatgagagcc tacagttgaa agcacacttg gatgaggctc ggaccctgct tcatggcacc 600
agaggaaccc accagcacca ggttgagctt attgagcgag atgaggttag tcttcataag 660
aagctganga ctgaagtaat tcanctngaa gatacattgg ccca 704

<210> 1641
<211> 828
<212> DNA
<213> Homo sapiens

<400> 1641
ttttttagat ttatcaacta atgagaatga tcgatttaat gaaatttgtt atttctacat 60
cagttatttt ttctccacac tttttatata gatacttatc atcagcattt gtctacctat 120
gaacttcatc aagtaaattt agcttcataa acatcataaa aagatcaatg aatactacca 180
catattcttt taactaaatg ggatggtcta ggatcttgta acatattgca caatgaagtt 240
tcctgttgaa tgactgtctg gctaaaagta cttcttgtcc ttaaaaatca tattgtacat 300
tcattccttc ttaagtttca gaaaatttat ctaggatatc atcatctgaa gattcataac 360
ctgagatttc actactacct gcctctttac attcaccatc taataactgt gaaatatctt 420
tctttgtcag ttttcttctc tttgccatta tgggtagaaa atgaaatatt ctgaattttc 480
aaccgtgttt actgaaaccc tcaaaaatac aaagatagga tttccagcct tcttttcaaa 540
agatgagaca ataccaccaa ccaaaaaaag cctgggacct gatggattca cagccagatt 600
ctaccagatg tacaaacaag agctggcacc attcctacag aaactattcc aaaaaactga 660
agagaaagga ctcctccaca acttattcta tgaggccagc atcatcttga taccaaaacc 720
tggcagagac acaccggaga aagaaaactt cangccagta tccttgatga acattggtgt 780
ccaaatcctc aacagaatct tgcaaactga atccacagcn catnaaaa 828

<210> 1642
<211> 804
<212> DNA
<213> Homo sapiens

<400> 1642
gacatgctca gcaacatgcc aggcacagct gcaggctcca gtgggcgcgg catctccatc 60
agccccagtg ctggtcagat gcagatgcag caccgtacca acctgatggc caccctcagc 120
tatgggcacc gtcccttgtc caagcagctg agtgctgaca gtgcagaggc tcacagcttg 180
aacgtgaatc ggttctcccc tgctaactac gaccaggcgc atttacaccc ccatctgttt 240
tcggaccagt cccggggttc ccccagcagc tacagccctt caacaggagt ggggttctct 300
ccaacccaag ccctgaaagt ccctccactt gaccaattcc ccaccttccc tcccagtgca 360
catcagcagc cgccacacta taccacgtcg gcactacagc aggccctgct gtctcccacg 420
ccgccagact atacaagaca ccagcaggta ccccacatcc ttcaaggact gctttctccc 480
cggcattcgc tcaccggcca ctcggacatc cggctgcccc caacagagtt tgcacagctc 540
attaaaaggc agcagcaaca acggcagcag cagcagcaac agcagcaaca gcaagaatac 600
caggaactgt tcaggcacat gaaccaaggg gatgcgggga gtctggctcc agccttgggg 660
gacagagcat gacagagcgc caggctttat cttatcaaaa tgctgactct tatcaccatc 720
acaccaagcc cccagcatct gnttacaaat cagggcacaa ngaatgtgtc ttaaaaggct 780

0056294 0 0 2 0 0 0

ttcttnaccc aaccccggcc ccaa 804

<210> 1643
<211> 553
<212> DNA
<213> Homo sapiens

<400> 1643
aaatttttta tttcatttta tttttgagac cgagtcctgc tctgttgccc aggccggagt 60
acagtagtgc tatcttggct cactgcaacc tccacctcct gggttcaagc gattctcttg 120
cctcagtctc ctgagtagct gggattacag gcacatacca ccatgcccgc ctcatttttt 180
tgtatttta gtagagacag ggtttcacca tgttggccag gcttgtccgg aactcctgac 240
ctcaggtgat ccacctgcct cggcctccca aagcgctggg attacagtta gagtctccat 300
gcccggctga ttttaaattt taaaattaag ccttgtatag cctgggcaac atggtgagac 360
ccttccacaa aaatgaataa ataaataaaa ttaaccaggt gtggtgatgt gtgcctgtag 420
ttccagcgac tggggaggct gaggtgggag gatcccttga gcccaggagg tcaaggctgc 480
agtaagctgt gatcatgcca ctgtcctnca gtctgggtga caaagcaaga ccctatctct 540
taaaaaaaan ana 553

<210> 1644
<211> 844
<212> DNA
<213> Homo sapiens

<400> 1644
taacctgccc tgccatgggt tcaatttacg tagtacactg gacaatgtag cttgaatcct 60
aaattcaaat gtgttaaata ttcttagtat tccgtctgta tactaacaaa gaaaaaaatg 120
ttaactgact gtgccacgct ctccttccag agcagtgttt cttaatttca gcactactga 180
cattttgggc cagataagtc tttgctgtgg gggcttgtcc cacgcactgc aggatgtttg 240
gcagcacccc tggcctccac cctctagatg ctgggagcac tctccacctc cacccccatt 300
gtaacaacta aaaatgttgc cagacgttac ccagtgtacg ctggagggaa aaatcactcc 360
agggtgaggg ccactgatct agaatatgat acatggcatc tgtgatatga gaaaatgacc 420
ttgggcctgg tcataaaaga atgtgccacc tcctcacctg aaacacaacc aagcagtggc 480
ccgtgactga cttggcaaaa taacactttg ttcagaggaa gctcataaaa cagttttggc 540
cgggaggatg agctaacctc ataataggta cttgagagaa gccaccccgc taatgcatgc 600
tgtgtaccat gattaggatt gacttaacta gggtgaagaa atcatataat ttgctgngtc 660
tacagatatg taagtaatcc aaatgtgtgt ttctttttta agtatcaaag gataattcta 720
gaataaaatt catagcacag tcatattaaa aaacgtccac attttcaaaa gctaactaca 780
tttttnctct nctctaaaaa tggngaccca acactgggtc taacctgaaa atttgcatac 840
tcaa 844

<210> 1645
<211> 752
<212> DNA
<213> Homo sapiens

<400> 1645
gatgaggatg gaggccgggg aggcagcgcc gccggcgggg gcgggcggcc gcgccgcagg 60

09509509.DOC

cggctggggc aagtgggtgc ggctcaacgt ggggggcacg gtgttcctga ccacccggca 120
gacgctgtgc cgcgagcaga agtccttcct cagccgcctg tgccaggggg aagagctgca 180
gtcggaccgg gatgagaccg gggcctacct cattgaccgt gaccccacct acttcgggcc 240
catcctgaac ttcctccggc atggcaagct ggtgctggac aaggacatgg ctgaggaggg 300
ggtcctggag gaagccgagt tctacaacat cggcccgctg atccgcatca tcaaagaccg 360
gatggaagag aaggactaca cggtcaccca ggtcccaccc aagcatgtgt accgcgtgct 420
gcagtgccag gaggaggagc tcacgcaaat ggtctccacc atgtctgatg gctggcgctt 480
cgagcagctg gtgaacatcg gctcctccta caactacggc agcgaggacc aggcagagtt 540
cctgtgtgtg gtgtccaagg agctccacag caccccaaac gggctgagct cagagtccag 600
ccgcaaaacc aagagcacgg aggagcagct ggaggagcag cagcagcagg aggaggaggt 660
ggaggaaggt gaggtggaac aggtgcaggt ggaggcagat cacaggagaa aggtcccgtn 720
cgaccctntc aacctgagct gacttgcant ga 752

<210> 1646
<211> 445
<212> DNA
<213> Homo sapiens

<400> 1646
aatttagaat gtcttacact gtacctattt tttcctgtgt aagtctcaaa aacttgattt 60
agacttgaag gttttatgaa tgtccctact tttttgtttt aagagggagg aagagggaag 120
gagagggagg ccatttgatt gagaagggca taaatcgcag tggatgagtt accacaaagt 180
cagtccatat gggttacaac agttcaatca agaactaggc caggcacggt ggctcacgcc 240
tgtaattcca gcactttggg aggctgaggc gggtgtatca cctgaggtca agagttggag 300
accagcctga acaacatggt gaaacccccc ttctacaaaa ttagctgcgc gtggtgctgc 360
gtgcatgtag tctcagctac ttgggggggct gaggcaggag aatcgcttga gcctgggagg 420
canangttgc aatgagccan gatcg 445

<210> 1647
<211> 858
<212> DNA
<213> Homo sapiens

<400> 1647
tcttgcattc tgcctagcat cttacattag ctcttacatg tctgtctgtt gacttactgt 60
tgactgaacc agcagggcat tggagagaag taagagctag atgtagtggt ggattctgtg 120
gtccaaattc atagatcaca aacttcatat gtaccagagt atgtctaggt actgggagat 180
gttctcaatt ctgaccctct gagagggcaa aggatgtagc atctcttctc tgagttggtt 240
gtcagaatgc ccatggtacc atttcaccac tctgtcccca ggagcagtca ttggaaggtt 300
gacgtaaata gggttgtatg ggaagacaca gcccaaggtt agatgttggt gaccttgtct 360
agaagacaga gagttcccct ttcctgaaaa aaggaagtaa atgattaacc acttctcatt 420
aaacactcaa atacaacatt tcaatactca tggttttgag atttcaaaac cagacagtgc 480
tttgctactt acacatgtct tatgacacca agccaagctc ctggatggtt gctggctctg 540
ttaaatgact aattatgcaa ggagatgtca tttctaggta cgttaaagtg aagagttacc 600
cttactcaat tttcagttgg aataaaaaca actgtaacat attctggggt ttctttttt 660
ttttctcact cgttttagtt tgatatcaaa tcaaataatg atcatatcca ttgcatcagt 720
ggatatgccc tcaagataat atggatttag aaccagaact ttcataatgn atttctattg 780
aaatgttagt tcataagcca tgattgggtt ttcatgccca tgtgtgaaan gtgcctnctt 840

0050456-0050800

aaaccttgta tgatttgc 858

<210> 1648
<211> 799
<212> DNA
<213> Homo sapiens

<400> 1648
gtccgtggcc agagctgcag agagacaagg cggcggcggc tgctgtgctg ggtgcagtga 60
ggaagaggcc ctcggtggtg cccatggctg gccaggatcc tgcgctgagc acgagtcacc 120
cgttctacga cgtggccaga catggcattc tgcaggtggc aggggatgac cgctttggaa 180
gacgtgttgt cacgttcagc tgctgccgga tgccaccctc ccacgagctg gaccaccagc 240
ggctgctgga gtatttgaag tacacactgg accaatacgt tgagaacgat tataccatcg 300
tctatttcca ctacgggctg aacagccgga acaagccttc cctgggctgg ctccagagcg 360
catacaagga gttcgatagg aagtacaaga agaacttgaa ggccctctac gtggtgcacc 420
ccaccagctt catcaaggtc ctgtggaaca tcttgaagcc cctcatcagt cacaagtttg 480
ggaagaaagt catctatttc aactacctga gtgagctcca cgaacacctt aaatacgacc 540
agctggtcat ccctcccgaa gttttgcggt acgatgagaa gctccagagc ctgcacgagg 600
gccggacgcc gctnccacca agacaccacc ggcgcggncc ccgctgccac acagcanttt 660
ggcgtcagtc tgcaatacct caaagacaaa aatcaaggcg aacttatccc cctgtgctga 720
nggtcacagt gacgtacctg agaaagaaan gccttgngca ccgagggcct gtttccgaga 780
tcccccacgt gcaaaccgt 799

<210> 1649
<211> 841
<212> DNA
<213> Homo sapiens

<400> 1649
taaaaacaac tcttaaggat aaaacaaatt tcagattaat tatgaaaaca agaatgtggc 60
agggcatggt ggcctacaca agcaatccta acactttagg aggccaaggt agaaggattg 120
cttcagccca ggagttcaag accagcctgg gcaacacagt gagatcttgt ctctacaaaa 180
acaattttaa aaattagcct acatggcaca aacatcattt tgtttgtaca ctacctatct 240
gagagaaatg acttgaaaat gtgatattat cagctggatc agtcatctga tatgagctat 300
aaacgtgcag cacaaatgtc actcagagac tgaaaaatga gtaaaaatca ataatttctt 360
agggaaaaaa gactgcctag aatcttatta aaaaacattc tgggggtcta tcagttagaa 420
atattttggt tacactgaca gataaccaaa ttcaaatggg cttagagcaa aaaatgggag 480
ggcatagagg acacttactt gttcacataa ctggaaagct ccaaggtcag ttggtttcag 540
gtaaggcttg atccagcagt tcagcagtat tactaaggac ttgcctttac ccatattctt 600
ccccatgcct gaatgtccag gtaagagtca ttggtcattg taaagatttg tccagcttcc 660
attcttcatt cctaatctga gtttgttttc cttttagaga ataactccct agtgtgttaa 720
tcttagtaag aaggtaatta ttccaggcac cagtttcatc tctactggaa agggaaagaa 780
acagattcac cttttccctt tggcctttcc nttcccttcc catnccctaa gtttantgag 840
c 841

<210> 1650
<211> 745
<212> DNA

05052305.SEQ

<213> Homo sapiens

<400> 1650
tgtttgcctt tgaagatcct tcaaacccaa tgtctcaatt cacctggact gttttacccc 60
aagggttcag ggacagcccc catctatttg gccaggcatt agcccaagac ttgagccagt 120
tctcacacct ggacactctt gtccttcagt acatggatga tttactttta gctgcccttt 180
cagaaacctt gtgccatcaa gccacccaag cgctcttaaa tttccttgcc acctgtggct 240
accaggtttc caaaccaaac gctcagctct gctcacagca ggctaaatac ttagggctaa 300
aattatccta aggcaccagg gccctcagtg aggaatgtac ccagcccaca ctggcttatc 360
ctcatcccaa accctaaagc aactaagagg attccttagc ataacaggct tctgccaaat 420
atggattccc aggtatggtg aaatagccag gccattatat acactaatta aggaaactca 480
gaaagcaata cccatttagt aaggtggaaa cctgaagcgg aagcagcttt ccaggcccta 540
aagaaggccc taacccaagc cccagtgtta agcttgccaa cggggcaaga cttcgtatat 600
atcacagaaa aaacagggat agctctagga gtccttacac atgtctgaga gacgagcttg 660
cacctgtggc atacctgagt aagaaaactg atgtantggg cnaaaggntg gcctcattgg 720
ttatgggtaa tggcagcaat agcag 745

<210> 1651
<211> 766
<212> DNA
<213> Homo sapiens

<400> 1651
gatttggcca gcaagctgaa gtttgccagc ccccgagcta tagtgatagt atccaccttt 60
gttgagtctc tctgtagcac ctgtccctgg gctaaggcga ggtgactttc ctgaggcttt 120
gtggcaggct gatgaatcct ttccaccccc ccacataatt gtgtctcttg caggattcca 180
ggaaggctat ccttacccct atccccatac cctgtactta ctggacaaag ccaatttacg 240
accacaccgc cttcaaccag atcagctgcg ggccaagatg atcctgtttg cttttggcag 300
tgccctggct caggcccggc tcctctatgg ggtatgtagg tggagaagac cactgagttg 360
ctttacgtgg tgttggtctc ctcccttaag gttactgctc agaggaagaa aagggatata 420
ggggaactga tttcttgact gaggagtttt agggaggagt acttcagccc accctgtgga 480
gatgagccaa catcactagg gggtgactgc ctgtgcttca cctaagtagc tcacttgatc 540
acagtagccc acatgttttt actgaagtcc ccactttcta agctatgcca tagaattaca 600
gggaggccat gcagcttatc agcattacac agcactaagt ggtggagata ggactgcagc 660
taggtctgcc ccactctgaa gtcttcagtt gnttgtgctg cagcatgctg cctctggtct 720
tgngtggcag aagtggagca cangcaggag gaagtggagc aataga 766

<210> 1652
<211> 762
<212> DNA
<213> Homo sapiens

<400> 1652
agcccggtaa gccctcctcc tcttcccctg cagcctcagg gctggagcca cagctgggag 60
ggctcccaga tcctgaccat atcctcccag aggctgagcc aggcctgggc actgtccccc 120
caaatgtgag aatactgggc agggggaggg gagaaaggag ggaatggagg gctgagcctg 180
gaggcatgaa aggggcaacc taggcagcgg tatgggggag tgctcagagc ttggagtcct 240
gtggaaggca gagaactgcc ccagcccctg cctctcatcc cccaccctct gtgtccctgg 300

EP 1 950 305 A2

ccgagaggtt cctggaggac atttttccag caaaagaggg agggtggtgt ctgggcctag 360
atccttggat gggcttttct ctgcctgctt gtggggtgcc tagggcgagt gggcttttgg 420
agacaatttc tggcctaacc tgacttggac agcagccccc agaggcacag ctctcccctc 480
aggcatgggg gcatgattcc acctcgctag cccacatgtg ttcttcacgg agggctgctg 540
gcccgtctcc ctggggttac cctgagcagc agagctgtgt ttgttgagac tccatggggt 600
ggagggattg cgatgttgtc ctctcagttc ccggggctga tgtggaagct caaggcttgc 660
cctggattct tcanggtagc cctgccatcc ctagtgagtc antgagttgg gaagtttggg 720
ggcttggaaa aatcaggtag ggaaggacac agctnggacc tt 762

<210> 1653
<211> 863
<212> DNA
<213> Homo sapiens

<400> 1653
taaaatctta aaaattctta aaaagctctc ttgaatttga cctctactac cttccaagga 60
ccttggaaag acttaagtat gtgttagaac tctcctgaag gcttggtctt cctttagtga 120
cattaacact caggtttgtt attccagtgg gcagccccag ttcatgcaaa ctgacctgtt 180
gtgtctggtg tccttagact ttgatatgca ggccaaagtc caagggatat gcaaacataa 240
cacacacctg tacttccata aaaaccagca gaattgtaga tcagctcatt ttactgaaat 300
tttaaaccct gtaaaaaaaa aaatactatg cttgaagaaa gaaatcctgg tgcatataaa 360
aactacaatg agtaacagta atacaggtaa gaatcaagca ggccttgagc aaaacagtcc 420
attattactg tgtaaactat gttgctatga tacttatttt gagcctttat gcaccagcac 480
atacatagta agacacacaa gatagttcaa caaaatctaa gtaatataca aacactgtaa 540
gagcttttcc aaccaaagaa actttaatgt agatctgaaa tgagccatca tgatacagaa 600
aaagatgatt atcatttcgt gtcctttcca agtagaacta tctgataacc ttttctgntt 660
gtatcagaag agatttcaac tcaacatgaa aattctacta cttggaatta tttgaaaaat 720
caagtatttg aaggaaaaaa ttatttttca tctaaagaag cattacattt ccttttgcta 780
gaaacgattg acaatgatgg aatttttcct gacatataat taaatatgga cctnttcaag 840
tggatngcaa ctgnatccca acc 863

<210> 1654
<211> 918
<212> DNA
<213> Homo sapiens

<400> 1654
ccagcctaga ctctatgatt gacagggtga ccagctgtcc cagtttgccc tggggcacag 60
gattattcgt gctgaaaatg agaaagtcct gggcaacctg ggatgaattg gccaccttca 120
ctattgatcc aacttcccaa atgctttgtc tacattgctg gtatctggct cggaggaagc 180
cctgtgggaa aggctgtgag tgtgttgccc caggttccac aggacactta gagtttgggg 240
gacacctgcc gtcaacgcac tgcaacaatc tttagggatg ttaattgttc ctcaggaggc 300
atacgtagga atcacatcca ccttaaacat gcccacttat ggcatttggg ctcacacagc 360
caaacagctg ccattgtctg aagtaacgca tgggctgttg ggctcctacg gtgtgacaga 420
catacttctc tgcatcatcc atgtaccagc ctgttttctt ctcactgcag cccaatcagc 480
taattatcat catttccatc tttcaaaaac aaatgcttaa agatgccatt atttacccca 540
gggtcacaga tggtaaaagt gacagaacca caggccaaac acttgttgtt ttaccatgtg 600
actccaagga gcatgaaatc tgaggctctt catccatgag attttccagc cactcacgtc 660

US 2005/0059030 A1

ccttcctctg ttggagatga agcctcttca gagtggaagg cagtgtacct agcttggatc 720
aggatgcctg gactttgctt cctgcttctt ccagataccg ggtctatgac ttgnatcaag 780
gtcatctttt aaccccttct gagccttact tttccgcatt cttgngaaat gggncatcat 840
taatggcttg gcctttacct tcttgcctta agcttggctt tgaggaggaa aattggaaat 900
gatggcctnt tgaaactt 918

<210> 1655
<211> 704
<212> DNA
<213> Homo sapiens

<400> 1655
gcaaagctaa tagctttaaa caaaaacaaa agcaatacaa agaaaccaga tcaaaacata 60
taccacaaga agaattatac aagaaaataa tatctatttt ccatactagc aaataaatag 120
aagacattgt ggcctcctta aaataaaagg tcaaggccag gtacggtgtg gctcacacct 180
gtaatctcag cagtttggga ggctgcggcg ggtggatcag ctgaggtcgg gagtttgaga 240
ccagcctggc cagcatggtg aaaccccctc tctactaaaa atacaaaaat tagccgggca 300
tggtggtggg cgcctgtaat cccagccact cggtagactg aggcaggaga atcacttgaa 360
gctgggaggt ggaggttgca gtgagccgag attgtaccac tgcactccag ctagggcaac 420
agagcaagac tctgtctcaa aaaataaaat aaataaaata aaataaaata aaatgaaagt 480
tcaaaaacta gataacagga ttgaataagt gataagacaa ataaggagaa ataaaattgt 540
ctgtgagaga acaagaagga agtagaagaa gaaaataaaa ctctaatggg accaaaaacc 600
atataggaag caaaaagctg ggagaggaag gagaagaact tctactgata ttaccacaat 660
tgtgaattag aaaaatcaag cnnatnaaaa tttaaaaaaa ccag 704

<210> 1656
<211> 712
<212> DNA
<213> Homo sapiens

<400> 1656
agaagcaaaa gagcagagct accatgtcct cttggagcag acagcgacca aaaagcccag 60
ggggcattca accccatgtt tctagaactc tgttcctgct gctgctgttg gcagcctcag 120
cctgggggggt caccctgagc cccaaagact gccaggtgtt ccgctcagac catggcagct 180
ccatctcctg tcaaccacct gccgaaatcc ccggctacct gccagccgac accgtgcacc 240
tggccgtgga attcttcaac ctgacccacc tgccagccaa cctcctccag ggcgcctcta 300
agctccaaga attgcacctc tccagcaatg ggctggaaag cctctcgccc gaattcctgc 360
ggccagtgcc gcagctgagg gtgctggatc taacccgaaa cgccctgacc gggctgccct 420
cgggcctctt ccaggcctca gccaccctgg acaccctggt attgaaagaa aaccagctgg 480
aggtcctgga ggtctcgtgg ctacacggcc tgaaagctct ggggcatctg gacctgtctg 540
ggaaccgcct ncggaaactg ccccccgggc tgctggccaa cttcaccctc ctgcgcaccc 600
ttgaccttgg ggagaaccag ttggagacct tgcacctgac tnctgagggg tccgntgcaa 660
ttagaacggn tcatctagaa ggcaacaaat tgcaagtact gggaaaagat ct 712

<210> 1657
<211> 605
<212> DNA
<213> Homo sapiens

0005245.0005245.0005245

<400> 1657
tctgtttata tttcggtagc cccatggggc gggtggccac agtttcagtg cagatgtaaa 60
tccggaagcc tccagcacct gcagctcata gacagctctc gcccaccttc tcccaggacc 120
aagccagtcc tgtccagtcc agtgtctgag cagagtcaga atccacacca cccgccgcct 180
gggctcagaa agttctgctt taagtcatta tttctccact gtacgatggg gaatgcggtg 240
tgtgggggcc atttacccac caacacagca gctgtgaggc acacacggct attgaaaatt 300
catggaaatt gctgggtgtg gtggctcatg cctgtaatcc cagcactttg ggaggccgag 360
gcaggaggat tgcttgagtg caggagttcc agaccagcct gggcaacata gcgaaaccac 420
atctctacaa aaaaatcctc caaaattaaa aaaattagcc cgagcatgtt gttgcatgcc 480
tgtggttcca gctactcaag tgatccttct gccttgggtt tccgagtagc tgcaattaca 540
ggtgcacacc accacacctg gctaattntt atatttttg tanagacngg gctgggatta 600
caggc 605

<210> 1658
<211> 626
<212> DNA
<213> Homo sapiens

<400> 1658
gggtgcattt tgtaacagtc ctgttcatta tgactgttac tccttcattg ctatctaaag 60
agcgtgtagg taggtaaggt catatggatt gggcagaagt ggcagtagga gtgggcagta 120
aggatagaag gaacgtatct cagtgagtgt gcaagttaag tacttggcat aatgtaatag 180
tgcctttcat atcctaaggt caaactgtgg gtatctttaa actgtctaga ccacacgtgc 240
atacaaatcc tcccctgggg atctcctgaa atgcacattc tgatttggga gctcagggag 300
ggggtctgag agactgcatt tctaaccagc tctcagggtc acttggagta gcaagcacct 360
ccaaaactgc tggaacctgg aacaactgca gggagacctg atctgcccat tagaccacat 420
ctccctgagg gtctgggatg catgtgtctt tgtgcctcct gtaccaagag cagtgcctgc 480
taggaagtgg atgctcaaaa tgatcttttc aactgaactg aagaggctgc tgtcccagag 540
tccgtttacg ttagtggcct tgggaccgca ggggtgtggc gacccagtca tagcctgtac 600
acttattcgg nccancttgg ntatcg 626

<210> 1659
<211> 807
<212> DNA
<213> Homo sapiens

<400> 1659
agaagggcgc ggagcaccgg agggcacgca gctgacggag ctgcgctgcg ttcgcctcgt 60
ttgcctcgcg ccctccactg gagctgttcg cgcctcccgg ctcccaccgc agcccacccg 120
gcagaggagt cgctaccagc gcccagtgcg ctctgtcagt ccgcaaactc cttgccgccc 180
gccccgggct gggcaccaaa taccaggcta ccatggtcta caagactctc ttcgctcttt 240
gcatcttaac tgcaggatgg agggtacaga gtctgcctac atcagctcct ttgtctgttt 300
ctcttccgac aaacattgta ccaccgacca ccatctggac tagctctcca caaaacactg 360
atgcagacac tgcctcccca tccaacggca ctcacaacaa ctcggtgctc ccagttacag 420
catcagcccc aacatctctg cttcctaaga acattcccat agagtccaga gaagaggaga 480
tcaccagccc aggttcgaat tgggaaggca caaacacaga cccctcacct tctgggttct 540
cgtcaacaag cggtggagtc cacttaacaa ccacgttgga ggaacacagc tcgggcactc 600

0050750800 - 0050750800

ctgaagcagg cgtggcagct acactgtcgc agtccgctgc tgagccttcc acactcatct 660
tccctcaagc ttcagcctca taccctcatc ctatcaacct taccacctga ggtcttttct 720
ggcttcgnta ctaccaacca tagcttcact gtgacagacc caacccactg ggagcttcaa 780
ctgnaccaga gtncccgaca gaggagt 807

<210> 1660
<211> 775
<212> DNA
<213> Homo sapiens

<400> 1660
atgaatgaat gaatgatagt ctcgagctgt ttaacttcat ctctcttatg gtttgcatat 60
aagattgtgc agtggggctg ggcgcggtgg ctcacgcctg taatcacaac actttggaag 120
gccaaggcag gtggatcacc tgaggtcagg agttcgagac cagcctggct aacatggtga 180
atggtgaaac cccatctact aaaaatacaa aaattagcca ggcgtggtgg tgtgtgcctg 240
tagtcccagc tactcgggag gctgaggcag gagaatcact tgaacccaga aggcagaggt 300
tgcagtgagc tgaggcaggc tgcaccattg cactccagcc tggacaaaaa gagcgaaact 360
ccatctcaaa aaaacaaaca aaaaaaagat tgtgcagtgt agttgtaaga ttggggagac 420
caaactgtta aagcgattat tgactgggga actggagatg gttgacatac tttgtcctca 480
ccaagcccct ttcagttcct tattcacaat gagccactag tgggtgtact tggttctagt 540
gggtatatgt ggttttattc aactatgtta gggtggataa aggtttacat tattgccgat 600
tgtattcata tgaccattta ctattccgag tcactacatg cagctaagct tacagttgct 660
gagtataaag cactgccttg aagccctata gatggcgtta gttctgactt ctttttacca 720
tgtaagatgc atcacgtgtg cttgtgctna nangaactaa agggaccagc cattt 775

<210> 1661
<211> 755
<212> DNA
<213> Homo sapiens

<400> 1661
caatgttagt atgtatgtaa acatgatagt acagccattt ttttcatatg tgagtaaaaa 60
taaaatagta tttttaaaaa tatagtttga gcactgtata ggtccttttt ttgttcagac 120
tttttccaaa aatctaaaca taattaatat actctttcag ccacatgaat aaataatgag 180
tgtttcttgt aggtattggt ttggagattg ttttacggta gtatgaactg ttaactggaa 240
aagaaacctg agattgcagt cagccaagat tgtgccactg caccccagcc tgggcaacag 300
agactccgtc tcaaaaacaa aaaagaaaag aaaccaagaa acctcaggca tgaacctaat 360
ttaatctcca tgaaagaggt actacagttc tagaatatac cctttatgtt caggaatgca 420
gtctatcatt cagagttaat ttctttctag gctctttgac aatcagtttt tccctggatc 480
agttcagtac atatgcattg agcacctgtg tgccagtcag ccgagctatc acattgcaca 540
attctaagaa gcaccattca tgtctcatca tatttctatg ctctgggagt tgcctttcac 600
atagaatatg tgtgattgtt atccctagaa ttgtgcagtg aggcaattgg ctaggtgctg 660
tgctgctttt tctttctttc ttttttttttt aagagacgga gtcttgctgt gttgcccant 720
ctggaatgca ntggtggcat gatcttgcct nactg 755

<210> 1662
<211> 802
<212> DNA

US 2003/0190605 A1

<213> Homo sapiens

<400> 1662
gtaatgattt ttttctattt tctttttttct atttctataa tgacttttttt ctatttcttt 60
tttctattta cttaaaaaaa taagatgcta tgtttcgttt ttattgaagt aaaattctta 120
aagaatgaaa aaattatatt agaaattgta cgattaggcc gcgcacagtg gctcacatct 180
gtagtcccag cactctagga ggccaaggca ggaggatcac ttgtcaggag tttgagacca 240
gcctggccgg catggtgaaa ccccatctct actaaaaata caaaattagt gggtgtggtg 300
gcacatactt gtgattccag ctacctggga ggctgaggca ggagaatcac ctgagcccag 360
gaggcggagg ttgcggtgag ctgaaatcac accattgcac ttcagcctgg atggcagagc 420
aagaccctgt ctcaaaaaga aaaagaaaat gaaattgtat gattatcttt aggtttttgg 480
gtacaaatgt agatcctcaa aaactttatc agaaatttgg aaatctgtaa ataagttata 540
tgtatctcct tttaaaatcc aatattagta agctatatgt ataaaaacaa agctagtgta 600
tcttgaaaag tttttatttc tttattcctt atccctcctt atcccactga actattgaag 660
aacttcttat agatttacct tcccattagt gctgtagtac agttttcttt tatctccatt 720
gncttgngtt tcctggctaa attttacttg gtataaaact attgggtcac ttttggncta 780
gaatagaact ttcatagtat aa 802

<210> 1663
<211> 740
<212> DNA
<213> Homo sapiens

<400> 1663
cttagctgcc tctcagcagc agaaagatat ctcaaactga tgtttcagta aaatatgtgc 60
gcattaaaaa ctgatttttt tattgaaaat gacgacaaca gcagagttta aggatacaaa 120
tccttgccat gagccaccac agaaaggcat atactcaacc tttatttata cgtacaaaaa 180
acttctgcca cagacttcta tacataacct ttatgatgtg taatgtatat gaaatagtaa 240
ttaaaccacc catctttgct gccttttata cttttctagt gttctccaaa aagcaataca 300
aattatacat ttttgttctt gcatagtata tcattctatc attttgagat ttaacatttt 360
aacactatca ccattaagta tgaccctgtg aaatttcatc taacaccaaa gaagacaata 420
gcataaactg tcttggttct gttgattttg tacatgtctt caggttttat atgtgtgtta 480
ttaagacatt ttgtactgta gatttactga ctctcaattc tggtattgac tagagccaaa 540
ctccctatag tacttggggg catggttcta ttcagttctc accccagttt tcatggtttt 600
ctgttgntct gttctgccat ctgatctaga gtcgcctggc actgccagtg ttccgcttag 660
agttcagaac tcttggcgac gatcccaggt tttctccant cangtaaact gcatactggg 720
tagctggatt tcttttgngc 740

<210> 1664
<211> 790
<212> DNA
<213> Homo sapiens

<400> 1664
gagcttccct aggaaggaag gacacccttt tcctggaatg ctctcctgct ctgccacagc 60
tttcagtcaa ttatcactgc ctttagaatg cttatcagca ctccagccct tcagaagtgt 120
ccttctcctc ctctggtgtc aaactccaga gtttactttt ggaattaagg tttatttcc 180
ttaggtttta ggaagtagct tttgaacctt agaagagtca gtttccttta ctaactactg 240

09/02/2008 09:53:03

aatgaagtta ggcattcaaa acttgggtag tcatgatttg aagtgtcact tgcggccagg 300
cacagtggct cacctgtaat cccagcattt tgggaggttg aggcgggcag atcacctgaa 360
gtcaggagtt caagcccagc ctggccaaca tagtgtctct actaaaaata ttaaaaaaaa 420
aaaaaaataa ccgggcgtga tggcaggcgc ctgtaatccc agctactctg gaggctgaga 480
caggagaagc acttgaatcc aggaggcgga ggttgcagtg agccaagatt gcaccattgc 540
actccagcct gggcaacaga gtgagactcc gttccccaaa aaatgaaatg tcaatttcat 600
tgagactgta tgaatgcctg acatgcactt gaaagtgatg tttattttat aattttagcc 660
cttcttcact accccaaact tccagtgcat ttaaaaaatt tattggccta accattctca 720
tggggtaata tatcatgacc atcaaaagat gacnctaaag ngaatcctnc atgtatagct 780
gggctttctg 790

<210> 1665
<211> 756
<212> DNA
<213> Homo sapiens

<400> 1665
tataggtttt gagtagaaac tattaccctc acacctggaa agagtaagtt agatctactc 60
ttacttcact ttcttatcct cattgtcgtc attatcactg aagatgcata acgctgttta 120
aagtctgaag gatgatacag aactgacggt aaacctctct gaaccatgtt taactgccta 180
aggctagaca cgcagtgata tcagaattaa tattgttttc tttcaaatga aggattctga 240
gctgtggacc agagtgagga tgtgtattta tgggcttcta ggtggtaact gttcttgtgt 300
ctaaacctta attaacataa cactctttca cacgaataaa actttcattc attatggttt 360
tggcccataa aagttgaagt tttttgtttt tgnttntatt tttttcacca aatcagccct 420
acagcgattc ctccaccccc attagcaaat accgtaatat atgtctctag taatcatcct 480
ctcacaattc tgcttttcct aattttgccg tgagtcaagt ttcttgacca caatgttatg 540
ctgaggaaga tctaatgttt tccatggagc agaaattgtt agtcctcaac tccaaggtct 600
gccttgtcaa gccctgtttt ccgtgtcttc ataaaccttg tcaggcattt atttattcag 660
cacatatcta ctggtctctg ccaagaattc ataanggatc tgatgaatta tgtcccttct 720
gggtggaatt atttccttnt acatttntgc aaaacc 756

<210> 1666
<211> 720
<212> DNA
<213> Homo sapiens

<400> 1666
gcagcctcag tcccgccgcc gcccgctgcg tccgcccagc gccagctccg cgtcccgacc 60
ggcccgcggc agcctgcgcc gcgccatggc cacctccccg cagaagtcgc cttctgtccc 120
caagtctccc actcccaagt cgcccccgtc ccgcaagaaa gatgattcct tcttggggaa 180
actcggaggg accctggccc ggaggaagaa agccaaggag gtgtccgagc tgcaggagga 240
gggaatgaac gccatcaacc tgcccctcag cccaattccc tttgagctgg accccgagga 300
cacgatgctg gaggagaatg aggtgcgaac aatggtggat ccaaactcac gcagtgaccc 360
caagcttcaa gaactgatga aggtattaat tgactggatt aatgatgtgt tggttggaga 420
aagaatcatt gtgaaagacc tagctgaaga tttgtatgat ggacaagtcc tgcagaagct 480
tttcggtagg agagttgagt gctgcaatgg atgtgtgttt aattgcaggt ggttggatca 540
cctacttgta gctagaagga gttattctca gtttacagtg gcttacctgg aaatggatta 600
caaatgtgtg gagcatggaa taacagctca atgaaggctt tagatgtctc ttggaatgtt 660

US 2005/0260650 A1

tcatatgaat gaattgtann agggaagtct tcatgactag gtgggcctgc tccttntagc 720

<210> 1667
<211> 753
<212> DNA
<213> Homo sapiens

<400> 1667
gctccagtcg cctccgacct cggcgctggg cgggcgcgcc gggcctgggg aaggggcggg 60
cgcggggacc cgatgcgcgg gagcggaggc cgagatggct tcggcgggag gcgaagactg 120
cgagagcccc gcgccggagg ccgaccgtcc gcaccagcgg cccttcctga taggggtgag 180
cggcggcact gccagcggga agtcgaccgt gtgtgagaag atcatggagt tgctgggaca 240
gaacgaggtg gaacagcggc agcggaaggt ggtcatcctg agccaggaca ggttctacaa 300
ggtcctgacg gcagagcaga aggccaaggc cttgaaagga cagtacaatt ttgaccatcc 360
agatgccttt gataatgatt tgatgcacag gactctgaag aacatcgtgg agggcaaaac 420
ggtggaggtg ccgacctatg attttgtgac acactcaagg ttaccagaga ccacggtggt 480
ctaccctgcg gacgtggttc tgtttgaggg catcttggtg ttctacagcc aggagatccg 540
ggacatgttc cacctgcgcc tcttcgtgga caccgactcc gacgtcaggc tgtctcgaag 600
agttctccgg gacgtgcgcc gagggaggga cctggagcag attctgacgc agtacaccac 660
cttcgtgaac ccggccttcg aggagttctt gccttgncga caaaagaagt ntgccgatgt 720
gatcattcca cgaggagtgg acaatatggn ttg 753

<210> 1668
<211> 761
<212> DNA
<213> Homo sapiens

<400> 1668
ttacaggcat gagccactgc gcccagccaa caccatttgt tgaaagcact cttgcaaaaa 60
gcagttgact ttactcattt gaggctattt ctggattttc tactttgttc cactgatact 120
tgtctatccc ttcaccagta ccacactgtc ttgattattg tagctatata taataagtct 180
tgaaatttgg tggtgatccc tctcgctatt ctttttgtca gaattgtttt agctattcta 240
aattcctttg tcttttcata taaagtttag actaaccttc cctggatctg caaaacatct 300
tgtagagatt ttgatagaaa tggtgttata tctgtatatc aatttggtgg caattgacag 360
ctttactaat tctttcaaca cgtgaataca gagaatcttc catttattta ggtcttcttt 420
gatatctttt atcagtattt tgttgttttc agcatacggt tcctgtatgt gttttgttag 480
atttacacgt atttcttttt gttgttcttg tttttaggtt ttattttgct tcgtttttgt 540
ttttaacaga gatgggggtc ttgctttgtt gcccaggctg gtcttgaact cctggcctca 600
agtgatcctc cggccttggt ctcccaaaat gctgggatta caggagtgag ccactgagct 660
cggcctcttt ttttttttt ttttgagtg attgnaagtg gtattggatt ggattccttt 720
cttttctttt cctttctttc tttcctttcc tttcccccct t 761

<210> 1669
<211> 773
<212> DNA
<213> Homo sapiens

<400> 1669

09/05/2005 09:46:56 - 09/05/2005

ctgagtgggt ggacgtggtc gtggatgacc tgctgcccat caaggacggg aagctagtgt 60
tcgtgcactc tgccgaaggc aacgagttct ggagcgccct gcttgagaag gcctatgcca 120
agtgagtagc ggctgagggg gcaactccag cttccagctc cccctagggg tgggggctca 180
tgactgtctt ctcagagggt cctgcttgat gccagagtgc tgacctggag ctgcccacag 240
ggtaaatggc agctacgagg ccctgtcagg gggcagcacc tcagagggct ttgaggactt 300
cacaggcggg gttaccgagt ggtacgagtt gcgcaaggct cccagtgacc tctaccagat 360
catcctcaag gcgctggggc ggggctccct gctgggctgc tccatagaca tctccagcgt 420
tctagacatg gaggccatca ctttcaagaa gttggtgaag ggccatgcct actctgtgac 480
cggggccaag caggtactgc cctgggtggg gccttccctg aagggcggtt cctgcccccc 540
ggcctgtcct tgcctctctg gcacctgacc agggctgtgg aaggtgctgg ctcctccttt 600
ccccttctgc agcaccttat ctctcttctg gggacaccca tctgagatgc ctatcatgtc 660
ctgccctgac tgactgtagt tcatgtgtgc agcttgcttg cctgggcttg tgaattccaa 720
gangacangc ttcatctggg ttgctgaaca aggctttgaa aagggaaatt ttt 773

<210> 1670
<211> 720
<212> DNA
<213> Homo sapiens

<400> 1670
acattccaca gcagcgcgct cacgcgtgtt cgcactcagg acagccacgc agctgctggt 60
gtcgcccgtg tgctcctgcg gtgtgggatg gtcgcggtgt gggacggtct gcggtggtgt 120
cttcgcgttc cccagggagt gtgccctgtg catctccatg gtacctgaag tccaggaagc 180
tgcctgcgga tgttgcagtt gggattacgg ggcagatgca gtggtcggta ggagcgagtg 240
ttcggggaag ctgtaggtgt tcgtggcgcg ttggctttct ggtaattcct ccggctgcac 300
tagacatgcc gcactgtgtg tccttccgta gcattgagag agaagaggga ggatgcccag 360
gtaaaagatg ggaaatagcc tagaatatca actgtgatgg tccctggtgg ggctaatggt 420
ggcaaacttt tctgcttttt tgtaaagaaa taacacaggg tcctaaaagc ccgtgtatcc 480
tggaagcagg gggtctgcgt cggaacagcc gactctggaa gggcgttggc tatgtccctg 540
gacgtctcct gcagctcctc ccatctcccc tgagtctggc ccagctggaa aggatgtggg 600
ggccacaggt taagtggcca ccctggggcc tgtgttccca gactgcctgc tgtgctggga 660
gttctgtccc gggagagaca cagcttcgtc tnggcttgcg gccgtgtccc caangctntg 720

<210> 1671
<211> 706
<212> DNA
<213> Homo sapiens

<400> 1671
tgtgcaaatg ggtatgtatt ttttcatact catctttact gttagccctt catccctcta 60
caaaatgttt aatgttttaa acagatttac tccctacagt ctgcttgggt tagtagttta 120
tatagattta atttagcatt ttctcaagta ctgggctttt tttctggcag aatttttcaa 180
atagccaaaa cataattttc cctctgaata ttaaaaaaca ccaacaaaaa agatttttgc 240
acgacaaata atttttacac atgcaaaaaa gtaattttca aaagtaagca cttctgccag 300
atgatgctta ataagtctgt cctaatggta tttatcttaa tgcttacttt caggaacagt 360
ggataatacc atattcagtc cccctgacaa acccctgaaa caggtaatgt cattagtcct 420
actttctgga ggaaatgaag gcacagagaa gataagtaac ttgcctgagg ttgcacagcc 480
aatatgcagc tgagtgggag ttgagtgcta ggctgttgga tttcagagcc tgccctctta 540

0356230450.0070000

aattgctacg tgacactgac tctcatatgt atttatgttt tatcaagctt aatataggat 600
aaattgtcgt gcttagggat gtagtctcaa agagtggaaa ttcagacatt agtagaaatt 660
caggtatcag gacagttggg gaccangang ccaaaanggg gtatgg 706

<210> 1672
<211> 757
<212> DNA
<213> Homo sapiens

<400> 1672
taactcatga aacttgagaa cacgagaaca acaaaaatac tttccttgaa cattttcagc 60
tagaatgaca cggcattctc ctacataaaa cattataatt ttcccactac tccaaaggaa 120
tccaataaat aattttacag tgaaggggcc tggatcaaaa ctggcagtga cacctggccc 180
ctgacaagcc tgagtcacag gtccctgtgc aggtcccagc gtccagtcct ccaagaacca 240
gcactgccgg agcctcgctg tggtttcttc cttccccgat gggaccagct ggaatttcca 300
agctgcttca cagaggccaa agatgacaac acgagaggtg gtcaaagcca aggtttccct 360
gcgctgcctt tgtcttcttc ccatggcctg gcctgagtgc tgcagctggg ccccaggaga 420
tgagctcctc gcccaagctg gagagcatcc gctgcacccg ccatgccggg aagagctcgg 480
gtgggctttc tccatagcaa ttcttcgcaa tggggtccca atcggtggga tgaggccctg 540
ggatgaggtc ctgcatttgg ccggacatga ctcaatactg atcttcgact gccatgaaga 600
ggttctggaa caccacgatg ctccaggaga agctcctggc tgggctgcag gcagcaagag 660
acatggncag cagcccgtca cagcagcact gcttcacact anggctgtgg acgttacaag 720
cctggaccag caaatccttc ttttgnaaac atagctt 757

<210> 1673
<211> 676
<212> DNA
<213> Homo sapiens

<400> 1673
gagtaaactt ttctctgctt ctagaaaact gacttctcaa tctctggaag ttggaggttt 60
tgttgtggca atttgcttgt gttgtttttt aatgtggact gcgagaaaca ggggcagttg 120
aggtcatgtt gaaatctgct gtggttggtt ctgatgtgct ttctagtatg ttctttcttt 180
agtgggacca acagggttat aataccttcc tctgagttgg aagataggcg cttctgactt 240
attgccaagc tcgggtaact gagctggact gcctcttttt cttctctttc cccccacata 300
tgtgtgcata tctaaggtga ccacctatag accgcatgat tcctggtgac tcaaggatga 360
gggtgggagc aacagtacca gtgggggggtg gtaatgtggt cagctctgca ataagtgaaa 420
aagcagacaa gaaaatatgc agggaaagac tgtgagtagg actggagtct cttttgattg 480
gtacaggttc ttattgacaa aaagcatgtc atgatatatc ctaggaaaaa tacttgaatt 540
tagcatgaac ttttccgtga gtggttcctc aaaaattttc aagagtagaa gaacagcagt 600
ggactggcag atgcanatgt tgacaggaag aagaccccct gctcaaaata ctatncagtg 660
agcctnagga tatatt 676

<210> 1674
<211> 681
<212> DNA
<213> Homo sapiens

0050340.00200

<400> 1674
gatttttttg tgaaactcag tgcttcctaa gatgaaaatg tgttcatgct aagactggtt 60
tcttccttag cactttgtct ggcttagtgg agtttgatgg ctattacctg gagagcgatc 120
cctgcctggt gtgtaataac ccggaagtac cgttctgtta tatcaagctg tcttccatta 180
aagtggacac gcggtacacc accacccagc aggttgtgaa gctcattggc agtcacacca 240
tcagcaaagt gacagtgaaa atcggggatc tgaaacggac caagatggtg cggaccatca 300
acctgtatta taacaaccga accgtgcagg ccatcgtgga gttgaaaaac aagccagctc 360
gctggcacaa agccaagaag gttcagctga cccctggaca gacagaggtg aagattgacc 420
tgccgttgcc cattgtggcc tccaatctga tgattgagtt tgcagacttc tatgaaaact 480
accaggcctn cacagagacc ctgcagtgcc ctcgctgtag tgcctcggtc cctgcaaccc 540
aggagtctgt ggcaactgtg gagagaatgt gtaccagtgt cacaaatgca gatccatcaa 600
ctacgatgaa aaggatccct ttctntgcaa tgcctgtggc ttntgcaaat atgcccgctt 660
tgactttatg ctctatgcca n 681

<210> 1675
<211> 546
<212> DNA
<213> Homo sapiens

<400> 1675
aaaaagtcga accaacaagc cttgaggtct aactctgttc aacattaaag ggaagagtga 60
gtctaagaag acttcaggtt tctagcttgg ccaaaccaat tgagctttaa gtgaaatgtg 120
cgatatggta acagagaagg aaaaagacat aacgatngat ttgagctgct ggtgggaaat 180
tctggtttag tgcccagctg gctgtacagg ctggttggac tttaggaggg aggtttgagc 240
tggaaaataa agatggagag ttgtctttca nttttanatc atcantgagg tcataagggt 300
agatggagtt tacctgggaa aattaagtag ctattcgatt tggcttatta ttatgttaaa 360
ataatacttc tctagtgaag tacttaatat gccagatact gtgccaagca ttttatatac 420
atcctctctt ttactaagcc ctcatagggc angtattttg attccaatca tactgattgg 480
aactcctaag aaggtatctt gcttaangtc ccacaaccga ataggtggca natccagggt 540
aattca 546

<210> 1676
<211> 709
<212> DNA
<213> Homo sapiens

<400> 1676
agaaaaaatg atgcccaggt tgggctcccc ggcccaccgg ccgaggagag gcctgcgctg 60
cacacgcgca gaccgagcat ccgcgtcaag aggcgaagag agcgcgcgct ccccacgtcc 120
tgcgctcctg gctgccgggc attcgtctca gccgtgactc tcgccaggcc ggggctggcg 180
cgcccacgtc tgaagagcga tgccccggga gatcatcacc ctgcagctgg gccagtgcgg 240
caaccagatt gggttcgagt tctggaaaca gctgtgcgcc gagcatggta tcagccccga 300
gggcatcgtg gaggaattcg ccaccgaggg cactgaccgc aaggacgtct ttttctacca 360
ggcagacgat gagcactaca tcccccgggc cgtgctgctg gacttggaac cccgggtgat 420
ccactccatc ctcaactccc cctatgccaa gctctacaac ccagagaaca tctacctgtc 480
ggaacatgga ggaggagctg gcaacaactg ggccagcgga ttctcccagg gtgagaaaat 540
tcatgaagac atctttgaca tcatagaccg agaagcagat ggaagtgaca gtttggaggg 600
cttcgtgctg tgtcactcca tcgctggggg tacnggttct ggcctgggct cctacctnct 660

US 2005/0059000 A1

ggagcgactg aatgacaggt accccnaaga agctagtgca agacttatt 709

<210> 1677
<211> 753
<212> DNA
<213> Homo sapiens

<400> 1677
ctggacctgg gaggcagagg ttgcagtgag cccagacggc accattgcac tctagcctgg 60
gcaacaacac gaaactccgt cccaaaagaa aaaaaaaaaa aaaatcccaa ggggctgcag 120
ctgccaaacc caataccctc tatttaaccc ctactctgtt ttacaagaga aataaaagaa 180
gtatcagcag agctcaggtg ctaacacctg ttgagggctg acctacaaaa ctctgcctac 240
aaaactctct tagacaggtg aatatgccac tagaagttag gttgctggta gacctggggg 300
tccctgcggg agggtgatgg tttctttacc accccacagg agatttcagt ggcaaggcat 360
gcctgcagtg ggctttgggc catgcatctt ccaagtccat aggtcttcac ctgggtggca 420
gtgagaaaaa gtagaaagta atgagcctcc tgtgtctctg gaaggttcta gggatagggt 480
agagggaaga agagaacaaa caagcctggc ttgtgctgaa gtgtggtagg cactaccctg 540
tttgcgtgaa gagaaaacaa agcacctgtt agtagggagg ctttaggggg aagccccgtc 600
ttgggggcat ttctgggcag attgtgaatt ggaggaatct ctttaactga agtactctgg 660
ctggaccctg nccttgngtg accatgtctc ctattgcacc agcatttgaa ttccatggct 720
taagaaggnt ctggaccatt tattccagac tgt 753

<210> 1678
<211> 779
<212> DNA
<213> Homo sapiens

<400> 1678
tatttaaatt ttatgaatta atttgaatgt tttttacact aactaacttt tcccaataaa 60
gtccactatg aaaccacgac atccaagagc ccaaagtcgt cttctctgcc ttcaagtcat 120
agatttgccc gcagtatctg tggtgctctg ggccctcccg gtgtccgtct cttccaggat 180
ggggatgccc gggagggaaa ctgtctgtgg ctctaggctg cacggctcgt gccaacccat 240
cagggagggc catgcccgtt gtcctattga gtgccccacc ctgcaccccc accttgggaa 300
ttcacatgtc cattccttga ggttcatgtc aacctcggag gcatccctgt cttcattata 360
gctgacccct ctcctgcgtc cttctgtcag catatcccct ctgcatcctt cccgtcacac 420
atacatacca agctatgatg attgattgat agtggccttc gagatgaaaa ccatccttaa 480
ccccatgatc cttcccagct ggcatcccca ccctaagcaa ggttccctaa agagaagctt 540
gttgacattt tctccccttc ctacttacag tcagctgtca ccttgctcct tcacctnnct 600
cgtcaaggtg actgncttca ctgcagcaca ctggcaattg cttgagacct accgggcaac 660
cgnctggggg cttgcgggga agaagaggag gacaaggctc tgacctgtta cttggtttca 720
ggaaaccccg ttaggttttg cngcttatgg gggctccttt nctttccggg ctaaaagnt 779

<210> 1679
<211> 837
<212> DNA
<213> Homo sapiens

<400> 1679

09/05/2005 - 09:50:00

agaatatgat gcaggtcatc aaaatctgag ttccaaatat gttttgaaca atagaaaaca 60
tgagaaaaac tacataacct tccaaaacca ttactttgaa ttgtgacatt tatttgaaaa 120
taaaacttcc agatatttta tttaaaggat cttatgttgt ttgagtcaca cttcgtcatt 180
atcagtcctt cctgtcaggg aaaagtgtgt ttgggagaaa tacaaagaaa agctttgagt 240
tgccaagata gcatttacta aatttggtca taaaaaatgt tctgaaactt actttctgta 300
tgctgttcta gaggcagctc aagaattaca gaaatttcct tttttctaca ctcttaattt 360
ttctacttta tgtatttctt tttggctctt taaaaggcaa cagattaaaa aaaattagag 420
gaaaaacatt tgttctacta atgtgtcact tgagaatccc agacaataca tagtatcatt 480
gagctaaaat gtgttgtagc ctatagaact tagcacttct ctcaaagaga gaaggggaga 540
cccaatgaga gaggcagaca tggggtgagg ccaatgaaca ctcagaaatt aaaaagaata 600
gttctacctt cttgacttat gtgtagcaac taaatcacaa ttagagaaag atacatgtgt 660
gagtgtgtgt gtgtatactt gtgtgtgtga aggtgtgcat gtgtacaagg aaaatggaaa 720
atgcatttct acctagtgnc ataatgaaac taggttttcg gccaagatat tttcctttgc 780
ctttgcatat ctgnggccta ctgggccctt atattgnacc tgtgtagaaa ggaacct 837

<210> 1680
<211> 770
<212> DNA
<213> Homo sapiens

<400> 1680
gacgcacttc gccgccggcc gacgggcgcc attgtgcggc gcgcgccggg tgagtgccgc 60
gcgaaacctg cgtccgtcgg gggctgcgct gggcgggtcc agaaccgtta gttgggggcg 120
agcgcggcct ctgcatttc cgccgagctc gggtaccctg agccggccgt gcctgcagtc 180
ctcccgccgc tctgtgggat ggggtcggtg acccggaacc ccgaggggag acagtgcttt 240
cagggcgccg cggtggagag aacagatcgc ctccggaagc gtggggtctg ggccagggag 300
gcgatcccct ccgatgcgcg ggacagagga ggctcggtgt cctctcgggg aggggaaaac 360
tggtcctatc cagtcctgtg ggagtcctat gactcactct gggcgttttc cagtttgggt 420
ggacttgtca tttcccgctg agggagccgt tcctgggcgg aggctgcggt agctccccag 480
cggacacctt aagcctctcc ctcccctccc aacttcggtt tcctcaggac tctgcccact 540
tncaccagag acacattgag aaggaggaaa ctatggcctc caggctttcg acggcctggt 600
cctgtgtgag tagaggcttc tttagctttt gagtccgtac tgacctggga ggatccgatg 660
gtggtgagat accaccttcc tgagataccc ccatcttcaa agcaccttgg ggaaggggta 720
naaattggnt gggcattaaa aatcctgctg atggtggaac cccangtttg 770

<210> 1681
<211> 706
<212> DNA
<213> Homo sapiens

<400> 1681
ggccttttt ttttttttt tgagacagac tctcactgta ttgcccaagc tggagtgcag 60
tggtgcgatc tcggcttctc ttaactactc agagtaaaat gtgagaagaa acaatacaaa 120
gatgggattt ataacacgga agcaaaatat agagatttga aaattctcag cctaagcatg 180
taaataaaaa ggtatttagg aaagtaaacc aagggtgtga ccaagtgact ttctgatcag 240
agtgtggcta gaaagaagcc aggtgttttc atcatgacaa taggagaatg aacccaatgg 300
cacttcagag agcttcaagg ccgctcctcc catcacaggc ccacagtgcg agggccttga 360
aggcaggatg gtttccaggg aagggcgtag aacactcatg gaactttggg gcttgctgcc 420

09512006

cggggctgcc tcaagtctct gctccccaca tcccggcaca gtgctccttg gctgccgtag 480
ttgtggctcc agtgggccca ggtgcagttt agtccctgct ctggagggca aagtggtgaa 540
cctcagcatc cacatggtac tgattttgca agtgtgcaga gtgcacaaga tgtggaagca 600
tggcatcctt caaagagatt tctttttttt ttttttgag acagactctc actgtattgc 660
ccaagctgga ntgcagtggt gcgatctngg cccaccgcaa ccttng 706

<210> 1682
<211> 494
<212> DNA
<213> Homo sapiens

<400> 1682
agaagctgtc ggactgtgag cgccttcgaa ctttggaggc ttggctcgtg atggaggttt 60
ttttagcatg gggaccaggg aggactacgg tgctcgggac tgggctgcgg cctcctcgcg 120
gccccgagtg ccctgtgaaa tcagctcagg ccgcgtccct ctagcctgca ctttccctct 180
gttcacgctg cttccctcca gggcccggcc tccaagtgaa ggggggcgga gggcggtcac 240
ctgccagaag gtctggggcg ccaaggtgtg tcccgggact cttggctccg tccaggttcc 300
aggccccgcc ccccagctta tccctagccg gggctcccca ccgtgggaac ggggaccagc 360
tggccggaag cgccaaactg cgtccctgtc cgagccctgg ggatcagtca agccgaggag 420
ttaattatgt aatgaggggg cagggggtcg aggctaatga agcctcccgg ggtggggagg 480
gagggggang angn 494

<210> 1683
<211> 720
<212> DNA
<213> Homo sapiens

<400> 1683
aaaaagtaat ggtaatacat gtttcttgtg aagggaaaat aaacaaggtc agttttatt 60
ttactagata gcaaataaaa aaaaaaagag ggattagtga tttcagtctt ttagaaatgg 120
ttggcatctc tctgccttag ttcttacctc acttgtaaag gattgagttc ttccttaatg 180
ttttctcctg gtatgagaat gtggttatat tctttcttag gtaattgata tgaatctaac 240
ctagtttttt tttttgtttt tttttagtta ctttaagttg aaatgtaaag gagcagttgg 300
ttctgtacat ttccaagctt ctctgtaata attgatcatt acaatgatga ccctaaagca 360
tcaggaaaat actgtatact atatgctcag agatatatat atgtatatat atatatatat 420
ttgatggagt ctcactgtcg accaggctgg agtgcagtgg tgtagtctag gctcactgca 480
acttctgcct ccccgggttt aagtgattct cctgcgtcac cctcttgagt agctgggact 540
acaggtgtgc accaccacgc ccagctaatt tttgtgtttt tagtagagat ggggtttcac 600
catgttggcc aggctggtct tgaactcctg acttcaagtg atccactggc cttggccttc 660
caagtctggg atttcangtg tgagtcactg cacccggcct atttttctaa aaaaagaann 720

<210> 1684
<211> 756
<212> DNA
<213> Homo sapiens

<400> 1684
gtggcttgca gctcggggtg ggtggctcat ttcctggccg ctcctgggct tcgcggaaag 60

0050204050

aagagattac tcacactcct tctcaagcac agaaccagtt gtactgagct ttttgctaag 120
ctgtttcagc caagaatggc tgtggaatct ggagtgattt caaccctgat acctcaggat 180
cctccggaac aagaactaat actagtgaaa gtagaagata acttttcctg ggatgagaaa 240
tttaagcaga atgggagtac tcaatcctgc caagaattgt ttcgtcagca attcagaaaa 300
ttttgctacc aggagacacc tgggccccgg gaggctctga gccgactcca ggaactttgc 360
tatcagtggc taatgccaga gttgcacaca aaggagcaga tcttagaact gctggtactg 420
gagcagttcc tgagcattct gcctgaggag ctgcagatct gggttcagca acataatcca 480
gaaagcggcg aggaagctgt gaccctgttg gaggatttag agagggagtt tgatgaccca 540
gggcagcagg tcccagctag tccacaggga ccagcagtgc catggaagga tttaacatgt 600
ctcagagcat cccaagagtc aacagacatt caccttcagc ccttaaagac acagctgaaa 660
tcctggaaac catgcctttn ccctaaaaag tgagttgtcc agaccttcca aagcttttc 720
anctatncgt tgggaatggg gtttcttcca ggaaag 756

<210> 1685
<211> 648
<212> DNA
<213> Homo sapiens

<400> 1685
ggatgaaatg ggtacgaggt atggaaaacc tttgatgtct ggatggctgt ggagttatcc 60
atgatatgaa atagcagctg agctgttgcc tgttatgaaa ggtaaaagtt acctgtcgaa 120
tttcaaatga tagatccaac tccaggagaa ctgactcact agatcacctg gctacttttg 180
gccatgctgg ttacagtgag gagaaaaaag aagtgtancc caggtaatac cttcagtttt 240
tgttctctcc tcccggaaga aagaaaaaag gcccaaaaat tcccaaagat gagctttggt 300
tgggccaaaa atgttaaaca tttatggcac tctttcctca caagtaggag gaaaaaaggt 360
tgaatcagtt ctcagggctg gagcaaagta aaaaagggca gaggacatcc ttcagttgtt 420
agcctacctg cacgccctca accccattcc agatagggtc tcctccgcaa ctgtaatatt 480
aaacctttg ctaaatttac tgcaaggggt cgaatacatc tgcagtgagg aaggtgccgg 540
ccagggtggg gtagcggcgg cagntaatgg ccttgtattt tgcanttatt acatctatgg 600
atatacgata gaagttgatg taaaatgttt tatgcttgtn atgtcgca 648

<210> 1686
<211> 805
<212> DNA
<213> Homo sapiens

<400> 1686
ttcaaattca cttattctag tagtttgtag attcctttga atttttatg tctgtaatca 60
tagaagcatt ctatgcttgt gcagataaag cattttcag tgttaaaagt tttattgact 120
tctttttctg gagtttccat cttctcattt tgtcttctcc ttttggtatc aagtgctaag 180
aatagcacca cttggaaata tgacaggact gcagccagtg tggataatta tcattttcaa 240
ctacagatct ctctcagcct tgtctgctta tcacactggc ttgatcgcgc ccatgaagat 300
ccgcacagag gcccctggga accttcgttt atacagtggg agccccactc gcagcgagaa 360
agagcaggtc tccatcagct ccttctacta caaggagcgg aaatcaagac gatggaaaag 420
taagcgtgag ggatcagact ctggcaatcg acagatcaag gctgctggga aagtcatcat 480
ccaggatatt gcttgcctcc tgcctgttca caaatcgctg ggagagctgt acatattgaa 540
tgtgaatgat attcaggaaa catgtcagaa gaatgccgcc tctgccttgc tcgttggaag 600
aaaggatctt gtccaggttt ggtcgctggc tacggtagct acagatcttt gccttggtcc 660

0050245350.0020000

gaaatctgac ccagatttgg aaacaccctg ggctcgacat ccatttgggc ggcagctgct 720
ggagtccctg ttggctcact attgccggct tccggatgtt canacactgg cgatgctctg 780
tancgtgttt gaagcccagt ntcgg 805

<210> 1687
<211> 751
<212> DNA
<213> Homo sapiens

<400> 1687
agacgatggg aagatcttcc atggcagtgg tgtgggggac ccctttgggc cacgctgtta 60
caaaggggac atcatgggct gtggaatcat gttcccccgg gactacattt tggacagtga 120
gggggacagt gatgacagtt gtgacacagt gatcctgtct ccgactgccc gggccgtccg 180
gaacgtgcgg aatgtcatgt acctgcacca ggaaggggaa gaggaagagg aggaagagga 240
agaggaagag gatggggaag agatagagcc ggagcatgag ggcaggaagg tggtggtttt 300
cttcactcgg aatggcaaga tcattgggaa gaaggatgct gttgttcctt ctggaggctt 360
cttccccacc attggaatgc tgagctgcgg ggagaaagtc aaagtagatc tgcacccctt 420
gagtggctag ggcctcccct ccagacctgc tccttctccc tgctcaccct ctgctgggcc 480
aggcacccag ttcctgactt cccagaggct tcgtttaccc agcaggcccc tggaggtgtg 540
tagtcactct gcccccactg gctcangccc ctgtcacgct tctctgtgcc cacgtttctg 600
acctggtgct gccactgttg tcagtccctg ggcctgagtc cctggttgga caggaatgga 660
cccaaagaat ggtgttnggt atgtngggtg gtcccacttc gcttttggtc aatgggcttn 720
tgggtccccc ttttccttta ccgggccctg t 751

<210> 1688
<211> 841
<212> DNA
<213> Homo sapiens

<400> 1688
ttttactttg tgtaactgat taattgttca tttgggtagt gatattatga ctatggctaa 60
atttgcattg tcttgcctaa tagacctgag cactgatgag cactgtcttc cctttagata 120
tcatagaata cagtcatggt tacttggttt ccaatgtgta gccttgtttg gggcttgctt 180
tccaaccagg ggagtaagaa ggcacaggca agagtgccag ggcttgctgt catagactga 240
gggctctgcc aagacaggga ttgactctgg ctttggatta tctcctaagc tttggagggg 300
aaaggggaga gaagaggact acagaaggtc tagtagttgg gaaatgaggg ggcagccccc 360
ttgtgccact gccttgagag tttcaaacct gtggcccccg caaaaggcca ataagcactc 420
ttgtgtaagg gaaagggcca ttcaggtggg tgctgggaaa gatagctaaa tttacccgcc 480
tctctattct tgggtttttt cctctgtgcc tgcagtactt tgttttcttc tcattgtgaa 540
tgacctggac ttatttcctt gaggtccagc ctgacttggg ctcanggctt tcatcttccc 600
ttcacgggat ctgggaaagg gcatgagatc tggagccaga caaacctaga tccagtccca 660
gcttcaccaa atattagttg aatggcttca gacaagtctt ttaacctctc tattcctgaa 720
tttcccatct ncaaatggga tggtgatgat taaggtgaaa gaaagatgcc tgggttaaca 780
gcaagaacat agactttggg tcatagacct gganttaaag tctggccttg aggccccggg 840
c 841

<210> 1689
<211> 825

0050205-0050800

0952045 : 07200

<212> DNA
<213> Homo sapiens

<400> 1689
cacgttttga ggtcccaagg ggttaggact tcggcatatg aatttggatt gtggggtggg 60
gggaacacga ttgaacccct cactggatga attcttgaga atgggcagcc agaaaaagac 120
ctgattgagg ccaaagagca agcgatgttg ggagcttagg aaagagggtt ctggtcgagg 180
ggccggggag ccccaggtca gtgcacgcct gctgtgcgcc agctgttctg attctagcct 240
gactgaacat gacagtgtcc agagagaaga ggaaagcaga gttcccatgg tccttggaga 300
cacctgtcct tgggaggcat cagagctttc cccagcattt ggctctaggg cacttctcct 360
ctggggcttc atccagggac ggcagtaggt ccagtcagtg ccagcctcag ctccgctcca 420
ctggcgccag ggtcatggtt tggcaggccc ccaaatactg ccccagtcca gacaggtctg 480
cagggagcca gggcaagccc ggacactagg ggaggctggg ggccaaggca gcctcttttt 540
ctctggggac agcactggca gcccctgacc cacatcatgg ggtgagcaag tgtccccaga 600
gctcctgtcc acaggctgat ggaggtgccc cgggcctggg agcagcacgt cttccccaga 660
gacctcatgg gctccgtagt gacatgctcc ctcgattccc accgttccag gcagagctgg 720
cctccagccc cacacttctc tctcgtgggc tgnctgttcc ctgctgggcc gccactgcct 780
atgacanggg caatgctgtg gtccttcttg gacatgatng gactt 825

<210> 1690
<211> 867
<212> DNA
<213> Homo sapiens

<400> 1690
atgcaaccaa gaggcttggg gctccattgc ttcccccgct cccacccata ggttggaagc 60
tctacccagg cacagtgaac tcagatttgg gccctgattg cctttgcctc agcttgcttg 120
taaggcagag gtttcacaag agaaacaaaa tggctaccac ccagcccatt gcccagaatg 180
gtggttcaga gattttgtcc agagggagag acagtgtata agaatagagc tctgaagctc 240
tctcaagaag aatggaattt atttgaaaca gtgtcagaaa cttcccttaa ttaaaaacaa 300
catgaaccgt aagtcagcta gttaatcagg taattccagg ggaagacaca gctaaggagc 360
ccttctaagg tcaaaagaaa ccttaaagac tggcctcaaa aactagccct gcttggctta 420
aattatacca aactgcttag taattaatgc tccaaggact tgtggagaac agtagactga 480
tcagacagaa gccagtggag cctagtgggc tagaaataat accaaaggag acaaacatct 540
taacagagag atcagggaaa gatggtcaaa gagactcctg tttaaaacca taccagggta 600
tattctgcgt atgtccaagg ctgtaccctc tgaagagcaa caaaatgctt cccactgcca 660
gctatttcac taaaatagct tagtgaaaac acaaaacaaa taactacgag taactctgca 720
tatgtccaag gcttgcaccc tctgaagaac aacaaaatgc ttnccactgc aagctacttc 780
actaaaatag cttagtcaaa gcagaaacaa attaccaaac naaaccaacc acaaaacccc 840
ttttgaagac accaccaaaa ccctttg 867

<210> 1691
<211> 759
<212> DNA
<213> Homo sapiens

<400> 1691
gttgagactt ccccaggatg cccgtgaaaa ttaaatgaga taatatatgt gaaaggcgtt 60

ttgtaaactg tgaaatctcc ataagccttc attgtttctg gctttgttga tgagcgtccc 120
cacacatacg tgaatgcggt cgccctgaac gtttccccac aaatccagaa tttgacagca 180
gggatcccag gggcacttgg ctgtcctgtg ccgcccttg caatccgggc tgaggggttt 240
tctgggccaa gttaacagcg gatggtgcct cacagcagag gcctgaaagc acctgctgcg 300
tgggccataa acacagtgtg ctcagacacg cagagacact ggttcttacc cactcccaag 360
ggtgggataa cgctgcacct tgcacttgtg ggatgaggaa tgaggctctt ctgctgggca 420
gggcctgggc aagggagaag cttttataga ggaacccgca tggccccgga gtcctccct 480
cttagcccct ggcctgagtc cccagccagc aacccagggt agctgttctg aagcagaggg 540
gctttgttcc attgtgtttg gaagcccaga agccaccttg tggcttaggg tgacataggg 600
acctacacac agaggagtga acttagggtt ctagggacta tggccgggtc accggtggcc 660
aggggcagag atgagcacct gtccatgtaa gccatatgcc acccccacag ggcctggcaa 720
ggtgcanang gtgcangtct cggccatgta ccccttttg 759

<210> 1692
<211> 857
<212> DNA
<213> Homo sapiens

<400> 1692
gttgttgggg ccgtcgaggc ggcggcgact ctgcgtcccc ggctcctgat ggaggcgggg 60
ccgcatcccc ggccggggca ctgctgcaag cctgggggcc ggctggacat aaaccacggc 120
ttcgtgcacc atatccgacg gaaccagatc gctcggtacc gccccgccct gcgccgccgc 180
cgccaccact cctggcctgg cctggcccgg cccgacagtc cctgactccc gctcggctcc 240
ccgcagggac gactatgaca agaaggtgaa gcaggcggcc aaggagaagg tgaggaggcg 300
gcacacgccc gcgccgacgc ggccccgcaa gccagacctg caggtgtacc tgccgcgaca 360
ccgaggtgag gccgcccgcc ccgcctgcct ccagcccgcg cgctcttcct gcaacgcact 420
ccccttctct atagggaaaa accacttctt actcctaagg ttcagctcat ctcgtctctt 480
tccggaacct ccacctcagc gctnccaaat ctccgctgaa tgattctcac caagaactgg 540
gacgactcat aagcccccag ttaagcatcg ctgtcagagt atcggggagc cagcaagaag 600
tttatctgcc ggtttgcccc accgtgctgt attttagtaa ggtgctccgc tacctagcaa 660
agagaaagtc tggcacagcg atgagcgacc aagcacataa ttgcggaatg aacccagtaa 720
atggcctttc ccacttctct gctactagag atcacactgg gtaatatatg acggcaattt 780
ttggtaacat tattactttt ttttaaaaag gtttttattt atttttgaga ctaggtctct 840
tgtnncccca gntggaa 857

<210> 1693
<211> 785
<212> DNA
<213> Homo sapiens

<400> 1693
aatgtatagt aaatttggta ttaaaattgt ctcaattatt tgaaatttcc atttctattg 60
tttttactct gtcatcaatt tctgtctgga tatgcagtta cctgtagctc agaatctgac 120
taggttatcg ttaaattcaa aacccacaag aggacattat gttaacaaac ctggaaaata 180
taaatggagt tttaaaagaa atatataaac taccaaaata gacttgagga attagaaaac 240
ctgaacaaag caataaccaa ggaaagcatt gaacaatatt attaaacaat tcgctttatg 300
aaaggttcct gtccctgata aatattgtat taggaatgtt tgcttccaag gaatgactaa 360
agggaaaagg gatttatagg aaacatagag ggtaatctca tagaaaacct ttgcagtaag 420

0050203450

taaggctgga cttcatgtaa actgtgaagt cattaaaaag caaatcttgt tcactgtatc 480
ttttaaggtt tctatggctc ttgttctctg cttttctcca aatacacgtt ttcttagcct 540
gtatatagtt gaataatagc gacccacccg aatttaccca gcatttagct ccagcactta 600
ctgacatcga attatccaca gctaaatgtc tcttagttca aacgcgcaaa acacattctc 660
attggtcacc aaatgaccag tgtgtttcct ctcctcaagt gcagtgtctg cttttggtct 720
gatgagctgt gggtggataa tcagggtatg tgattgattc atagtctgtg caanangang 780
ttgaa 785

<210> 1694
<211> 861
<212> DNA
<213> Homo sapiens

<400> 1694
tattacaatg atgcttctgt cctaagaagc ttgagacacc gtcatctttg ttactactat 60
gactgtttat gttagtgcct caccttttgg tttccttgtg tgcccaaagc tgctctccag 120
agaacgtcat ctcagtttcc tgatcacaag caggcttttc cctgagatag atccaggcat 180
tgaatgccca gagcacattt agtatgtgca cgaatcctct agcttcctct cgcatttgta 240
aaagaatctg attcaccagg atgtttttgg ttcttttatg taatttcca tttcctgatt 300
gtggcaggtt ttttttcca ttttctattc atctgtaact gctttggctc agccctttgt 360
ctccctactt tctgccctgc agctaacttc atgagaaagt cccgtgttcc ctgggtctgg 420
aaacttgtct tgtcccagga gacatactct agttttcaag agacgtgaaa gagcttcagc 480
aacctcagaa tgttctggtg gcagcatcaa aatcatgacc atgcatgaat aaggggtatt 540
gtcatgtgtg tgctgataga gcccggggac cactgaattc tagccccatc tctgaaatat 600
gtgcccacca gggcagagca ttttctttta agttccgccc agcttctctg caaagtgggc 660
cactttagtt ctagatttca gagatctctg tataaaccag attacgattt tagggtcttg 720
aaggagaaaa aaaaaaatgt cataaatctt attaatacta atggctttg gtttaccagc 780
angaaataag taaattgctc tcattgggat aagataaacc ttttaataac cattcttata 840
gcnctgagta gtttgaggng g 861

<210> 1695
<211> 759
<212> DNA
<213> Homo sapiens

<400> 1695
gggggggccca cattttttgt ttaggataaa actagcctga gcactgttct actgaatctg 60
aagtcaggag tatcagattt ttgtgtcagt ccagccctta gccagtgcta aatgactttg 120
aatgtgttag ctagtctttt gggtataatg tccacatctg agggatttgt cccttatctg 180
aaaagtagat aggtggtgag ttcttcaggg acaaggattc aattttattc atacagtata 240
tatgtggata tacatataca catttataca taaaatccca gtacctagca ctgtacctgg 300
tccttggtaa ggccttgata aaggtttgtt agaggcgtga atattttctg tcttcagggc 360
actttatatt ctttatgaaa agcagtttat gtagtttatg ttattgtttt aaaaaactta 420
atcctaaatg tgaagtcatt tcttttcttt gttttgtttt gttttgtttt tgagacggag 480
tctctcatta tcacccagat tggagtgcag tggcaccatc tcggctcact gcaacctcca 540
tctcccggtt tcaagagatt atcatgcctc agcctccaag tagctgggac tacaggtgtg 600
caccaccaca cccagctaat tttttttttt tagttgagat gggagtttca ccatgttggc 660
caggctggnc tctaactcct gacctcaagt gatccgcctg cctcagcctn ccaaagtgct 720

0050205.0070203

gggattacag gtgtgagcca ccatgcctgg ncaatagtt 759

<210> 1696
<211> 851
<212> DNA
<213> Homo sapiens

<400> 1696
gtttgggttc ctgtattttc accagaggga gttagtcctg ccccagttca gctggtcctc 60
aaagtgtata tagctcttta accatcagca agtgtctatc agaacataat cttgatttca 120
gctgctacta aatatctacc aggagactgc ttgagagaat tgcctgatgg gtgctgagtc 180
caccattcct gagatacttt gaaatcagtg gcttaaccca agctgtgtat cgggaccctc 240
tcaccgtggt cccaatggag tcacttttct taggcgcccc cctttacctt gggctctgag 300
cttcctctgc ctttcatctc tgtgggatga agccccaccg cccttcagga tgcaaagccc 360
tcttctctaa tgtgagtgca gggccaggtg cagtggctca cgcctgacct cccaacactt 420
tgggaggccg aggcaggggg atcccttgag cccaggagtt tgagaccagc ctgggcgaca 480
ctgtgagacc ctgttgcctg aattgccctg ggagatttcc tcagcttgtg ctgggggcat 540
gtggccccat gaagcccgta gtcactgttc accctgagag acgctggctt tcgggctcac 600
acacctgctg cggggcagcc ccaggaaatg gccaccccat ttctcctgga gctgcgcgtg 660
ttctcagaaa ctgtggtggc cgtctgnttt ggttgcatct tataaacgtt tacctgatga 720
cattttcctc ttcaatttaa ctgctagaaa atttaaagtc aggttggtgg cttaccagta 780
atgagagttt anagtnaagt aaactttatg acatagctta aactcttact ttctttttaa 840
ccaatntgaa t 851

<210> 1697
<211> 851
<212> DNA
<213> Homo sapiens

<400> 1697
gtgtaggtgc atttgtttaa aaaatataac tccccattgc ctctgggata aagtcttatc 60
tcagtttaca tatattcttg ataacctctc caactttatg tctcaccacc cccactcact 120
tcgtaattcg tgccttatca gaatggacct gttatactgg cagttcacca tatataccat 180
tacattttgt ttctcccatc tctcaggtag acttacactt tcggcccagc acatcagtca 240
tcgcccttgc ttgctttcct attcactcct gttctggaag gtgcaccacc ttttcttgga 300
aggcttccct tgctctccca ggctagatga gatgtccttc catcagttcc cacagcaccc 360
tgtgcatgta tctgttgtgc acttaccaat agtatacaag ggatctatga cccaagtctc 420
tccccactag cttgtaagct cctcacagac aggaaccatg ttttgtcttt gtactccagt 480
gcctagtata taagagatac tcaataaata aatatttgtc aaatcaacta attgattcct 540
tgtgacctaa ttctagagaa tgggaagaag gcctgttatt ttgttgtcct ttatggttct 600
ttaggaaagc tctccaagct tggcatttgt cagggtggga ggaaaactgt tgaagtatta 660
agactggaca catggctgct aattcatcag cttatcattg aaaaagtcca tagccaaaac 720
ctgactgngc acttactata ggaccctgac tgnctgggtc ttcctgtctc ctccagccag 780
tatatttaaa aggtaatgag ataatgatga agtggtttgn aaaaaggtta agggtcaaat 840
ngaaaccatt c 851

<210> 1698
<211> 773

0552945 - 07/2000

<212> DNA
<213> Homo sapiens

<400> 1698
agtagtcgct gtcgtccgca gagccagttc ctagcgcaga gccgcgcccg ccatgaggga 60
gatcgtgcac atccaggcgg gccagtgcgg gaaccagatc ggcaccaagt tttgggaagt 120
gatcagcgat gagcacggca tcgacccggc cggaggctac gtgggagact cggcgctgca 180
gctggagaga atcaacgtct actacaatga gtcatcgtct cagaaatatg tgcccagggc 240
cgccctggtg gacttagagc caggcaccat ggacagcgtg cggtctgggc cttttgggca 300
gcttttccgg cctgacaact tcgtctttgg ccagacgggt gcagggaaca actgggcgaa 360
agggcactac acggagggcg cggagctggt ggacgcagtg ctggacgtgg tgcggaagga 420
gtgcgagcac tgcgactgcc tgcagggctt ccagctcacg cactcgctgg gcggcggcac 480
gggctcaggc atgggcacgc tgctcatcag caagatccgt gaggagttcc cggaccgcat 540
catgaacacc ttcagcgtca tgccctcgcc caaggtgtcg gacacggtgg tggagcccta 600
caatgccaca ctgtcggtgc accagctggt ggagaataca gacgagacct actgcatcga 660
caacgaggcg ctctatgaca tctgcttncg actctgaact gacaacgccc acctacgggg 720
acctcaacca cctggtgtcc gncaccatga tggggtacca ncttgctggg ctt 773

<210> 1699
<211> 795
<212> DNA
<213> Homo sapiens

<400> 1699
gtcaatctat aatagctcca gcagagggaa tgaaagtaat ttagaaaaaa gtttactatt 60
tgatttgtca aagtgtgtcc aggaagtaag agagcctaac caaggggctg ttgtgcatgt 120
aagctcttca gtaaaagtgg tggtgtacta agctatattt aagaaggtaa tttgagattt 180
tatattacat gctagtgaat catttttgga ttttgcacca gaactgagct ctttggtccc 240
tgcctgtctg tggtttgtgt tgcaaggtcc agaggcttaa aacaaagaac accatgggaa 300
attctccatg agtcattccg tcagctgtag cttctgtttt atagtccttc ggatataact 360
agtgttttaa tgccagctct cctagccgct tttcatgctt tggttctata tgctaataaa 420
aaagtatggc agtatggcta ttgtagataa cgttcagact ttttttttctc ccgattccac 480
aatttttagt tcttctaatg gctctaagct agaccaatta taaattgtaa ctggtgaaaa 540
gatttatgac tgtttatttt gttgtagttg cgaggtaagc gagtggtcac ttaatacttt 600
tggttctgng aatcttactg tccagagaac taaagattga attagcagtt cagctggagt 660
cagcactatg tgctaaatcc ctatacttaa gagctcttat gtattgcaga caaatgtcct 720
cttaactggt ttggtatttt gngaaaaata atataataga gcaggcagtt anatcatatc 780
agnttcaaat ttaag 795

<210> 1700
<211> 801
<212> DNA
<213> Homo sapiens

<400> 1700
gaaaaacatg cagaacctct tcagccagtg gctcccaggg agtggcggga cagtaaagcc 60
ccagaaacgg gtgagcccaa gactctcccc acctaggaca gttttctgac tttggcatag 120
ggaggggaac ttaaaaagag gcccatcatc ctgcaggtcg agatggacac cagagtccag 180

0005204350

ggaggctaag gtggctggaa ttcgcatcgg aggatgaagg agaggaagga gctaaacaga 240
gagaagggcc agaacctgcc caggggcgcc tggagtctag ccgtgttgca gtcggcccgt 300
ggaaacttac tcctgaggct gggaggctct aaactgaaca gctcccaaag atcaggtggg 360
gctggaaatc actgaagctg ccaccagcca agtaacaggc cccactgagt attcggggcg 420
cccagggcat tccccgaagg gccatgcctt aggagtgggg ctggactcgg ccaagggtaa 480
agacgctgtc agactcgtcg gaaaagtgct tcaagaacaa gcttccaaag gtgggaacca 540
gccgggcgcg gtggctcacg cctggattcc cagcactttg ggaggccgag gcaggcagat 600
cgccttcaga gcagcctggc caacatgggg aaaacccgtc tctactaaaa atagaaaaac 660
ttagccgggc gcggtagcac acgcctgcgg tcccagcttg cttcgggagg cttaagccgg 720
gagaatcgct tcgaacccgg gangccggaa ctttgcaacc gaagcccaaa accgggccaa 780
ttgcacttnc ggncttgggc c 801

<210> 1701
<211> 853
<212> DNA
<213> Homo sapiens

<400> 1701
gaaagaaatc tggtgcctgg gggtccctgt gttcacccct agagtttgtt ttaaaatttt 60
taattgaagc atgtgaagtg tacgtgcaga aaagtgggaa catgatagtg tatggcttgg 120
tggattttca caaactgaac atacctgtgt aatcagcatc tagacccaga cccagagcat 180
cacaaatatc ccccatcctg ggcttttccc agaggagatg ggggcttctg aagatggact 240
tacctgggac ctgccccccа tgagccagga cggtcccccc acagtcagcc tgtgcaaagg 300
ccccgtggcc aggggtggag gagaatatgt gggtgtggac aggatgggag actgtggcct 360
gaacaggaga ttttattata tctggagacc ctgagagacc ctgagacctg gggcaccatg 420
gctggccagg tcagaagcat cctgactgca gaggtccgtg cagccacacc ctcttccctg 480
ccagcaagtt gtctgcggct catcggaggc ccctccgcct ggagccttct atggacgtga 540
tatgcctgta tctgttttta attttcattc ttcacttagg ggaagtgaaa tcgctcagag 600
atgagatcct ttaattgaaa acgaagtgta acggaatcta gtgtctttct aatgtggtaa 660
aattcttcat caacatcaca gtcagctggc agctgaactt cagaatctca cttacagcag 720
gcgacacngg ggtacaccga tgggtcacac tgggtctggg ggcttcctgg acttcttctg 780
cgtgtggtct ggntaggaag ttgaattgtt gcttccangg ttattctcct tcttgagtca 840
cagtnacacg aat 853

<210> 1702
<211> 828
<212> DNA
<213> Homo sapiens

<400> 1702
aatcaaacat agacaaatgg gattacattg agctaaaaag cttttgcaca gcaaagaaaa 60
caatcagcag agtgaagaga caacctacag aattggggag ggggaggaat atgcaaacta 120
tccatttcat aagggattaa taaccagatt acataaagac atctaacaac tcaatagcaa 180
aaagccacaa ataatttgat ttaaaacagg gaaaatgatc tgaatagaca tttcacaaga 240
gaagacatac aaatggccaa caagtgtagg aaaaaatgtt caacatcatt aatcgtcagg 300
gaaacgaaaa ccaaaacctc aatgagatat tatctcacct gttaaatggc tactttcaaa 360
aacacaaaaa gtaataaatg ttggcaagga tgtggagaaa ggggaccact catacaccgt 420
tgctgggaat ataaattagt atagccacta tggaaaatag tatggaggtt tcccaaaaat 480

0505204.0070000

ctgaaaacac gcctaccata tgatccagca attccactgc tgggtatata cccataagaa 540
aataagtcag tacatcaaag agatttgcat tctcatgttt ataacagcag tattcacaat 600
ggtcaagata tggagtcaat ctaaatattt gtcaatggat gactgttaaa gaaaatgtga 660
tatgtataca cagtggaata tcattccttc acaaaaaagg aataaaatct gtaatttgca 720
gcaacatgaa tggaaataga gtcattatgt taaagtgaaa taattcaggc ncacaaaggc 780
caagtnttac acgttctnac ccaaataggg gaactaaatg atctcaag 828

<210> 1703
<211> 719
<212> DNA
<213> Homo sapiens

<400> 1703
ggctgccccc gccctggacg ccttcgtgga gcgagtgctg gcggccggac ggctggggcg 60
ggtcgtgctt gctaacgctt cggggtccgc caacgcctcg gaccccgcct gggacttcgc 120
ctctgctctc ttcttcgcca gcacgctgat caccaccatg ggctatgggt acacaacgcc 180
actgactgat gcgggcaagg ccttctccat cgcctttgcg ctcctgggcg tgccgaccac 240
catgctgctg ctgaccgcct cagcccagcg cctgtcactg ctgctgactc acgtgccccc 300
gtcttggctg agcatgcgtt ggggctggga cccccggcgg gcggcctgct ggcacttggt 360
ggccctgttg ggggtcgtag tgaccgtctg ctttctggtg ccggctgtga tctttgccca 420
cctcgaggag gcctggagct tcttggatgc cttctacttc tgctttatct ctctgtccac 480
catcggcctg ggcgactacg tgcccgggga ggcccctggc cagccctacc gggccctcta 540
caaggtgctg gtcacagtct acctcttcct gggcctggtg gccatggtgc tggtgctgca 600
gaccttccgc cacgtgtccg accttcacgg ncttacggag ctcatcctgc tgccccttc 660
gtgccctgcc agtttcaatg cggatgaaga cnatcgggtg gaacatcctg ggcccccan 719

<210> 1704
<211> 855
<212> DNA
<213> Homo sapiens

<400> 1704
gcggccgccc tggcttcctt ctacctgtgc ggccctcaac gtctccttgg tgcgggaccc 60
gcttcacttt cggctcccgg agtctccctc tactgctcag acctctggac ctgacaggag 120
acgcctactt ggctctgacg cggcgcccca gcccggctgt gtccccggcg ccccggacca 180
ccctccctgc cggctttggg tgcgttgtgg ggtcccgagg attcgcgaga tttgttgaaa 240
gacattcaag attacgaagt ttagatgacc aaaatggata tccgaggtgc tgtggatgct 300
gctgtcccca ccaatattat tgctgccaag gctgcagaag ttcgtgcaaa caaagtcaac 360
tggcaatcct atcttcaggg acagatgatt tctgctgaag attgtgagtt tattcagagg 420
tttgaaatga aacgaagccc tgaagagaag caagagatgc ttcaaactga aggcagccag 480
tgtgctaaaa catttataaa tctgatgact catatctgca aagaacagac cgttcagtat 540
atactaacta tggtggatga tatgctgcag gaaaatcatc agcgtgttag cattttcttt 600
gactatgcaa gatgtagcaa gaacactgcg tggccctact ttctgccaat gttgaatcgc 660
caggatccct tcactgncat atggcagcaa gaattattgc caagttagca gcttggggaa 720
aagaactgat ggaaangcag tgacttaaat tactatttca attggataaa aactcagctg 780
agttcacaga aactgcgtgg taacggtgtt gctgttgnaa caggacagtt ttttaagtga 840
tagttcgcaa tatgg 855

0356305-000800

0962346.02800

<210> 1705
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1705
ttttcatgct tccatagaat catccctgac ctcaggaaaa aatacaaaaa tggaacaaac 60
aaaacagaat agtaaaacct gaagtaagaa aaaaagaaat gaatttgaca ttgtacagat 120
caggagaaag aaagttcatt aacagtttca agatccctgc gttttcaccc agcaggaaac 180
aaattaccat gagttaaggt ggggaaatta ctggcaattc attgccttct tttaaagact 240
ttaaaaaaaa atgagtaaat aattttagac tattaccccc tttccatgag agatacacag 300
ctagttaaac tgccatgcat attaattttt tgttttcatt ttattccacc taccaactac 360
acagtgtctg ctttccaaaa ttagtttgaa agccaatgac ctgtgtttga actgggtgaa 420
atagcatagc agttcacacc tggaataaaa gaatgattgt gtgtgagtct gttaatggct 480
gtgtagagct atatctctat atggagctat ataaaaatat attttataca tgccagattc 540
atttagactt gaattgaccc tgtggtaaag cagcaggaat aaaatatttt tttgataaag 600
cactcactca aatagagaaa tgagctcttg cagttaccat ttaatctgtg acttcttttt 660
gagatgcaga aaaactccat tataaagtgc tcagttcatc cagggacaca gacacactgn 720
gggttataac acaccctcat ctgcatggtg angtcatgag tcagctgctc ttctntcaag 780
a 781

<210> 1706
<211> 817
<212> DNA
<213> Homo sapiens

<400> 1706
gtgctaagaa aactgcccca catcatctgc agtaggacgg gggagttgga gccctggtca 60
ggccactctg ctactgacca cagttttctc atctctaaaa aggcgcagta acaatataat 120
taccgtatgc agtcccccag gatacagggt caaaggagag cacaaccatc gcagttggaa 180
gcccatgggg cagcccagtg cagatgcatc tgacttacga aacttcagtg acacctgctc 240
tgtgccagac actgaagatg gagcagtgaa cagcactgac ccagcctgtc ctcctgttgc 300
ctgcaggcca gacggagtct cactctgtca ccaggctgga gtacagtggt gtgatctcgg 360
ctcactgcaa cctccgcctc ccaggttcaa gcgattctcc tgcctcagcc tctcaagtag 420
ctgagattac agacgtgtgt caccatgccc tgttaatttt tgtttgtttg ttttgttttt 480
tgttttgttt tgtttcgttt tttgtttttt tttttgagac ggagtcttgc tctgtcgccc 540
aggctggagt gcagtggccc cgatctcggc tcaccgcaag ctccgcctcg cgggttcatg 600
ccattctccg gcctcagcct cccgagtagc tgggactaca ggcatccgcc accacaccca 660
gctaattttt tgtatttttt ttagtagaga cggggtttca ctgtgttagc caggatggtc 720
tcgatccgct gacttgtgat ccaccaaggn ctcggncttc caaagtgctg ggattacagg 780
catgagccac gtgcccggnc aatttttata ttttttg 817

<210> 1707
<211> 852
<212> DNA
<213> Homo sapiens

<400> 1707

aatgtgaatg gtagagatgg aaagagcagg caaagataag aacctggtgg agaatgtaga 60
agtagaattg agagagagct agaaggagca atgttaggat tgacattgtc actccggttt 120
ctctgagacc acgtttgaca ttgttgtatt cacataataa ccatctgttt acctaagcta 180
ctttgagtga attctattcc tgtaaccaaa aaaagtcttc atgagaacac cccattttac 240
aatataatcc tgtgtgcata actatgactt gagatctatt tctacactga aatctgcaat 300
atgagattgt tctaaggaaa gcctctaaat aaccaaaaag actagacaac cttcagtatt 360
agggtttaat aaaaatagtt agcattctga tatgggaaat gtattccaga tggaatgtta 420
ttaaggctta tcagtctaga gtaaacatgg atgtgtacac caaattcttc agtatcagaa 480
ccagatggca ctcaaaaagg tttaatttca ttcaaataag caatgccact ttaccaacta 540
gaaaggggat aaatgaaact cattacctca gtgtatggct taggactcag ataaatgcat 600
gtgagagaga tccttaatag gtgattgaga taaattaggg aaatttaaga aatcttctta 660
tacctttaag ggagactagt gagaaagatt ttgctgtcta acaaaacatt ttcttgatgt 720
tagtattcga ttccacaata agcggtatct tttattctag tgttctccnc cggtagtagg 780
tatgaatttg ccctgtgact ctcagnggct tggtacattc ttcttatgaa tcagattatt 840
ttctcaagag cn 852

<210> 1708
<211> 635
<212> DNA
<213> Homo sapiens

<400> 1708
ttttcctaat ctggtttcgt ctgcttggtt catctgtgtg cgatggctcc ggactcggat 60
cccttccctg aagggccgct cttaaagctg ctacccttag acgctagaga ccggggcacc 120
cagcgctgcc gcctgggccc ggccgccctc cacgccctgg gcgcgcgctt gggctcggca 180
gtgaagatct cgctacccga cggcggctcc tgcctctgca ctgcctggcc tcggcgggac 240
ggagcggacg gctttgtgca gctggacccg ctgtgcgcga gccccggggc ggcggtcggg 300
gcgtcgagat cccggaggag tctcagcctg aatcgcctcc tcctagtgcc ctgtccgccc 360
ctgcggcgcg tcgccgtgtg gccggtgttg cgagagcggg caggcgcgcc cggtgcccgg 420
aatacagccg cggtgctgga ggcggcacag gagctgctga gaaaccgacc gatctccctg 480
ggccacgtgg tggtcgctcc gccaggcgct cctggcctgg tggctgcctt gcacatcgtc 540
ggcgggacgc ccagtcccga tcccgctggg ctggtcaccc ctngtacccg cgtnagcctt 600
ggcggggagc cttccgtcgg aaagcccaac cgnaa 635

<210> 1709
<211> 851
<212> DNA
<213> Homo sapiens

<400> 1709
gtttatgctt cctgtatttt gaggcactgt tattagatgc agaaacattt acagttttgt 60
cctcttgatt atttgacccc tttatcattc tgaaataacc tttatttctg gtaataatca 120
ttatattaaa aaccattatt tggccagaca tggtggctca tgcctgtggt cccagcactt 180
tgggaggccg aggcgggtgg atcgcctgag gtcaggagtt cgagtccaga ctggacaacg 240
tggcgaaacc ccatctctac taaaaagaga aaaatagcct agtgtggtgg cacacgtctg 300
tagtcccagc tactcagaag gttaagtcaa gataatcact tgaatccggg agttggatat 360
tgcagtgagc cgagatcacg ccactgcacc ccagcctggg aagcagagca agactccatc 420
tcaaaagaaa aaaaaaaaaa aaaaaacaaa acaggcctgg tgcagtggct catgcctgta 480

09/05/2005 09:45:50 PM

aacccagcac tttggaaggc cgaggcaggt gaatcacctg aggtcgggag ttcgagacca 540
gcctggctaa gatggtgaaa ccccgtctct actaaaaata caaaaattag ccaggcacgg 600
tggcagctgc ctgtaatccc aagtacttgg gaggctgagg ccagagaatt gcttgaagct 660
gggaggcaga ggctgcagta agccaagatc atgccattgc actctagcct gggtaacaga 720
caagactnca tctcgggaaa aaaaaaaaaa attacttaat attaatataa aattagngtt 780
ttatattagt agtataatac tggttttgac tagngttaaa atgacatatc tttctntacc 840
ctttgcttta a 851

<210> 1710
<211> 775
<212> DNA
<213> Homo sapiens

<400> 1710
gatgagcaag tggtggggac gcccctgctg gtgaaatctg gcgtggagta tacacggctt 60
gcagtggaga cagcccaggg ccttgatggg cacagccatc ttgtcatgta cctgggaacc 120
accacagggt cgctccacaa ggctgtggta agtggggaca gcagtgctca tctggtggaa 180
gagattcagc tgttccctga ccctgaacct gttcgcaacc tgcagctggc ccccacccag 240
ggtgcagtgt ttgtaggctt ctcaggaggt gtctggaggg tgccccgagc caactgtagt 300
gtctatgaga gctgtgtgga ctgtgtcctt gcccgggacc cccactgtgc ctgggaccct 360
gagtcccgaa cctgttgcct cctgtctgcc cccaacctga actcctggaa gcaggacatg 420
gagcggggga acccagagtg ggcatgtgcc agtggcccca tgagcaggag ccttcggcct 480
cagagccgcc cgcaaatcat taaagaagtc ctggctgtcc ctaactccat cctggagctc 540
ccctgccccc acctgtcagc cttggcctct tattattgga gtcatggccc agcagcagtc 600
ccagaagcct cttncactgt ctacaatggc tccctcttgc tgatagtgca ngatggaatt 660
tgggggtct ctaccaatgc ttgggcaact tganaatggc ttttcatacc ctgggatctt 720
ctactgggtn ggacaagcag gaaccagacc ctggccctgg atccttgaac tggna 775

<210> 1711
<211> 816
<212> DNA
<213> Homo sapiens

<400> 1711
ccagctcgga gcaggcctca gactgtaaca tgatgtttca ggtttacggt gtgagacttt 60
gtcagtgtga accttgagca gtttggactc aaattgtagc ctcatccact gaggcatgtt 120
tgtaattagg gtctggctta ctcagggctt tctctggaag ttaacaagaa ctacagagtc 180
agaaaattct gccaggagaa aagtgatgtt taaaaaatca tctaggatgg ccgggtgtgg 240
tggctcatgc ttgtaatccc agcactttgg gaggctgagg tgggaggatc acattagccc 300
aagagtttga ggctgcagtg agccatgatc acaccactgc actccagctt gggtgacaga 360
gtgagaccct gtctcttaaa taattaaaat ttaaaaatta aaaaaaaaat tccctatgag 420
agaaagtaca tggactttgg ggaaggatct gaagtttagc caggttggga caatttggac 480
cgaatcattt aacttaaccc tgctattttc ctcaactgtg cttagaaaag gggtacagga 540
cctgatttct gtccttaaga ggtttatagt ccagctacac cttagcctgg gggcagagtt 600
tctcaacctt agcactattg acaacttagg caggataatt cttacagtgg ggggtgtcct 660
gtgtgttgta gcattggcag cacccgttgg tctctaccca gtagatgcca gttgcccctt 720
cccagtttta acaggcaaaa ctgtttncag acacttgcca actcttgtgc angcaggaag 780
gggcaagttt tnccctgatg gaaaaccact ggccca 816

05052005.00200

<210> 1712
<211> 703
<212> DNA
<213> Homo sapiens

<400> 1712
ctcccgtggg ctccggccgg ctaagccgcg gcggacaact atgctgaaag ccaagatcct 60
cttcgtgggg ccttgcgaga gtggaaaaac tgttttggcc aactttctga cagaatcttc 120
tgacatcact gaatacagcc caacccaagg agtgaggatc ctagaatttg agaacccgca 180
tgttaccagc aacaacaaag gcacgggctg tgaattcgag ctatgggact gtggtggcga 240
tgctaagttt gagtcctgct ggccggccct gatgaaggat gctcatggag tggtgatcgt 300
cttcaatgct gacatcccaa gccaccggaa ggaaatggag atgtggtatt cctgctttgt 360
ccaacagccg tccttacagg acacacagtg tatgctaatt gcacaccaca aaccaggctc 420
tggagatgat aaaggaagcc tgtctttgtc gccacccttg aacaagctga agctggtgca 480
ctcaaacctg gaagatgacc ctgaggagat ccggatggaa ttcataaagt atttaaaaag 540
cataatcaac tccatgtctg agagcagaga cagggaggag atgtcaatta tgacctagcc 600
agccttacct gggactgcca catncccagt gaaatcagca tgtttctcgg tgcagatctg 660
aaatcacatn cagcttctga tggtttcttc tcctntgact gca 703

<210> 1713
<211> 747
<212> DNA
<213> Homo sapiens

<400> 1713
gatcagaaga attaatattg ttaaaacgac catcctgccg aaagcagtgt acagattcaa 60
tgcaattcct atcaaaatac caacatcatt tttcacágaa ttagaaaaaa cagtcctaaa 120
attcatatgg gaccaaaaaa ataaaaaata aaaaagcaaa gcctaagcaa aacaaaacaa 180
caacaaccaa aaacaaagct gcaggcatca catttcctga cttcgaacta tactgtaaga 240
ctacagtaac taaaacaaca gggtacttgt ataaaaatag atacatagat caatgaaaca 300
gaatagagaa cccagaaata aagccatata tctacggagt gccagctgat ctttgaaaaa 360
gttaacaaaa acatgctctg cgtattctga gatgttctca ggagtatatg ttagtccttc 420
tccacatacc tgttttccag gttggtcttg aactcctggg tgcaagcgat ttacccagct 480
tgacttccca aagtggtagg attacaggca cgagccatca tgcctagcta ggctaccttt 540
taaatatata tcatggccaa tttttgttta ttctgattat ttattagttc ctttttgatg 600
tctggaagaa cttattttct agccagacag actcttatat caaatatcaa atttccagcc 660
ttccaaatgg gttttcctac cttgnctcaa gccaaagcaa aacaaacccc caccccacaa 720
aagaaaaaca naacanaaca aaaactt 747

<210> 1714
<211> 843
<212> DNA
<213> Homo sapiens

<400> 1714
cttttctctc gttaatctgt tttttgtcat gggggtattg gccatggacc ttggaatggg 60
tgaggaaaag gtactacacc tctttgccct acaaaagcag gctggcaagt aggatggccc 120

0050150.0002

agcacctatt gcatgccaag tgtcttcact caggcagttc catccgtgtc taaacaacct 180
cgcacttttc acttccccac tttggggatg aggaagctga gactcaaagg ggcagattat 240
tcgtcttaga tcactcagct ggcaaatgga agaaatagtg tttgaaacca caatctgttg 300
cagcctccca gatgggtacc tgcccaccag aaggtcttat gcctagtgtt ccattattgg 360
aatgctaagc aggtgggagt tatttatatc ctgcggctca aggtcatcac caaggcctga 420
tttttcacac acgtctgcaa ttcaaattgt aacctctggg ccgggcacag tgactcctgc 480
ctgtaatccc agcactttag aaggctgagg caggtggatc atttgaggtc aggagtttga 540
gaccagcctg gtcaacatgg tgaaaccctg tccctactaa aaatacagaa attagctggg 600
catggcagcc tgtaatccca gctacttggg aggctgaggt gggagaatca cttgagcctg 660
caggcggagg ttgcagtgag ctgagaccac gccactgccc tnctgtgtgg gcatcagagt 720
gagaccctgc ctaaaaaaaa aaaaaaaaag tacctcttaa gctctctcct tancttctgg 780
gaaaaatgag taggggaact cattcacact tanaatctaa tatagggtaa taatatcctn 840
ttt 843

<210> 1715
<211> 840
<212> DNA
<213> Homo sapiens

<400> 1715
ttgagcaagt ggcatgtaaa ctgagagtga aataatgaga aggagccagt catgagaaag 60
tggaaaaaag agctttccag cgtagggaaa gcatataaga aggccctgat atggagcaga 120
gctgaacata ttggaggaac tgaaaggaag gaagtggctg gtatgtgctg ggcatgaggg 180
aacacaaaat aagtgaagat ggaaggaaca tggagccaga aaataaaatt cgttgtggac 240
tgtgtatatt agggttccct agagggacag aactaatgga atatacatac aggggagttg 300
atcaagtatt aactcacatg atcacaaggt cccacaatag gctgtatgca agctgaggag 360
caaggaaggt agtctgcacc aaaactgaag aacttggagt ccgatgtttg agggcaggaa 420
acatccagca tgggagaaag acgtaggctg ggaggctagg ccagtctctc atttcacatt 480
tttctgcctg cttatattct agccgagctg gcagctgatc agattgtgcc aacccagagt 540
aagggtgggt ctgcctttcc cagcccactg actcaaatgt taatctcctt tggcaacaca 600
cccacagaca cacccaggat caatactttg tatccttcaa tccaatcaag ttgacactca 660
ttattaacca tcacactgta taagaggtta taaagccagt aaaagggtaa gtggcatttt 720
aatttaatta aattgatcag tttatttatt ttgagatggt gtctgaccct gcacctaggc 780
tggagtatct ggtacagttg tagctnactt gtacctccac ttctgggttc aaggatcctc 840

<210> 1716
<211> 840
<212> DNA
<213> Homo sapiens

<400> 1716
catatttgta ttgacaaagg gacttttgat gccataagcc ttaatcctga caatgcaatt 60
gagaagagga agcaatatgt gaaatctctc tccagggtgt tgaaagtaaa aggcttttt 120
ctaataacgt catgtaattg gaccaaggaa gagttgctaa atgaattcag tgaaggttgg 180
agtacagtgg caggattttg gctcactgca gccttgactt cctgggctca agcgatcttt 240
tccacttcag cctcccgagt aggtggaact acaggcacac atcatcatgc ctggataatt 300
tttgtatttt tagcagagac gaggttttgc catgttgtcc aggctggtct ggaactcctg 360
ggctcaagtg attctcccac ctggcctccc aaagtgctgg gattatacca tgccaggccc 420

0552035.02720

tcgttggcat tttagatttg aacttctcga agagctacca acacccaagt tcagctttgg 480
aggcagatct ggaaacagtg tagcagcatt ggttttccaa aaaatgtgag acttttttctt 540
ggacgaattc aggtagctac acagaatcta cacagcaaag ttaacctgac acagaaaatc 600
cttgtgcaaa taaatgctta gtaagtacac aggatgcaca tgttgaatag agtatactgg 660
attggtgaaa gaaaataata ataatgagca tctaagtggg tgggttttag agatcaatca 720
agaataattt taattttctt ttgnatttga aatgtaaata ggtttctttt cgattaaaaa 780
aatttcctat actgnttaac agttnaaaac tttaaagtag taaatgagtt attggaaagc 840

<210> 1717
<211> 749
<212> DNA
<213> Homo sapiens

<400> 1717
aactttacgc gtagggtaga catggagagt tagcatttca tatagcctta ggacagagtt 60
tgttcatccc tattttgatg gcacggctac tttatcttac tgtgtttcct ctgtgtccaa 120
gtatttatta atatttttta agattttcaa gtcaaaatgg caatttgagt atatgtatgt 180
agcctgactt cagaatcggg agagactttt caaccttgag ctacccactg gcagcgtgag 240
agaaggtgat aggatgtcat aggctcagct tacacaagta agcatgcaca agtgtgtaaa 300
taggcaaaaa ccccttccca gattgcaaca tttttcccag tcctgagttc agccctttct 360
caccaacata acaatctata tttcttttaa cttttatttt aggtttgggg gtacatgtga 420
aggtttgtta cataggtaaa catgtgtcat gggggcttgt tgtacagatt atttcatcac 480
ccaggtatta agcccagtac ccaatagtta tctcttttgc tcctctccct cctcctacct 540
tccccactca cgtagactcc agtgtctgtt gtttctgtct ttgtgttcat aagttcttat 600
tatttagctc ccacttgtaa gtgagaacat gcagtatttg gttttctgtc ctgctttant 660
ttgctaagga taatggcctn cagcttcatc catgttcctg caaaagacat gatctcattc 720
ttttttatgg ctgcatagta ttnccatgg 749

<210> 1718
<211> 839
<212> DNA
<213> Homo sapiens

<400> 1718
ttattcaaac aacacgtgcc atccttcaac accccaaccc acctcccgtg ccccctctat 60
gcctcacagc acctgccctg gagtagctga cttactgccg ttactgtctc ctccaaggag 120
tggaagctcc gtgagaccag atattttgct ggttttgttc actcaagtgc ctagaactgt 180
gctgagtaca aaacagatgc tcccaaacta cgagtaccag tgcatgctca ggagaacaaa 240
tgagcaaacc aacggtgaat gtctactatg tgccacacgt cactgctacg cactgtgagg 300
gactgagaag gtctgcctgc aggaagttca cgttctagta tggaagggaa aatgagtgca 360
agggcaggtg cggcagctca cacctgtaaa cccagcactt tgggagactg aggagggcaa 420
atcacttgag ctcaggagtt tgagaccagc ctgagcaaca tagcaaaacc ctgtctctac 480
aaaaaataca aaaattagct gggtgtagtg gcgggtgcct gtagtcccag tactcaggag 540
gctgaggcag gaagatcgct taagcctagg agacggaggc tgtagtgagc tgagatggtg 600
ccactgcact ccagatgagt acagaagaag agcaaatgtg ctaaacacca aaccatttcc 660
aaaaataccc cagtgtttca gaacacacaa accatgctct acttcacccc caaagtacca 720
ttcagccttc tgtcccacga gtgtncagcc ccgccaagtc ctgacaccca ggacttccca 780
tgcctttggg tcccnagttg tgcttnttgg ggaccagaga tgtcaatgct gccagcaca 839

0050504600

<210> 1719
<211> 844
<212> DNA
<213> Homo sapiens

<400> 1719
aacatgctgt taatacttgt aagactccta gcaaactgca tttaattttt taaattagtt 60
ttagtgtaca taaaggcatg tcttttccaa atactgtact ttttgaagtg ttctttgttg 120
ttcattaatc tttgtgcgtt tccctccagt ctctaatagt aggttgtagc atgatttgct 180
tccatcgtgt gaattctgtt cggttttgat tttcaagtat gagagtgagc gtaagctacc 240
cttataggtt acctaaggta agttagaatt agaacgtctt tatgctaggg ttactactcc 300
ccaccataac caaccatctg caaaagcgtt cagaaagaac atgctagcaa ggtcaaaagc 360
ttcaaatcac gaaataagaa cttgaaaacg agcaaaattg ctgctgaggc gctctgccat 420
ttaactcaaa ggcttcactt tatttaggtt taaagtatga gtgcatattc agtggacatt 480
gagctccgaa ctgttcaaaa tctctattca tctgcattct ggagtagagc tgcgggtcac 540
attattagct ccatctttgg atttctgcct ggacccaggg cactcctaac cgttgtggga 600
tcatataaca atcttacagg atgaattttc tgttagtcca agcagaaatt ttggcacatg 660
aaaactatct taccataaac aaacaaaaaa agtacaaatg gtaatctaag gaaaatagct 720
aaaatcatta aacaactctt acagccgttt cccctggttt ctctccattt tttaaaagca 780
tattttcctt tactttcttc cttctgctat gggaattttt cagggtctag ancnttttte 840
tctt 844

<210> 1720
<211> 817
<212> DNA
<213> Homo sapiens

<400> 1720
gctgtttccc tgtgggtcgg gttggactga cttttgacag tcagccttcg gctgcggagg 60
gggctcggcg gcggccggcg gagaaagttg ctccgagaag aggctgggtc gagctgggcc 120
gagccgggcg cgcagggcgg gcgtcgcggg cgtcccgggc ggacgcggcg cggagactgc 180
cggcgcgtcc cgggggttcc gatttgaaga ccttgcttct catcacccac tggattatgc 240
cccaggcttt cctacccaat gatcctcttg caacacgccg tgcttcctcc acctaagcag 300
ccctcaccct cgcctcctat gtcagtggcc accaggtcta caggaacctt gcagcttcca 360
ccacagaagc cttttgggca ggaggcttcc ttgcctcttg caggggaaga agagttatcg 420
aagggagggg agcaagactg tgccctggag gagctatgta agcccctgta ctgcaaactc 480
tgcaatgtca ccttgaactc tgcacagcaa gcccaggctc attatcaggg taaaaatcat 540
ggtaagaaac tccgaaatta ctatgcagca aatagctgtc ctcctcctgc tagaatgagc 600
aatgtggtcg agcctgcagc tactccagtt gttccagtcc cttcgcagat gggctccttt 660
aagccaggag gccnagtgat cctggccacg gagaatgatt actgtaagct cttgtgatgc 720
cttcttcagt tccccagctg tggctcaagc tcactatcaa gggaagaatc atgccaagan 780
gcttcngctg gcngaagctt aaagtaactt cattctt 817

<210> 1721
<211> 834
<212> DNA
<213> Homo sapiens

0356203.00700

0508450-070200

<400> 1721
ttccacctga cagcaatcga gtgaactacg tctactgcag gctccaaaaa gtcaggttag 60
aacccagatg agtctgattt cacagcctga gcacctaatg tcactctgac actctgcccg 120
ccacggccct atgttgttcc tggcctggcc agaacctgct catgatggcc tcacatcttg 180
cttatggacc atcctagcag tttctcatct gcgagtgact ggattcatcc tgcagtcagc 240
atcctgctca cccactcctg agtggccacc taccacaagt gggaggaagt acagctcctc 300
gtttggctcc ttgggcctcc cagatctgtc ctgactttcc atcctaatca ctcccagttg 360
tcctgactgt actgtctcca cagccttccc atggtgccga agtcagagct gactttgtac 420
agcctttgct cataccctgt tctgatcctt ccctctgacg tcctccactg caacccagcc 480
cagttccaac ttacttgcat agagctccca taagcattca gcccatagaa cccggacatc 540
tctcccttcc tctggactta actgcattga tctctttcag ttatctatac tctgcataaa 600
cttccttgtg gcatacttta cactggtgtt ttgtttaact gaggtactgt ggataacacc 660
aaaaccttct tgcataggtg tggaaaaggc cttttgtgaa ctggtccctg tctggcttta 720
catagaacaa ggctacttaa cttcgctaaa cttnagtttc tcatctgtaa aatggggaag 780
aataatagta tctaccacat agggtggttt tgangggatt aatgncttaa atta 834

<210> 1722
<211> 797
<212> DNA
<213> Homo sapiens

<400> 1722
atttttgaga cagtgtcttg ctctgtcacc caggctggag cgcagtggtg cgatcttggc 60
tcactgcatc ctccgcctcc ccggttcaag tgattctcct gcctcagcct cccgagtagc 120
tgggattaca ggcatgcacc accacaccca gctaattttt gtgtttttgg tagagacggg 180
gtttcaccac gttggccagg ctggtcttga actcctgacc tcaggcgatc tgctggcctt 240
ggcctcctaa agtgctggga ttacaggcgt gagctactgc gcctggcctt cagtggcatt 300
ctagaatgtt ctattgaagt tactatgtca gtgcttggat ttcttactgt cttccccatt 360
agaacgtagt atgtagtgaa gaattaaagc caaacataaa catttctagt tttgtttttg 420
ttttttcca actttaatta tataggctag ctggaagagt gagttaattt aacttgttaa 480
tttctgaagt gagattgcaa caacccatga aatgctctgg gtttttctaa aaaaaaaaaa 540
aaaaaaatca ttcctgtgga cgttctaccc tcacttctat tatttttctt atataatgtg 600
aatttgngca tctcttgaaa aaaaaaaaaa cctgctgtaa ttttttaaag ctctccagaa 660
agagagtcca tggaaagaaa ccaaacctgg actgtgttga gttgatagac ttaacaggtg 720
acactggtaa atgctactgg ggtgaattct tgngggccac tgatncaatt tgagtcaaag 780
aagtctttga cactntt 797

<210> 1723
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1723
gcttccggca cgggatgttt tcggttgttt gaccgagaga gttgtaggcg caaagctgag 60
gaaaggagag tgtggagagg ggcctggtgt ggtggggccc ggtgtttggg accggagggt 120
gttgacggct gatgagttcc ttgggtttgc tctttcttca cctgaaaaga agactccagg 180
aagggcagca catgccggag aaagatgaat tgcagcttga ccgcccagag gcgcggcagt 240

gacgccgagt tgggaccctg ggtgatggct gcgaggtcca aggacgcggc gccgtcccaa 300
cgcgacggac ttttgcccgt gaaagtggag gaagactcac ccggaagttg ggagcccaac 360
tatcccgcgg cttcgccgga ccccgaaact tctcgactgc actttaggca gctgcgttac 420
caggaggtgg ctggaccgga agaggcgctg agccggctcc gagaactctg tcgtcggtgg 480
ctgagacccg agctgctctc caaggagcag atcctggagc tgctggtgct ggagcagttc 540
ctcaccatcc tgcccgagga gcttcaagcc tgggtgcgag agcactgccc agagagcggg 600
gaggagcggt ggcccgtggt gcggctctgc aacgagcgct cgatggaacc tnatcccaag 660
ggatggtgac tttcgaggac acgcttgtgt ctctaacctg ggaggantgg gacccctgac 720
ccagcacgga nggacttttg ca 742

<210> 1724
<211> 486
<212> DNA
<213> Homo sapiens

<400> 1724
agttctcctt agtttttaa cctatttgca atagttgctt tgaagtcttt atcttctagc 60
tccaacatct ggggtcactt ggggatattt tctatttatt gttttgtggg gttttttttg 120
tgttttttt ttaatccccc tgagctgtgg tgttctatct tgtttctttg tatgtgtaca 180
catttctttt gtaaataaca tatatatatt ttagacagag tctcactctg ttgcccatgc 240
tagtatgtag tggtgcgatc ttgattcact atagcctcga catcctgaac tcaagcaatc 300
ccctcacctc agaccccaga ctagctggga ctacagctcc gcactaccat gctcacctaa 360
tttttgtatt ttttgtagag atgggattnc accatgttgc ccaggctggn ctcaatccac 420
ttgcctcanc ctcccaaagt cctgggatta caggaatgag ccactgcagc tggccaaaac 480
atacat 486

<210> 1725
<211> 827
<212> DNA
<213> Homo sapiens

<400> 1725
tagaaccaga ctagagaata tgatgcaggt tcactggctt tatggtcttt ctaatgctcc 60
ctgccctgca tccacgccat ggaagaacca gacaagggga actgggagcc tggaaaccag 120
acacacttac ccagggccaa ggccactgcc gccctctgat aggggcagac agaacagaaa 180
gagaaatccc atctgtgatg tttgcaggag agtaactgag ttgagaaatg gtccgtgagt 240
ggctgtcacc tgccaatcag gcctttagtc cactttcagg ggggaagaga aggaaggtgg 300
gatggtaata ggtccagagc gtttatgtaa agacccttc tcgtggaaag aaaatgtgtg 360
agaggtaaga atccccctt cacatttaag aaagttgcca agaatttaat aagcactcac 420
tttgtgtatc agtgctcttc atgcattcat tcaataaatc accaactatc tattgatcac 480
ctgttttgta cccggttctc ttctcaggct cttgggttca aaacagaaag agattccttc 540
tctcatggaa cttacatttt tggactgagg agagacagac agtaagcaat aatcatgata 600
agtaaggaaa tcatagacta tgctagaaag cggtcattgt tatagaaaaa caatagtaac 660
cttagactcg agggaagtgg gaggagtgag ccatggggct ttctggggaa agagcattcc 720
aggcagagcg acagctggtg caaagaccct aaggcaggag cgtgcctgaa gggtgtgaga 780
aaagcnagga gtncgatgtg tgcacagaaa anggcatgca ttctgga 827

<210> 1726

09513453.030200

<210> 836
<211> DNA
<213> Homo sapiens

<400> 1726
gaatgtgagt atagaagacg agtccaggca ccaggagcat aatagcggtc agagaaccaa 60
gtccaggacc ccaggcagat tagctagagt tcaggcaggg tgtcagcgcc agtggggaag 120
aaagaaacca aggagctgga ataccgtctg taagttgaga cagaaggata gccatatggc 180
ctggaaaaag atgacaagtt tgaggaaata gtttgcatgt cagagggaac actcgaggga 240
ccctggccag agggagggat atatccagac accccatgtc tgagtcagga taggctcaaa 300
ggttgcccag cactggacat cttcaaagat ttttattact gtttattgcg tcaggtgaaa 360
tcaacaacag ctaagaaaaa ggagaaacac attacaatgt aactagtata aacagtggaa 420
aatcactgtg gtttgaagaa acaagtttaa ctaaagaaat ctgaggtctg tgtctcctaa 480
agagaggtga ctgtggaaca gtaacacaga atatcagatt tcaatcttca tgtttctcct 540
tttgatgggc acacaatcca aattcgagat tttaaggtcc tgcacaattt cgtttcaccc 600
acgtgtcctt ccttattccc cggccccttt catgagacgt gctcccttcc tcctccagtg 660
ccttaatgca gcttctccag cttccgcagc tctttactcc aatcccagcc atctgggctc 720
acttcagatc acaccttncc ttatggagat gacnaaatct gctctactgt aatgatgctg 780
gcnaagctta attggtcttc acttattcat ggctgttggt ttatcttccc acttaa 836

<210> 1727
<211> 696
<212> DNA
<213> Homo sapiens

<400> 1727
ctcagtgtta agaggtggcg acttgctcag gcttctaaag gacaggtgtt tgggagcctc 60
ttgccggaag cctgctgtgg gggccctctg tccctgctcc tcgccggccc ccatccccaa 120
gggtgcagca gaagccaggt tttccctgtc cctgtccggg ctgtctctgt tccttctatt 180
ttgctgattt tcagaaaaac tagatccggc acctttgtgg tgcacagtcc ccaccagcgg 240
gaaccagtag gtgacaggct ccattcaaca ggacaggcag gttagggaca cccctggctg 300
gcagcagccg ttcctgctcc tacccagccc cggttactcc ttctgggacc tcaggcaagt 360
gacttcgcct cccctcactg gtctcccctg tgaacagggg ctccagctgt tcttcctgca 420
caggccatcg agccagtaaa atgaacttgg cacccagcgc atccatacgg agggtcttgg 480
agaacaactt ctcttcggac cttagagttt ctaaggtgat tctagaattc catgccggca 540
agtttggcaa actgcagctt cagggaatag cccctacaag actaccctca ctgcagacca 600
agaactgcac accagaaaca agctcangca tccctaggac cacccttacg tctgagcaat 660
gggctacang tttnggggtc cttacattca ccctta 696

<210> 1728
<211> 727
<212> DNA
<213> Homo sapiens

<400> 1728
aacagattgc taacccaccc ccagattttc agattttatt ttatttattt atttatttt 60
ttatctgact gattttcaga ttttaaaaat ctatccctag attttctggg gtagagtttg 120
aaaatttgtg tttctaacaa gctcccagat gacgctgctg ctactgcttc agggaccaca 180

0962945.0042800

tttcaagaac cattgatata actctaaacc attcttgtct tcttcctatg tattttccac 240
atcagtcaaa gtgatctttt caaaccataa atctggtcat tctactgcat agttttgaaa 300
tccattgtct tcccattgct tttaggacaa gtcaaaatcc tagaagtccc tacacagtcc 360
cctcctagcc tactcgttca gtgacatctc acactaatgc tgcccctacc ctcaacccac 420
tcttcgctgc accagccacc atggtcacct ttcagttcct caaatttatc aagctccacc 480
cttccccaag gtctttccac atactgtttc ttccaccaag atgttctccc taccccccaag 540
ccctccctga ccacaatttt gctcggttaa ttcctacttc tcctccttgt gcaatgcggg 600
attggttatt aggatcttaa cttaaatgtc actttcctaa ggaagccttt tctaactgcc 660
tcagccaaga cagatgtctc tnggttncta actngagccc ttaaatatac ccttgggtta 720
aaggata 727

<210> 1729
<211> 787
<212> DNA
<213> Homo sapiens

<400> 1729
gtgtgattgg ctgttgccat ggatacgctt tgtgtagcgg ctatgggcgc tgtcttacaa 60
caaagccaag gaatctcgct gctgagggtt ctgtgcttta ttatgaagaa taatggacga 120
tgatgatgca aagctcaaag cagaaataga agctgaattg gataaactca gcatttcctc 180
cttggaaaaa gaagacaatg agagtgatgc aaaatcagaa acccagagtg atgatagtga 240
tacagattca gttgaattac cagaatcagt tcttcactgt attaacatca taaagaacag 300
gagtaaagct gttgaagagc tcattcttca ggacctggaa gatactgata ttttaagcta 360
tagttatgga gcagtttcta ataatcatat gcatttaaga acaggactat caactgaata 420
tgaagaaagt tcagagcaat taattaagat attatctgaa atagaaaaag aagaatttat 480
gagaagtaaa accgattgtg ccactcctga ttttgttcct gagcctagtc ctcatgactt 540
gcctatggat gaacatgttt taccagatga tgctgatata aattttggat actgtgaagt 600
ggaagaaaaa tgtagacagt cttttgaggc ttggcaagag aaacagaagg aattagaaga 660
tnaagagaaa caaactctca aagctcagag ggatagagaa gaaaaacaat ttcaagaaga 720
agaagaaaag cgacattgct ggatgaaaca atttaaaggt gaaaaggaag aaatttngng 780
accttcn 787

<210> 1730
<211> 740
<212> DNA
<213> Homo sapiens

<400> 1730
agttgctgat ggccaggtcc tgctggtcag ccgccttgga cggagtctcg ggcctgcttt 60
tccgttttct gtcccttac tctggcttct ggatagcctt tggaatattc cgggcgatag 120
ctgggcctcc agagagagtg ggctgcaggg tgtgggcccg gcctcccctt gcctggcggg 180
ttttcctggt cagcgttcct gctgctcccc ggtcatccct cctgtgctgc agccttttc 240
tctggttcag acccacactc tgccgtccca ctgcctgggc ttgctgagct ctccgttctg 300
gcttgaaggc ctcgcccgag ccctgtcacc ggctctgcct gtcaggaggg cccaagtgtg 360
cggcttcggt ggggctgcct gacactgacc tctggggttg taaaggtccc agagggtcct 420
aagtcgggcc tgatgtggct gagatggcaa gagccggaac gtttctgtaa aatctgaaag 480
cccttgatgg ggccgagggg gtgaggagga ttcccaccct gtgtggacag gagcacgcag 540
cagcggagtg actccaccac gtgagtgggg tccagcgggt gtggcactcg atgacaagac 600

US 2005/0048500 A1

aagtttgaga gcggcttgtc tccggggacc tggcgtaggt ctcctctgcc ttaacccttg 660
gcttttgcac ttcctctgnc tgtcctncat acaggcttct tgccctaatg aggactggct 720
tcttaacang gtgagcccgg 740

<210> 1731
<211> 390
<212> DNA
<213> Homo sapiens

<400> 1731
gaatgaaggt gtcagaacga atgagattgt cctatgaaag aagaggcagg agccagggag 60
gaggatccca cccggccggg gctcagccag gaggcagggc cattggggca gggtggcagt 120
ccaaggaacc gctctgggaa ggtttgcaaa ggtcggggtc ccccctgcca ggtgatcgaa 180
ttatcgtgga gtgtctggaa ggcgggggaa gttttgttga gttcaccaaa taactcagac 240
caactggaaa ccaagtggag tttctacagg accaactaga atagggatca gctacatggg 300
ggcgggggga gggggggcagg gaacggtgtc tgncttcatt gcagctctgt ctgcanagcc 360
agcnctgtga tacctcatag tatgtgctca 390

<210> 1732
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1732
ttcagaaaat tttcatttaa ctagagattt ccatcctggt cagctgggtc tcatttacct 60
gattaaaata ggtttgcatg gataaagtct taaagcaaat tctccttacc acattttgtg 120
tgaatttttt cctctttaat actaatttta gtttgttctc attacaattg catatgtaaa 180
aaatactttt tgataaagca actgaaactt tgaagttgat aatttatcac aatacttttt 240
tccccattat atcaacactt ggcaaactac agactgtgag cctaatccag gttgtatttc 300
cttctgtgag taaattttca atggcggagc catgctcatt tatttactta ctgtctgtgg 360
ctacaatggc agaggtaagt agttccatag agactatctg gcctgcagag ctgaaaactt 420
ttactctctg ggcctttact gcaaatgttt gctgattcct gcattactga tatcatttc 480
ataacagtct taaaaacttg gcatttttaa acttaaatac ttttttcttt ttgtcgcttt 540
cttctctacc ctatctctgc cagcagttct ttgtgaatta ccattgtgat cttctaaagg 600
caaaaaaaat ggtaggtagt caatgactga tagctataga cctatgaaac taacatttcc 660
tatcttgnct caatattctg atgtatataa tcattttaaa acataataaa tttangcctt 720
ttttggtttt ggttttaaca ccaagatatg ccactaatgn ctgacaaggc atttaaacta 780
n 781

<210> 1733
<211> 846
<212> DNA
<213> Homo sapiens

<400> 1733
tggattaaga atcaggagag gtggggctgg gcgcagtggc ttacgcctgt aatcccagca 60
ctttgggagg ccgaggcggg tggatcacga ggtcaggagt tcgagaccat cctggccaac 120
atggtgaaac cctgtctcta ctaaaattag aaaaaaaata gccgggcatt gtggtgggcg 180

US20070020660A1

cccgtagtcc cagccgctcg ggaggctgag gcaggggaat cactggaacc cgggaggcgg 240
aggttgcagt gagctgagat tgcgccactg cactccagcc tggcgacaga gcgagactct 300
gtctcaaaaa aaaaaaaaaa aaaaaaaaaa aaatcaggag aggtggggtg tgttttatga 360
ctttaggcaa atcaacctaa gagacagttt tctcttctgc agagttttag gaaagtcaca 420
aattaatgta cttgaagaaa gtgtacaata gaatagtagt attaccaaat cctaaagttc 480
ttattgtgga aaatctctga aatattacct gcctatgtag atgccaaccc ttcagcaatc 540
cagacaagct tattatcttt tctggatgaa ttaagtgtcc acagttttgt acctcttcaa 600
tgtgattact ttgtaggcta gactgcagac tgttaattga ctactttctg gtccctctan 660
ctattgcttg agacagtaaa ataattactg ntctntagct acatccttac attttcctgg 720
tctgaaatga aatcattttc ttatgttaaa aataaagtta attactggtt caacttccca 780
aggggatatt taacttggca nctttttaca aacccttttt tttttaaacn gggggaactn 840
ttttta 846

<210> 1734
<211> 690
<212> DNA
<213> Homo sapiens

<400> 1734
gaaagtgtcc ttgcaaactt tgttccgagt gtaatttcct agggatccta tggcctcttg 60
agaacagcat tttagggaca tggatcactg ctctctatag aggtagctca actcaagagc 120
attttacatg taggctccag acagcaaaca tgtcaacaca ctgacctctc tgctccaggt 180
gactgtttgc tacactgggg attgcacaag tcagagactt caatgcaact ggctttgtga 240
tgggtggcag gtgtgatgtg ggtcagaggt gagaggacag acagaatggc tgcatggaaa 300
agcgagcatt tgctattcta cagaattcca taatgcactg gttaatgaca ctaaaaggag 360
aaataatttc acaaaatgta tccctggtcc tgacaccacg tggggcgtgt tttaacaaag 420
tgagttaatt ggggttgcaa atagatcaag agcataaaac atctctgact caaatgtatt 480
tttagttaat aagaaagaag aggggcccag cacgggggtt catgcctgta atcccagcac 540
tttgggaggc ccaggctggt ggatcatctg atttcaggag ttcaagacca gcctggccaa 600
catggtgaaa ccccgctcta ctaaaaatnc naaaaaaaaa ttagcccggg catggtggcg 660
ggtgcctgta atcccanctc ttgggaagct 690

<210> 1735
<211> 726
<212> DNA
<213> Homo sapiens

<400> 1735
ggtaggactg cggacgtatt tgttttcttc aagcatttgg tcgagattaa gaattaaaaa 60
tgtcatccaa acaagaaata atgagtgacc agcggtttag acgggttgca aaggacccga 120
gattttggga aatgccagaa aaggatcgaa aagtcaaaat tgacaagaga tttcgagcca 180
tgtttcatga caagaagttc aagttgaact atgccgtgga taaaagaggg cgccccatta 240
gccatagcac tacagaggat ttgaagcgtt tttacgacct ttcagattct gattccaatc 300
tctctggtga agatagcaaa gcattgagtc aaaagaaaat aaagaagaaa aaaacccaga 360
ctaaaaaaga aatcgattca aaaaatctag ttgagaaaaa gaaagaaacc aagaaggcta 420
atcacaaggg ttctgaaaat aaaactgatt tagataattc tataggaatt aaaaaaatga 480
aaacctcatg taaatttaag atagattcaa acataagtcc gaagaaggat agcaaagaat 540
ttacacaaaa aaataagaaa gagaaaaaaa acattgttca acatactaca gactcttctc 600

0050450-0050800

tcgaagaaaa acaaaggaca ttagactcag gcacctctga aattgtgaaa actcccagaa 660
tcgagtggtc taagacnaga agagaaatgc catcaggggt cactcataat ggcccgagac 720
acngnt 726

<210> 1736
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1736
gctggtgggc tccaggtgca gagagcaggg tgggcgtcag accccaggtc cactgtgcac 60
gccctcttgt agagcccgtt ccgttgtcca tgagatgagg agtgttctta tctctaaagt 120
attatcatga aaacctaaca atgtagaaag actaaagcac atgggtggtg cttcataaat 180
agtatttctc ccactttctg aaaactcctg ctgaagtaac tgcacaagaa tccttgaaca 240
tttagaattc tggttttagc cataccataa agtcagtagt gcgtggtgga attctgctaa 300
cgaaaattgc gaaggatcaa ggcagagtac agagctggtg tgtagcgggt accttctgtc 360
tgctggcact aggtatttta cacattaaat cagctcgttc tcacatcagc tcttttaaaa 420
ataaggaaat gaggagccac agtggcccaa ctgatgcagt ggcagaagta gaatttgagc 480
ttgtgcagat gtgcctccgt gttttgtctc ctgagcatgc tgccccaagt ttgacaatac 540
caagatttgt actggaacat tccctcccat ccccaccccc tagaagcccc tcttcctccc 600
ttagatttga cacatagttt gaaaccacta ttaactacct tatgagagcc actgtttgtg 660
aagtgctgac tatgtgccag gtcccgtgcc gtgcaatttt tgtgaattat ctcgtgtcta 720
cagtgcctac aatttctctg gtcaatacct tcatgttact ggcgaggaaa gggaactcan 780
agagagtaag taatttgctc gagttaaaga ctggncagga cagccagggc t 831

<210> 1737
<211> 774
<212> DNA
<213> Homo sapiens

<400> 1737
ttcggacctc aaggttcccc ttaacacaga gcgccccgca gtcttcgcgg aaagcgttcg 60
gggtaggcga tggctgcgac gcgtgcaggg ccccgcgccc gcgagatctt cacctcgctg 120
gagtacggac cggtgccgga gagccacgca tgcgcactgg tgagagtctg cccggccggc 180
gctgctcgct gcgttcccca ggcctgggcg cccggttttt cgcggggagt cccgtcatcc 240
actgcggtag ctcagccgct ccgcctctct tagtccccgt gattcccgcc gcccaatagg 300
atcgcgccct gtaggacgct cccttgagcc ttggcggtgg cagcctttta gtctgttccg 360
gtcttcccca ctggttctct tgcccgttga tcctgaactc ctcgtagtgt ttccgcggtt 420
ttcctgaact cctctagacg ctctcgtgat tcctcagggt cccctcagaa cctgacgcca 480
cccaccagac cccttaggat tcctgtgagg ctccagtgac ccacaacccc cattgtcttt 540
ccacgactct tcaaaacatc ctatggcttc catgggcctn cagagcaccc cagacctnct 600
gagggactcc cttcatccct ttgattaccc agagaccttc agaacttnca tggagccccc 660
gtgatcccat aggacccctc aatactcgtg gggttcatgt gacctcatcg gaactcttan 720
gagcctaaga atncatcagg actttcgggt tggggttggg gttttttttt tngg 774

<210> 1738
<211> 826
<212> DNA

0952450.07800

0050150 09/20/2000

<213> Homo sapiens

<400> 1738
tctactgtgt tacactcagc tgctttcacc tggaaaagca gaggaatcag gctgtctcct 60
gcagctgtct tggtccattc tgctgcccaa gcagtacact tggtttcaga tggaaatcta 120
ggatcgcaag catgggtaca tttgtcggca gcatttggaa gtatttttcg tcatcaggat 180
ggcagtcaat ttgcaattca gtcatctcag tgcaaggtag tttggcaaaa agattatgac 240
acttaatgga ttttttttcct cttttaaatc tgtttaccca gcattttgta gtataatgca 300
atgtaataac attgcattat tttgagcata gtttagaagc caagaagatg ctttcaaaca 360
gctgacataa ttcagttatg gcccagatgt cctgccttcc ccatcacaca ttcatattaa 420
tggtcttaga aagctgtttc tgaggcaaca gtttcttcct caatatcatc ctactgggga 480
aattttggca gttgatgtct aatgttgatt ttttttcctg atcgatttta attgttcact 540
gggcactttg gggtagaatt gttttaaaaa tttggttact gggaaagcta gacaagcctt 600
tgctatggtg aaagagacag aaggaatata gatataattt gtaagtggtt atgccattgg 660
gcttaatgct ttgcatacat tatctagttt gcatctnctg atcgccttta agtttgctta 720
cngtaaagca ttattccttg cttggcaatg cacagagaaa aattatttgc tgaaggaccc 780
tgcaaatgag ggacaggatc anagttggac tgtaaccctg ncctcc 826

<210> 1739
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1739
tttttataaa aaccctagaa gaaaacccag gaaatactat tctggacata ggccttggca 60
aagatttcct gacacagact ccaaaagcag ttgcaatgaa aacaaaaatt gacaagtggg 120
atctaattaa attaaagagc ctctgcatag caaaagaaac aatcaacagt ataagcagac 180
agcctacaga aagagtgaaa atattcagaa actatgcatc tgacaaagat ctaatatcca 240
gaatctataa ggaacttaaa cagatcaaca agcaacaaac aaccccatta aaaaatgggc 300
aaaggacatg aacagatact tctcaaagaa gacatacact ttgccaacaa ttgtatgaaa 360
aagtgctcaa catcactaat cattagagaa atgcaaatca aaaccacaat gaaataccgt 420
ctcacaccag tcagaatgac tacaattaaa aagtcaataa ataaggctgg gcatggtggc 480
tcatacctgt aatcccagca ctttgagagg tcaaggcagg tacatcacct gaggtcagga 540
gtttgagacc agcctggcca aaatggtgaa accctgtctc tacttaaaat acaaaaaagt 600
acccggatgt ggtggtgggt gcctgtaatt ccagctactt gggaggctga ggcacaagaa 660
tcgcttgaac ccaggagttg gaggttgcct gagatcacac cactgcactt cagcttgggc 720
aacagagtga ggacttcgtc ttcaaaaaaa ataaattaaa aataacaaat ctacaaacct 780
ttancttgac tgacaaggaa aaaaagaaga atgtgaatac tagaatcgca t 831

<210> 1740
<211> 828
<212> DNA
<213> Homo sapiens

<400> 1740
actaagtggt gatgagcatg agtaacaatt ggaaatctca tacattgctg gtagaaatac 60
aaaatggtaa agccatttgg aaaaacaata ggcaatctct tataaacata ctcgtccatt 120
tgacatagca atcctatttt taggtattta tccaagagaa atgaaagcat atccatacaa 180

acacccgaat gtgaatgctc atagtagcct aattcaaagt agccctaaac tagaaacaat 240
ccaaaagtct aacaactggt gcatggataa acaaattgtg gcccatccac ataatggaaa 300
gctacccagc aatggaaagg aacaaacaag tgatacatgc aacaacatgg atgaatctca 360
aaagcactgt ggtcagttga aaaaaaaaaa aggcaaacac aaaggagtac ataccatatg 420
attccactta tatgacattc tagaaaaggc aaaactatag ggacaggaaa catcaatggt 480
tgccagggac tgtgggtgag gagaggagac ttgactataa aggaacatga ggaaattttt 540
cagggtgaca gaaatgttct gtatcttgat atggtggtgt aaaagtgagg tataatttat 600
atacagtaaa atgcacaagt cttaaatgta caactcaatt aatttttacg tatgtataca 660
ccatgaaacc ttcacccact tcaacataca gaccatttcc ttcaccctgg aaggaccctt 720
gcaccttatt gaatcaatac ctagtcctnc ggangtaacc attattctga tttctacccc 780
atagattagt ttgcttgatt tgatgtcata tgaatggaat catntctt 828

<210> 1741
<211> 769
<212> DNA
<213> Homo sapiens

<400> 1741
tctcttttac ttatttttca gttgggtttt cgtctttttc ctttagaagt tcttaatatg 60
ttctgatttt taatcacttg tcagttatgt gctctgtaat tattttcttc ctgtctgtgg 120
cttatctttt aactttgtat aggttatcct tgtgaggtta tgtgtgtgtg tgtgtgtgtg 180
tgtgtattcc taaactggtt tccagaaaaa ttatactggt ttacagaaca tccaacagta 240
tatgacagtg cccagcttgc cacaccctgc ctgactctgg gaatagttnt atcatcttgc 300
ccagtggaat agacaaaaag tggtattgcc ccttctttgg tggcttttcc tagaacattc 360
ctacctcttt ggtatagcca aaagctggct tttccctgaa gatcttactt tccttgtgac 420
cctctccaat gaagccacct nacctnctcc caactctcgc tctgaactcc ccacgttgct 480
tncaagcccg ggctggcaac ctttcccatg agaagttagt ccctcctctg ctcactcttg 540
gtgcccttac ctgcctattg acttcaggct aactgttaac aaccttcttc atatgtcctc 600
tttttggcat aattaggatt tgaggattca tactgagaat ccatcaatgc tccggcctca 660
cagtccctcc atncttccaa ctctaangac ttcgtcttca ttcctcttag ggtacctttg 720
gctttatcac ttggagcaat ttcactttta ngatgctgaa ctcggagat 769

<210> 1742
<211> 713
<212> DNA
<213> Homo sapiens

<400> 1742
catgaatgtt tatggcagct ttatccataa ttgccaaaac ttggaagcga tcaagccatg 60
aaaagacatt gctgagaaga agccaatctg aaaaggctac acatcctgta taattccagc 120
cgtattctgg aaaaggcaaa gctgtggaga cagtcaaaag atcaggagtt gccaggggtt 180
tgttgtcagt ggttgccaaa ggcaaggatg aataaggaga acacagggga ttttatgtga 240
taagtatcat acctaaaaat cccctgtgtt catatcatgt ataaataaat gtacatagac 300
atatacacat atatatatat aaatcatgtg tatgcaatga catgtatcta tcctgtcatt 360
ctgtattggt caaaatatca aaatccacag aatgtacaac acaaagagtg aactctaatg 420
taaactgtgg actttagtta atactaatgt gtcaatattg gcttatcagt tctaacaaat 480
gtaccacact aatgcaatag taggaaaaac tgtccaatct aaacactggg caaaggattt 540
taaaagatat ttcacaaagg aagatatgaa aatggcaaat cagcatgtga aaagatggtt 600

0050120760

aatatctttt ttttttttt tttgagtctc tctgttgcct aggctggagt gcaatggcat 660
gattgccgcc cgctgcgacc tctgcctctc aaggnttncg gcatntcgtg cct 713

<210> 1743
<211> 827
<212> DNA
<213> Homo sapiens

<400> 1743
ggaccaagat ggcggcgccc tgtgagggac aagcgtttgc cgtaggggtt gaaaagaatt 60
ggggtgcagt agttcgctcc ccagaaggga ccccccagaa aatccggcag ctgatagatg 120
aggggattgc cccggaagag ggaggcgtgg acgcgaagga cacgtctgcc acatcccagt 180
cagttaatgg atcaccccaa gcggaacaac cttcattgga atctacaagc aaagaagcct 240
tctttagcag agtggaaaca ttttcttctt tgaaatgggc aggtaagccc tttgagctgt 300
ctccactcgt ctgtgcaaaa tatggctggg tcacagtgga atgtgatatg ctcaagtgct 360
ctagctgtca agcttttctc tgtgccagtt tacaaccagc ttttgacttt gacagatata 420
agcaacgatg tgctgagctg aagaaagcct tgtgtactgc ccatgagaag ttctgtttct 480
ggccagacag cccatcccca gaccgatttg ggatgttgcc cctggatgag cctgctattc 540
ttattagtga attcctagat cgttttcaaa gcctttgtca cttggacctc cagcttcctt 600
ccctaaggcc ggaggacttg aaaactatgt gcttgacaga agacaagatc agtcttctcc 660
tacacttgct tgaagatgaa cttgatcacc gaactgatga gagaaaaact acaatcaaat 720
taggctcaga catccaagtc cacgtcactg cctgnattct ctctggtgtg gcttggcntg 780
tagttcctct ttggaatcca tgcagttttc ctgatacatg ttccaat 827

<210> 1744
<211> 663
<212> DNA
<213> Homo sapiens

<400> 1744
gggtagggac tgtcaggcag ggctatgaga tagaggccct gagagtatgg gatttttttg 60
tgctgatcgg gagaaacgtg gagaggtggt gtgataggag gagctgggtc accccatttt 120
attatatgtc atgaaactgg cttccttctg catgacctct aaagtaacta ctcccagtgc 180
tgagtagaag gacactgtaa ataggacaaa gaaagtcttg atgtggtgtc ggaggctaat 240
gaggacagaa gaaaaagagg aaacattcac aattagtaaa agacttctgg cttatcattg 300
caagagaaat gtttgggggc caggcacagt ggctcacacc tgtaatccca gcactttggg 360
ggtccaggca ggcagatcac ttgagcccag gagttcaaga ccagcctgga caatatgggg 420
aaaccccatg tctataaaaa atacaaaaat tctcctggca tgttagcaca catctgtagt 480
cctagctact aaggaggctt angtaggagg atcacttgag ccccagaggt cgaggcagca 540
gtgagccatg attgcaccac tgcaccccag cctgggcgat agagcaagac cctgtctatt 600
taaaaacaaa naanagaaaa aaaaaagttt aggttctcag ccatcccctg agctttangc 660
tca 663

<210> 1745
<211> 586
<212> DNA
<213> Homo sapiens

0950450-020800

0052016070850

<400> 1745
attatagtat gtgtagtgaa atggtgggat tttattttta ttttttattt tttagagaca 60
gcgtctcatt ctgtcaccca gggtggaatg cagtggtgca ctgatagctc cgtgcttgaa 120
gagccttgaa ttcttgggct ctagcaatcc tctcgcctca gcctcctggg tagctaggac 180
tgcaggcaca ggccaccatt cccagctaat ttaaaaaatt atttttttg tagacacagg 240
gatctctctg tgttgcttag gctagtctca aagtccttgg ctcaaaggat cctcccacct 300
cagcctccca aagtattggg attacctggc caataatgga attttagaac tggcaggaac 360
gtcagagata atccaatgtg agctcttaat gatacagatt aatgaagtat caaaagatga 420
gaggtatcta aaattcacaa aacttgttag taacagaacg agtattagaa ccagctatct 480
aactcttagt ccagtggtgt cctgtatcat acggtttctt agaaaatага tgtttccang 540
ccaggtccgg nggctcacgc ttgnaatctg agcacttgga gaggcc 586

<210> 1746
<211> 711
<212> DNA
<213> Homo sapiens

<400> 1746
tagtgatatg gacagtgaag tccaggctga gttggtctca gatgggagat gagaatctta 60
ttccgaactg gagtgaaggt cactcttggc tgtgctttag caaagagagt ggtggcattg 120
tgcccctgct ctagagatct gtgaactctg aactcgagag ggtatctggc agaaaaaatt 180
tctaagcagc aaagtgttca agatgtggcc tgattgcttc taaaagccta tgctcatttg 240
catgaacaaa gtggaactta tatttaaaac agaagctgag cttttataaa agtttggaga 300
atttgcagcc caaccatgtg gtgaaaaaga aaaatccatt ttctggggag gaattcaagg 360
ctgcagaaat ttgcataaga agagcctcat gttaacagcc aagagagtga ggaaaatgcc 420
tctagagcat ttcagagacc ttcacagcag ctcctcccat cacaggtatg gaagcccagg 480
aggaagaaat gcttttgtgg gccagcccag ggccccactg ttctgtgcag ccttgggaca 540
tggtgccctg catcccagcc actccagctc cagctgtgac taaaaggggc caaggtacag 600
cttgggctgc tgcttcagag ggtgcaagcc ccaagccttg gtggcttcca tgtggtgtta 660
ggcaggtgtg cagaagantt gaggnttang aacctctacc tagatttcag a 711

<210> 1747
<211> 550
<212> DNA
<213> Homo sapiens

<400> 1747
ttgtaatgga tgaagaggca tgactcagta gatggttgat ttgggaataa ccacatccag 60
tctagaaggg agctgaccct cagaatttct agctatggga tagacagacc tgcctaacta 120
agagacagtt tactgataga ctgtggtaaa ttctgtatgg agatatacag acaacagaag 180
gagaacataa ttcctggttg ggtggggagg ggagggtgtg cttgtggttc tcagccctgg 240
atgtgtttcg gaatcacctg gagataaaca tatagaacct gggctccatg cctaagattc 300
tgattttcag ttctgggagt ataacagggc catcagaatt ctctttttтt tttgagacag 360
ggtttcactg tcgcccaggc tagagtgtag tggtggcaat tatggctcat tgcagcctcg 420
acctcctggg ctccagggat cctcccacct cagcctataa ctgggactac aggcatgcac 480
caccatatct ggctgatttt aggttttgtg gagctcggat atctctgtgt tgcccanaan 540
gnggccatca 550

<210> 1748
<211> 802
<212> DNA
<213> Homo sapiens

<400> 1748
acggtaatgg tcttctctcc ttagtcctga tattgacaat aaacatcaat aggagaaatc 60
aagaaaaatg aaaagcaaaa gatgtctact atatacttaa ctacactttt catccctatt 120
gattattgta aataaggtta aaaaaaaaaa gaggcgccaa atgtgaacaa aaccatgatt 180
gttattagta gagaacccag tctgtaaaat attttctgga caggagggaa cacagggact 240
atgccctacc cactggctac caactaaatg aggagagacc gtttcacatt accagaatcc 300
aggagcacac tcagaagtaa aaggtgatat tctgataatc agctgcagcc atattactga 360
aatttgctta gttgtgatag tggctgttgt tatggactga agtgtgttcc tccaatatca 420
atatgttgaa gcccttatct ccagtacccc aggatatgga tatatttgga gataagggct 480
ttacagaggt aatttagagt aaatgaagcc attggcatgg gccctaatac aatcttctgc 540
cagggtaaaa gatgtaaaat tctagtccca gtttcatctt tatgtgactt tgggtcaatc 600
tatgggagct gaaatcaatg ccacaattta ttgttagaaa agtcatgaga agtggactgg 660
aaatatctga aaatctctga ctgatgaaaa gacagcttgt gttatcaaaa atccatctcg 720
ntaattangg ttagtgtcan ttgaaaccac cttcaaaaaa ttttaaaact ctgctacaaa 780
cagcatatct tatcttaact ag 802

<210> 1749
<211> 752
<212> DNA
<213> Homo sapiens

<400> 1749
atttaaaaca tgagctttc ttccatactt gtgatactat tctagttaca ttacaaaaat 60
taatcttagg tctctacctc acatatatat aaaaatgaac tcagaaattg atcaaagact 120
taaatataaa accaaataag gccaggctca ggggctcacg cttgtaatcc cagcactttg 180
gaaggctgaa gcgggtagat cacctgaggc caggagttcg aaaccagcct ggccaacatg 240
gtgaaacccc gtccctacta aaaatacaaa aattagctgg gcgtggtggc atgtgcttgt 300
aatcccagct acttgggagg gtgaggcagg agaatcgctt gaaccaggag gtggaggttg 360
cagtgagcca agatcaagcc attgcactcc agcctggtca acaagggcga aactccatct 420
caaaaaaaaa aaaaaaacta aaaattctta gaggaaaaca ggccttaatt tgtgtgactc 480
cttgattagg ctgtggcttc ttagataggt cattaaaatc gtaagcaacc aaagaaaaaa 540
acaaatttat tggacataat caaaatttaa aatgttcaca ataaaaaatt taagacttat 600
aattcaaagc acattatcaa aaaaagtgaa aatacaaccc atagaaagat aaaaaatatt 660
ttcaagccat gtatctgata agggtctagt atccagaata tataaagccc attacaactc 720
aataaaaaga cnaattaccn ggnttaaaaa tg 752

<210> 1750
<211> 700
<212> DNA
<213> Homo sapiens

<400> 1750
tggcttgagg tccgtagttg agaccagcct ggccaacatg gtgaagcctg gtctctacaa 60

0050/0050-0002000

aaaataataa caaaaattag ccgggtgtgg tggctcgtgc ctgtggtccc agctgctccg 120
gtggctgagg cgggaggatc tcttgagctt aggcttttgg gctatcatgg cgccagtgca 180
ctccagcgtg ggcaacagag cgagaccctg tctctcaaaa aagaaaaaaa aaaaaaaaga 240
aagagaaaag aaaagaaaga aagaagtgaa ggtttgtcag tcaggggagt tgtaaaacca 300
ttaataaaga taatccaaga tggttaccaa gactgttgag gacgccagag atcttgagca 360
ctttctaagt acctggcaat acactaagcg cgctcacctt ttcctctggc aaaacatgat 420
cgaaagcaga atgttttgat catgagaaaa ttgcatttaa tttgaataca atttatttac 480
aacataaagg ataatgtata tatcaccacc attactggta tttgctggtt atgttagatg 540
tcattttaaa aaataacaat ctgatattta aaaaaaaatc ttattttgaa aatttccaaa 600
gtaatacatg ccatgcatag accatttctg gaagatccac aagaaacatg taatgatgat 660
tgcctttgna nggctatttt tcctcctttg acccggggng 700

<210> 1751
<211> 849
<212> DNA
<213> Homo sapiens

<400> 1751
tatttagtaa atatttgata aactaatgat aagccattat agcttatacc attttccatt 60
tctcaacaat tcaaataatc accatgtact atgctttatg tcttgctttg cttttctgta 120
ggaaaacttt ggaccttatt gagaagagga aaacacttaa ttgggcagaa gtcctagtgg 180
cacccaccag agctctactg cattcagaca ctgttcacac actgaccatt catgtgtgtt 240
cagcatctga acttggcctt gtgacgtaga gaccctgatg aaagctaatg tttctgtttt 300
catgaaaata ttcaatctag ggaacacctt agaggaaaaa agacttttag gtaagattgg 360
tttggaaatt gggaatgacc cagcttgtgc ctatatatgt gggcctgcaa tcaacttctg 420
tggtaggagt gagttgccta cctgaaggga aacttttac ataggattta aaaagatgat 480
actaatttaa aaacaaacaa cattttaaat aggttcaaag ctagtgaaag taaaaataaa 540
ctaattaata ttaccccagt attaagaatt tagtacacct acaaccatct gatcttcaac 600
aaacctgaca aaaacaagca atgggggaaa ggactcccta tttaatcaat ggtgctggga 660
gaactggcta gccgtatgca gaaaattgaa actgaaccct ttccttacac cttcatacca 720
aaattagttn cagatggatt aaagacttaa atgtaaaacc caaaactntt aaatccctag 780
aagaaaatct aggcaatcta tctgggacat aggcccaggc caagatttta taatgcaaat 840
cccaaatcn 849

<210> 1752
<211> 723
<212> DNA
<213> Homo sapiens

<400> 1752
gagagtagag gggatgtaaa atcattatgt ggagagctgg agaacaacct gatgaaggaa 60
atcaagtgag ctgggcaagg tgtggagtcc atttgagatt gaagatcaat aaattatcgt 120
ggtattggtc tgtcctgttg tgtgaattat tttttaaatg tttcccggca gctcaggtcc 180
aagtgtcagg aaagcaggta gttgtatttg tcctggatgg ggctttcttg gatgtgacag 240
aaagacaatg aggcaaggga atttggggaa aaaatgttca gtttttaaca aatgatggac 300
agttaggaga actaagctgg actaggaagt gaaaataggt gagtctgata gagtagaatg 360
aactgtgctt ggaagacagg tgccatggga gtaatcgggt aattaagcag cgagagtctc 420
attagggtga gagcggaggc atctgagtga gtggatctgg aggtgacggt ggaggtcagc 480

0960345.0720001

gtatggtttt ggcagtcgtg gcactcacct ctctgagggc ttccctgtag gagggacata 540
aattcaggaa tcatggccaa ggaaacatgc tgttttactg gaaacttgca gttattaata 600
aatacattac ataaaagcag tgctggagcc tctatggctt anggtcangg cttaagtaag 660
acagcctatc atctgccttc taaacttgag gtggcccatt tggaaaaccc atttnctgag 720
gta 723

<210> 1753
<211> 706
<212> DNA
<213> Homo sapiens

<400> 1753
tgctcaagtc cctgataaaa aaataaaagc agtggtgccc tcgggttcaa aaacctgaac 60
ggtggtcttc agttgttccc ccaagctcct ctatcagagg cccagacact ccaagaggct 120
gggaagaggc aagtggcttt ccctgactgg catcagactc ctggatggct gtgtttctgc 180
atactccacc atcaacaatc agaagggcac tgctttcttc aagaagggga ccttgcaaag 240
aactgtctca gatgggctat ctttgagttc atcttgttct gaatgtgagt ctgagtcttt 300
gtttccagat gacacagtgc tgtctgagtc ctctgaatca cctgcctcag agctgcagca 360
aagtttctgc tgcccagaaa ctgaatgggc tgcttgtaat gcagattctt ctcctggaca 420
agaagtgctg ctgcttctag ttcttccagt tctaacccca actgggcctt tgtaagggag 480
acttccttta aggcttctgc aagagctgcc aacgttttgg atttgacttt ctgagtccac 540
acacagtagt atgagatgta gagatcattc agtatgtatg ctgggtcgtt ttcctgaaaa 600
attttgtgaa tatccaggag acactttaaa actgcacttt tacttaattg caggatcttt 660
atagtcttcc cgtangcctt catcgccngt ttgaaatggn gattga 706

<210> 1754
<211> 761
<212> DNA
<213> Homo sapiens

<400> 1754
attcttatgt attcattaaa ctaggaccct gtaggattta ttttaggtgt tattgccttg 60
acctagagtt aatctgtatt tttgaaggaa aatacgttgc ctttttttcac aagcacttta 120
taactcactt ctccctaatt cagattgctt ttcttaatca tttgaagtta atgatacaat 180
tatcacatag tagccttaca aatagccata atattaaatc ataatttatg taaagtaaac 240
atccaaattc caaaacatct gaacatggga acaggctgat tgaagttttt gtgggtcata 300
agaccttggc aattgtttgt gagcctgatg ccgacatttc tcaacagtaa tcaaagcaca 360
gaacaacaac catccacatg aaaaataact caaattgtca ttgtacttcc catgctattg 420
tcatttagca agttatggca tgactgattc agccagtaag aaaaatgtga tgagaatatt 480
ggctaggagt acagtctgct tagatctttt agtttttttt ccttcaaaag ccaatagact 540
tttactcttt aaaataggag ctatgcaaaa acgtaatatt tggaatgcca agctgcctcc 600
atgattgaga tacctgtttt gaagttctcc tctactgnaa attctaacag aattaaaaaa 660
gaatcaatga ttcttggtac cttcaatgta cctaccacac tactcatgaa aaaagcttta 720
aaaattaatg gnaaattggt gggnctggaa attctggcng g 761

<210> 1755
<211> 774
<212> DNA

0050250.0050200

0030203.0050

<213> Homo sapiens

<400> 1755
gttttgtttt gttttcaatc taacatagag gcagcctttt aaattgactt tttttccccc 60
agtttttagt tngacctatt aaatatctag acagactttc atactccagt gttcctaaag 120
atcaagcatg ctacttgttg aggtgtctta agttgcgtat tttaaacaat aaatattggg 180
taaaagtagt gaaacattag aagtatcctt ttaccaacac tacaagaaac caggacagaa 240
atcacctctt ccattttcct tgccagtgaa tcttggaagg ttataaagtt ttttgcaagt 300
acaggctgct tttccatgtt tatagatatt tgctataaaa tagcctgcat caaaaacatg 360
tctattaact gtcttactga aggcttgata gtgtattttt caaagcaaaa cagactttga 420
aggtgtctgt ctgaagattt ccggaccaga gggaatgcat atgtggacaa ttcanagatc 480
tcanggaaag taattgtgta ggctggcgat caatttggca tgagggaaag gagagtgaca 540
atcgatatct agctgggagg tgagagaaga gcctcaatag tgacagctca ttcaaccaac 600
ggaggaaaaa agtaacaccc aatgggaaaa ggccaccaag agcaacactt acttgccctg 660
cttgaatttc ggccctgaat cacctgggcc cccattggaa aagttaccaa gcttgggctt 720
gccngtcact gagtagtaan tcccatatat atcttcagtc ctnacaatgc acac 774

<210> 1756
<211> 604
<212> DNA
<213> Homo sapiens

<400> 1756
gcgcggcgcg gccgggactt tggctttgac accgactgcg agcgggagcc gtgcggctgg 60
tgctgggtct ggactggctc tggcggatcc ccgcccgagt tgggcgcagg acttttgcc 120
ggggtaaacg caactgcggc ggcgccgccg caagccccgg tgcagcctcg gcggcgggtt 180
tcgccgccgc tgccgccgcc tccgagcagc cctgcggctt ctattcactc tgggagagcg 240
atgctaagtt tctcccatag aaagagccgg gacacgcaga ccgaagcggc gtagtcggct 300
tccagggcct gaccagtgac ccacacccgc gcggacgcct aggctggagg caggggccc 360
gtgctgtccc gggctgggct cangcttccg agccgcaggt ggaagaggaa ccggcgcccc 420
gcagagcggc cgagaggcgg ccaagtgaaa ggtaattttg gacacgccag gcatggaaga 480
ttcaggtgtt tgtctatagt aacctcttca gtccctgaat cctgcacctt ncgttnttct 540
gtgcttgtac ggnctactgg gcttcctccc tagccagaga gctcttctgc agtggtgcgg 600
cctt 604

<210> 1757
<211> 831
<212> DNA
<213> Homo sapiens

<400> 1757
ataagtagat actctctgtt ccctcatctg tagatttttt ctgtgtgtgc catttagtaa 60
ggtaagattg aggtttgctc tctgagaact aatgtagcat ttaactctcc tctaatgtgg 120
catatagtaa gaatccagta aatcacaggt agtaatagtt ataatatgga aaaataggcc 180
ttcgggggcc atagttgagc aataccattt attactaggt aatgtatcct ggatgcttct 240
ttggaaagga gtgattcctt atggctggtg actcatgctc tgttctcttg gaagggtctt 300
taggaagtgg aaggtgtcgt gtcccatcct tcacttgtct atctcacctg ctttccctgc 360
ctgtatgcca cctctgactt tgctttccta ccacgtggcc tggtcctgga catatgtggt 420

gtttgcagca aacagaagtc taaaaatttt gaaggagggc ccagccctac ttctgccact 480
tatcagacct gaattatgtg gacactgctg ggtttcttta aaataacttc agatctggtc 540
ttgaatggat caagaaagat tttcttaata aaacaaacaa aaacagcaat cctgtccttt 600
atgaatttac ttgttttgga aaacttaatt tccacattgg acaagagaaa aggtgaatcc 660
cggtaggtga gggcacaacc tgggtatcac tctcctctct agtgacacaa gggtcaccct 720
ttgncaccct acctgtcaat accctcttac attttagaat tttctggcat tcaaaccttc 780
aaattttaaa atcagaaccc tggtctccac tacacatncn gattttccac t 831

<210> 1758
<211> 811
<212> DNA
<213> Homo sapiens

<400> 1758
gaacaggact catgatatac aaaagaacaa agacaaggaa tatttattgt tagaaataag 60
tgagaagaca gtggaaaatc tttaaagtac tgaaaaaaaa ttgtcaacct aaaattctat 120
tcctagagaa aatctctttc aaaaacaaag gggtgaattg aaaattaaaa agctagtgtt 180
ccattatgtc agcataaagt cttatgaatt ttgtacatac ctttggtctc ctctttgttt 240
gttttcaaat tacaaatatt ttgaaaatcc tactgtcttt ttaagagaca atggcagccg 300
ggtgcagtgg atcacttgag gccaggagtt caagaccagc ctggccaacg tggtgaaacc 360
ccaactctac taagaataca aaaaaattag ctgggcgtgg tggcccatgc ctgtagtccc 420
agctactcag gaggctgggg caggagaatt gcttgaaccc aggaggcaga ggttgcagtg 480
agccgatatc cactactgca caccagcctg ggtgacagag cgagactcca tcttaaaaaa 540
aaaaaaagag agagacaatg gcctctctaa gcaacatgac ctacatttaa atggagtcaa 600
gtggtcctct gtttccattt gnttaatttc tactttgata ttttgcttgc agcttcaata 660
ttactggctc gtgtggcctg cttcatgctc ctggaataaa ttcaataacc accaattgcc 720
ccttatgttc ccagcccagg attcaaactg ggcttcatgc anaatgggcc ctctaatgga 780
aggatttgct tccnggatag atccaaactg n 811

<210> 1759
<211> 745
<212> DNA
<213> Homo sapiens

<400> 1759
gatgcgaatg ttgtcatcag ggtgggtgag gatgtactag gcactgtgct aagcatttta 60
catatactat cttattcaag ttttacagaa gtctaccata aatactatta ccaccccatt 120
ttgtagttaa gaaaactaat gataagagag gtcaggtgag tagctggtag ttacatagcc 180
agtgagtggc taagcaagaa ttcaaataga ggctttctga actccagggc ccacacttaa 240
tctttattct gcattcctcc cagggagcct tcatgtgcac agcatggcac tgactgcaga 300
agtgtgccta gtattgccat agtcaaaggg cacatcatgc actcagctta gaaaaaggga 360
cagttcccaa agaggggaa aaaaaaaaaa aaaaaaggga cagttcctta aaaaaaaaat 420
actttgtccc caacattcct tataaaagtc aatttaatga atttctcaga ctattatttt 480
agatccatca ctcagtaacc cttgtccatc tatatccgta ctcctcttcc cacctccagc 540
tccagatttc ctgaactttt gtttctgctg cctgttcttg tcagaaactg tgcaaccttg 600
gttctgtggg tatgtgaatg tcaggttggc agggtgcagc tgtgtggntc cagatgacca 660
gaagccacaa gcggttgctg cttctctctt gggattggtt ggggagtgaa aggcanaccc 720
gacggatgcc ttggntggtt ttggg 745

0050203-0050800

0956030 - 0420080

<210> 1760
<211> 836
<212> DNA
<213> Homo sapiens

<400> 1760
gtgcacaata aatgtaatgc atttgaatca tcccaaaacc atccctgcac ccccggtctg 60
tagaaaaatt gtctttcatg aaacccgtcc ctggtgccaa aaaggttgga gaccactact 120
ctaaaagata aagatggttg ggcatggtgg ctcacacttg tggtcccagc attttgggaa 180
gctgaggagg gcagatcacc tgagaccagc ctgggcaaca tggggaaacc ctgtttctac 240
aaaaagtaca aaaattagct ggacctggta atgcacacct gtagtctcag ctactgagga 300
ggctgaggtg agaggatccc ttgagactgg gagcttgagg ctgtagtcag ctgtgagcat 360
gtcattgcac tccatcttgg gcaatggagc aagaccctgt ctcagaaaaa aaggattaaa 420
aaatttttagc cacaatatta tttatcacac ctaaaaatta ataatttcct accatcaaac 480
tacttaatca atgttcaaaa agtagaaaac acgtttgcaa aactgagcac ctttttcact 540
taagaataag ttaggtcaga tatttgcctt tccttggtca gctctagacc aaggggaaat 600
gcaagatgta actactgaaa catagtggtt ggcatttggt ggaatatttt tggttaaaac 660
atggaagtta ttttatcatg agttacttct atagttctaa ctaattttag ttagacaatg 720
nattataaat gcagtgtaga attttgacct caaagaatct catctagtat catgaaatct 780
atgcngtatg atgtaatcag tagaatgtgc ttaactggga gcctttggca tccaan 836

<210> 1761
<211> 800
<212> DNA
<213> Homo sapiens

<400> 1761
taacaaacgc cggcgctgac aggggccgcc agcccctccg ccgcgcggag cccacgaagg 60
ggacagcgca gccggcccag agctcgggtc tccggggacc gagccttatg atctcctcat 120
tgcgtccccc tctgcccact ggacttggac ttcagatctg accccagacc tgccggctac 180
ctcgggaggg cccacctccc cgcccatcca gcaagatgcc aatcctcaag caactggtgt 240
ccagctcggt gcactccaag cgccgttccc gagcggacct cacggccgag atgatcagcg 300
ccccgctggg cgacttccgc cacaccatgc acgttggccg ggccggagac gcctttgggg 360
acacctcctt cctcaatagc aaggctggcg agcccgacgg cgagtccttg gacgaacagc 420
cctcttcttc atcttccaaa cgcagtctcc tgtccaggaa gttccggggc agcaagcggt 480
cacagtcggt gaccaggggg gagcgggagc agcgtgacat gctgggctcc ctgcgggact 540
cggccctgtt tgtcaagaat gccatgtccc tgccccagct caatgagaag gaggccgcgg 600
agaagggcac cagtaagctg cccaagagcc tgtcatccag ccccgtgaag aaggccaatg 660
acggggaggg cggcgatgag gaggcgggca cggaggaagc agtgccccgt cggaatgggg 720
cccgnggtcc acattccctg acccttctcg atgagcangn cttttgggat cttgaagatc 780
tgctgtcgtg cccaaggcac 800

<210> 1762
<211> 747
<212> DNA
<213> Homo sapiens

<400> 1762
ggaagctggc tggctgcctg ttaagatgta tcttaggaca aagagatttg ggatcctgga 60
gagcacgggg gagattctgc tgcctgcctt aggaccttta tgaacaagcg tgatgttggg 120
agggcggctg tggctgtgta ccaggtgctg taggaggcgc tggaactgga gccttgcatc 180
cgaatgacaa agtgcctgcc ttcccggagc ttacattgag tgcggaggac agaccaggga 240
ctagccagca gacagtccca tgtgtcaggg tctggtgttt gcagagggtg tttgcagggg 300
tagagcatga caggaagtgg ctgttttgga taagacgatc aggaaaggta cccgtctgcg 360
gaagtgatac tgggtctgga gtgaagcggt tggaagaaaa ctgcacctct ctggaggaag 420
acagtgccag gcacagctga aaatccgggg ctagagctac tgggaggaac aggaggagca 480
gctgggaaac tgggtggccg gagcagacgg ggagggtgag canggagggt aaagataagc 540
aagcaagggg ctggggctgt caccgaggtg gggtgcctcg gagggtgcag gagcagagtc 600
aggatctgac ttaggtttga taggctnctc tggctgtcct gcgatttatc agggacccag 660
gttgccagca ggccgaccac tcaagaggcc gtctacatca atgcagtcna aggctatgct 720
nacttggacc anatggatgg cggaaga 747

<210> 1763
<211> 682
<212> DNA
<213> Homo sapiens.

<400> 1763
ggtaaacatg ttgcttggaa gtatgctttt ccagtttcac aaaatgacac cagtggccac 60
agaagttagt acccttggc ctctaaaaat ttcgctttat gaagagaagg ctactaaaag 120
acatgtagga cttagggttc aaggtggcag actagaggag ctagtgtgta ctgctctcgt 180
ggagaggaaa tagtgacgag taaacatgga ctctctaagt ggatcatcta agaaaccacg 240
tcaggattca ggatgcatca agggagtaat gggacatgga gaacagagaa aatcgaagct 300
gggcagctgc ctgcctggga ccagcatgaa gacaggagaa gctcctcaac acagggaaag 360
aattagtgag taagagtcct caggggatcc atacttccca cagtgacctg tgcaatcctg 420
agaatgtgaa aaaccccatg actcccttgg gcctctagac tgatacagag agctacccag 480
agtttttgca gaggcaacac tcaagtccgt ggggaccccc acaggccctg gactctggaa 540
cagcctggtt gaggtgccat ggccctgaca gaagctgcag tcatggtgct gganatggac 600
agattgctct acttcctntt gcagaaaacc tgctaaaccc ctggggttta ngagagcttt 660
gtgttccccc aggaagcact tt 682

<210> 1764
<211> 799
<212> DNA
<213> Homo sapiens

<400> 1764
aaagtgaata gaattgtttt cttactcaaa acactgttta acatgacact tggctccttt 60
ctttgcatct ctgagctctt gtaagatttg agaaacaatt acattcaagg gcagtatgct 120
taacctactg acatttgaac tacaaagcaa agatgttcag attttcctga aggatcaagt 180
ctttcaggcc acagaatttt ctgtcctagt tttttaatac agtagtcccc ccatatctgc 240
aattttcctt tccacattca attacgcatg gtcagctgta gtctaaaaat attaaatgga 300
aaattccaga aataaacaat tcataagttt taaattacac actattctga gtagcatcca 360
tgatgtgaat tcttgctttg tgcggcatat tcatgcttaa attctcccca cccattagtc 420
acttagtagc catctcagtt gtcacggact gtcactgtat ctcagtgctt gttttcaagt 480

09/15/2005 08:50:03 PM

aacctttatc ttactaatgg ccccaaagca caagtgtaat gatgctagca attcagatat 540
gccagagaag ctgtaaagtg ctttcttaaa gcgaaaaggt aaaagttatt aatttaagca 600
agggaataaa aatcatatgc taaggttgct aagatcgagg gtgagaatga ctcttcctgc 660
tgtacaagat gatcatcccc agagcacata gccgtcagac tttncaaggt caataccaaa 720
gaaagaatct taaagaccgc tngagaaagg gtcatatact catcatgcta cagcagactt 780
nttagcagaa actttacag 799

<210> 1765
<211> 761
<212> DNA
<213> Homo sapiens

<400> 1765
gaattataag caggattaac gtagattaaa gttgacagaa tctggttctt gctctgtccc 60
tttcccatgg tggccagccc cagctgccca gctgctgttg tctgtaagcc aaagctcctg 120
cgtgttctcc ttccaataga aaacgactgt gcggaacctc atcctccccg ggcccagggt 180
gttggtgcag ctgctgaggg atctggtgag gtagcctatg ctcatgtgcc actggagatg 240
cccggagagt tccaatgccc aggccatacc agcagctccc tgggtgatgt ccccttggac 300
ttagtttcac tctgaagctg ggaagcaata gcctacattt tcagttaaat aaaagctgga 360
aatgatgatc tcgttaggcc tgcctcctgt acttcatgct ttggtgctct ccttcatttt 420
cctgccagga agactttccc agtgcctctt tctatatgct tgcatcccgt tctcaagtct 480
ctgaccagcg gttccacttt gaagtccatc ccacagaagt attagctcaa ggctgcaaag 540
atacaggaat gagaacgctt gctgcaacgc tgctcataac agggagacca ggaaaataac 600
ccaaagggcc attcacacac caggtttttg agatgaatga catcatgagc aactcatgag 660
catgagcacc aggcgtgcct naccatcttg gctncttggt gataacgtgc agtccctaat 720
atcagcctga cttcaaggac tgagatgata agtgngaaaa g 761

<210> 1766
<211> 823
<212> DNA
<213> Homo sapiens

<400> 1766
tttattttaa agcaccttta ttttatatcc taacaatttt tatttactct ggcaataaag 60
agatagaaca cccaccaaca aagtccctaa aatacgtaat tgataaagca ttggttatct 120
gctaggtttt aaacataatt tctaagaata taaaaattta atcaccacca tctttataat 180
tgttttaaaa ttacctctaa tttcttcgca caaggtccac taacaagtgc aatcacacca 240
ctgtcagata cctaagcaaa gggaaaaaga aacacagtcc atgaatccag acaacggaag 300
tagaattttc caaaatgtat tcattattta gatatagtct taatgcctcc cattcatcaa 360
acatgtgttt tagccatata tacctttcac ccttgctact taattgagag gaatatgcca 420
atatatatct caattactta accacaaaaa gcatgaagtg gtcaatagtt tcaacaaaaa 480
caaaatgaac tccttatgat atgttctcat tagtcatgaa aatacatttg gtaaacacat 540
agtctatatg tttgtagcct atatgtcatt tacctgagta gctgaaaagt cgacacactg 600
caaaaatggg cagtttttc ctaatgcatg taaggacaca tcagtaatac ttaagcagcc 660
cctaaatcga tgatctttag cagctggcaa ttgagtgcaa gagcaacgac ttcttcgcag 720
tgagattgca gcatcttttc aagaaacttc nngtaggatg aacaagatga agccccggtt 780
ttattctggg ggaaaattaa ttattatcaa gngcttatgg ggg 823

0952046.0720

<210> 1767
<211> 782
<212> DNA
<213> Homo sapiens

<400> 1767
tagaaacaga cccacactgg ccaccgcacc agattcaagg catttgttac tgttagggac 60
tatgatggcc acatcagttt aagtgttaag tgctccaagg aggttactac tgccatccaa 120
gggaccatca ccctggccaa gctttccatt gtccctatgc ggagaggtta ctgggggaac 180
aagatcggca agtcctacac cacccctgt atggttacag gctgctgtag ctctgggcta 240
gtacacctta tccctgcccc caggaacaat ggcatcatct cgactcctgt gcccaagatg 300
ctgctgctga tggccggtat tgacaactgc tacacctcag ccaggggctg cactgccgcc 360
ctggacaact tcaccaaggc caccttcaat gccatctcca ggacctatag ctgcctgacc 420
cccagcctct ggaaagagac tattcaccaa gcctccctgt ggaatgcact gaccatcaca 480
tcaagaccca caccagagcc tccatgcaga ggacccaggc tccagctgtg gttacagcat 540
aagctttcat acaagaataa tagtgaatta cacctgttaa aaataataag cagaagaaaa 600
tgaaattgaa caaaccagcc accgtagtcc cttctaaagc gacgtggnct gcgggcatca 660
ntgcccttcc tctctggcta tagctcttcg gcatctgaag aaagttatcc taactatttg 720
ggggatccaa atttgggcct gctggtatga tnatgcccct ggtcgggaag gaatttaagn 780
nt 782

<210> 1768
<211> 806
<212> DNA
<213> Homo sapiens

<400> 1768
ttggaattgg agtctccatg aaccagtggt gacttccaga gctctgctcc ttctagattc 60
cttcagagtt cttgagcctc ctaaaaagta taaggaggag ccaggtgcca tggctcatgc 120
ctgtaatcct agcactttgg gaggccaagg tgggcagatt gcttgagccc agtagtttga 180
gaccagcctg ggcaacatag tgagacctca tgtttacaaa aaatgcacaa agttacctgg 240
gtgtggcggt gggcacctgt agtcccagct actcaggagg ctgagatgga aggactgctt 300
gagcctggga ggtggagact gcggtgagct atgatcatgc cactgcactg cagcctaggc 360
aacagagtga gactctgtct caaaaaagaa aaaaaaaaaa gcaaaagaaa atatggaagg 420
aaggagggta tgccttctcc attgtcttgg attccataca cctgctggga caggggcctc 480
acagctttgt ctttcgcagg cctgcaccct ggctcggcgg aatgctgagg tgtttctcaa 540
gtacatccac aggaacaacg tcagcatgcc cagtgtcgcc agccacactc ggggacccga 600
gcaacaagtg aaaggtcagt gagagacctg cccagccacc agtcacttca gcgacagccc 660
ctncctgaaa tataccatgt cccagttttc acacaatctc aaatttcctg ctgcttctcc 720
ttagaaatga aaatgtatga tgtgggatgg tgtggccagt aatgattcat gggcaatttt 780
tnaacacccc ttaagatctg gaangn 806

<210> 1769
<211> 728
<212> DNA
<213> Homo sapiens

<400> 1769

09/25/2006 09:50:00

acgtcttggt tcgggccggg cataaaaggc ttcgcggccc agggctcact tggcgctgag 60
aacgcgggtc cacgcgtgtg atcgtccgtg cgtctagcct ttgcccacgc aggtatgaac 120
acccggagtg cacctggcgg gaggaccccc ttcaggctgc tttggcccga tcctgacttt 180
agtgctggcc gcctttgctt tccatccgct atagtggcct cctttgtcct tgcgggggaa 240
accgaggcca cagccttgca gcgcagtcct gatcgcccga cttcccgccc cctgctcgtg 300
cgggcctcac tgtctccttc tgggctgggg gcttgcgaca ccgccctccg gccgactcgc 360
tcgtggggtg ctggtggcag tggctgggtc actcgtgctc tggtcaggag agcgggtctc 420
cggcagcctc cgggcctcgt agaccgggta cccgggaggg tgagggttag tgctgtcgcc 480
tccgccgtgc tgactcagtc atagggccca gcacgcagcg cgaccttggg ttgggaggac 540
aaagtgtctt cccgggcgca ctgaccgggc gggggtctca gctttcagtc atggcctccg 600
gtaacgcgcg catcggaaag ccagcccctg acttcaaggc cacagcggtg gttgatggcg 660
ccttcaaaga ggtgaactgt cggactacaa aggtgaaccg cccgnccgga nggggcccan 720
gtagaaac 728

<210> 1770
<211> 794
<212> DNA
<213> Homo sapiens

<400> 1770
aacccgcccg cttctcctgc ctaggctctt ctttctgctc ctgtcgccat ggccccggcc 60
tcggcgctca agcgaccctc tcgctccgcc cagacccctg gatgcccagc tgccgcacct 120
cccgtggccc cacgctgtgg ctacgtgttg tctgaagacg cctggggaaa ccttcagggc 180
ctctgtactg gcctgtcatg tggtcaacca gatctccttg attgcacagt caaccccgct 240
cctgtctgtc aggctcagga accacttaca agctatggca ggtgatgttc cagcatccca 300
cagggaggat tatgctggtg agccacatgg ccaagcagga ctatggcttc aacagctctg 360
gggcctgcat gttcctgcat tagccctact ccagcaatga ggctgaagtt accagagtga 420
catcatggta tctggtgcaa gctatagcat ccacctattc ttggagcaca cgtggtcaga 480
cactgattgg catgtgacca agttgatggt ggtcaaaaca gaactccttt catgcccaca 540
agcttcagta ttactatgtt ccctgccact tccgttgaag ttttgcagga ttgggatgat 600
cctttggtgt gaacgaagcc ccaaagagga ccacgtggag agtgcctgac tgttcctgtg 660
atgtcttcta gtacatgaac aggaatgaaa cccactatgt ccttcatgtg aactacatgc 720
tgancgtggg tccagatggg aaaccattct tctaccctgc anaaatgggn tataagtttc 780
aaggatgtgg gtaa 794

<210> 1771
<211> 807
<212> DNA
<213> Homo sapiens

<400> 1771
actttggctt tgacaccgac tgcgagcggg agccgtgcgg ctggtgctgg gtctggactg 60
gctctggcgg atccccgccc gagttgggcg caggactttt tgccggggta aacgcaactg 120
cggcggcgcc gccgcaagcc ccggtgcagc ctcggcggcg ggtttcgccg ccgctgccgc 180
cgcctccgag cagccctgcg gcttctattc actctgggag agcgatgcta agtttctccc 240
atagaaagag ccgggacacg cagaccgaag cggcgtagtc ggcttccagg gcctgaccag 300
tgacccacac ccgcgcggac gcctaggctg gaggcagggg gcccgtgctg tcccgggctg 360
ggctcaggct tccgagccgc aggtggaaga ggaaccggcg ccccgcagag cggccgagag 420

0 9 5 2 0 4 5 0 2 0 0 3 6 0 0

gcggccaagt gaaaggtaat tttggacacg ccaggcatgg aagattcggt gtttgtctat 480
agtaacctct tcagtccctg aatcctgcac cttccgtttt tctgtgcttg tacggcctac 540
tgggcttcct ccctagccag agagctcttc tgcagtggtg cggccttccc gggagcctga 600
tcctggcgga ccatggggag caccctgggc tgcaccgctc catccccagg gacccctcgg 660
acctgtccca tacccgcaag ttcagcgcaa cctgtaactt cagcaacatt ctantgaatc 720
aggagcggct caacatcaac actgncacgg aggaagaact gatgacccct gcctggggtg 780
accctgccct ggcaccaaca tcnggaa 807

<210> 1772
<211> 760
<212> DNA
<213> Homo sapiens

<400> 1772
gggcccgcgg aggaaagata ctggggagtg ggagccgcgg ggttcagagc gatgattccc 60
ccacaggagg catccgctcg acggcgggag attgaggaca agctgaagca ggaggaggag 120
actctgtcct tcatccgaga cagcctggag aagagcgacc agctcactaa gaacatggtg 180
tctatcttat catcctttga gagccgcctt atgaagctgg agaactccat catccctgtg 240
cacaagcaga cggagaatct gcagcggctg caggagaatg ttgagaagac gctgtcctgc 300
ctggaccatg tcatcagcta ctaccatgtg gccagtgaca ctgagaagat catcagagag 360
ggccccacag gtaggctgga agagtacctg ggaagcatgg ccaagattca gaaggcagtg 420
gagtatttcc aggacaacag cccagacagc ccggaactca acaaagtgaa actgctcttt 480
gagcgcggga aggaggccct ggagtccgaa tttcgcagcc tgatgacgcg gcacagtaag 540
gtcgtctcgc ccgtgctcat cttggatctg atcagtggtg acgatgatct ggaggcccag 600
gaggacgtga ccctggagca cctgcccgag agcgtgctcc aggatgtcat tcgcatctcc 660
cgctggctgg tggaatatgg ccgcaaccaa gatttcattg aacgtctact accagatacg 720
cttcagccag cttggacccg ntncatcaaa nggacttgaa 760

<210> 1773
<211> 842
<212> DNA
<213> Homo sapiens

<400> 1773
tatgtgtgaa gtctttacgg tcagaggaca ttgacaaaat attttagatt gaaagcctgt 60
tctccttgat gattcagtat aacttctttt gactgcgctt ttagttcttg caaaatagat 120
cttgtttaga tgagattcca gcatgactcc tttgtaattt ttcatatttt tgctattaca 180
tctcaactct tgaagagcta tttctgtgaa aaccaaacat gcagtcaagg cacattccac 240
gtgtggctga tggggttatc atagttacaa atcatattta tccacagtga taattatctt 300
ccttagcgtt ttgttctact tcagagctca tttgtgggcc ttaccacctg tttcttacat 360
atggggaaag agtctcttat tctcttttgg aatatagatc taagagtaga tttatatcag 420
gatttgaaag atgaatcttt ttcaaggatg tttttcctct ggaccgtggc attgtgtaag 480
aaatttccct actcatccca tccctggggc acattaattt ggagatgatg ttaaatgtgt 540
cagagtgtgg cacaaatctc aactggcaga taaagcctag tattgaattg ttttcagttc 600
agaaacgtgg ctggctgact ttgaccctga atgtgtaaat tatctttgca gcaataagaa 660
cttgaagtag ctttgatagc taatcatagt atgataactc agccagaaga attcactaag 720
agcagtttgg gggcttccat ctaatgtaaa ggttaagtaa tgtaagtcat atcttgggcc 780
tttagaccta nttatgcaga gagactccat ggccttcagt aatcttactc ttacagtcct 840

US 2004/0259100 A1

ta 842

<210> 1774
<211> 848
<212> DNA
<213> Homo sapiens

<400> 1774
gagatcgctg ggagcggttg cggcgtgcgg ggagctgagt tatagctgtg acttctgccc 60
tgccaggccg cacacaagct ggctgacccg gtttgtaaaa atggaatttc aagcagtagt 120
gatggcagta ggtggaggat ctcggatgac agacctaact tccagcattc ccaaacctct 180
gcttccagtt gggaacaaac ctttaatttg gtacccattg aacctgcttg agcgtgttgg 240
atttgaagaa gtcattgtgg ttacaaccag ggatgttcaa aaggctctat gtgcagaatt 300
caagatgaaa atgaagccag atattgtgtg tattcctgat gacgctgaca tgggaactgc 360
agattctttg cgctacatat atccaaaact taagacagat gtgctggtgc tgagctgtga 420
tctgataaca gacgttgcct tacatgaggt tgtggacctg tttagagctt atgatgcatc 480
acttgctatg ttgatgagaa aaggccaaga tagcatagga cctgttcccg gtcaaaaggg 540
gaaaaaaaaa agcagtggag cagcgtgact tcattggagt ggacagcaca ggaaagaggc 600
tgctcttcat ggctaatgaa gcagacttgg atgaagagct ggtcattaag ggatccatcc 660
tacagaagca tcctagaata cgtttccaca cgggtcttgt ggatgcccac ctctactgtt 720
tgaaaaaata catcgtggat ttcctaatgg aaaatgggtc aataacttct atccggagtg 780
aactgattcc atatttagtg agaaaacagt tttcttnact ttcttacaac agggacaaga 840
agaaaaag 848

<210> 1775
<211> 691
<212> DNA
<213> Homo sapiens

<400> 1775
cgcagaggag gcccacaaac actgcctgcc tcaccaggag ggatggtaag acgcttggcc 60
cctccttccc tcagcctgac aaggggcagt ccctggccct ttcccaaagg gaccccagag 120
agggggaggc ccagcccacc atcctgcccg gtgggattag ctatatcctt ctgcccctgg 180
gacaggaacc atgggaaagc ttcctcctgc tgcatctacc cgctccctcc ccaccagcca 240
ggtccctctg cagtgtgtgg gggtgggggc acccatccct gccacctgcc tgtagtggga 300
agagaaacag taaccccagc cagcctccct ggaggtgccc aggtaggaag tttttgatgc 360
ttggctctga agatgtaatc tcttctcctg acattgttgc cagagcctgc cacaaataac 420
gtaagggtgt caggacctct aggccacaca ccgtcctctc ctctcagtct ggaagcccca 480
cagcctttgc cctctgcatt gggggacaca aactgtttac agcaggggg gatcactgac 540
cagcctgtgg ggcgggatgt tggctgtggg cagccttcag aagggagctt cctggccccc 600
tgggatcaga agctttcang tttggtaggg ccaacctttt gggctcttgg ctctcaagct 660
gtgtccaggc anaaggccca ancttggcc a 691

<210> 1776
<211> 663
<212> DNA
<213> Homo sapiens

0 9 6 5 0 4 5 0 2 0 8 0

<400> 1776
ttcacccaac acaggagcct cttaaaaatt ctgtgtgagt tcgtttcagc cagtcttgca 60
tggggacatt gtcttccgtt tcagtcctga cgtccaccct gtgcacctgc gtgatcgcca 120
gccctgcctg gtccctcctc tgcgggctct ccctctccac tccctcctct gggagctctg 180
tggccccagg cccaccttcc ttgagagaca tttgtgtgcc tgccagtcat acccctttcc 240
caggaggcgc agcttaggct ctgaggctgt cccttcccac cgaactcctc cctgcagcct 300
cgcagtcctg ccctcctgag agctgcccac tctgctcctc tccccagcgt ccactgtcct 360
tgaattgccc tttgctgggc attgcgatcc cgcattctgt ctgagggagc taagggcctc 420
ctggaagttc ctctgggtcc tctggcttct cccatcaggg ctggtcttgt cctggtctct 480
gttcctgtgg aacttttttac ctgcttctgt gaaaactcac gctgtcctca gcacagcacg 540
cacacacacg catattcacg catgcacagg cacacacgtg cacatgccca cgcgtgcaca 600
cagccacaca caccctnacg cacacaacgc ncagnaccat gtgggaaggg gttcttcgct 660
tgt 663

<210> 1777
<211> 658
<212> DNA
<213> Homo sapiens

<400> 1777
acaatacaat tttcctacct aaaaaatttt aatgagtttc ttagcaaata tccaagccat 60
ttttgtattt ctctgatagt tttataaatc tgtatgtatg tgtttagtga ctttttttgaa 120
ttaagattga aataagattc ataaaatcac tattaatcaa tgtctcttaa gccttttttt 180
aatctatggg ctacatctca tttttcttat ctttcttctt gcaatttttg gttgaagaaa 240
tagaatgttt ttccattagg cttcccagag tatggatttt cctgatgata ttgctatgat 300
tttgtttaac ttgtttttct atcctttgga ttttctataa attagtagtt agatctagag 360
actttattgt attcaggttt gattcctttt tttttgtttt ttaatgggat acttcatagg 420
tggtatttgt atactttctt caggaggtaa taagtatata gttgtctctc tttttgtgat 480
attattagcc attgatgagc attgcttaga tccattaatt ccttaggggt tacaaagggg 540
tgatactcta agttctttta ttccttcttt ggttattcct tccttgacta tctataaaga 600
gaaactttnc ctcaactatt tgcctgtaaa taaatncnaa tcatcatata aaaatggc 658

<210> 1778
<211> 604
<212> DNA
<213> Homo sapiens

<400> 1778
agtgccctcc ccgctccgcg gcgccggctg cgaagttgag cgaaaagttt gaggccggag 60
ggagcgaggc cggggagtcc gctccagcgg ggcgctccag tccctcagac gtgggctgag 120
cttgggacga gctgcgttcc gccccaggcc actgtaggga acggcggtgg cgcctcccca 180
gcaaaccgga ccgactgggt ccagccgccg cagggaatga cgccggtgct cctacagcca 240
cggctccggg cggggaaggc gagccccaca gccggccctg cgacgcccgc ctgggcagca 300
ccgataagga gctgaaggca ggagccgccg ccacgggcag cgcccccaca gcgccaggga 360
ccccctggca gcgggagccg cgggtcgagg ttatggatcc agcgggcggc ccccgggcg 420
tgctcccgcg gccctgccgc gtgctggtgc tgctgaaccc gcgcggcggc aagggcaagg 480
ccttgcagct cttccggagt cacgtgcagc ccctttggc tgangctgaa atctccttca 540
cgctgatgct cactgagcgg cggaaccacg cgccggaact ggtgcggtcg gangaacttg 600

0956204-050800

gncc 604

<210> 1779
<211> 638
<212> DNA
<213> Homo sapiens

<400> 1779
gatgccatca gtcactgtga caaatggtgt gtggggggag cttgctggct gaagcattgt 60
caccgtgggt aattatacac ttaatattca tgtgttatcg ttccacctgg aatctttaaa 120
ctcttcatcc aggagacact aatcttcacc ttattattac gtcctaatgt cactctagca 180
gaagaatggg gctgccaaca gggggagaga acttcctcct tctcctctag gttgtaataa 240
acatggttat ttgttatttg aactctggct gaagataaga cgctatatgc ccctgccaga 300
tatggcccag gtgtagagat gagtccaggt tattgttaaa agagtgaaaa tgcccctgtc 360
acattcccca tcgttttctt ccatctataa agatgatggc aatggtgttg gcaatggtgg 420
tgataatgat gattatcaag tgagcattat tccatttta ggcatgatgg aaggaaaagt 480
caaatgcagt gttcttaaca cttcttataa cgttcagaaa ccaccagata gagagaatgc 540
tgtctgtcct taatgcaagc agcccttgga attggttcta gagctgcatg agctgccgat 600
gggaaagtga catcagtggc ngtcaccaaa tntccntt 638

<210> 1780
<211> 654
<212> DNA
<213> Homo sapiens

<400> 1780
taaaatgttt gctattcctt gaatatagga aatgctaaaa acaatatgtg attaaatacc 60
aagtgaatag agtaatagac agtttgaagt ttggggtgtt aataaatgat cagaatatca 120
tggcttagct tcctgaagga ggtttttttt ttttttttt ttttgagaca aggtcttgct 180
ctgttgccca ggttctagag tgcagtggtg catgatcacg gctcattgca gcctcgatct 240
tgagggtcca agtgattctc ccacctcggc ctcccaaagt gctgttacta caggtatgac 300
ccaccacgcc tggcctctga aggagattta tataagtaga acaatggcaa gtaggaaatt 360
agaagtatta ctttattatt aatttgggct tttggccaaa ataccaatgt aaatttgtgt 420
agtaaacagg gtgacatcat attacttaag ctccaggact agtcaagggc tctctcatcc 480
tcctaaattt cactgnctta ctactctttg gttgatggct ttgcagaaga ccccaacaat 540
tagtctttta gagtgtgtaa gagtgaaacg accaagaaca agaacncaaa ctcttacatg 600
tatgngactt ttttttctat cttgcccttg aatcaanaat tggggaactt ttaa 654

<210> 1781
<211> 678
<212> DNA
<213> Homo sapiens

<400> 1781
attagatggc atgtcaaaaa atccttcagg gaaaaacaga gaaactgttc caattaaaga 60
taatttcgaa ttagaggtac ttcaggcaca atacaaagaa cttaaagaaa agatgaaagt 120
aatggaagaa gaagttctca ttaagaatgg agaaattaaa attttgcgag actcactaca 180
tcagacggaa tccgttctag aggaacagag aagatcacat tttcttcttg agcaagagaa 240

09509509.0N2000

aacccaagca ctcagtgaca aggaaaagga attctccaaa aagctccaat cattgcagtc 300
tgaactccag tttaaagatg cagagatgaa tgaattaagg acaaagctcc agaccagtga 360
acgagcaaat aaactggctg ctccctctgt ttcccatgtc agtcctagga aaaacccttc 420
tgtggttata aagccagaag catgttctcc acaatttgga aaaacatctt ttcctacaaa 480
ggagtctttt agtgctaaca tgtcccttcc ccacccctgc cagacggagt caggatacaa 540
gcctctggtg ggcagagagg atagtaagcc ccacagtctg agaggtgact ccataaaaca 600
ngaagaggcc canaaaagct ttgttgacag ctggagacag agatcaaaca ctcaaggttc 660
cattttgata aacctgnt 678

<210> 1782
<211> 782
<212> DNA
<213> Homo sapiens

<400> 1782
tcagttaagc ttcgtaacaa ccctatgtct tctctttata gttaagaaaa ctgaacctta 60
gagaggtgaa gaattcgtcc agggtcataa aactagcaag tggcaaaatt gagatttaaa 120
cactgctagg tgttacctta ggatctaaac ttttaaccat tactccaaag tacaggctgg 180
gtgcggtggc tcacgcctgt aatcgcagca ctttgggagg ccaagacggg tggatcactt 240
gagcccagga gttcaagacc agactaggca acatgacaaa accccgtata tactaaaaac 300
aaaaattagc cgggcatggt agcacacacc tgcaatccca gctccttggg aggctgaggc 360
atgagaattg cttgaacctg ggaggcagag gttgcagtca gccaagatcg caccactcca 420
ctacagcctg ggtgacagag tgagaattgg tctcaaaaaa taaataaact acataggaaa 480
taaaactacc tggaatcttt tcttttacaa aatcaatatg acacacatat cggtacttga 540
caaagacaac atgaaaaatt ttataagata ttaggccggg aacggtggct catgcctgta 600
atcccagcac tttgggaggc cgangtggga gggtcacttg angccaggag tctgaaacca 660
tgcctggcca acatggtgaa cgccccattc cccatatcta ctaaaaattt aaaattagct 720
gggcatgggg gntatgcctg gaatcccncc tttgggaggc tnagcggtgg acactttagg 780
gc 782

<210> 1783
<211> 739
<212> DNA
<213> Homo sapiens

<400> 1783
gtttccccgg caacccgcgg ccgccgccat ggacgcgctg ttgggcacag ggcctcgccg 60
ggctcgcggc tgcctgggcg cggctggacc cacgtcttca ggtcgcgcgg cgcggacccc 120
ggcggcgccc tgggcgcgct tctccgcctg gctggagtgt gtgtgcgtgg tcaccttcga 180
cctggagctg ggccaggcgc tggaggtgag cgggcgcgag cgcgggcgcg ggcgggtggg 240
cagggctgcg cctctcgggg ccagtcccgc ctcgcttggg gccctcggcc gccccgcact 300
ctccctggcc ttcggccgcc gcctcctgga ggggcctctt ctccgggctc cagaagcgct 360
ccccaggccg aggagggaag gcgagctgct cggagtcgga tcttgtcttc acattgggat 420
ggagcatttt gcataaccta agtggtactc tttcgatttt tcccagtaaa tgtctcacat 480
ctcccccctc cattccccac cggagcagtg acaccttcat cccctcagtg gctcccgcca 540
gagtcccggg cttaccctcc gctccgcatc ccatctctgg gcataggcga ggctgacggt 600
ccttctgcaa caaaggtctc ggatccgttc ctttgctgca tcactgatgt catccccacc 660
ccagcttgca ccccaaaagt tcaacctttg ggggctcttc tgcttnaaaa cccttgcagn 720

0205205.0205205

ggcttccttg gttnaacct 739

<210> 1784
<211> 669
<212> DNA
<213> Homo sapiens

<400> 1784
ggtttgggag gcccaggcgg cggagcctcc gggacggcga gcggcgggcg gcggaggagg 60
agacggcagg cattaaaaaa tatttaatca ttcatgtgtt gagactcatt cttgagttat 120
ggatgacaag gcttctgttg gaaaaatcag tgtctcttca gactcagtat ctactcttaa 180
tagtgaagat tttgtcttgg tttccaggca aggagatgag acaccatcta caaataatgg 240
aagtgatgat gagaaaacag gactcaagat tgtagggaat ggaagtgaac agcagctgca 300
aaaagagcta gcagatgtac tgatggatcc tccaatggac gaccagccag gggaaaagga 360
gcttgtgaaa aggtcacaac tggatggtga aggagatggg cctctttcta atcagctctc 420
cgcttcatcc accattaacc ctgtgccatt agtagggctc caaaaaccag agatgagcct 480
accagtgaaa cctggacaag gagattctga agcttcaagt cctttcacac cagtggccga 540
tgaggacagc gtantttca gtaaactgac ttacttaagc tgtgcctcgg taaatgctcc 600
caggaattga antggaaacc cttaaggatg atgtccatct taagnaagcc agtggtcana 660
tttcactta 669

<210> 1785
<211> 785
<212> DNA
<213> Homo sapiens

<400> 1785
gcagcggcgg cagcagctgg gctcggtgta aacaagtcca ggcgcctgcg aacccgggcc 60
cgggggggac ggcgcccgcc aggagcgccc cccactccca ggccagccca ccccggcgga 120
ccgggccccg cgcgcccagg cgaggtgagg cccgcgccgt cagggctcca cagcagaccg 180
ggctcctctt gtgaccggcg tctctccttt gcctcctaga gaatctcgat gctggcctgg 240
agcagaaact gagctggacc actggagcct cggtgagggg tctgtacccc acctgggaaa 300
ggcagtgggt ggctggggct atgtggacag ggaggccgga ggtatctaga actgccatgt 360
ggtgtctgca aggctctgtc cagccaggtt tcaaccgtac ctgtcactct gccacccccg 420
cgccccaggt gagccccgga gtccaggtaa ggctccgcga tgcaggtaag agcccctgag 480
cgtagaggag gccttggcgc ccgcaggtga gagcccctcc cctcctaggt gaccctcaac 540
cttcacggcg aggcctccta cctcctccag gtgggggacc ctctccccga tgaaccccct 600
aaaccaccag tgaaccccac tgctcttcag atgaggtcgc aaggaccaac cagtgctacc 660
cgccatgctc cccgaaactg ggaactgaca agccagccct tcaaagccct tctcagttca 720
gttgcaggtc acaaggtgag gcggaacagg cggtgattac ctggactcna gctanttncc 780
atgat 785

<210> 1786
<211> 639
<212> DNA
<213> Homo sapiens

<400> 1786

0050050.00000

aaaattgtta ttattttaag atgttgctat gtcattgaaa gtgagttttg ttattagcta 60
aatcataaga tgcttctaat atttctttgt tcttactata aatcctctat tagtaatgca 120
taaaagcatg caactccaaa tgtatactaa aacaaagctt tgttcatgtt cactccctca 180
gggcagaatt tgggttttcc tgctttgggg tcccgtaggg ctttgtccat acctctgtct 240
gcctgttgta tttaagagcc agtttatata ggtctgttct ctcgcctagt ctgtgagctg 300
tttcagggca gagaccatct tacacacttc tgaatgtcag ccacttagcc tagtaccaga 360
tatgggatgg aatcagagtc atttttggtg gaactcattt taatctatca gcttcagcaa 420
ttcactgtcc aacagtgctg tttgtagacc ccccaaaaag tggggaaaaa aaaaacacac 480
agaagaaaag acagatgtgg ggacaagctg cagcaacctg cagggatatt ttaggagggc 540
cctgtcccct taggtgcaca ttaaacagtt aaagggaagt tcatctataa gcccagagac 600
ccttngtaac cataaatccc ctttnctgca naaaacccc 639

<210> 1787
<211> 468
<212> DNA
<213> Homo sapiens

<400> 1787
aatgtattta tcttcattga acagtcgtct tcagaactgt tctttttttc ttgagacagg 60
gactcatgct gtcacccagg ctggagtgca gtggcgcaat ctcggctccc tgcagccttc 120
acctcctggg ctcaagcaat ccaacccctt ctgcctccca agtagctggg actgcaggcg 180
cgagccacca tgtccagcta atttttgtat ttttttgtag acatggggtt tcaccatgtt 240
gcccaggctg gtcttgaact cctgagctca agtgacctgc ctgcctnaac cacccaaaat 300
gctggaatta cagtcatgag ctactgcacc ccatccagcg gaattgtcag ntctgaggtg 360
acaaatgttc cccaaaatca ctatgctatg caaagacatg cattaaaaac cacagggagt 420
ctaggcacag taactcatgc ctgnaatccc anngctttga caggctga 468

<210> 1788
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1788
ggtgcaatta ttgtcattgt tgttatttat catcatcagt atcattacaa aggctcagct 60
ggaaggcctg aagtgcccat tatacacata gggaaactga ggcccagaga ggggtcaagg 120
cttgcacaga gttgcccctg ggggaaggag gcaggactcg gactctggcc tcagtttccc 180
cacctgagaa acaggccaca taactctagt gacctcctgg gggaagggca gtcaggccct 240
tgggtggggc ttaggcttga ccactggcca cctgaggtac cttggaactc tggccctgag 300
tgcctcgcta ttctctgcct tctgtgtgtc actgtgcccc atgagtgcct ccaatgtcct 360
tctgtattcc caccctctac cacactgttc ccaatctgtg tttttagggt gctcgcttgt 420
cccccaccct ctgccctctg tcctatctcc tgactgatac ctgtattacc tctcaccggg 480
ccctcaatgc cccagcctca tgacctactc ttcctggact gtctgtgctc ccagccagcc 540
ttgtcccatc accccagcct tgtatgtgca ccttcagggc ccctgtccct ctgacacccc 600
catcctgccc cccacaggaa cctgcttgta cgtgtacccc gcacagcctc aacttcagca 660
agccgccang gcttcgtgcg caaccttgct gtgccagtgc agtacatgac aggcgangac 720
cccanccagg ctcttgccgg ca 742

<210> 1789

0056245.0002

0508150.00800

<211> 770
<212> DNA
<213> Homo sapiens

<400> 1789
tatatcttag tcctatgact tcctttgcct ctccacatat acacagaggg aaattattta 60
atatttaatc caaactgctc aattttcttt ttctttttct ttctttttt ttttttttga 120
gacagagtct cgctctgtcg cccaggctgg agtgcaatgg tgcgatctcc gctcaccaca 180
gcctccctag tagctgggac tacaggcgca tgccccaaca cccagctaag ttttgtaatt 240
ttagtagaga cgggtttcac tatgttggcc aggatggtca tggtctgctg acctcgtgat 300
ccacccgcct cgacctccca aagttcaatt ttcttaaaag tgaccaccaa caccatcaac 360
atatgtttat agactagatg tatcacttgt ttacccaaat tgtagcataa atatctgttt 420
ttagaaagct tttccataag tctttctata tgattggatt attaagcaag gctatgatta 480
ggaaataaac cactttcccc tttagctagt tctaatgaaa gctttccaaa ttaaacactg 540
tgtttgaaca cttcttccat tcatagcatg tgctcatcaa aaagtgcttt ccgtttctgg 600
natgtcaact gtactattta taacctagtt aacaaagccc acatggngaa accttatctc 660
tactaaaagt gcaaaaatta gccaggcatc atggcacatg cctgtaatcc cagctaccca 720
ggangctgag gcaagagaat tgcttgaacc tgggaaggtg gangntgcgg 770

<210> 1790
<211> 819
<212> DNA
<213> Homo sapiens

<400> 1790
tggtaatgac tggattctgg cactttatgg ttatagaaac cacttttata tattttgatt 60
tcctccccta atgcttaatt atctccatgt ggacattatg atagagtgtc attgaaggta 120
ttaaaaatgt aattaattgc ttaacagtta tatcttgtga aaacaatgtg gaaatctttt 180
tacattttta atttttggtt caaacaaacc taactaatca aagagcagcc acaaaaatcc 240
tcaaaatgca aattagacac aataatgtac agctaccaat tacagatttt agtgtttttg 300
tattccacag caacaaactg ccaagtctta aaaaaaaaga agtcaactaa agcattctgt 360
tgttccctga gctctactgt atattctact ggaagatttt aagctctgtc atggacatat 420
gactagaatc acaaattttt taaaaagtgt tcagacaagg caaatatcta actatgagct 480
atagaagtta aatatattga gtatgtcagt gtttgcattt tatttttgga tggtatagaa 540
ttttattagt tttctataat aatcattgct tatactggct tacagtgatt tactgtatta 600
acataagctt tttatacaga tctgagattg tatctaataa gatgactaga gtcatgacca 660
tttagttaat ctaaaaaatg aatagatttt taaaaaatta atttcagtgg tcttttatgg 720
tatagagtgg atggagtcta acaaaatttt aaaatcttgg caccaaaaaa ngattcccga 780
aaaagatttt ggcataatgg ntntaataat taatcctct 819

<210> 1791
<211> 785
<212> DNA
<213> Homo sapiens

<400> 1791
gaactttata gtttttcaa aatggcagat acttgcctta tcagagcaga aggttagctt 60
ggtgattgta caagtgttgt caatttctag tttatactta atattccttt ttctcacctg 120

ctacttacat caccaaacac tcacacagtc tgattataaa atattgagac tgacagtcat 180
atagaaccag tttcataacc tcattaccat gtacacccag ctcagtacct ctccagactg 240
caaacccttt gagggttccg gcctggcttt tctttatatt tggggaaatg ttagagaaaa 300
cagcatctaa aactggaaac cttgacttaa attagccatt tcttctcatc ctaaattgag 360
agacatgagt tctaaatggc agagaccatt tataggagaa tgccaaagag agcagaagag 420
aatgggaagc ctttcccaca gcagaaactt tccacagcag agacaataga ctgatcccta 480
tcacatcccc taaatatttc ttctgacacc tggatgggtt ttgacaatca tagaagcaaa 540
ctggacagag tgccatttac ttctgtgcca tttcatactg gggctttgca cagaatagga 600
aatgcattgt ctaggttcct ctagacctct aggttccctt ctattctcag aagaaactta 660
agttatgctt gagtataact tgagtagggg ccaggtaggg gcagcattgt gggattcagc 720
cnccaatggt gtgattcaat ctggccctnt ggggnctttg ggttcatttt aacgggcatt 780
tattg 785

<210> 1792
<211> 746
<212> DNA
<213> Homo sapiens

<400> 1792
gaaagaaaaa gaaaaaagaa agagagattc caaccagcct ttcttccctg gttccctgac 60
agctcagagt taaccattgt gcccctaagc ctaacagcag ctggagctga tagcctttca 120
cagggcctgc cagcagcctt ggagaaacca cgagcccatt taacaggcag gacgctgagg 180
ctctgataac aagtgcggtt tcggacaaga gcgggagagg agatggagaa acagaccctc 240
gtgcgtggct ggtggggatg gaacaaggcc cagcctggca gcttctcaca tggtaaacac 300
ggaattacca tagggcccag caatcccact cctggggata gaccccacag aactgacagc 360
agggactgaa agaggtgttt gcacacacaa gtgcacagcg gcatgattcc caacagcccc 420
agggtggaag ccaccccagg cgcccatcag tggataaaca cagcatggtc caaccagaca 480
gtggaatatt acgcagccat gaaaaggaag ggaatccaga cacgggctac agcgtggatg 540
aaccttgagg acctcacgct cagtgagagg atccagacac aaaaggacgt atcctgtgtg 600
atcccactcc tgggaagtcc ctagagtcgt cagattcaca gagacaggaa ataggatgag 660
tgagtgccaa gggctgggga gggggacagg gantgagtgt ttcatgggga caganttttca 720
gtttgggaan aaggaaaagt tctgga 746

<210> 1793
<211> 728
<212> DNA
<213> Homo sapiens

<400> 1793
ctgttagtaa agtgcttaga acagtgctga acttgtagtc aatcctgtgt aagtttttgt 60
tagataaaat agaaaactgg ctgggcacgg tgactcatgc ctgtaaaccc agcactttgg 120
gaggccgagg cgggcagatc acgcggtcag gagttcaaga ccggcctggc caacatactg 180
aaaccccgtc tctaccaaaa atacaaaaaa attagccggg tgtggtggca gatgcctata 240
atcccagcta cttgggaggc tggggtagga gaattgctag aacccaggag gtggaggttg 300
cagtgagcca agatcatgcc attgcactcc agcccaggcg acagtacgag actccgtctc 360
aaaaaaaaaa aaaaaaaaaa gaaaaccata cattccaaaa atagcgattg agcattagct 420
ctgtgctagg ggctgggaac accaaggaga agcacccacc cctgtctaga tggtgttgat 480
gggatgccag ggaagacttg gcggaggggg tgatgcccac acggtatcct gaaggaggaa 540

0956030 - 0956030

tgggcctgag ccaggcaaag aggagcaggg agggtgtggc tagcacttca tgcacaggtc 600
tagcaagtgc aaaggcctgg gggtcagaga gagcaggatg catttgaaga gctgtctaca 660
tggntggagc acagcacagg aagagttcat actncacctg tttgctggcc atgtgtccat 720
ccttncat 728

<210> 1794
<211> 721
<212> DNA
<213> Homo sapiens

<400> 1794
cacagccaga aacagaagtc caaaaggaaa gaaaagccac tggagagcag attgaggaaa 60
acaggtggcc acggggccag gggcacgctt cttccagttc tccatgttgg taatttttct 120
ttccttcctt aaatatcact gtcaccaagc tgggcacctc aaactcctaa ctgcttcaca 180
ctcccaggta ccccaaagtc aaggcccatg ctagaagacc atatgtggac ccggtgaccc 240
ggagctcgcc aggcccatgc caaccacata gatcatgctg gaccatacca tgtccaggac 300
catgggatgg ctggttggag aatgggccct ggaacccaca cacaagcaca gcttggctgg 360
tttcttactg agactgtgga ggctgctggc cccctcacct ccagggagaa gactcaggaa 420
aggatgtaga cactgtagga gttgtaggtg actgggcatg gctgtgtctt tagcatcttt 480
ctggggcaat tggtaaaaga aatgtatatt gctcattgat gcagagacct cctctgtgtt 540
ggatgctggg cgcacaaaca cggataagcc tcagcccctg ccctcaaggt gttcacagtc 600
acaaggggga agacatgagc aatcagacca tcaatacagg gtgatctgtt caacaactga 660
ggggtttatg gcagctctgg ggaagcctgg ccttcangag atgctncttc ctgangcttg 720
g 721

<210> 1795
<211> 853
<212> DNA
<213> Homo sapiens

<400> 1795
attcagtggg aacactagct ctcctttaaa tcctttctaa atagatgtgg aatttccagg 60
tggttttgat gtggaccttg aaaattcatt cccttagtga caattttatt tgattcatgt 120
atttggaata agcatgaact ttggagccag acatctggat taagatatta gctatactgc 180
taatacactg acttaccttg gacaggtttc ttaccgtgtc tttaaagcag ggataataat 240
acacacctta ttgggttagt gtgcagatat aaggagatga tccatgtaaa gtcccaagta 300
taatgccagg aagttagtag gtgattatta aaagttagtc attatttttg tgtctctctt 360
attggtgctg atatcagaag tattataaaa ggatattact atagttgatg ttactgaaat 420
cttctacaat gagggtgcca acatgtgttc ctgagtccac ttatcgtcat caccattgct 480
gccaaagcaa ttgttatggc tttgttagcc tccccattta atttagcaaa tactgaactc 540
cttaaaccaa gctttagttc tttcttccct taagatgaat ttgttaatct taaccctaag 600
atcatatgga attaaaaaag agcccaaata gccaaagcag tcctgagtga aaagaataaa 660
actggaggca ttacactacc tgacttcaaa atatattgca aggctatagt aaccaaaaca 720
gcatggtata aaaacagacc cataggccaa cggaacagaa cagagaacct atnaataaat 780
ccatatattt gcagccagct gattttcanc aaaagggccc agaacatacc ctggggaaan 840
ggacccctt ttt 853

<210> 1796

0056450.0002800

<210> 681
<211> DNA
<212> Homo sapiens

<400> 1796
aaaaagccag aaccaggcct gtcccggacc cgcgtcccgg ggaggctgca gcgcagagca 60
gcggggctgg ggccggtggg gggccgtttg ggacgcgcgg agaggtcctg agcgcggtgg 120
ctctgcgtct cctagctctg atctccaggc tacccctgtg attccgcgca gaggtacctc 180
tcggaggacg ccggggtccc atgggcggcg ccgcgcaggg cgctaggacc ccgcggggag 240
cggaggcggc ctcggcccgg gagcctggag gacctggccg gtcgatccgc ccgggctgga 300
aaactttctt tataattact tctccaggtc ggagcgcgcg gcttgctagg cgcgcggggc 360
cggcgctgtt acccggcgtg gagtcgccga ttttttttttc ctgcgggacc gcggggcccc 420
ccagactagc ggagctggac gccggggcga gcacggggag gggcgcaccg agggaggaga 480
caaacttaac tctggggccg ggattccgag gcgggggccg cagccctcga ggcccgaagc 540
caccgcttcc tcccccgctt cccattcagg tgggcgccaa cggcgggagc gagggtgtcc 600
aggccgncgg gctgcaggtc cgagcacgca cagggagaac tctgccagtg gttcgncggg 660
cgctgtantc cccgggatct a 681

<210> 1797
<211> 717
<212> DNA
<213> Homo sapiens

<400> 1797
tgctgcagcc acaacaagtg ccaccaccag gggccttcca gctgccagtg caggctttcc 60
agagccgggg actggggaac ctgcagtcat cacctnagca attctggtgg cagccaggcc 120
agccagggca gcgatgatga ccgtaatgaa aagtgggatg acagctccac actggtggat 180
gagttgagaa caccaggcag aggcatgtac ctggtctttg atggttcagt ggacctgcac 240
taccattgca gtgcaaagtg caagagttga agcttggaaa ccttcaccta gatttaggaa 300
gattcaggga aaagtctgga tgtccacgca gaagcctgct gcacgagtgg aaccctcatg 360
gagaatctct accagggcag tgtggagggg aaatgtgggg ttggagcccc cacacagagt 420
cccactggag cacttcctag tggagctatg agaagagaac cactgtcctc ctgacatcat 480
aatggtagat ccactggcag cttgcactct cagcctgaaa aagctacaag tactcaaggc 540
cagcccttga gagcatctac agatgctaaa ccctggaaag ccacaagtgt ggtgctgcca 600
aggctttggg agcccacccc ttgtaccagc acgcccttga tgtgggatag gaggtcaaan 660
gaagttattt tggagcttta agattaatga ctgctctgct tggnttttgg acttgng 717

<210> 1798
<211> 636
<212> DNA
<213> Homo sapiens

<400> 1798
aaaaagcgtc caggtttggt gacgcacaac tgtagtctga gctacttggg aggcctgagg 60
caggaggatc acttcagcct aggagttaaa ggccagcctg ggcaacatag caagacccct 120
atttccacac aaaacaaata cataaattct agaagatgat ctcgaatagt ttttaaagtt 180
aaaatagcca cttaaatagg attgttgagg ctatccgtat ggccacaatt atgactgagg 240
ctgttctaag agggcagtga acatgaagtt tttatttctc aagaggctag ttgtgtgtgt 300

0050150-0050800

gcatttttt ggtaaagaat cctgcctgtg aacatttttt aatgaaaggt ataggtagaa 360
ctagaatgag ttgtccaaat cctagaatat gtggctacaa aggcatccct tgaattatgt 420
cttttcattt gaaacataag agggcagctt tgatgtgtgt gcaaggcggt gcttcctgac 480
aacgtcggga gtgtgcttgt ggagcttact acctcgagag gtgatgcagg cacaaaataa 540
aaggcccgag aagggcttga gatgtccata tgtgacagct ctcctctcca tggctgctgc 600
angcggctct gggtgtttgg ntaccaccgt naccct 636

<210> 1799
<211> 723
<212> DNA
<213> Homo sapiens

<400> 1799
ctctgacagg atccggggct gagggaagga ggcggcggcc atggagttgg gcgagctgct 60
ctacaacaag tctgagtaca tcgagacggc atctgggaac aaagtcagtc gccagtcagt 120
gttgtgtgga agccagaaca tcgttctcaa tggcaagacc attgtgatga atgactgtat 180
tatccgaggg gatctggcaa atgtaagagt tggacgtcat tgtgttgtga aaagtcgtag 240
tgtcataagg ccaccattca agaagttcag caaaggtgtt gcattctttc ctttacatat 300
tggagaccat gtctttattg aggaagattg tgtggtcaac gcagcacaga ttggttccta 360
tgttcatgtt gggaagaact gtgtgattgg gcgccgatgt gtgttgaaag actgctgcaa 420
aattcttgac aacacagtat tacctccgga aactgtggtt ccaccattca ctgtcttctc 480
aggctgccca ggactcttct caggggagct cccggagtgc actcaggagc tgatgattga 540
cgtcaccaag agctactacc agaagttttt gcccctgacg caagtctagc atctctgcct 600
catgtcttga atctgcttga gctctaanat gaacctgggg acaaagtgag ccantcagca 660
cctacaaaga gcttttgggg ctttgacatn taccaccctt cttcctttta aaaaatttct 720
tta 723

<210> 1800
<211> 805
<212> DNA
<213> Homo sapiens

<400> 1800
gaaagttttc actgcatctc ttgtgggata cgtataatgt ttggcagatg atacttttaa 60
atgacaataa caatagttat ttttcagaga gaggaatcaa gatagccctg caaattcagt 120
gtagttgtta attctctgta ttcttattaa caagattcct ttattcattt atttatcaaa 180
tagttatcga gggccttata taccagacat cagtttaggt gtttaggata cattagagtt 240
aaaaaaagac aaaaatccct gccctcgtca acttaaattt tagtgaggga aacaatacat 300
aataaacata ataaatagta aatgacatgg tatgtaggaa agtgataagt gttatgggaa 360
aatcagaggg aaaggggggtt agtgagtgct gagggaatgt gggttgccat tgaaatggag 420
tggttagtat atgcttcatt aagaaggtgt catatgaata aagactttga aagagatgta 480
tgagttacca actgctacat aaaaaactac cccaaaactc agtggcttaa aacaattaaa 540
catttgttca ctcatgaatc agtagatctg ttagttctta gtctgagcca ggcttggttt 600
ttctctatag ggcttgctca cacagttatg gttagctaca ggttagctgg tggctggctt 660
tgctaatctt ggctgggttc tttcttacct atgaagtccc atctgggaca acttgactca 720
gnctcatatg atcnttaatt atccttcagt aaactagcct ggacctggtc tcttggcaca 780
ataggactnc tgaggtttgg gctca 805

US 2003/0224400 A1

<210> 1801
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1801
gaaaaacaat gtttttagag acagggtgtt gctacgttgc ccaggctgga ctcaaactcc 60
tgggctcaag cgatcctcct gcctcagcct cctcagtagc tgggaatgat aggcgcgtgc 120
catcatgcct gtatgaagtg gaaatgaaag gctggtataa gctgtaaagt ctttttgttc 180
ttagagattt ttttctcatt ctaaacatta tcagacctga aaagtatttg tcgtaatgac 240
tgagacggtc ctggggtaac agcgtcttct taacggccac tttaattggc gtagtttaca 300
cctagcctct ccgagaactg gaggacactg gtaatcacta ttagatattg agtgctgact 360
gtatggcaga cacataagca ttggtgatct cctgtgaggc aggtattgtt attcccaatt 420
tatagatgaa gaaacagaag tcagtgaggt ggagtccgtt tttgaggtca cgcggctagt 480
aattggagcc tggtttagaa ccaagtcagt ctcattccag aatccagaac cagtgatttg 540
taactgatgc acttgtctcc aaagggatcc agcactgggt tttctcattt ttaatgcatc 600
cattccttaa agcctctgtt cacagtcaca aggtgtactt tttaaaggaa cacagcacac 660
aaatgtgacc gctagtggac agcantggca gcccanttgg atggcagagc ctggcatgcc 720
gactgggaca gaaccccagc acacggtgtg atgatggcgt nttcaggctt gaccttcatg 780
g 781

<210> 1802
<211> 420
<212> DNA
<213> Homo sapiens

<400> 1802
atggctcggt gcagccttga actcctgggg ctcggggaat ccttccacct cagcctcccg 60
agtagctggg actgcaggcg tgcactacca tgcctggcta atgacattgc ttttatgaag 120
caaaacatag gatgttgtcg ggcatggtgg ctcacgcatg tgatcccagt gctttgggag 180
cctggggcgg gcagatcacc taaggtcagg agttcaagac cagcctgagc aacatggtga 240
aaccccgtct ctactaaaaa tacacaagtt agccgggcgt cgtggtgtgc acctgtagtc 300
ccaactactc gggaggctga gacagaaaaa tcgcttgaac ccaggaggcg gaggttgcat 360
taagccaaga ttgtaccgct acactccagt ctgggtgaca gagctanact ccntntcaaa 420

<210> 1803
<211> 697
<212> DNA
<213> Homo sapiens

<400> 1803
aattgttagt caagatggat gtagaaattt tccatatggg atgtttctct ttgaattcat 60
gttgttaaaa tgatttcttt tggtggagtg ctgatctttt ttatgattgt ttcatataga 120
taagaacaga ctacaaaaaa atatgccttt caatcctgaa gagtaacctg aactatacac 180
tagttttgtg ctttaatttt catttgtaat ctgccttcaa taaagagtta agctagtgga 240
atttatgtct tagcttgtta taacacaaac acgaatattt gtctgcttgg cattaaaggg 300
taaagatatt ccatagctgg gaatcttaat ctgaggtacg tgtaaacatt cagggactat 360
atgatctctg agaatttgta tgttgtaagt ctttgtggca gtgtatacat ttgtgttgca 420

0982760.0 09/29/2009

acttattaac acatacaccg ggctttttt ttttttttag aagattcgta gctttcatca 480
tattctcaaa aggtttctgt gacccatgag atggtttaca gtatggggaa gcatcaaagc 540
acttgcatag ttgatggnta tatgtgtgng ttattatttc agccacccat tatcatgtgc 600
ttaccaactg cctaacagtg catacatatg tagaagtttt attcttttct cctggtgcca 660
tattataccg tntcatttca cancanaaaa ccactgc 697

<210> 1804
<211> 750
<212> DNA
<213> Homo sapiens

<400> 1804
tttttctatg cgatgttaag ttttggagga actagaaatg tttgaccaga ggcacccaca 60
atcaggtttc cagtatctca aagcttgtct tgtggataag gagaaaactc aacgggcaca 120
actaggacca ataattggga gtgtgagggt gacaggtttc agttcagtat ctgaaaatta 180
ggctactaga gctgcccaac tgtggaacag gctacctgaa taggtactga gcacctcatc 240
ccgggaggca ttcaagtaga ctctggctga ctgccttgat gacagtgttg gatgagaagc 300
tgtattagtc tgttctcgca ctactgtaaa gaaatacctg agattgggta atttataaag 360
aaaagaggtt taattggctc atggttctgc aggctgtata ggaagcatgg ctggggaggc 420
cacaggaatc ttacaatcat ggtagaaggc gaaggggaag caagtacctc ttacatggct 480
ggtgcaagag gaaaagagag agggggaagg tgctacacgc ctttaaacaa ccagatctcg 540
tgagaactct attgagagaa cagcaccaaa ggaatggtgc taaactattc aaaagaaatc 600
acccctgtgg tgcaatcacc ttccaccagg ccccaccttc aacattaggg atcacaattt 660
gacatgagat ttgggtgggg accccaaatc caaaccatat canaagctgc ttttactgaa 720
anggctttcc agtcanaaaa ctggattggc 750

<210> 1805
<211> 782
<212> DNA
<213> Homo sapiens

<400> 1805
aatacaaact cactggtttg tgaaagataa ttagatttta attataaagt agtaatacaa 60
actcactggt ttatgaaaga taattagatc caaattacat ttctgacaaa attgggcccc 120
tatatgtaat taaggctgtg gaacaaaatt tggggtaaag tagcctgtag aatgcagatc 180
acgtaaaata ttaaatttga cacacagaaa accaaaagta aattccctag aaaagacatg 240
tctaacgaac agaatgtaaa ttccgtagaa actcgggtcc tcaaaccaca aagacatttg 300
tctttaaacc aggaaagact tgccagaaaa gacaaaaggt cttctgtcat cccaggagag 360
atgtaaggtc ctttatttac cagatccaga ataaagtcaa gaggttctac cttgatttta 420
gagggagaga gagtcttggc ctgacaaaag gtgtgccgtg gaagcagaga gctccagggg 480
ctcatatgag tactgcacac cagttctaag catcacaaac tgtgtccaaa agtaatccta 540
ttcaaggtcc tacctctgga cactcttcat gtcaacctaa ataacaaaca gagaggggct 600
ctctaaaaga aaataatgtt tatttgggaa tagggtattg gaacaggagt ncacaggtca 660
tagtaaattg gttgcatatt caggaaggta aaaggaagac aatgggtggt taaagaaaaa 720
atggaggggg gattncctta attgggtttt gnaaataant attccttggc ctattaaggg 780
at 782

<210> 1806

0603450.0760800

<211> 752
<212> DNA
<213> Homo sapiens

<400> 1806
ggggggggctt actaagggct gcctggaata ggatgcataa aatgaactac taggataaaa 60
gaactaaccc cgtgtccagt aagcccccat gaaggcttcc ttccatcttc tgcacctctg 120
cagctggaaa atgctttttt agaatggcct tcctaaaaaa cgagcgagtg gatgctgccc 180
tccagtggcc aagtgtgccc ttaaagcatg tcagaagagg accaggaagc aaaatcaaac 240
ccttcccccc tgcttcttcc cagtgcttca cagactgctc ctaatgggaa tactgctggg 300
gtattcctgg ggtgctgaag gggcttggat ctgtgccaca aagggacagc agaagcaaca 360
aggtgcattt agcaggagaa aaacaatagc taacatttgc tgagcgctta ctttgcattg 420
gcctaaatct caaatgattg acatgccttt aatcatcaca cataccgttg ttatctcaac 480
ttaaaaaaac aaggccaagc tatgtggcta atgcctgtaa tcctagcact ttgggaggct 540
gaggtgggca gattgcttga ggccaggagt tcaagaccag cctagggaac atagtgagac 600
cctgtctcta caaaaaacca caaaaattgg ccaggcatgg tgggcacgtg tctgtagtcc 660
cagctgctac ttgggaggct gagaagggag atcccttgaa ccccagaagg tagctgnant 720
aagctatgat cactctgcac ccangctgaa at 752

<210> 1807
<211> 760
<212> DNA
<213> Homo sapiens

<400> 1807
gttaaaaatg cagatttctg gacttccaca gtctaccaaa ccaaaataga tggcaatgag 60
gcctggcaat cagcacttta aaaattaaac aggagtttct ggtagtgata tgaaattggg 120
gaggtgatgg caggaaaggg aaagagggga aagatggatt tttctgataa tatttggtaa 180
aaagttggta tcatctccta aaaatatata actgaaagga agcaaggagg atggagttaa 240
acaggctatt tgtgaataaa aacaataata aaataaactt tagaaaatct acatgtggaa 300
cttactagag gagcttagat ccaaggttct atgtttttga aaaatcactt ttccttttg 360
tgtttggcgt cactgagtat gataggatgg actaaatctt tctatctaag agtgttctct 420
tggaataaaa ctgggggttg agaaggtgtg ggaactcttt agggccccat caggtgtgct 480
agaatagtaa cttgttaaac agaaacccac gaggtaaata caatgttcca aagcaaacac 540
ttgctcccag gaaatagctt atgcactatg agaatctttc gagaatcata gaatgttgga 600
gctgcaaggg acctcaagag atcatcaaat ccaacctctt ccttttaagg aggatggaat 660
tgaacttccc gtcaggcaag tgacctgctc aaggtgtgac cagcaaggtc cccaattaga 720
actggggact tagaacccca cgggnttcct ggtggcnaan 760

<210> 1808
<211> 730
<212> DNA
<213> Homo sapiens

<400> 1808
ggcagccgca gaagcggcag cggcggcggc gcggcgcagg caccggcccg gggagaggca 60
ccatgagcgg atcacagaac aatgacaaaa gacaatttct gctggagcga ctgctggatg 120
cagtgaaaca gtgccagatc cgctttggag ggagaaagga gattgcctcg gattccgaca 180

0052060 - 0052060

gcagggtcac ctgtctgtgt gcccagtttg aagccgtcct gcagcatggc ttgaagagga 240
gtcgaggatt ggcactcaca gcggcagcga tcaagcaggc agcgggcttt gccagcaaaa 300
ccgaaacaga gcccgtgttc tggtactacg tgaaggaggt cctcaacaag cacgagctgc 360
agcgcttcta ctccctgcgc cacatcgcct cagacgtggg ccggggtcgc gcctggctgc 420
gctgtgccct caacgaacac tccctggagc gctacctgca catgctcctg gccgaccgct 480
gcaggctgag cacttttat gaagactggt cttttgtgat ggatgaagaa aggtccagta 540
tgcttcctac catggcagca ggtctgaact ccatactctt tgcgattaac atcgacaaca 600
aggatttgga cgggcagagt aagtttgctc ccaccgtttc agacctctta aaggagtcaa 660
cgcanaacgt gactncttgc tgaaggagtc cacgcaagga gtgancacct gttcaaggag 720
atcacagcct 730

<210> 1809
<211> 783
<212> DNA
<213> Homo sapiens

<400> 1809
aaaaaaaaat ggaaaaagag aaaaaagtaa aaagtaggta agaaaaaatg aagaaattag 60
gaagtatgtg tttgtataca gcctgccact accgattata tttaatattc aaatgtgtac 120
cttttaaaaa tcaaagttca aacttacagg gtacttagag atttaaaagg gaacaagtca 180
tcagttccta tctcaaaact ggcccattta cccttctttc ctctttctca tttctgatcc 240
tggaaacaaa attatttttct catacaacat cgagagcatt gcagacaatg tattatagtg 300
agcaagtatg tgcggtagag gcagattctg agtttaaatc ctgattctgc tagtagttgt 360
tgactttgga caaattatta accactaagg tttccgtcat tcatctgtaa aatgaggata 420
ataacacttt tcctgtagga gtatttttta aaacaacatg taaaaagtat gtattgtagt 480
gccagcgcat aaaagtaatt tgttaaaatc gtttcctcct tttgtctgcc ctttcttttc 540
caatcctact gctataacat gaattcgggg atttatcgtc ttgtatctac tagacaccat 600
ggcagccttc ataccaattg ctaacttccc ttctccattc cattccaagc acttctattc 660
aatatgtttc ctttaatcca gattttcatc agttttgaag cacatcataa tcctttaaaa 720
attcctcang ccaggcacaa tggcagattt ctataatccc agcactttgg gaagncnaag 780
gta 783

<210> 1810
<211> 894
<212> DNA
<213> Homo sapiens

<400> 1810
agcctcgggg cttgacggga ttgtggcggt cctctctccc aattcggaag ctacagctac 60
ctccggacgc tctcaagatg gcgacctctc tgggttccaa cacctacaac aggcagaact 120
gggaggatgc ggacttcccc attctgtgcc agacatgtct tggagaaaac ccatatatcc 180
gaatgaccaa agaaaagtat gggaaggaat gcaaaatctg tgccaggcca ttcacagtgt 240
ttcgctggtg ccctggagtc cgcatgcgtt tcaagaagac tgaagtgtgc caaacctgca 300
gtaaattgaa gaatgtctgt cagacctgcc tcttagacct agagtatggc ctgcccatcc 360
aggttcgtga cgcaggattg tcttttaaag atgacatgcc aaagtcagat gtcaacaaag 420
agtactatac acagaatatg gagagagaga tttctaactc tgatggaaca cggccagttg 480
gcatgctggg gaaagccaca tctaccagtg acatgctgct caaactggcc cggaccacac 540
cctactacaa aaggaatcga ccccacattt gctccttctg ggtgaaagga gagtgtaaga 600

0960204.0076600

gaggagagga atgtccatac agacatgaga agcctacaga tccagatgac ccccttgctg 660
atcagaatat taaagaccgt tattacggaa tcaatgatcc tgtanctgac aagcttctaa 720
agcgggcttc aacaatgcct cggctggacc caccagagga taaaactatc accacactat 780
atgttggtgg gctangtgat ccattactga gacagattta agaaatcatt tctaccagtt 840
cggagagatc ccgacgatca ctgttgggca aagacagcat ggcttttatc agtt 894

<210> 1811
<211> 885
<212> DNA
<213> Homo sapiens

<400> 1811
tttaaattaa tgtgtatttc tcttctctct ctctcacata cacacacaca gccatttaat 60
ccaagctttc attcaaacca aggatctttc cacaaaatcc ctgagagtca acttttactg 120
tttactaaaa ctgtcttcac tgtgtggagc ttacttcttt gtgaagcttg gtgtttcatt 180
tggacaggcc aatttatgga aagctgtcct tcatactgaa ctgaaattga tcttttcatc 240
tgtgcctatc attcctggaa tcaaatgaga taccatatcc tgaaattttt tgaaatggca 300
aagcactgaa taaatataaa atatattaat gtcagttcta ctgtatagag tttgaaaatt 360
tgacaagcac actgtcctct ccaagtcatt ggaatagatg aatatgagaa cagaacaaga 420
gagatactct gcacaggttt tggaagtgct cctttcaatt tgatattaat ccattaatca 480
gtattcttta aactactcta tttaagcagt gagaggcagg gaccaggtta agccaagacc 540
tagagaataa aaacaaagcc aaagtagaaa gaaaaccagg acccaccacc accccaggcc 600
tgcagcaaat acatcagtgt tcactcaagg cccaaggacc cttcagtcag cttgtgatga 660
atactgttga gcctgggact ctcccttcan gacagtgctc ccctctagcc caggaaaagt 720
ccagtaatac ccatccatgt gccaangcct cgaatcatgg accccaagag cccacttggg 780
tctctatccc tctgtggnca atatnggacc taagcttcaa ggacaaaagt cgggtttact 840
ctttcccctc ctttcttaag cccnaagggt ctcttcatca taacc 885

<210> 1812
<211> 722
<212> DNA
<213> Homo sapiens

<400> 1812
actatccttg agtgtttcac tacgtattaa atttccacaa tgcatcacta gagcctatat 60
tgtatctgtg gacactcttt aaatgtggac atttaagcaa aagtcgaaag aataaatcta 120
gaaataaaaa tgaatgtgaa atttgatgag aaggattggc tcctgctgca aataaatttc 180
tgttcattat acattacagt cagtggtatt ctattatagc agcatgaaat ggtctaatac 240
atctgatcaa gaatggagaa tctcagtcct atgaggacaa agaggcttcc atgacctact 300
aagttgcctg gtattgttca gtctctcctg caggctcttt gtcttgtagc ctaagtatct 360
cttggtagaa aaaagaagtc tcaggacagg tgggtgagga gatgcactct catgtcttaa 420
gttcagctgg tgctatgctg ggggctactg tttgatctgg agaaacaatg ggcctatctg 480
ggctgccttc tgctactatg tcatggggga aagaagtact ggatatggat ggccttcctc 540
tcaggtggga ggacacaagg catcttgatg ttgngttgnt gctcaaatcc tgggtcccca 600
caccagctct tctattttta ccacctgcag agttctcctt tatttgcttt ttgtaccatt 660
tgcagtgctt aaggntgggc ctagtgagaa ggaaccggna ngaagtgggc tgggccttct 720
tg 722

US 2005/0009000 A1

<210> 1813
<211> 832
<212> DNA
<213> Homo sapiens

<400> 1813
tcgcaatgaa tactgttttt atagtgctgt ttttcaaaat ttctcacctc cctacccttt 60
acttcatttg gggtctgcat tttctttgta tttccccttg cccttacttt cttcttataa 120
tacgtattac atttctgtag catttaaact tttgatgaat actttccccc ggtactattt 180
cttggatact cacagaaacc ctacaaatta agtaatgtcc atcttttcca gatagtgaat 240
ccagtactga aatgttaaat taattgttca atattcctta gctagtaagt gggaagagcc 300
agaattcaaa cctatctcat cgctttatac ttaaattttt tttctatcgg tctttttca 360
gtatttgcga ttttattaag aaggaagttt agaccatggg tggcttaaca tgccctaata 420
ggtgaatttt tttttggctt tccagatggc tttttatttat ttgcattgca aatgcttttt 480
ttttaaaaag agattttctg aggctcttag ttgtttacta cttaatattc tccactgtca 540
tttctcttta atgacttcat taaaaataat tgagcaaagt gttataaagt ttgattctat 600
ctcctaacat atttttccat tattgctaac tactatgtag gacagaaaaa atgcttgaag 660
tttcctcaaa tagattttat tatttaattc tgtctgactt taaaagattt gcttcaaaaa 720
tgctgttaag caaaaagtat gcttgaatta ctaatttaaa cacttnctgc cagaatgcat 780
ttttttgcga attaaacatg gcattncaga agaacatagt ggncttatat ga 832

<210> 1814
<211> 833
<212> DNA
<213> Homo sapiens

<400> 1814
ttacgtagat agttcggatg caaatggtca tttggcttga atgttctcta ctttctttgt 60
atggatcttt tgccaataaa ctggttatct gttaccagta aaacagtcca gattttgact 120
ctgaatctga acgggttcac taaatataat aacaaaagga aatatttgtt tccccttgat 180
ttcctcaact cacgtaattc ttgaaacaaa cccgtaacgt gggtattatt ttattcctat 240
tttacaggtg aggaaactga gctttagaga ggtcaagtct atttttaaat ttacacagct 300
ccattatttc agtaacagaa ctgacatttg aaaagcagtc taacttcaga atctattgtt 360
ttaactattc tagaaattaa cacgctatag agaatgagca gacgttttga gacagaactt 420
ttaaaaaaaa gcatttccat gataatcccc tgctattcaa aatcaatgac aaaaattgct 480
cgtcattttg ttctttcttt tccttcacta gctatcagtt ctcatctggg aaaactacta 540
acaacgtatg gaatagtttc atgtaaagta tctagtatga agttagacat cgatgatcat 600
aaatttcact tttttgggca ttttagataa ggagattatc cgagtttata acacatagtt 660
caatggaaat taggtttgat aagacacaag tcaatgcgat atagtaaaca gtagaccatc 720
aaatggtcaa atttcagaag tgttgatatt ttaatagnta tatcntttag tatctatagg 780
gggaccaagn tttgggttaa tatctcctga taccaaccca aaaataagaa atg 833

<210> 1815
<211> 757
<212> DNA
<213> Homo sapiens

<400> 1815

0050200.0050400

ctcacaactg ccccatgccc ctcaatccac gctcatgcac ctgccctgtc tctgtctcct 60
gcctccagac cttccgtcat aagctggtgg agcctgtctg tgctttctgg aactacagta 120
tcagatgagt ttccatttcc aggttctttt ttttttttt ttgagatgga gtcttgctct 180
gttgcctagg ctggagttca atagcacaat cttggctcaa tacaacctcc atctcccggg 240
ttcaagcaat tctcctgtct cagcctcccg agtagctgag attacaggcg cccgccatca 300
cgcccaacta atttttgtat ttttagtaga gacagggttt tgccatgatg gccaggctgg 360
tctcgaactc ctggcctcag gtgatccacc cacctcagcc tcccaaagtg ctaggattac 420
aggtgtgaac caccaaaccc agccgttaag atgatttttt taaaaatatg tccactctgc 480
ttggggatga ggcaagactt acacatggtt ttgacctctg ttcaccatnt gcctttcagg 540
gtgactccag gctcctccca gctctaagac aagctgcagc ggnaggatgt gttacccagg 600
gggtagtgag ctccttgtca taggagtatg tgaaggagga agcactcact ctgtgaggtg 660
cctaggaaga gaatcatctg tcaaatgggc gttgaacttg atctatctga ggccggggcc 720
cgtggactct tgaaggagca nancaggctt cagggnt 757

<210> 1816
<211> 783
<212> DNA
<213> Homo sapiens

<400> 1816
aaaatactta gcccagggcc catcacacag taaccaatat taagtgttgg ctcttagtta 60
ctatgatatg ctctgtcaag catcaactga cctggtctac ttccagtcaa taggtagtct 120
ctacatggaa gccaaataaa agatactgtt gtccatattt cagcagagtg gtttcctcag 180
gggaggcaga gaaggaatgg aatcaagagc attacgtaga caggttcagt tatatccata 240
atataatttt tatttgtcta agtggcagat acaaaggtat ttgttagagt attttatctc 300
tttctggtgc ctaaaatttt tcattaaaaa atgctgtagg ggtggtttgg tttgtgcagt 360
gaaaccacct atgttattca caaccttgcg agagatgtat caacagctct ggttcagaga 420
tgaaaaagtg aggcccagaa ggctcttccg gccagccttc aaaggaaggg ctgaaggctc 480
agtggtgact gtgtacatca aagtggttag gcactatgca gtgtaagcag tggtcatatt 540
acatgggact atgtttgaaa tcagtaagaa tgaaaggcag aataacgttg aactccattt 600
aaataaatga ctggggcaaa atatggaatc tgatttttt ggaaggggg attgagtatc 660
aaagtgtgta ttccaataaa gtatctggcc aatgtgacac ttttcaagtg cctaagaccc 720
tacnaggcca cggncatcgg ttgcctggtc taccttaact ttggctttgn ccggccctgg 780
ctt 783

<210> 1817
<211> 899
<212> DNA
<213> Homo sapiens

<400> 1817
gaaagaaatg attcatttcc tacttacaga ctttttaaag ccacattcag tattctcact 60
acctctaggt tttgctaaca tctactttgg ttagcactag aaaatttaat tttttttgtc 120
aggaaagcac agtaataaat tgcctactgt tgcctaccac aataatgaaa gtctgaaata 180
agtaggaaat gcattaagtt acccacatgt ccagagtagg caaatctata gagacagaaa 240
gattagtgat tgcttagaaa tggaaatatg aggctgggtg ccgtggctca cacctgtaac 300
cccagcactt tgggaggccg aggcgggtgg atcatgaggt caggagatcg agaccatcct 360
ggccaacatg gggaaacccc gtttctacta aaaatacaaa aaattagccg ggcgtgatgg 420

US 2005/0260650 A1

cagatgcctg tagtcccagc tacttgggag gctgaggcag aagaatggca tgaacccggg 480
aggcggagct tgcagtgagc tgagatcgtg ccactgcact ccagcctggg tgacagagca 540
agactccgtc tcaaaaaaaa aaaaaaagaa atggaaatat gagggtgagg acccagtgaa 600
tgacaggtaa tgagtatgga gtttctttta agggagacaa aaatgttcta acattgattg 660
tggtggatgg ttgcacaatc ctgtgagtat actaaaatcc aatgaattat atactttaaa 720
tgggtgaatt atatggnatg tgaattacat ctcgaagtca ttttttttaa atgatgggga 780
aatcaaagtc tgaaaataag acctgcttaa aagaaatttg acagcgatgt tgatattact 840
acttttctg aataataacc ataatccttt tcagaccttc atcctctttn ctaaacatt 899

<210> 1818
<211> 903
<212> DNA
<213> Homo sapiens

<400> 1818
tattcttatc tgcattttgt tagaagaaca cagttaataa agtgggtgtg gggaagaaaa 60
cagtgcagga gaaggagaac tggaagagga accagagtgg cttgagttat ctagtaaagt 120
cttcattgca tgatgtgacc agctctcaga ggggcatcta atacagagca gtttagttta 180
acctcagaag gtcatcaggg tgctagaatc atgtcccatt ttcatggtaa ttgggcaaga 240
ctgggaaaat gttttgggaa tacacatttt atcttccact tccagcagtg gcttctaacc 300
actgaggact ctccacgtta ccaatctcta ctgacctacc tcaagctttg taaaatctta 360
tttaccgaac aaattacatt tttaagtaat aattaagccc ccccttttct gtagagatat 420
ataataactg ttaacctggg gtcatttta tcgggcttta tataattcca acagaaagca 480
aaggactgtg agtgcttaag ttagcctgag cagtaaagag gcttttagac ctactgagaa 540
tagtttttgg attcacatta ccactgcttg acctgagact cgatttggga gctagaaact 600
aaaaccagtt atgcctttcc attgaataga tggaggctgg gaggctcggg cttgtctagc 660
ttgtagggac tcaagggcac tttggtcgtg tcacggtgct gctttctctc ctgcgcgagc 720
ctcatacttg ctttctctgg tgaatggtaa aagccagcct cttggttgct attnccgggg 780
ttagaatttc aattcctttt ttaaaactct ggttagatca gaaaccattc agacacttct 840
tcagaaaccc tttgggggaa ggtntgactt gggatngaaa ttggagagtt ganaggagga 900
gaa 903

<210> 1819
<211> 843
<212> DNA
<213> Homo sapiens

<400> 1819
atgcggcggc gtggtgaaat agatatggcg accgaggggg atgtggagct ggagttggag 60
actgagacca gtggaccaga gcggcctccg gagaagccac ggaaacatga cagcggtgcg 120
gcggacttgg agcgggtcac cgactatgca gaggagaagg agatccagag ttccaatctg 180
gagacgggag aaagaactgg caaaagtcac tatcaagaag gaagatctgg agctaatagt 240
gagtggtagt gcctaactag tgtatgcgga ggggaggcta ttctgcttaa tttgggttgt 300
ttcctgaaac aagcggagtc agtatatttg gtggcacatt aatgcctggg aacctatgta 360
acatgatttt tttctgcaga tgactgagat ggagatatct cgagcagcag cagaacgcag 420
tttgcgggaa cacatgggca acgtggtaga ggcgcttatt gccctaacca actgatgcgt 480
gctttctcaa atatacctac tggattaatt tatggcaata aaatttttt ttgtcttttt 540
cagttttatc atcttgggtc aagtagagtg tatactatat cctatgttgt ggagaattta 600

0962346.0720000

tatgttggag actaactgaa tttaagtgac ccattaaaat ctagcacacc tgtatgaaaa 660
atcagtgtag aagaatacct catgtgcaga tgctaggtgg caggccagtc tcattcatct 720
gactagctct caacagtatt caaggtacat ctggagtctn aacagagttc tgnactcaaa 780
tggcatgtgt cttccaagac agcttatgaa tatctaaaaa ggccacttcc tgnctaggac 840
cct 843

<210> 1820
<211> 765
<212> DNA
<213> Homo sapiens

<400> 1820
catgcagcgc ggctgggtcc cgcggcgccc ggatcgggga agtgaaagtg cctcggagga 60
ggagggccgg tccggcagtg cagccgcctc acaggtcggc ggacgggcca ggcgggcggc 120
ctcctgaacc gaaccgaatc ggctcctcgg gccgtcgtcc tcccgccccc cctcgcccgc 180
cgccggagtt ttctttcggt ttcttccaag attcctggcc ttccctcgac ggagccgggc 240
ccagtgcggg ggcgcagggc gcgggagctc cacctcctcg gctttccctg cgtccagagg 300
ctggcatggc gcgggccgag tactgaaagc acggtcgggg cacagcaggg ccgggggggtg 360
cagctggctc gcgcctcctc tccggccgcc gtctcctccg gtccccggcg aaagccattg 420
agacaccagc tggacgtcac gcgccggagc atgtctggga gtcagagcga ggtggctcca 480
tccccgcaga gtccgcggag ccccgagatg gggcgggact tgcggcccgg gtcccgcgtg 540
ctcctgctcc tgcttctgct cctgctggtg tacctgactc agccaggcaa tggcaacgag 600
ggcagcgtca ctggaagttg ttattgtggt aaaagaattt cttccgactt cccgcatcgg 660
ttcagttcat gaatcgtctn cggaaacacc tgagaagctt accatcggtg tctatactac 720
acgaaggtcc aagctncttt cctggaacct gtgtggangc aacaa 765

<210> 1821
<211> 790
<212> DNA
<213> Homo sapiens

<400> 1821
gcaacccgga aggtccggcg tcccagccgc ctacctcgct gggaccctgg tcttgctgtc 60
ccccgctggc ctcctgccca agcgactgcg gccaggatgg gccggaaggt gaccgtggcc 120
acctgcgcac tcaaccagtg ggccctggac ttcgagggca atttgcaaag aattttaaag 180
agtattgaaa ttgccaaaaa cagaggagca agatacaggc ttggaccaga gctggaaata 240
tgcggctacg gatgttggga tcattattac gagtcggaca ccctcttgca ctcgtttcaa 300
gtcctagcgg cccttgtgga gtctcccgtc actcaggaca tcatctgcga cgtggggatg 360
cctgtaatgc accgaaacgt ccgctacaac tgcagagtga tattcctcaa caggaagatc 420
ctgctcatca gacccaagat ggccttggcc aatgaaggca actaccgcga gctgcgctgg 480
ttcaccccgt ggtcgaggag tcggcacaca gaggagtact ttctgcctcg gatgatacag 540
gacctgacaa agcaggaaac cgtacccttc ggagatgcgg tgctggtgac atgggacacc 600
tgcattggaa gtgagatctg tgaggagctc tggacacccc acagcccgca catcgacatg 660
ggcctggatg gcgtggagat catcaccaac gcctcgggca gccaccacgt gctgcgcaaa 720
gccaacacca gggnggatct cgtgactatg gtcaccanca angacggtgg gatttacttg 780
ctggccaacc 790

<210> 1822

0960345.0020800

0050050-020800

<211> 717
<212> DNA
<213> Homo sapiens

<400> 1822
gagctcgcgg cagtacgggg agcgcccgcc cgccccgccc tggacccaac caagcgtccc 60
gcggaggggt gcggccactt gggggcagga gaaagcggag tacgccaccc ctctagggac 120
ccaggaagcg aggcgagcct caggtggacg cggtggtgtg gaccacggcg atcagggcct 180
ttccccctgc tgtggagacg gaggtgcgag gggacgccgg cggctcccca ccttctggcc 240
gagtggcctt ctccgcctcc ggctggactc cctcggggcg ctccctccag agccgagtcg 300
ggctggccgg gggcggctgt ttggcctgag tgtcgtctta ctaaagcgga acgccggagg 360
ggaggccact ccgagagaag gcggtccccg gcggaggtgg cttcgtgaat cctgcagccc 420
cctgcccgcc cgccactcga gacgccgcgc ctcgtgggtt tcacgctgga tggaggggcc 480
gccgccgagg atgcccagcc tnccccctcta attctacctc tccagttcct caggtagaca 540
cagcctctgt ctgctgtggt tttagtgccc atggnccctc agaaattatt tttgtccccc 600
cccgatagtg gctttggggg atggagggcg agagatgcaa agggccagtg gaagattttt 660
tatagcacaa gggaatcaaa cccggaagat ggangnttca ttgccaacct tggggtn 717

<210> 1823
<211> 848
<212> DNA
<213> Homo sapiens

<400> 1823
aacatagcaa cactagccat taagtaggca tcaaataaca ttctgaatta agttacaaga 60
taaaaccaag atttggatga caatgacaat attgtccatc attgttatcc aattcctggt 120
tttatcttat aactggtttt aggggcaatt ctagtgaatt gtccctaaaa gatgtttgaa 180
attagttcca tacacttttc ctgaatcaac ttaaatattg atttcacaaa caataagatg 240
gtgtgctgta gcatgtcatt gcactagaaa gaaaagaaat actccactag tggggaataa 300
tttcaacaga ggaaagtgat gaatgttgga tgtgagttcg gaaaccagag gttgataaag 360
tcttacgatt gctatatgca ctgtgaggct actgtatttg gaaaattgca aaacaaaata 420
ttttttaaag aacaaaaatc tggtgagtag catacacaga tttcaaaaat aaattgcata 480
acttcatatt tcagtaatta aagatttaac aattgtgatt ttgtggctaa acaaaatata 540
ctgaacaatt atgtataaac catggattca aagctccaga aaattgtctt aatgaggcgt 600
ataaactctt tttgtttaat gtccacacca aatcattatg gtctgccatt tcatgaaata 660
acaagagttt taaaataagt gatgtttttt agtttgtgta tctatattct ttcctaccag 720
gtatagcaca gtgtagtaca agggcctaca gttgtaagcc ttgggaaaag atactggttt 780
ggccacatat ttcanctatg tgacccttgg aaagngggtc ttaaaangga cactgtggcc 840
cctcaagg 848

<210> 1824
<211> 697
<212> DNA
<213> Homo sapiens

<400> 1824
atatttgagg caccatccct gccattgccg ggcactcgcg gcgctgctaa cggcctggtc 60
acatgctctc cggagagcta cgggagggcg ctgggtaacc tctatccgag ccgcggccgc 120

gaggaggagg gaaaaggcga gcaaaaagga agagtgggag gaggagggga agcggcgaag 180
gaggaagagg aggaggagga agaggggagc acaaaggatc caggtctccc gacgggaggt 240
taataccaag aaccctgtgt gccgagcggc tgggccagtt catgaccctg gctttggtgt 300
tggccacctt tgacccggcg cgggggaccg acgccaccaa cccacccgag ggtccccaag 360
acaggagctc ccagcagaaa ggccgcctgt ccctgcagaa tacagcggag atccagcact 420
gtttggtcaa cgctggcgat gtggggtgtg gcgtgtttga atgtttcgag aacaactctt 480
gtgagattcg gggcttacat gggatttgca tgacttttct gcacaacgct ggaaaatttg 540
atgcccaggg caagtcattc atcaaagacg ccttgaaatg taaggcccac gctctgcggc 600
acaggttcgg ctgcataagc ccggaagtgc ccggccatca nggaaatggt gtcccanttg 660
cagcgggaat gctacctnaa gcacgacctg tgcccgg 697

<210> 1825
<211> 835
<212> DNA
<213> Homo sapiens

<400> 1825
taggggtact tgaacacaag cactgcgata cagtcatctg ataaccgaga cagtcgatct 60
gatcaccgag actgctacta agtgactaat gggtgagcag catgaatatg ctggacagag 120
ggaggatcac ctccagggca gcaaggggca agatctcatc atgctcctca gaatgctgtg 180
caattaaaat ttatgaattg tttatttctg gaatgttcca tcaaatattt ttggactgct 240
gttgagcgta actgaaacca tgaaaatgaa gccatgggta agaggggact actgtatacc 300
atttcttttt ttagtctccc tgctactctc cactaggaga ataaaggtgg gagaacaaag 360
gggtctggca ggaaggagat tgcaaactat gttgtcaatt cttgaaacga atccatgagc 420
cctgtgcgga aaccctctag gtctgttcct ctcaggacat taaatcattc tctttttatt 480
tctaatatag tcccatgaat ttatttccta agaaacttta gaaagtttac agcttttaa 540
ctatatgtcc atccactatt tgacatcctg ggggtcatcg gcccacccag gagctttcat 600
gatcaagtca aaatcacaat gtatccattg ggcttcangg cagaacatgc gtnctcagat 660
gattgttgta cacagaaaat tagggaacac agctaagatc aataccaggg agcttccaaa 720
tgggagttcc attttcattc cttcattaaa atcattaaaa tccataataa ttcctgggta 780
gcaattaaac ncaaccattg gggccacatt attaaatnac acctttgat cnacc 835

<210> 1826
<211> 813
<212> DNA
<213> Homo sapiens

<400> 1826
ttctttgatt gtttaacctt acaaaaattt agactagtaa cttatttcac actgaaaagt 60
gagttccagg aaggttagag gccacagagt ataaaaggta aaaccataaa gcctctagat 120
gctaacatag attgctaaaa acttcaggga acggaaagat ttcttaaaac taaacagtgg 180
aacaatggta tatttaacta cattaaaact aaaactttaa tttgtcaaga catcatttga 240
gagcgaaaag gccggtcaag gacatgggta agatgtttac aaatacacag ttatcatttg 300
ctagcattta aaatatataa agagttccta aaaataagga aggaaaagac agaaaaggct 360
actgaaaatt ggacagaagc ctgaagagcg acaccccaga agagctgacg taatggccag 420
aagtggtgga aagggctcca ccttgcatgt caccaggcaa tgcatgacaa agcccaggcc 480
ttccccgcag aggccaacgc tgaccctcct gacagtggca ggactggaag cctcagtact 540
ctggggccct gcagtgagga cacgccctgc ccagtcccat ggggagaccc tagcatatcc 600

0000-0000-0000-0000

ttgaagggag ctgtgtaagc attaggaacc cagtccctgc actggaggag ctcgtgcacn 660
gagggtttgt cacaactgnc cccgctggaa tagcccatgg cacttgcaca gtgggatgga 720
gaaactgggg attcttggtg cctgggaagg tggtgggggc tttttnccag gttacattgg 780
gcccantggc ccaaaccttt ggggaaangg ttc 813

<210> 1827
<211> 804
<212> DNA
<213> Homo sapiens

<400> 1827
ggctccgggg gtggcggtcg gacagtgtct agcacgctca gtccgggctt ggggccccgc 60
ggcggagaag gaggtagagg gggcggcggc ggcggcggcg gtggtggcgg caccatgttt 120
cttcactcag ttaatctctg gaacctggcg ttttatgtct tcatggtctt tctggcaacc 180
ctggggctgt gggatgtctt cttcggcttc gaggagaata agtgcagtat gagctacatg 240
tttgagtacc cggagtatca gaaaatagaa cttccaaaga aactggcaaa acgctatccc 300
gcatatgagt tgtatcttta tggagaggga tcctatgctg aagaacacaa aattctccct 360
ttgacgggta ttccagttct ctttcttcct ggtaatgctg gaagttataa gcaagttcgt 420
tctattggct ccattgcact tagaaaagca gaggacattg acttcaagta ccactttgac 480
ttctttagtg tgaacttcaa tgaagaactg gtggctttgt atggtggaag tcttcagaag 540
cagaccaagt ttgtacatga atgtattaaa acaattctca aactctataa gggtcaagaa 600
tttgctccaa aaagtgtggc aataattggt cattctatgg gtggccttgt tgcaagagca 660
ttgcttacac tgaaaaattt taagcatgat ctgataaatc ttcttattac acaagccaca 720
cctcatgttg ctnctgtgat gcccctttaga tcggttcatt acagaatttt antccnactg 780
ggaaaccaac ttatttggga ttct 804

<210> 1828
<211> 776
<212> DNA
<213> Homo sapiens

<400> 1828
aagccgagga gggctgttta aaggcgcagg ggccatttta cctccaggtt ggccctgctc 60
aggaccagga ggaaacacct ccagcccgcg acctcctccc acaggggaa aaggaaagca 120
ggaggaccac agaagctttg gcaccgagga tccccgcagt cttcacccgc ggagattccg 180
gctgaaggag ctgtccagcg actacaccgc taagcgcagg gagcccaagc ctccgcaccg 240
gattccggag cacaagctcc accgcgcatg cgcacacgcc ccagacccag gctcaggagg 300
actgagaatt ttctgaccgc agtgcaccat gggaagctct gaagtttcca taattcctgg 360
gctccagaaa gaagaaaagg cggccgtgga gagacgaaga cttcatgtgc tgaaagctct 420
gaagaagcta aggattgagg ctgatgaggc cccagttgtt gctgtgctgg gctcaggcgg 480
aggactgcgg gctcacattg cctgccttgg ggtcctgagt gagatgaaag aacagggcct 540
gttggatgcc gtcacgtacc tcgcaggggt ctctggatcc acttgggcaa tatcttctct 600
ctacaccaat gatggtgaca tggaagctct cgaggctgac cttgaaacat cgatttaccc 660
gacaggagtg ggacttggct taaaacctac ngaaaaccat tcaagcancg aggtcttgag 720
aattactttt ttgaccgaat tttggggcct aacatggtta tcttttaagc aaaccn 776

<210> 1829
<211> 777

0950450.0920300

<212> DNA
<213> Homo sapiens

<400> 1829
atgcaaatat tagaacgtga caaataatgg tcagcagacc aggtaagaga caggatttaa 60
ttttctagct caaattactg gtttttaatt ataaccttga catctgtaat cattaatatt 120
ttgggaagca gtccctttc atgcttatgt tacttggata tatacttgtt ttaattaaaa 180
ttgggggcca ggcgtggtgg ctcctgactg taatcccagc actttgggag gccaaggcag 240
gtgatcactt gaggtcaaga gttcgagacc agcctggcca acatagtgaa accccgtctc 300
tgctgaaaat acaaaaatta gccaggcatg gtggcaggca cctgtaatcc cggctacttg 360
ggaggctgag gcaggagaat cacttcaatg cagagggtag aggttacagt gagccgagat 420
cttgccactg ncctccagcc tgggcaacag agcaagacct tgtctcagaa aaacaaaaac 480
aaacaaaagc tgtatatatt tgcaaaaaca ctatagtaga cataccagac catcagctcc 540
ctagggcttt ttatgaaaaa cagcagtcct tccccactcc cctttccagc cccttagaag 600
cagncatttt caactctcca gttccttttg gtatatctct ctaaataata agcctctttt 660
gctttacagt gtttggtatt atttattaac ttcactcctt taaataggggg tcgtttttgg 720
taggcttacc ttgaccacct tacatgccca ccnttaattg tnacttntgg ggccagg 777

<210> 1830
<211> 681
<212> DNA
<213> Homo sapiens

<400> 1830
gattatcagc tggagaactg aatggtacac accttccccc ttcttccaac accatggccc 60
ccaagatgct gcacctgccg ccgcctcatt tagccctaca acccccctgcc actcaacatt 120
atgcagaggg cccaggaggg tcttgcagtc atctacatac ttccctgcga gttcttggtt 180
tggtccctag aaatggcagc ctgcatgtgg agaaggctgc atgcagcctc aggcctgccc 240
acccgatacg aggtctgcat gtatgagttg tgtgcatcac atagctcctc accatgcttt 300
cctacccagg aggataagct ttcctaccca ggaggataag ctttcctacc caggaggaga 360
ctcaaggcaa aacactggaa actgtgttta tacaaactcc ccaagtgatt ctggcagcca 420
gcacagaatg actgtgcaca gacactcagg catcactagc tctgggcgcc gcgcatttgc 480
ctgcttcatc caggacagtg gctaacactt caggtagggc ccacatacac tcagaataaa 540
gagctgcctg gtcaggaggg gggcagtcag catggggcta agtttttac agatctctgg 600
cagacagtgn tgctgctttg gctaaagaag gaatgggaag gcaaatgaca aatggcctnt 660
aacggtgcna agaataatgg g 681

<210> 1831
<211> 633
<212> DNA
<213> Homo sapiens

<400> 1831
ttctttaaat tctacaaaga gatacacttc ccccaaatac atttacttta ctgacagcaa 60
agttagtttc catttggaaa agttatcctg tttccaacat cgagttatct ctgttgccag 120
aaaatcaaaa ggcagccaat ccgatttgta aacctttcct ctggcacatt gtcaagatct 180
cttgcaaaac gaaattgtcc tacagccctc ccctcccctg tggctctaag tgcagttctg 240
ccccatctaa atattaatat tttgcaatcg tgctctttat gagcccctgg cagagtggag 300

0056305-0042000

atacgccaca gacgggttga ggagagagtc gtggggacca cctggccagt ggctgnggtc 360
ttaatggaga ttgacaagcc caaaggaggt ttgcaaatac cctgatgcct gcagccggct 420
ttgcatccag cagctccctc cacagattta cagtggcctc tattgtcctt gaagagctgc 480
ttagaaacaa ggttgcaaag ctttctcctt ggggccttgg gaaggctgga tgaaccctcg 540
cgtctccacc tgatagggct gatccaagtg tttctgggtg gtggntttcc acactggttt 600
tatttnaggc tatcaacagg tgcttgantg tga 633

<210> 1832
<211> 745
<212> DNA
<213> Homo sapiens

<400> 1832
gaatcattag gaggaaatag ctgcaaacct ggaaacgtcc ctggagaata cttaattcag 60
gaataaaggt ttggattgat gagggctaaa ataaaacttg gcagcgacag cattctagta 120
acttttagcc acttctcccc atctcactgg ggtattcctg ctggtatatt cactagcctg 180
agctctgctc ctgagagggc tgcaggagct gggtgggttg ggagacacag gtgtgtggga 240
ggcgccttca ccaagtgccg cacaattgcc gggtacccct ctgtgccttt aactggtcgg 300
taaacagaaa gcaggatgtg cttatctgaa tagtgacaac agttgcaagc actcagtcac 360
aaagttcagc attctggctt tagatggacc agcgtggggc tctggaagct ggtgacttgg 420
gagtgcctgc cgtacacatg ggtggggaag ggatggaaag tttagcaagg acttgccgag 480
ttattaagca aagactctgt aagtgcgtca gaatgggaag gcagctcaga acctttccac 540
ttcacccttt ttgttgttgg aaataggtaa actgaggcca gtgaacagga atgtgtattt 600
caataatacc aaagctaact tctatcactg tgagttgtgt gccangccct gggttcactg 660
gcttctgagt ggtatctctt ttaatctctg cccaactctg tgggggnaac actgggggta 720
tacccatttt tcanataagg gaacn 745

<210> 1833
<211> 664
<212> DNA
<213> Homo sapiens

<400> 1833
gagtgctcag tagaaaatgg gtagccttat gtatctaccc taaaggaaaa aaaaaaaaaa 60
aaagacttga ttctcaccac agagctgctt tcttatacat aagaaattgc ttgtagtatt 120
catgaacgac acagccaaac agcaggccgg ttgtagccca cttcgcctgc tcacagccca 180
tctgggcccg cctctgcaca cccgggatac cccagcttct ttccctcaag ctgttcatat 240
attgagtcct cccactgtcc cacagcagcc acttgagggc agggctgagt cttggtcacc 300
cgtgtcccta gtgcctcgag cagtgcccga cacagacata cagcagaaga aacaaactaa 360
atgagtgagc ggtaggagtg ctttgaagcc aaggggctga gcaatctgtg ttggaaaagt 420
gtgagatttt tcaagttcag aaactccacc aattttaggg tgaccgttgg aactcctgaa 480
gttttagcgc tcagaacatg gggacccaaa ctcgaggaga ccccaacctc ctctcctgga 540
ggcaggggct gctccagggc aagtttccag aagcttccct accctgtcga gttgccaggc 600
cggagtgtga ttcaggaggg gagaagcagt ggctgtcaga agaggctgaa aacctntgna 660
gnct 664

<210> 1834
<211> 759

0950450 - 20090000

<212> DNA
<213> Homo sapiens

<400> 1834
atgtgtcgaa accattgtga aggctaaaga ccagcaagct gcagaagcaa ataagaatgc 60
gagtattctt ttaaaggaac ttgatctgga aaagtcaaga gaagagagca gaaagcaggc 120
tcttgctgct aaaagagaaa aaagaaaaga aaagagaaaa aaagaaaaaa gaggaacaga 180
aaaggaaaca ggaagaagat gaagaaaaca aacctaagga gaattcggaa ctaccagagg 240
atgaagatga agaggagaat gatgaagatg tggagcaaga agttcccata gaacctncta 300
gngcaaccac caccactacg attggaatct ctgcaacatc tgcaacattc acaaatgtgt 360
ttgggaaaaa aagggccaat gtggtgacaa ctcccagcac caatcggaaa aatnagaaga 420
acanaacaaa agaaacccct cctacagcac atttaatttt accagaacaa catatgtctt 480
tagcccaaca aaaggcagat naaaataaaa taaatggaga acctagaggt ggtggtgcag 540
gtgggaatag tgattcagat aacttggaca gcacagactg caacagtgag agtagcagtg 600
gtggtaaaag ccaagagtta aattttgtga tggatgtgaa ttcctctaaa tacccctcac 660
tgctccttca ttcccaagaa gaaaagacca gtctggtctt tcaaaactna gaccnacttg 720
aaggtgaaat gacttctaat tccttgtcaa nccagtttc 759

<210> 1835
<211> 789
<212> DNA
<213> Homo sapiens

<400> 1835
gggggagagg gtgtgaggct cggagtcgcc ggaggagcca gtatctgtgt cgccgccgcc 60
cgcggcgtcc ccggtttggt gttgcggcgc ccaccttcgg gaggatcagg ctgcttctga 120
tgcttggaag atatcctctc agccacaaag atggtaataa atctttgcct cccacagttc 180
agaccaagaa ttcactgcaa caagatatca gctgatggtt acgaagtaga aaatctcatc 240
tctgaagatc tcacaaagag aagtcatggt ttcaggacag agtatttcat taagccacca 300
gtctatgtga cagtttcatt tccctttaat gtggaaatct gtaggatcaa catagacctc 360
acagctgggg gaggtcagaa cgtcactggc ctggaaatgt acacatctgc ctcatctagc 420
agagtgtctt ggaatacgcc ccagtgccgg accctgggcc cagctgagcc atctgtccca 480
gacaaggagg cgttcacctt ggtaggcaaa gtcttactga aaaaccagag ccaagtggtg 540
tttagccaca ggggcttcaa ggccaggccc ccttttggcg cgatggaagc cacactcccc 600
tcccctgctg ttgtggccca ggagctctgg aataaagggg ctctttccct tagccacgtg 660
gcccacttaa ggatctgtat cacccatgtg acaggcggcg gtatcccttg tatcaagccg 720
ttggaantgt ggggtcaagc ccggccaana cctggtttcc aggaagtgat tgacagcatt 780
cttgntggg 789

<210> 1836
<211> 720
<212> DNA
<213> Homo sapiens

<400> 1836
gatgcgcctg tgccggggag ggcagaacgc tggtgcctgg cacaggtgcc acaacacata 60
cgggtgagga cactgaaaac ccctcagttc ccccgactca tggccacttg tcccagtgac 120
acagccatgc tctcccactc acccacaata gggtctgaat gtgcccccca gattcacagt 180

05052015 09:52:00

gagaaactca ttccccagag caacagtgta gtgaggtgga acctgatggg agccccgccc 240
tcacagacaa actcctgtag ctgtcaagac agcttgggca tggattcctc tctgccttct 300
gccatgtgga cacgtggcct tcctcccctc tctcctccgg ggaatgcagt gtttgggcgc 360
catcttggaa gcagagatca ggcctcacca gacaccaagc ctgctggcac catgaccctg 420
gactcccaac ctccacagct gggaaagaac tctgctccct agaaattacc caggctcgct 480
caggtattct gttacagcag caccaagaga cattcactcg cttactccct cactctctaa 540
cccactccca ttcaccctct cactccctct ctaacccact cccattcacc ctctcactcc 600
ctcgctaacc cactcccatt cactcattca ctcactcact ctctagccca ctttttttt 660
gagatggagt cttgctctgt tgcccaggct ggantgcant ggcgcgatct tggnttactg 720

<210> 1837
<211> 795
<212> DNA
<213> Homo sapiens

<400> 1837
gatgttagcc tgtaaaatga actacaggaa tagctacaga ttggaaacaa cctgtggtgg 60
ttttaaaata tagctacaaa ttctttagca ctcctctgta gagaggtggg atccttgtac 120
cctctctgaa tcttgggtga gctgatgact gcttcaacca atggagtacg gtggaagtaa 180
cactctgact tctaaggtcc agacataaaa gtacaggcaa cttctgctag aactctagct 240
cttggagcct gaggcaccat gcctacctag ggctccatgt ctgcttagag gctgccatgc 300
tgtcaggatg ccaagaccat caggagagga cacatgaagg caccacagtc ccagctaagc 360
ttagctttga gtcatcccag ttcaagcata aaagaagtga gtgaagaaga accagatgag 420
gccaggcacg gtggctcaca cctgtaatcc cagcactttg ggaggccaag gcgggtggat 480
accctgagtt caggagttcg agaccagcct ggccacatgg cagaaccccg tctctactaa 540
aaatacaaaa atagccgggc atggtggcgt gcacctgtgg tcccagctgc tggggaggat 600
gaggcangag aattgcttga acccgggagg cagaggttgc agtgagcccg acatcatgcc 660
attgcactgt agaaggcgaa aggggaaagg ggaagaacaa gatgattcca gtgggccagc 720
ccttttgaat caanctttaa gccttcaaat cttcaaatct ttcctaanct tgaagacttc 780
aaaccatttg canaa 795

<210> 1838
<211> 777
<212> DNA
<213> Homo sapiens

<400> 1838
agcgaaggaa tttcgcagag ctgaagatca agcgcctgag aaagaagttt gcccaaaaga 60
tgcttcgaaa ggcaaggagg aagcttatct atgaaaaagc aaagcactat cacaaggaat 120
atattattga ccaggtcctg caaggggccc caggtaagac cagcgacatc agtgagccat 180
ctccagaatc ctccatttta tcatccagaa aggagaacgg gaggtccaac tctttgccga 240
tcaagaaaac agttcacttt gaggctgaca cctacaagga tcctttctgc agtaagaacc 300
tgtccctttg ctttgaaggg agcccaagag tggcaaagga atcattgagg caggatggac 360
atgtcttggc agttgaggtt gctgaggaaa aggaacagaa acaggaatcc tcgaagattc 420
cagaatcctc ctctgacaag gtcgctggtg acatttttt tggtggaggg cacaaacaat 480
aattctcagt cttcttcctg taatggtgct ttagagagta cagcccgcca cgatgaagaa 540
agtcactctc tttcaccccc aggagaaaat actgngatgg ccgattcctt ccagatcaag 600
gttaacctga tgactgtaga agctttagag gagggagact attttgaagc catcccatta 660

US 2005/0048500 A1

aaagcctcaa aatttaacag cnacctaata gattttgctt ntaccancca ggctttcaac 720
aaagttcctt tacctctgag acaaaccttg ccaggatgct gagcttttga aaatctg 777

<210> 1839
<211> 698
<212> DNA
<213> Homo sapiens

<400> 1839
ttgcctgtgt ctcatcctca ctcctgccag ttttatagaa tgtaacctcc cagcctctgg 60
gaatgtttgg gagacttgtt catagaggat ctgaagagca gtttaaagtg gacttaccca 120
aactatcttc tggagaacat tagtctcttt ggagataaaa tttttaaaca tccgctagtc 180
caatagtgtt ggcaaattcc ctgtgacact gtagccctct ctttgagatt gtcaatgtac 240
gttggcatgt taaaggctct gaggagtcct gcagcagtta aaaaattgtt tagtctagtg 300
tgcccccagt tgtttggcca ctgaaacccc cttttctgga aaaaccagct aacatctggt 360
agtcttttct aagaggtggt actgaagatg atactcatgt tacacattta aaaattctaa 420
catgtgtttt tcatgtgttt ataaaatgca actaatgtat caaacctgtg atttccagga 480
cataattact taagctaagg aaaaaagaaa acatgagtga aggaaaaact ttagtaaata 540
ggccaggtgg taagaggaga gagccttgtc tgtgagtgtg gtctagggga tgctggacct 600
agcttttcag agctaggttc aggcagagct gctctgagat gtaaacactg cagctggggt 660
tcttgttgaa cccggnaagc acttntgact aaggggcn 698

<210> 1840
<211> 464
<212> DNA
<213> Homo sapiens

<400> 1840
tatgcatttg gttattcata atcagatttt gttctgnggg ttaaagttga ataatatttt 60
ttgaggctca aattgttcta gctttgacca ttttgggagc tccttccgtt tgtctcctgt 120
gttcttctgg taagcccctg ccatttttt ttttaagtgt taccttaatt tcctttacta 180
caaaatattc caggctcatc ttgtaacttc gctgncccag ccctagagtc aggcacttct 240
ccacggagtc ctgctttcct ttattggaga atgctgttta gaaaccaagg tctggttgct 300
aggtatgtnc attgctacag cagntatcat tgcttctggg tcctctcagc agacaaagct 360
aggaaacaga taatctcagc acctatctgt atatatgtat gctaaagaat atgantttgt 420
actgataacg ctaattctga tctaacctca aaaagccgct natn 464

<210> 1841
<211> 639
<212> DNA
<213> Homo sapiens

<400> 1841
gcagtccagc tgctctggac gctgaggccc cggcttctct tgctggggtg tcgattcggg 60
agggctgagg gcgcggccga gagaacgggg cggtcaccgc cgccgtggcc cgcgcgtccc 120
gcgctctcct tgcagtgcag gccccagccg ctctcgggcg cggcgtgggg gaggcggccc 180
tgcaggtgcg tacccggggt ccgacacgtg cggggcttcc tgcgagctga gtccccgctg 240
cgcgtcttca ggcctttgta agttgtcaaa tttcccaccg gcccagctca tcgagcttct 300

0050450 0050450 0050450

tcccagctgt gaacaggagg gcctgttccc taattcttgc cgaaattgtt ccaactgctg 360
gtgttctgca agatggagcc aggaggagag cccacaggtg ctaaagagag cagtaccctg 420
atggagtccc ttgcagctgt gaaggctgct ttcctggcgc aggccccgag tggcagccgg 480
tcagccgagg tgcaggcagc tcagagcacg gagcctgccg cagaggcagg cgctcccgag 540
ggagagggcc acagaggggg gcctccccgg gcgttggggt ctcttgcctt tgtgaaaacc 600
aaggaagcca nagagaggcc ccggangttt ccccttnga 639

<210> 1842
<211> 739
<212> DNA
<213> Homo sapiens

<400> 1842
aatctgtgcc tggccggagt ccagggtaaa ttagtagcat ggtgttagat gttagaaaca 60
gaactgttat ttgcagtgtt aggtctagga tcccagttct agtaggacag ccctgcaaga 120
caatcaacca gaagcctcca ggagcttcta cctatggctt attcacaact gggcaagaaa 180
acatcattgg taagaactgc tgagtgtgcc cttagaaagc cctagtagct ccagctgtga 240
ctatatcaac tgtgtgccaa gtgtgacttt gtacagtttt atgtttccac tctcctgtat 300
gtgtagccac tcgatgccta acctaccttc cacaagccag ccccgcatcc ctgctcccgc 360
agtgtaagtg cagagcctgc ctcactggta agggaaaacc ttggcttggg aggccagccc 420
tggcccttga aggggttggc tgtgcccagc ccacctggct gcagtgggca gctcatgtct 480
gtatctccaa agtgatgttt gtttgcaaaa caccggctga actgagctgg tgttgccaac 540
tcttggcagc gctgggccaa accgaccaca taccatgagc tcccaaatgg cgtgtgctca 600
ctgtgagacg tcctgccaca ccccacanga gacggagcag tgggcatttg gaaccaattc 660
tattcagaac tttcgtcaaa agccaaagtc aanctnnggg tttgcaagtt gacaccattt 720
tcccaagttt aatggaacn 739

<210> 1843
<211> 642
<212> DNA
<213> Homo sapiens

<400> 1843
aaacgattcc ccttggtaga tgttcttcag tatgcattgg aatttgcctc aagtaaacct 60
gtttgcactt ctcctgttga cgatattgac gctagttncc cacctagtgg ttccatacca 120
tcacagacat taccaagcac aacagaacaa cagggagccc tatcttcaga actgccaagc 180
acatcacctt catcagttgc tgccatttca tcgagatcag taatacacaa accatttact 240
cagtcccgga tacctccaga tttgcccatg catccggcac caaggcacat aacggaggaa 300
gaactttctg tgctggaaag ttgtttacat cgctggagga cagaaataga aaatgacacc 360
agagatttgc aggaaagcat atccagaatc catcgaacaa ttgaattaat gtactctgac 420
aaatctatga tacaagttcc ttatcgatta catgccgttt tagttcacga aggccaagct 480
aatgctgggc actactgggc atatattttt gatcatcgtg aaagcagatg gatgaagtac 540
aatgatattg ctgtgacaaa atcatcatgg gaagagctag tgagggactc ttttggtggn 600
tatagaaatg ccagtgcata ctggntaatg tcatanatga ta 642

<210> 1844
<211> 815
<212> DNA

US20050250000

<213> Homo sapiens

<400> 1844
aagatacaaa aaaaaattat ccaggcatgg tggcgcatgc cggtagtcca ggctacctgg 60
cagggcactg agataggaaa atcacttgaa cccgggaggc tgcagtgagc cgagatcacg 120
ccacggcact ccagcctagg tgagagcgag actctgtcta aaaaaaaaaa aaagcactca 180
gaacagttct tggcacacag tacctgctga ataaaaggtg gctgttatta ttgaagggga 240
tatcacatat caaggttaat ggccctgtcc tcaaggagct tatatttgtg cagatccatg 300
cagatgaacc aagccagaag caataaatga gcaaacaaat gtgatgcaaa gtcagtaagg 360
acaaaagtac tgaaagaaca cagcataatc atcctaaaaa ttaacaacca taatcaccgc 420
aagccaataa acagatccaa aaatgttcca ctcagtcatt ttttttttta ggcaggtacc 480
ttggtcctta gacaaaagtg agttagaatt tgactctgac tcccagaggg gagacgctta 540
tatcatttgg cttcatagag gtgaattacc agacaagcaa agaactcagt gtattccacc 600
actgacctgc ctttgggaat gggtggctct gcanggcttc atcaagatga agagctcccc 660
agcagcacca atgtggaaac cgtcaacatg gtgctgagtc ggccatgttc aaacagcttg 720
ttncaaaagt ggtcagtaaa gggacccgac cttgggcctn ggggaaaacg tttaacattt 780
gggaaaaaat gggggaaaat tggccccnaa aaaaa 815

<210> 1845
<211> 663
<212> DNA
<213> Homo sapiens

<400> 1845
attgggtatc catcccctca agcatttatc ctttgtgtta caacaatcca atttactctt 60
tcagttatat taaaatgtac aattaaatta ttattcagta tagtcacact gttgtgctat 120
caaatactag gtcttattca ttctgatttt tttaaatctc tattttcttg ttataactta 180
ctgggtgaca gaagaaaaaa caaacaaaca aaaaaccctt acaactccat agctcttcaa 240
aagcataact ctgttagctt ctaatttgaa tattaccaaa aggaagacta cctgatggag 300
agccacgtct gtgacccaat aattcccatc tttatctata ctcaagccat gtggcaagta 360
aaacctgcaa aataaaaata tttgttgttt attttgattt ttttaaatca gaatgaataa 420
ccatcatcct gattaaccac cgccacctaa ccccccgcca cacacacata cacacacaca 480
caaacacaca ctcacacaca cacacacaca cactctctct ctctgtccca tacccttccc 540
aggctctggt aaccatcctt ctgtccatac atctatgagt tcaattgntt tgatttttag 600
atcccacaaa taattgagaa catgtcatgt ttgnctttct gnnctggctt atttcatcta 660
taa 663

<210> 1846
<211> 819
<212> DNA
<213> Homo sapiens

<400> 1846
gtgctactga agaccacgtg aggcagtgaa tagtgtcact ctgtctctca tgcgtagaac 60
gttgataggg gtgcagcata tacatgtgga gtaattaaat gaggcaaggt gatgtacgat 120
ctcaggtata agttaaaatg agtgattcag actcttttgc tgtagggttg tatattaagt 180
gactgaaggg atgggctgag gtcattcaat aagagtgtgg aagggccttc aactgacctt 240
tgtagaatgg cttgggattg aatagtcagg taggatggaa gaagaactta agcaaaggtc 300

US 2003/0224360 A1 Dec 04 2003

aagttggatt tttatgagga gtaaatcgaa gcgcagagag gttaaatatc cagaagtgga 360
ggagctggga ttagaaccca ggcatcctaa tttcagtgca gagaggctgg tttaggtgga 420
gtcagaactg tgaaatgtct tagagagatt ccattttatc ttggaggtgt ttgagttgcc 480
tgttgacttt ttcacatgct ttctgcgtat tcagcacctc tgccttaaaa atctattgct 540
tccagggctc actaggcata ggctggtggg taatcatggg atggtttcaa gcaacaaata 600
tttattgagc tgtgggtcag tcagcgggca aatagagaag cataagacat ttcactgccc 660
tcaacaggga attgacgtaa tatattaggt tgccattaaa aaaaaaattg gcaaagacca 720
cagttgcttt ttgcaccacc tagtaaatga aattttanta tgaatggtct ggccagaatg 780
aattttggac canaggagac tacagtactg ggattgnga 819

<210> 1847
<211> 833
<212> DNA
<213> Homo sapiens

<400> 1847
aactacctat tcaaaaaaat cattatttaa aaaaattaaa gagaggctag gtgtagtggc 60
ttacgcctgt aatcccaaca ctttgggaag cctaggcggg gggattgctt gaggccagga 120
gttcgaggct tgggcaacat aacaagacct catatcttag gaaaaaaaaa aaatggctag 180
gcatggtggc acacacctgt ggtcctagct acttgggagg ctgaggtggg aggatcacat 240
gagcccaggg gttcgagatt gcagtgaact gtgattgcac cactgtactc cagtctgggt 300
gacagagaga gaccctgtct aaacaaaaaa gagagagaga gagagagaga ggaggcagag 360
tgagataact gaatagaagc ctccactgat tgtcctccct gcagtagcac caaatttgac 420
aactgtctac acagaaaagt accttcatga gagccaaaaa tcaggtgagc aatcacagta 480
cctggtttta acttaatatt gttaaaaggg gcatggaagg agtaggaaag acagtcttga 540
attgaagaca ccacccccca acccctgcag tggccttgtg gcatggagag agaatctata 600
cacttccagg agtgagagtg cagtaattgt gagactttgc actggaactt antgctgcca 660
acactgagca gaactcagcc aatgcccaca gaggaagcct gtggactaac cctagtcaga 720
ngggaaattt tctctcccag caggcagaac tttgagttgg ctagccttgc caccgcgagc 780
taaagtgctt ttggggtctt aaatgactan aaaaccgtct aggtngaagg ntg 833

<210> 1848
<211> 820
<212> DNA
<213> Homo sapiens

<400> 1848
ttcgagcggc tgctcagggt cgctccgggt tgtgcagctg cccgcccggg acgcaaagtt 60
ctagtctggc cctggatggg aagttggcgt ggccgggatg ccttctaact ttttcccccg 120
gtggggactg acgttccttt cgagctgctg gcggtgccgc cgggcagcgt cgcgccccgc 180
ggtcactccc cagccctggc ccccaagccg ggctcggcgc gcgcagcagg ttgaggggggc 240
gagtgccgag gcgagcggcg gtccggcgtc ccccgtccct gctctccatc tcgggctgag 300
gattcgctga cgcagcaagc cggccgatgc cctgagggga cgcagccagg gcgtgcgggg 360
gaaacgctgt gtcatcccct ggggccgtcg tccctccgag gggctgccgc ctgggaaccc 420
ccccccagcc tcttcctcgc tgtgttctcc gcggagggtc tcccgcgccc gggcccccgc 480
gccgccgggg actggctctg ggcacacccg ctcaggctct tcggggcacg gcgacagggg 540
tcctttccct ccgggacctc ctctggggcg tcgccgactc ggccctagac tgcggaggcg 600
gnggtggaac gcggagcccg ggcgcctggt tgggcccgga gaccggaacc cggggagggg 660

0050150-0070000

cccgntcccg cgccgaatac cctcgggctt cccgcgcctt nccgaccaat gagaacggaa 720
atttattagg aaacaaggca ganaagaccc gttgaagtga aacccgggct ttgccaaggg 780
ttgggccggc aacccgangc gggccagnaa aagaactttg 820

<210> 1849
<211> 785
<212> DNA
<213> Homo sapiens

<400> 1849
gcgggtccgg gtgaagcggg aggcagccag agtcggagcc gggcccgagc accaggcgca 60
ggcccggcgc ccgcctgccc gcaccctcgt cctcacagac gccacagcca tggccatgat 120
ggtgtttccg cgggaggaga agctgagcca ggatgagatc gtgctgggca ccaaggctgt 180
catccaggga ctggagactc tgcgtgggga gcatcgtgcc ctgctggctc ctctggttgc 240
acccgaggcc ggcgaagccg agcctggctc gcaggagcgc tgcatcctcc tgcgtcgctc 300
cctggaagcc attgagcttg ggctggggga ggcccaggtg atcttggcat tgtcgagcca 360
cctgggggct gtagaatcag agaagcagaa gctgcgggcg caggtgcggc gtctggtgca 420
ggagaaccag tggctgcgtg aggagctggc ggggacacag cagaagctgc agcgcagtga 480
gcaggccgtg gcccagctcg aggaggagaa gcagcacttg ctgttcatga gccagatccg 540
caagttggat gaagacgcct nccctaacga ggagaagggg gacgtcccca aagacacact 600
ggatgacctg ttccccaatg aggatgagca gacccacccc tacccaggag gaggggatgt 660
gtctggtcan catgggggct acgagatccg gccggcttcg acctgcacaa cctgtgatcc 720
aatacgccta caaggccgnt acgaggtact gtgccactnt gaagcaggca ctngaagacc 780
tggag 785

<210> 1850
<211> 806
<212> DNA
<213> Homo sapiens

<400> 1850
acacacccgg gagacaccgc gaaggcagag cagcgttctc agcacagacc ttgtgggcac 60
tgcctcgctt tgggactact cggagccgca tcaatggtga ataaaatcct tcctgtttgc 120
agcccttaat aatcagggtc agagaccagt tagaagtgtt cagtgtggaa aacgggaaac 180
caaaagcccc tctgaatcct acccaccgag gttctcccca gccaaggcga ggcggccgca 240
gtgcgagatc cacaccgcag cctcggaaga caagcgggca gaaatcccat gaggggcagt 300
tggggtttga ggaaggcgag gtgaggcacc tgtggcagaa aaaaaaaaaa accgcaccac 360
ggagaagcag agcctgggtc cccaacggac aaaagtgtct tcccatcagc ccttgcgctg 420
ggcccaggtg accctggcat tcctggttcg agaccagggt gcgcttcagg ccgctagggg 480
tgcccaaaag cgggcagaag gcccatgagg ggaaggtgat gcacctgggg cagagaaaaa 540
aaaaaaaaaa aaaaaccgcg ccgcctataa gcggggcctg gctcccccac agaagaaact 600
gtcctcacat cagcgcttgc gctgcgcccc agggaccctg gtatccctgg ctcgagccca 660
ncgtgcgcct cggcctgcta ggggtacccc aaggcagaca gaaggcccat gagggaaagg 720
tgagacacct ggggcagaga aaaaantaaa aaaactgngc cgcccaaaag tgggcctggg 780
tccccacaga cnaacgtcct taccat 806

<210> 1851
<211> 725

0956204.0002

<212> DNA
<213> Homo sapiens

<400> 1851
aacggcccgg aagtgcggcc ttgtagtcgg tcaggaggaa gcggccacgg cagagcctgg 60
tgcctgaaga ggagtcggag atggcggctg cagaggctgt gcatcacata cacctgcaga 120
acttctcacg ctctctgctt gagaccctca atgggcagag gcttggggga cacttctgtg 180
acgtgactgt gcgcattcgt gaagcttcgc tgcgtgccca ccgctgcgtg ctggcggccg 240
gctcaccctt cttccaagac aagctgctgc tcggccactc tgagatccgt gtgcctccgg 300
tggtgcccgc gcagacagtg cgacagctgg tagagttcct gtacagcggt tcgctcgttg 360
tggcgcaggg tgaagccctg caggtgctca cggccgcgtc agtgcttcgc atacagacag 420
ttatcgacga atgcacgcag attatcgccc gcgctcgagc cccgggcacc tctgcgccca 480
cgcccctgcc cacccctgtg cccccgccac tcgcacctgc gcagctgcgt caccgcctgc 540
gccacctgct ggctgcacgt cccccggggc accccggtgc tgcacacagc cgtaagcagc 600
gccagcccgc gcgtttgcag ctgccagcgc ccccaacacc tgccaaggct gangggcctg 660
atgctgaccc ctnactgtcc gcggcccctt gatgaccaag tgacaaggat gacnaggaaa 720
gtgac 725

<210> 1852
<211> 837
<212> DNA
<213> Homo sapiens

<400> 1852
gttgccgtta cctgtttccg gcagtcgaca cgctcttcgc ttctcggggc ttgtctccgt 60
gtcctccgtc tcagttgttt ctccctctct atcctcctct gtctcagtct ccccagcctt 120
ggggccggtg cctcttccgg gcttcggcga atgagacctg cggacctgcc cccgcgcccc 180
atggaagaat ccccggcgtc cagctctgcc ccgacagaga cggaggagcc ggggtccagt 240
gcagaggtca tggaagaagt gacaacatgc tccttcaaca gccctctgtt ccggcaggaa 300
gatgacagag ggattaccta ccggatccca gccctgctct acatacccca cacccacacc 360
ttcctggcct ttgcagagaa gcgttccacg aggagagatg aggatgctct ccacctggtg 420
ctgaggcgag ggttgaggat tgggcagttg gtacagtggg ggcccctgaa gccactgatg 480
gaagccacac taccggggca tcggaccatg aacccctgtc ctgtatggga gcagaagagt 540
ggttgtgtgt tcctgttctt catctgtgtg cggggccatg tcacagagcg tcaacagatt 600
gtgtcaggca ggaatgctgc cgctttgctt catctacagt caggatgctg gatgttcatg 660
gagtgaggtg agggacttga ctgaagaggt cattggctca gagctgaaca ctggccacat 720
ttgctgtggg cccaggtcat gggattccac ttgcagtcaa gggagactgg gcattccttg 780
cgnataccta ctacattcct ttctgggtct ttttgctttc aanttccatt gtnaaaa 837

<210> 1853
<211> 803
<212> DNA
<213> Homo sapiens

<400> 1853
agttaggaga ctgcgtagaa aaaggaaaat gtgtaatttt cacagttaga attaacttag 60
gagagctgaa attaactgag cctcggaaat ctgaatcttg aagtcaccag tggcttttgg 120
ggctgtgaga gagtctcctg tggtctttaa tcatgtgagg gtggggtgaa attcaatatt 180

09509495.090200

cagtggttct gcaatgggat gcactgtgca attggtgatt gagaagccaa ctctctggct 240
ttaggagaag aatgtcttgc tgttagtcct tctggaaata gagccttgca ttgcctactg 300
tctgtttaca ctacctttgc acattgcctt cggttataga gtcatgtcca atggctcttt 360
acttctgttt gcagggcagg agatggcacc ctgttaaaga gaaaggatag tagctgcaaa 420
gtcatttgtt tctctgtttc tgtgactgta tatattggct catctttgaa tggtctttat 480
agccacacca ggctggaggt aacagggtca tgggagtgga ctgctggtgt gggctgaatc 540
agagttcaga tccatgtctc caggaggtag gaggtgcagg gcaagtcatg tggcttctgg 600
ggcatccctc actttcttag ttaaggagaa gttgaaggag ccgatctaaa atatcttggg 660
agtctgcaga aaaagtcgtg aaaatcaaag cactttcaat taaactatat aatttaagtc 720
cttacaagaa tgccccaggg caagcaacca gtcaggcctt ggtaatccgn gcttnctaga 780
agaaaagact gaggttcaaa ana 803

<210> 1854
<211> 797
<212> DNA
<213> Homo sapiens

<400> 1854
gttcctattc ggccatcttg gctccacctc cctgtatttt tctttttaaa attgcatagt 60
tgcttaaact tatttttttc tctttggatt tttaaaggtt cactgtatgt atagtcttat 120
atctcagtcg atcttgttag tggcttattg ttaaaacatg cagttttgg ctgggcatgg 180
tggctgtatt cctagcactt tgggaggcca aggcaggtgg atcacctaag cccaggagtt 240
tgagatcagc ctgggcaacc tggtgaaacc ctgtctctac tgaatataca aaattagctg 300
ggcatggtgg cacacgcctg tagtcccagc tacccaggag gctgaggcag gagaatcact 360
tgaacccagg aggcagatgt tgcagtgagc tgggatagag ccactccaga cttagtctcc 420
aaaaaaaaaa aaaaaattta aagaaaaaaa atgtctacaa catgcactcc ccaaaaatct 480
tatctaaaac tgaacttatt atgttctctc ctaaatcagt tactcgaagt tcaccgctct 540
cctggaacct cagaatacaa atcatagtat cttaattgac tcatcctttt atcttatcaa 600
acccatcatc aaatccagat cattttcctt tctctgnctc taattaattc attttgntca 660
gagttgccat gatagtctcc ctaatatact ggttatggct ttgccctctg catccaggcc 720
cgatgccttt cgacaaagaa tgcacatcac aatnaccctg gggacctntt ttaaaaactt 780
ggacctnggg ccccatt 797

<210> 1855
<211> 791
<212> DNA
<213> Homo sapiens

<400> 1855
cttgttgttc cccgccgccg ccgtcgctga cccagcccgc caggcgctcc tgaccgtcgc 60
ttcctccggt cccaggtccc cggccctcgc ctcagccccg gcccctggtc cccagccctc 120
gtcgcagccc cggccgcccg ccgccgccat gtccaaggag gagcgccccg gtcgggagga 180
gatcctggag tgccaggtga tgtgggagcc tgacagtaag aagaacacgc agatggaccg 240
cttccgggcg gctgtgggcg ccgcctgcgg cctggcgctg gagagttatg atgacttgta 300
ccattggtcc gttgagtcat attcagactt ctgggcagag ttctggaaat tcagtggaat 360
tgtcttctca cgtgtgtatg atgaggttgt ggacacatcg aaaggaatcg cagatgtccc 420
cgagtggttc aaaggcagtc ggctcaacta tgcagaaaac ctcctgcggc acaaagagaa 480
tgacagagtt gcccctttaca ttgtaaggga aggcaaagag gaaattgtga aggtgacttt 540

US 2005/0059005 A1

tgaagagctg aggcaaggag tggctttgtt tgcagcagca atgaggaaaa tgggtgcnaa 600
gaaaggagat cgggttgttg gttatttacc caacagtgag cacgctgtcg aggcgatgct 660
ggcttgcggc aagcattggt gccatctgga gcttcacgtt cccggacttt nggtgtgaat 720
ggtgtgctgg acccggnttt tcttaaaatt caagcccaaa gcttaatctt ctcttgtgga 780
aggcttgntg g 791

<210> 1856
<211> 780
<212> DNA
<213> Homo sapiens

<400> 1856
aaattgatgg taatgaagga gggttgtgcc atgaaaatac aagagatttc ctattgtaac 60
cttgttgcac tgtggattaa attgaagatg cacagtggac tcctgggggt ggaggagagt 120
ttggaggtca gagggctctt gtcttgagct ccaagtggtg ctctaagtct aggataaaga 180
ttttacacag ggtggggcag gtggacagcc agatcttcat ttattcttac caagctctta 240
ttaagtcatg tgggtgggat ttactgttaa ggaaggcaga gcctacctgt ccccataggg 300
ctggcatcct attggaggtg gcactagcca cttaactagt taagtgagtg atatttgggt 360
agggtgccca taactctgat acgatctgcc ttgcgattct gctcctgcta gtggagtgtg 420
ggggaggcct ggtcttggat cttgttcctc acagctggtt cattcaggag gttagtgctc 480
tgctgaggag gctggaggca gagctccatc ttggcctggc tggctagttt ctgttcagga 540
ctagagctag cacctgtagt cttggcaagc cattttagaa atctaagttg ttggtccatg 600
taatgtcctg gtggttgaac caacactcgt tctttgccat tcctgggcag gtgcttggag 660
aangctggtg agctgtcatg ttttttgaag aatggtgcat cagtagcaca agggtttccc 720
tggtctgctg angcctgttg ctgaactttg gggtgccctg nccccctggtt taattccngg 780

<210> 1857
<211> 752
<212> DNA
<213> Homo sapiens

<400> 1857
gagtgcatct cccagtctgc agtgaagacc aagtttgagc agcacacggt ccgggccaag 60
cagattgcag aggcggttcg actcatcatg gactccctgc acatggcggc tcgggagcag 120
caggtttact gcgaggaaat gcgtgaagag cggcaagacc gactgaaatt tattgacaaa 180
cagctggagc tcttggctca agactataag ctgcgaatta agcagattac ggaggaagtg 240
gagaggcagg tgtcgactgc aatggccgag gagatcaggc gcctctctgt actggtggac 300
gattaccaga tggacttcca cccttctcca gtagtcctca gggtttataa gaatgagctg 360
caccgccaca tagaggaagg actgggtcga aacatgtctg accgctgctc cacggccatc 420
accaactccc tgcagaccat gcagcaggac atgatagatg gcttgaaacc cctccttcct 480
gtgtctgtgc ggagtcagat agacatgctg gtcccacgcc agtgcttctc cctcaactat 540
gacctaaact gtgacaagct gtgtgctgac ttccaggaag acattgagtt ccatttctct 600
ctcggatgga ccatgctggt gaataggttc ctgggcccca agaacagccc gtcgggcctt 660
gatgggctac aatgaccngg tccagcgtcc atccttntga cgccagccaa ccccagcatg 720
cccccactgg cacanggctc gctcacccag ga 752

<210> 1858
<211> 810

0960204.0960800

<212> DNA
<213> Homo sapiens

<400> 1858
atggagataa aagagagtgt gaggagtcag catacttatt ttcattttga ttttagttct 60
tttatatcat tcatcctaat atttccctgt attaactaat tccaactttt tcagtgatgc 120
ctattttgtc tttagtttct ttctttcttt atttaagatg gactcctact gtgttgccca 180
ggctggagtg cagtgctgtg atctcttgac tcactgcaac ctccatttcc cagactcaag 240
caattctcct gactcagcct cccaagtagc tggtgaggca cgtggggcag agaaaaaaaa 300
aaaaaaaaac aaaaaccgcg cgagcggaga agcagggcct gggaccccac agacgaaagt 360
gccttcccat cagcccctgc gctgggccca gtggaacctg gcgtccctgg ttccacccca 420
gggtgcgcct caggccgcta gggatacctc aaggcggaca aaaggcccat gaggggaagg 480
tgaggtttga gggaggatag gtgaggcacc tgtggcagaa aaaaaaaaaa acgcgccacg 540
gagaaggggg gcctgggtcc cccacacacg aaagtttctt cccatcagcc cctgcgctgg 600
gccccgtgga ccctggcnac actggttgga gcacagggtg agcctcgggc ctgatagggg 660
taccccaagg agggcanaaa gcccatgagg ggaaggtgan gcacctgggg cagagaaaaa 720
aaaaaaccgc gccgtggaaa aaccggggcc tgggtccccc acgggccaaa attgccttcc 780
catnaggccc ttgngctttg gcccttgngg 810

<210> 1859
<211> 785
<212> DNA
<213> Homo sapiens

<400> 1859
ttgtttttcc tgatctttgc tgtttttctt cattatatct ctgagacata catatgtaaa 60
tctaattaat ctattgaatt catgtgaaat atacttaaag tgtaatttta tgtccttttt 120
ttagataagt aaatttcaga tactactttt agcagaacac atttttttaat gtgttggtta 180
taaagtgatc tgtaggtaaa ggaatctgaa aaagcaaatg ctcatgtgtt agaaatgagt 240
acctttagtt gcctctggac tgttttctct ttgctatcct atgagggtta catgaaacaa 300
tcccattcct ttgacatttc ctcacttttg ggttctctca tccctttttag agtaaggcac 360
tgctgattag gcctgtttcc agggcaattt cttgctgctc tcttattttt agttttgctt 420
gttttgttat cataggtttg aaatgtaagt aagcggctca gaatgacctg gttcttgtag 480
ctaattcagt aagcatttat tgagggcatt gtacatcagt ccaacaaaga aagaacacat 540
cggaatattt gcattatatt taccagttca gcatccaaaa tccaaaaatc tgaaatctga 600
aatgcatcag tgagcatttc cttcaagtat catgcagatt ttggagactt ttggatttgg 660
gatttgggat gcttaacctt caatagtgag tttatgtaac ttaaaatgta ctaaatccaa 720
caaaaactga ctgaaaatat gtcangtggt tgggaatttt tctttggaag caatcattta 780
tggnn 785

<210> 1860
<211> 720
<212> DNA
<213> Homo sapiens

<400> 1860
ctgttgcttc ccgtctcctc ggcggctccc ctcccccgcc cggctctccg cgcccttct 60
gggcggcggg gcggcggagc cgtcggcgtg cggccctcct tgcgttcgtg cgtgcgcccg 120

09512003.ENG

tggcccggcg cacgtcccgc gacaccgagg ccgagcgggg caggggggctg accgccatga 180
ccccccagag cccggcgtga gggggccgag atgcggtgac ctgccagcac ctgccgcagc 240
cttcgtccgg gagtcgcccc atctctccac gcatcggggc cctgtgcccc ttgctgctgc 300
agccgggcac catgtcgacc tcgtccttga ggcgccagat gaagaacatc gtccacaact 360
actcagaggc ggagatcaag gttcgagagg ccacgagcaa tgacccctgg ggcccatcca 420
gctccctcat gtcagagatt gccgacctca cctacaacgt tgtcgccttc tcggagatca 480
tgagcatgat ctggaagcgg ctcaatgacc atggcaagaa ctggcgtcac gtttacaagg 540
ccatgacgct gatggagtac ctcatcaaga ccggctcgga gcgcgtgtcg caacagtgca 600
aggagaacat gtacgccgtg canacgctga aggactttca gtacgtggac cgcgacggca 660
aggaccaagg cgtgaacgtg cgtgaaaaaa ctaaacaact ggtgggcctt gntgcgcnaa 720

<210> 1861
<211> 749
<212> DNA
<213> Homo sapiens

<400> 1861
gatatttaca aagatttgta aagaagacca ggaaataaca atgttaatag tacttctaac 60
tgggttgtag gctatattaa tagaattggg gcttaatggg gcatagtaac agcgtagaag 120
gttaggtaca tacagtcaaa aagatggacc tttcaccagc tgaagctaga ttggggatgt 180
gtctgatgtg catgtctaca ctgcacctgc aaatttgtga ctcctgaatt aaacatgctt 240
ccctcccccc cctcaggtca ctcacacagc aagtcttccc tggtaagagg aaggtgaagg 300
tagttgtccc cttagagcag gacactccaa aagacagcct gaagaggttt tgagcacccg 360
ctctatttgg catccttgtc tcactctccc atgcatggct ttgctgcctc cgtgaggagt 420
cagacgggaa gaggtagaga gtggctggaa aggccctgct cttccctttg ctggggacat 480
agacctgtgt gtccctttc taaagtgggg agtgatcctc cctaacttgt agatgatgtt 540
cactttgttc ttgtttttgg tcttttcaaa taccttccac agtgaataat gtgtataaat 600
tgaaaactgg aagaaagaaa agggagttca gatttagttc taaaatggtt aacttggcca 660
ggcgccatgg ctcatgccta taatcccagc agatgggttt aggccgangc aggaggatca 720
cttgagccca ggagttcnan accagtcca 749

<210> 1862
<211> 750
<212> DNA
<213> Homo sapiens

<400> 1862
cagnaactct atagagaaat aaagggtttt cccaatcctg gaaaaaaatg gttaaaattg 60
taaatcttac atatatttta ccatagtaaa aaatgaatta ggctgggccc atggctcacg 120
cctacaatcc cagcactttg ggaggctgag gcaggcaaat cgtttgaggc caggagttca 180
aaaccagcct ggccaacatg gcaaaactca tctctactaa aaatacaaag aaaatagcca 240
ggcatggtgg cacacacctg taatcccagc tactcaggag gctgaggcat gagaattgct 300
tggacctgga aggcagacat tggagtgagc tgagatcttc ccactgcact ccagcctggg 360
tgacatagct agactgtctc aaaaaaaaaa aaaaaagaat gaacacttaa atatttgtgg 420
cagatagagg tgttatttgc atatggaaga aaattgcttt agaaatgaaa tttctgatta 480
ctgaaactaa agagaaagta tctcttctta tcatggtacc aagcttgagg gtgcataagt 540
cacctataga cgtaataagc attgagtttc atttttgtt tgtttttgag acaggttctc 600
actgttaccc agcctggagt gcagtggtac aattgtagct cactgcagcc tggacctnct 660

0956469.0076800

gggatcaagg gattccccca acctcggcct nccaagtagc tgggactata gaaatgcaac 720
accatgccca gataatttaa ttttttttn 750

<210> 1863
<211> 886
<212> DNA
<213> Homo sapiens

<400> 1863
tttactaaat gtttcattta ctgaattgtt tcatttattc cttaaaacaa ctcagctcta 60
ttctcggagc cgttacttgc agctcagcat tgttataagg aataaatgaa acaaaaagta 120
cttaacatag tgcctccaca taagatgtca caagctgcta actactattt ttgttatgca 180
ttgtctgaag ataagtcaca aagttggttc ttagctttca ggtaactaat agtgaaggga 240
gaaaagcaac cacttaaaga atttacaggc cgggcgaggt agctcacacc tgtaatccta 300
gttctttggg aggcagaggc tggtggattg cttgagctca ggagttcgag accaacctgg 360
tcaacatggc aaaaccccat ctatacaaaa aatttgcagg gcgtggtggt gcgggcctgt 420
agtcccagct acctgggggg ctgaggtggg aggattgctt gagcccagga ggtcgaggct 480
gcagtgagcc aggatcgagc cactgcattc cagactgggt agcaaagtga gaccctgtct 540
caaaaacaaa acanaacana aaaagaattt atagtttcca aggtgaaaca aacaaaccag 600
ctgcttagga gaacacagct gattttaaca tgttctgagg agcacaattt ttcttgctgg 660
tactcatgaa gaaaacatct tacttcatat ttaaaggtat ttttaatgtg aatagagtca 720
aaataattta taaaagtggt cttgggggtc cagattgatg nggtctaatt atgaacctct 780
gtgatcggac ttaattcaaa gatagatttt gaggggctag angaatggat tgaactttag 840
gaattctatg gatatgggtc tcttctctgg gcttttgaaa aggcan 886

<210> 1864
<211> 747
<212> DNA
<213> Homo sapiens

<400> 1864
gaaacagaac aacaaggtga cagcctttg ctcaagtcaa aaagaaaata agtccctcat 60
cttagtttaa agttgttcat tcagtagtac agacttgcat ttgaagactt attcttgatc 120
ttctgtagct ttgacagcaa ggacatcact acaatgggta cagaaataac acattctgat 180
ccttgctgag atccttgtat gggcctatct taaatctagc ctattgtctg tcttaccctt 240
tgatttttat aagtagaaaa caggaaaagg ctaaccaagc aagaggaagg catagattca 300
tcttcctttc aatcttgact atagtttaaa gagaatacca tgatctttct gttctattct 360
tggcttactt gaatatttag ccaggtctct gcatcttatt cagtcagaaa acagacacag 420
attcagataa ctcaaaggat gttacttgct tgagtaatcc ttgggcctcg ctttaacttt 480
gtagatccag gaacagaatt aagcagacag ttcggtctac actgccaaat ttcttaggga 540
aaaagagggc aagtcagaag gaggaagttg gcatttggct caaatgacca aattatttaa 600
gggctctaca cttcactttg caccaagtag acccaagaat gattataatt canctacgtg 660
tggtggtgca natcagtagt cctagctatt caggaagctg aagccggtgg aatgggttga 720
acccangaat ttttaggctt gcaatga 747

<210> 1865
<211> 887
<212> DNA

09553458.030200

<213> Homo sapiens

<400> 1865
ttgcattgtc aggtaaattg ccttttttc tgtgggacgt catcaaaaag gcttgaaaaa 60
cactgctgga atcaatttat cctgttttct attcttctga atgctaattt tttttccttg 120
agccattcta ctttcatttc aatcatgaaa tatttccaac tggccttgat taatgcttta 180
acttttcaaa gaaaaaacac ccacacacat ctcagtagaa aatatggtga actgaagatg 240
atatttggtt ttcaaaagaa aagtttggcc aaatgttctg cattgcattt ctgaggcaca 300
cacaggagcg ggtgccaggg tatttgactg taggtaagtg aacaaggagc tatacagata 360
gaatggcacg gggtttgaca gtaatcagaa caccacatca gaacacttga ttgcacttca 420
actctcatgc tgtgtttgcc ccaaataatc ttaaaaattg tgactatatc gaataagttc 480
acaatactta ttaggatgtg gtgaaactga attatttgaa gtaggaagac ccgaagttct 540
tcgcctatga gactggtgaa gtgatttgta gccaacatgc tccaacccat ctattaagaa 600
aactatggca tctattaaga aaattcaaaa tcttaaacag agaaatccat atttagaaaa 660
catggccaga ttaaataggg ggtgggttat tttcttaaat acgttttgtc aatttcacgt 720
gaaaaatgaa aacccctagt catgttacat attacatttc tggtaagatg tatggtcctc 780
tggttctaat aaaaanttgt ggtggnttgg gaagtgaaaa atgaatgtga accccaggcc 840
ctgtnaaagg aaggagaaag tgtaaaggtt aatacccgga aaactga 887

<210> 1866
<211> 711
<212> DNA
<213> Homo sapiens

<400> 1866
tgttattttt attgttgtaa tgttacttta ttttctaata ttttctgttt gcggttggtt 60
gaatcctcag ctgtggaacc tacagataca gaaccacaga tttggagggc cacattgtat 120
atgtactatt ttgtgactta ttttgaatat ttctgcatca ttaagtattc attatttttt 180
ctagactata acttgctttg tctactgtgt aaatatgcca tgatttattt gtagntaatt 240
ttttacagtt aataacacta ggatgaactg ttagcctatt agccaatctt tgactatctc 300
tggcttgaaa cagcatatca cttatatttg tttggagtag atagagcaaa aagtaaagaa 360
atgattatta ttaaatagga catatcccat ttatcagcag atggttacag tagttcanac 420
tcttttactt ctgacccaga acagatcggg agcaatgtaa ctcgtcaaag gtcagtattt 480
ctgtcaatga aaagcatgtt aaactatctt gctgcgtttt aatgtttaaa actatttaga 540
accaagcaca aatgattttg ntctctgaaa gctgttaggt tacttttga tttatgtaaa 600
agacaagtaa ttttgatcct ttccaacttg aatagaaaaa canaaagaac cctgactttc 660
tnaatggtat gctgtggaag ctctaaaaag angtgataac ttcttgacga t 711

<210> 1867
<211> 868
<212> DNA
<213> Homo sapiens

<400> 1867
agtgaaaggg aagattggga gggaaggggt aggagataag aatatctaag caaggctgac 60
attgtgggga ccatcaaata ctatacttag ttcagttaca gatagctatg gaattgaaag 120
tttctcaggg aaaagggaaa aagatgtacc aaaggaaata accaaagtat agaaaagaat 180
gttctttgaa atgaggagaa aaaagatgag tttttgagag tgtatagaaa gaaaagtagc 240

09552550.030800

aaggttttag gcaaggttaa atactagaag ttagaaataa atcaaaatct aaaaaggcat 300
atataaagta taagtgtaat gagaaaattg agcagtttca tttttgttgt ttattagtgt 360
caacagaatt tgaaataatt ttcaagctga ttttattcat tgtttacctc cttaattata 420
taatagaaat aagtagcttg tgtttcttat gaaaatttac ctgctacttg atgtatcttt 480
tttcagtgca cggtagtaaa atcagttgta tatatcctgt ctaacatcag tatgcatatt 540
atactatact gtacatttaa ttaggagttt attagctgtt ggcttaaatg agtttaaaac 600
tactttatga tcacatttgg ctcaatgaat ttggatttga gactaatctt tacataccca 660
agatgataat gttcttgtct gtcttagaag taaagacacc aatattcttc ttaccttcct 720
ttttatatcc tatttcctta tctacatctc taatatgtac cctattcaat ttcaagtatt 780
tggtttttt ttaatggtca ntgtcctact ttttcgaaat cctgtttctt ctattaatat 840
agncctatct gacaaaagtc cgcnaata 868

<210> 1868
<211> 875
<212> DNA
<213> Homo sapiens

<400> 1868
aattaggacc tcagggaagg accttcaata gagagctttc atttcctgcc agcattttaa 60
tcactctggg gtttaaagtg gatggccggc cagcataatg gccctatgtt taatagaaca 120
gcttgtatct tgaaggccag ttaagggatc tgtcatccgc ccaatatttg tcttttctgt 180
ttcctgtcca tttatgaaga tcacccaccc ttttaggtgg cttccctgga tcattttgta 240
ggggagctgc tgccactgct tcttaaagag gctgaacaga aacccagttg aatgtggtcc 300
agtcttcagc ccacgcaggg aagttctgca gagtgcttta attagacacg aagttcacca 360
catttgggag ttgattccat cagttgtaga gggactgtgt cagatttcac aaaaaatata 420
gaattggaag aagattaaaa tttatccata tctcagaatt attggcacct attgacctga 480
tatgtgctca catcatcact gtggtggatg ttaatgtcat cctgtcatgc acaggagtaa 540
cttatctcct gaggggtgaa gtaacctggt gggtttgatc ctgttgtata caaaggaaat 600
tcacaatttt tctaatacag tggcttgtta actctgaagg caggcttcct ttggaaccct 660
ttanaaattt acctttatag tttatgagat gatatccaga actcctaaag gagtaaatat 720
tggagacaag acttgaaaga gagagccagc agtnngaagt aagggttctg aatttctttc 780
caactcatgc ctaatgggta agataagata acatcagtaa aagcctgaga atcactaagt 840
ttcatgtagg actgccttga aatgntnttg gaccn 875

<210> 1869
<211> 827
<212> DNA
<213> Homo sapiens

<400> 1869
aacttaaata tattctttcc cccaacaggg ttaatcatct cattttagtg gagccttggg 60
gtttccctga acgaccagac cttgctgatc aagacagacc aattccagtt tggatcagag 120
ccttgggagc agcattgact ccctttaacc ctttagctgg cctaaggatt gcaggaccct 180
ttggtgagtg cttatgttct aggaaagcaa aatgtttgta agttatgaga agagcagaat 240
tcactattgt tagtcaaaat cttaaaaaca aacaagaaaa ccctgaaccc ttacttttttc 300
tcctcttcct ctaataagta ccatgtcttg cacaaagacg aatgcaacta ggttcttctc 360
ctcaaaggag agtctttata ttgtaaacat tgtgaataat tagcaaagta gaaaaggagg 420
gaatgctgag gataaggtta gtcagtcctc aacactctaa aaaaagccag gcaagcagag 480

09529800

tgttttgggg agtatataag gacctctgct agtccagggc ctgggagaag tgtagcatgt 540
tgccctgctg gtgagcactg gagagcgttt ggccaattga tgataccatt tggtaccata 600
aaacctgatt tgattgaccc tggggataac aggtaccacc acactcacag attcttccct 660
tatccatgtc agagtgttgg aaagataaag ttatttttc cacaacattt tggggactcc 720
tgatatatat ttctggtcat attttgaggc ccagtgtcta ntccctgatg gacttttatt 780
tgactcttan cagttctgnc tcaaccccat agcatgggaa tttcctt 827

<210> 1870
<211> 871
<212> DNA
<213> Homo sapiens

<400> 1870
gtgcctttaa gaatgaaggc ttagactttt aaaatctcat gtttttcaaa cttcagggtt 60
ttatacctca gttttccatt tgaaaactag agtttttagc gattgatttt caaatgcatg 120
aaaaggggag aaaaggcaaa acttcatgaa ctagtatttt aaatgtggaa taaaatgata 180
tttattgaaa aataggccag gcttagttgt ccacacctgt aatcccagcg ctttgggagg 240
ccaaggcagg cagatcactt aagtccagga gttcaaaacc agtttggttg acatgatgaa 300
accctgtctc tataaaaaat acgaaaatta gctgagtatg atggcatgtg cctgtattgc 360
cttagtccca gctacttcgg aggctgaggc ttgaggatta cttgaaccca ggaggtagag 420
gttgcagtga accgagatcg tgccactaca ctccagcctg ggcaacagtg aaacacatct 480
caaacttctt aattgtcctc ttggcatctg ctttcaccca ctctcatgaa ctttttaat 540
tgcctttccc tggaccagct ctagttctgc tacagcagtc agtaacacac acagataagt 600
gtacatcgcc actagcccta tcagtacttt aacagtgagt catatctttc tcgactttct 660
ctgtgcctgt ctaatttata tatacttttt ctnccccttc acaatgggat cattctttat 720
ctgagtcatt tgctatatct gnatatattg gtttaagggg tgcatcttgg ggtattttct 780
ggtctgcatt tatatnccaa aacttttgga aaataatttt tttttctttc anaaaggaat 840
gttcaaaggt aatattttct tggtttggna a 871

<210> 1871
<211> 763
<212> DNA
<213> Homo sapiens

<400> 1871
ggtttttgtg tagctgcttt ctctcacagt gtttgtaaac ttgaacccaa gtgcaccgtt 60
cacagtctcc agctccagct cttcactaac acctttattc cttgctgttg gccttgggac 120
ccttactgtt ccccttgctg tgtagaaaca gatgcagtca gacccacata agctggactt 180
tggactgaaa cctgagttcc tgagccgccc tccaggcccc agtctttttg gagccatcca 240
ccacccccat gacctggcac ggccttcaac tttgttctct gccgctggtg agtgtgggtt 300
tgggtggggg gacagagctg agaaatgtag ttctcaggta actaaataaa tgaggtttgg 360
gctctgagct gccgctcagt caccacctac aaaaatacag ttaatgccag cttgcaaggc 420
aacatcgcag cacatccagg gagttgggaa tcttcagtga tacactctct ttcattaaag 480
gaggaggcag agatcatctt tcccttacag ggattcacat tgcttcggtt cattatttgc 540
ttctatatta aaccagtata actcacaagc atgtcagttg ctattgagaa agatctgaag 600
gcttgcaagg gcagatcgga aggaaacaat gccaggaatt atagaaggat gcggtcgccc 660
ttaatacggt gcccgcagag cactgtaatt ttgcaccggg atgctcantc atgccgggtt 720
taaaagtcct gaggataaag aaaggcgatt nangcagttg cca 763

0050050-0050050

<210> 1872
<211> 795
<212> DNA
<213> Homo sapiens

<400> 1872
aagcgaccag attgcccagc gcctggagaa tgggctgcag ccagagagag cataggagga 60
tgttgttctc tgtacactgt ctctaaaaat ggtgcttttt ggctgggcac ggtggctcat 120
gcctgtaatc ccagcacttt ggaaggctgc ggcgggcaga tcacttgcgg tcaggagttc 180
gagacctgcc tgatgatcat ggagaaaccc catctctact aaaaattcaa aattagccgg 240
gtgtggtggt gtggtgggca cctgtaatcc cagctacttg ggaggctgag gcagaagaat 300
cgtttgaacc cgggaggcag aggttgcagt gaactgagat cgtgccattg cactccagcc 360
tgggcaacaa gagtgaaact ccatctcaaa aaaaacaaac aagcaaaaaa atgatgcctt 420
ttagcaaaat agtgactgac tggcttttaa taccacaata aaaagacatt agcaaaagtg 480
gtgtgagagc atgatcatga gtcctgtaga gaaagtaacc aaaagtgata catttctatg 540
tggttccctc ccagacaaaa tgccaggctc cacccactag ttcaccctcc ctgttagcaa 600
tggctggtac gtgttcaggt ttagattggt gccagacact ttattttatt gnctcaccga 660
gtctncatga ccaacctacg agctatgaga tattactacc cctttttgg atagacacag 720
angtgaatag cttgcccatg gacacacatc tactaagtgg taaaactggn aatcgaaccc 780
aggcagtctt tncca 795

<210> 1873
<211> 784
<212> DNA
<213> Homo sapiens

<400> 1873
tacttaaatt aacttgggtg gttaataaag atgtaaatat tcttcatcca gtctataaga 60
agagccagga accaaaaaaa gatagcatat cttattttca tctctcagat tcaccttata 120
tttcaagagt ctgagttgaa tattatgttc tcatttgttt ctcattctag aacaataaaa 180
gaaaaagaag caagtccaag cagcatcaag gcaacaaaga tgctaaagac aaggtggaga 240
ggcctgaggc agggcccctg cagccgcagc caccacagat tcaaaacggc cccatgaatg 300
gctgcgagaa ggacagctcg tccacagatt ctgctaacga aaaaccagcc cttatccctc 360
gtgagaaaaa gatctcgata cttgaggaac cttcaaaggc acttcgtggg gtcacaggtc 420
agtaatgctt aagtaaaatt gcttaggaag gcatagatga aaagagcaca aagggagctc 480
attggggctg ctgttgatgt tgttgaaaat ggaaggttgt ttttctgcag tgtgtacgat 540
tcagccttcc tgaagccagg attgggggtg aaggggaatg taacagggca gagaataaat 600
gctcaatcta gctctacacc aagtcagagg attttttttt ttttttttt gagtctgggt 660
cttgctgtgc aaggctagag tgcatggtgt ggtcatagct cactgcactg cagtcttgaa 720
ctnctggact caagcaatcc tgccttggga ttccaaagtg ctgggattnc cgacatganc 780
cccc 784

<210> 1874
<211> 865
<212> DNA
<213> Homo sapiens

09552006.000

WO 2005/035570 PCT/US2004/033250

<400> 1874
ataagaggcg tcattggcgc ccgagctgtg accgccgcca ctggggcagc cagcacaatc 60
gggcggaggt ggcgctgccc cttcagacct gaaagatgtc tgaaaattcc agtgacagtg 120
attcatcttg tggttggact gtcatcagtc atgaggggtc agatatagaa atgttgaatt 180
ctgtgacccc cactgacagc tgtgagcccg ccccagaatg ttcatcttta gagcaagagg 240
agcttcaagc attgcagata gagcaaggag aaagcagcca aaatggcaca gtgcttatgg 300
aagaaactgc ttatccagct ttggaggaaa ccagctcaac aattgaggca gaggaacaaa 360
agatacccga agacagtatc tatattggaa ctgccagtga tgattctgat attgttaccc 420
ttgagccacc taagttagaa gaaattggaa atcaagaagt tgtcattgtt gaagaagcac 480
agagttcaga agactttaac atgggctctt cctctagcag ccagtatact ttctgtcagc 540
cagaaactgt attttcatct cagcctagtg acgatgaatc aagtagtgat gaaaccagta 600
atcagcccag tcctgccttt agacgacgcc gtgctaggaa gaagaccgtt tctgcttcag 660
aatctgaaga ccggctagtt gctgaacaag aaactgaacc ttctaaggag ttgagtaaac 720
gtcagttcag tagtggtctc aataagtggg gtatacttgc tttggtgatt gcaatcagca 780
tgggatttgg ccatttctat ggcacaattc agattcagaa gcgtcaacag ttagtcagaa 840
agatccatga agatgaattg atgan 865

<210> 1875
<211> 787
<212> DNA
<213> Homo sapiens

<400> 1875
aaactcattg gcgccaagat ggcgatggag atgaggcttc cagtggctcg caagcctctt 60
agcgagagac tgggccgcga cactaagaaa catctagtgg tgccggggga tacaatcact 120
acggacacag gattcatgcg gggccatgga acgtatatgg gagaagagaa gctcattgca 180
tctgttgctg gctctgtgga gagagtaaac aagttgatct gtgtgaaagc tttgaagacc 240
agatacattg gtgaagtagg agacatcgta gtgggacgaa tcacagaggt tcaacagaag 300
aggtggaagg tggagaccaa ctccaggctg gattcggtct tgctgctctc gtccatgaac 360
cttcctggag gagagctgag gagaagatct gcagaagatg agcttgcaat gagaggtttc 420
ttacaggaag gggaccttat cagtgctgag gtccaggcag tgttctctga cggagctgtc 480
tctttgcaca cgaggagcct gaaatatgga aaactaggtc agggggtttt ggtccaggtt 540
tccccctccc tggtgaaacg gcagaagacc cactttcatg atttgccatg tggtgcctca 600
gtgattctcg gtaacaacgg cttcatctgg atttacccaa cacctgagca caaagaagag 660
gaagcagggg gcttcattgc aaacctggag cctgtctctc ttgctgatcg agangtgata 720
tcccggcttc ggaactgcat catctcgctg gtactcanan gatgatctga tgatccacat 780
ctgtctg 787

<210> 1876
<211> 870
<212> DNA
<213> Homo sapiens

<400> 1876
gtgcctagcc atcattccat tcctcctcct tcgcctctca taaaaagaaa atattgngta 60
cctgcaaaca tatgctctgc tatcagcatt cagacaccca aacaccgaaa tcatttagca 120
gctcttactg ctgtcagtaa gcagatgatg gcgtaagggg tttagaattt gatatgtgtt 180
ttctaaagca tctctcaaaa taggcattgt ctatttcttg tttgttgctt gtgggaaatt 240

tttcgtcaag tgtacctgta cctaacccat gactaaaact tacctagatc ttaatttcta 300
gatttaaaaa gaagaaaaaa gggatcaagt aaggaacagc gaagtaaaga atatctaaga 360
ttaaaagtag gaatagctac aattacctag atttcaattt ctgggttatt tttagtgtga 420
caaagtaaag agtgtccaaa attacaaatc tgagggataa ttcaaagatc ctttttttgtt 480
gtcattgttc ctgggggaat atgtttcctg ggggaaggag catatctgac tggtcccagg 540
gaagaaatga agtagaactg gtattgaaga gatatctttc tatgggaatc cagcanaaat 600
actgggttcc aagaacttgc ttgcctgggg aactcccaga ttctttaaaa accttacatg 660
tgaaatagct taacataaat atataggttt agacatactg attgatgttt cagtgcctat 720
ttttatatgc atttatatcg ctcanggcat ctatttccac ttggtctatt aagtcatggn 780
ttttgcaaat ggncaccatt taaatataag ggaagggacc tattttgctt ctttcataat 840
cttcgacatt tcctcatgaa agaataagga 870

<210> 1877
<211> 871
<212> DNA
<213> Homo sapiens

<400> 1877
taagtagcat gaaatctaag gaagacaggt aaaccagcag cactggccta ccaagaggag 60
ggtatgggag ctgtggggtg tggggagacg gggtagccac acaaatgggt agaaagaact 120
cggctaacac tttaagcaaa ttgctaaggc caaggatggg atcctgcaac ccttggaagc 180
cactgacttt ataaagagat ttacacccac ttgcaggctg ttctgcacaa gcctccatca 240
gcccctcaca acgaagtctg ggggcaagtg ggagacttga ggaaaccacc gtcagtggtg 300
caggccctga gggaaaactg ttaggggaag ctccaagctc cacccagacc ttctccccta 360
taggaaagaa acaaaacatc ttaagctcct ctggaaaagg gcaacaagcc atgttatccc 420
agggcacagg ggaagtggaa gaaaacagga aaaatcctct atgcctagag gagtagcaag 480
aaatgatcct gagtccagat catccgcact ttcctgctac tggaaaaggg gcaggatatt 540
tgagaaagcc ccaccccaaa gcagtgcctg cccaaaactg aggctagact aggacaagaa 600
tcaaacccac ccaacctnca ctgccaggct agcaatcacc cagttacgaa aactgatcta 660
cgtgtgggtg aaggcatgag cctagaaaga gacccttca gagacacaaa agcacagcan 720
cttgaagttg aangtagatt aggaacataa accaaaaccc cagtccactt aacccacagc 780
agattatgcc angggaattt gaacctgtag tacacttgaa ggtaaccaca gcancagcaa 840
aacccgctna acttctgggc ttgggttaac t 871

<210> 1878
<211> 762
<212> DNA
<213> Homo sapiens

<400> 1878
aggatgaagc acaaaaggaa aaatttacag ccattcttta tcgtactttg gaacggagga 60
gacttgctga tgattatcag caaaaaaaga tggtcatggg gaggctctgc aatggcgaat 120
tctgagagca aaactgccaa taaacgatct gcatctactg aaaaacttga acagggtact 180
tctgctttaa tcagacaaat gcctttgtca tctgcaggcc ttcaaaattc cgttgccaaa 240
aggaaaacag acaaggagag aagctcatct ttaaatagaa gagatagtaa cctacattcg 300
tctactgata aagaacaagc cgaaaggaag ccacgtgtta caggcgtcac caattatgta 360
atgcagtatg tcactgtacc cttgcgtaaa tgtactagcg acgaattgag ggctgttatg 420
tttcccatgt cgacaatgaa aatacctcct caaacaaaag tagaagagtc tcccttggag 480

0050205-0050800

aaagtagaaa cacctcccaa ggcaagtgtg gatgcacccc cccaggtgaa tgtggaagta 540
ttctgcaaca caagcatgga agcgtccccc aaggcaggtg tgggcatggc ccctgaggtg 600
agcacggact cattccctgt ggtgagcgtg gacgtgtcgc ctgtggtgag cacatatgat 660
tctgagatga gcatggacgc atnccccgag ttgagcatag aagcactccc gaangtggac 720
ctggaaacag ttcccaaggt gagcatagta ncattccccg ga 762

<210> 1879
<211> 702
<212> DNA
<213> Homo sapiens

<400> 1879
atccaacagt tctgatttat tccactcaca caacaagtca gttcttaaca caaaccacat 60
aggttcttcc ttaaataaaa agctgtggct atgaagaagt gagagttttt ttttttttc 120
ctctccaaac caccacgtgc tcttgtgtgt tattgtagtg gcttcgcaga gtatttattt 180
ggccagaaag tctatagtca aattgctctt cattctcaag tgtagtattt atttctccag 240
ctcatgcaga attctgtttt atatggaggt tttaaatttg tgcagaaaag tattacgtgg 300
gtttcaaagg tactcttttt tctttttga gacagggtct cgctgtgttg cccatgctgg 360
agtgcagtgg tgcgatcaca gctttctgca gcattgacct tgtgggctcg agcagtcctc 420
ctgcctcggc ctcccaggtg gcttggaacc gcaggcatat accaccatac ctggacatgt 480
ttttaacttt aatttttatt tttgtggaga tgaggtctcc ctatgttgcc caggttgctc 540
tcgaactcct aggctcaagc agtcttcccg ccctggcctt ccaaagtgca ggcattttag 600
gcatgaccca tcgtgtccag cctaaatggc attcttggaa gtaaaaccac aggggatctg 660
ttggaagtgg catgatggag gaattttana angaattgna cc 702

<210> 1880
<211> 819
<212> DNA
<213> Homo sapiens

<400> 1880
tcatgattag ctttgccaaa ccatctccct agattatttt tctttttaaa tttcactttg 60
catttggtta atcattccct gggaaagcac acggggcagg tgggcctcct tgtcttcact 120
ttgccattcc ctatctgatg aattctgaac ctcagttttt catccaagaa ctggagttaa 180
aacacctgca ctattataca gggcgtgagg ctgttgtcat gataatcaat gagctgatgt 240
gtggttgaag ctcttatctg actccataga tagttttaaa ctacctaagt ataaattcag 300
cagctttgct taagatttaa agcaggtatt ataaatatgc attcctttgc cgatctttta 360
atagaaggac aggcctattc ttttgaagat ggatctgctg atgagagctc cctttgtct 420
actttacatc aaccacaccc ttatttcatt gttttgtgat tccagtgttg gtttctttaa 480
agtaaaggaa gaatttagat atttgccgag ccattctgaa tatagaaact tcctagatcg 540
catatccctt gatcttttat cgttaattta ctctcatcta attaacagcg ttttgntttt 600
ttttttagaa attgactttt attaagtctt tccaaagtag ccaacttagt tttcaaagaa 660
aatttctctc tatttttatg gtcatctaat cagtgacagt aataagtcaa tcagctcatg 720
taatcccagt naccaaacag caggattgtg gacacacaca ggtgggagcc ctgaaatgcc 780
tggcanctgg gaccagtggg gaaccttgaa ccanggcca 819

<210> 1881
<211> 768

0562345.02500

<212> DNA
<213> Homo sapiens

<400> 1881
tttcatttta gtttttaaa tttcttttta gaggcggggt ctcactgtgt tttgcccagg 60
ctggtctcga actcctcctg gtctcaagca atcctctcgc ctctgcctcc ccaagtgttg 120
ggattatagg catgagctac tgcactcagc ccaccatttg ttttaaaaag ggtggatcct 180
atttgtataa aaagccatgg gcattttctg tgtacttgtc tacacattaa tttccaggct 240
gggcgtggtg gctcacgctt gtaatcccag cactttggga ggccaagggg aggcagatca 300
tgaggttagg agatcgaaac catcctggct aacacggtga aaccccgtct ctactaaaaa 360
tacaaaaaca aaattagcag ggtgttgtgg cgggcgcctg tagtcccagc tactcaggag 420
gctgaggcag gagaatggca tgaacccggg aggtggagct tgcagtgagc tgagattgcg 480
ccactgccct ccagcctgga caacagagtg aggctccgtc ttaaaggaaa aaaatttctg 540
gaatgatgtc caataaatca gagagaggga ctagaagact aatgaggaca gaagctttta 600
ttcttaacac ctatattttg ctaccattta tattggcatc atatgcatat aacattttaa 660
catttaaaaa ctagtttaaa cagaaatggn tgccctggaa tgtggcctgg gntctttcaa 720
agggaggcca gcantttcta caaggggctt gaaaatggga ccttcatt 768

<210> 1882
<211> 685
<212> DNA
<213> Homo sapiens

<400> 1882
agccttataa atgcaatgac tgtggcaaag cttttaatcg tagctcaagg cttacccagc 60
atcaaaaaat tcacatggga tagaccactt acatataaat gtgtatatat gtgaataaac 120
ctacagcctt aacttactta ttttatatgg aatcgtttat actgacaaac atgtagaatg 180
ttggtaaagg ttcagaattg ctctcaagaa tatccaactt caggccgagt gtggtggctc 240
atgcctgtca tcccagcact ttgggaggcc aaggcgggca catcacgagg tcaggaggtt 300
gagaccatcc tgggtaacag gtgaaacccc atctctacta aaaatacaaa aatttagctg 360
ggcgtggtgg caggcgcctg tggtcccagc tgctcgggag gctgaggcag gagaatggca 420
tcagcccagg aggcggagct tgcagtgagc tgagatcgcg ccactgcact ccagcctggg 480
tgacagagtg agactccctc tcaaaaaaaa aaaannaaaa aaaatccaac ttcatacaaa 540
atgtatgttt atttcctgaa atgtttgacc ttaacctgtt caataaagcc tgtgtccctc 600
aaaatcaggg tgcagtctgc agttttgagt tgacaggtcc ctgtgaatga ngaacancnc 660
aaggagggct ctacgagcgc tgcta 685

<210> 1883
<211> 832
<212> DNA
<213> Homo sapiens

<400> 1883
gagtctaatt aatagacatg tttattgaac actgcagaag caggaggtat caggataaga 60
ctctccactt ccatggaaaa agtgcacatg gctgctgaag atgggcttta ggtgccttga 120
gagcagtcag tgccaataag gaagaagttc aagcgggggc agaagaattc ccccgggagg 180
tgattctgca gaactcagcc attcacaggt catgggagat tttgttccct tcagggtacg 240
tcagcttcac ttgctgaagt aggacaagta gattgaatta gccctggctg aagccaaaat 300

0 5 0 5 2 0 4 5 0 3 . 0 7 0 8 0 2

tctttatatt taaaagaaga aaagcaatta aatattcaac ccgatcctgg gttttgaatt 360
accccattta tctttcactc tgagcatctg ctttttattg cattgtggcc ctgcctgcca 420
tttatctctc cccgtcagtc tgtatccacg tgtcatggga ctcaaaagtg aagattagag 480
gagaaaaata tctctgtatt ctaagcctgg caacttctat ttctatcctc agctgttgga 540
gctgatagca aagtcacagc tcacatccct gagtggcgtc gcccaaaaga acttcatgaa 600
tattttggaa aaagtggtac tgaaaggtga gccttctctc actctctcgc ccctttttat 660
aggcatggag gtgggcagat ggattttcca atgaagtgga cgtgtcatta gacttaaaga 720
catgtgaatg gatggaaatg aataacttca gctacatttt agagacacta aattccagtt 780
cggaaaaggg gtccactcat cctcatggcn aanggtgaga catnaccctc tg 832

<210> 1884
<211> 819
<212> DNA
<213> Homo sapiens

<400> 1884
gaatttagta ctatttatgt agtcctcagt tgtgatgggc agacagttga accttgtaca 60
ccatatttag aaaaaaaaca caaaaaacct tttggccagg cgtggtggct catgcctata 120
atcccagcac tttgggaggc caaggtgggc agatcacctg aggtcaggag aacatgacga 180
aacctcgtct ctactaaaaa tacgaaaatt agccaggcgt ggtggcagat gcctgtaatc 240
ccagctccta gggaggctga ggcaggggaa tcgtttgaac ctcagaggtg gaggctgcag 300
tgagccaaga tctcaccact gcactccagc atggatgccc agcctggatg acagagcaag 360
actccatctc aaaaacaaac aaccaaccta ctttttgtat aggtatagtt tgaacctagt 420
attcagacca gtaaaatgaa aaccttgcag taaatgcttc ccagtcttta ttgggctaaa 480
ataggccacg tgtgctttta gaaagatggc cgcataataa catgtttatt gaatgccttt 540
ttacctaaca tgcaggttct actttatttt cccactttgt acaagacaag cagtttttgn 600
tcttataagt agtgaggaag tcaatatagt agatttacga cattgcattt tcaagccact 660
gggtgtaaaa ataaaattac tcaaaatatg taaaaccctg aaaacaatga tttaattgaa 720
ccagtcaaac attatttaaa attganagct ggtgtcccat ncaggtaggc ccctttnaa 780
aagaccgatt tttaagttta agcctttaaa aggttttca 819

<210> 1885
<211> 685
<212> DNA
<213> Homo sapiens

<400> 1885
gtgtagtgcg agtggggcgg acgcgcgcag cccgcccgcc cggcgaccag caagacggag 60
tctcactctg tcgcccaggc tggagtgcag cggcgtgatc ttggctcact gcaaagtctg 120
cttccctggt tcaagcgatt gtcctgcctc agcctcccga gtagctggga ttacaggagt 180
tggcatcctt tggaagagtt cgtgaaagct ttctgcccag agctcctgga ccaatgcatc 240
ttcccaccac cttaaaccac tgagcagttc agagccccag ttgcagacga cttgtcctgc 300
caccaccatg agttctgaat gtgatggtgg ttccaaagct gtgatgaatg gcttggcacc 360
tggcagcaat gggcaagaca aagacatgga tcctacaaaa atctgcactg ggaagggagc 420
ggtgactctc cgggcctcgt cttcctacag ggaaacccca agcagtagcc ctgcgagccc 480
tcaggaaacc cggcaacacg aaagcaaacc aggtctggag ccagagcctt cttcagcaga 540
tgagtggagg ctttcttcca gtgctgatgc caatggaaat gcccagccct cttcactcgc 600
tgccaagggc tacagaagtg tgcatcccaa ccttncttct gacaagtccc aggatgccac 660

0052045 0.9.2000

ttncttcagt gcancccaac ccgga 685

<210> 1886
<211> 645
<212> DNA
<213> Homo sapiens

<400> 1886
gaggcctgag gcggcggcgc gaggcagtat ggtttgaagt ggtgaacatg gatttttctc 60
ggcttcacat gtacagtcct ccccagtgtg tgccggagaa cacgggctac acgtatgcgc 120
tcagttccag ctattcttca gatgctctgg attttgagac ggagcacaaa ttggaccctg 180
tatttgattc tccacggatg tcccgccgta gtttgcgcct ggccacgaca gcatgcaccc 240
tgggggatgg tgaggctgtg ggtgccgaca gcggcaccag cagcgctgtc tccctgaaga 300
accgagcggc cagaacaaca aaacagcgca gaagcacaaa caaatcagct tttagtatca 360
accacgtgtc aaggcaggtc acgtcctctg gcgtcagcta cggcggcact gtcagcctgc 420
aggatgctgt gactcgacgg cctcctgtat tggacgagtc ttggattcgt gaacagacca 480
cagtggacca cttctggggt cttgatgatg atggtgatct taaaggtgga aataaagctg 540
ccattcaggg aaacggggat gtgggagccg ncgncgcacc gngcacaacg gcttctcctg 600
cagcaactgc agcatgctgt ccgagcgcaa aggacgtgct cacgg 645

<210> 1887
<211> 685
<212> DNA
<213> Homo sapiens

<400> 1887
aaagtgagtc cagggcccgc ctcccgggga gtcggcctcg gatgtccgga ggctcctagg 60
ctgagccggc gacagagccc gggaaggcag cgagacgtgg gcgccggccc agccccctcc 120
cgcgtccttc agccccaagc cccgagcccc tctgaccctt ccgcagccct ccctccagcc 180
gcgcccggcc tccggcagct ccctgtacgc ctccctcccc ctgcccgccc ctccctccca 240
cagccgccca tgacgccctc tcggcacccc ttcccactct gccacgcgtc cttttcctgc 300
accttcgccc cgcgtaccta ctcctgcccc gccctgccat tcctctcccc tcccttctct 360
ctgcgacccc tccctgttag gccccagcct cttctccccc cacaggtctt ctctgtcctg 420
gcctcaccgc cttatcctat tcctctccct tgccctgtgt cttgtctcag agccccctcg 480
gggtgggagt aggttgtgga gcagcacaac tgggctcacc ccaaagcaga acttctcaat 540
ccatgaggac aatggggagg cctttaggcc agcccacatg tgacaatgga nggctgcggc 600
ttccttgcgg agagcacaag tgagctnact gccctggact tcanggaatc agagttcttg 660
gccgcggggt gaaccaactt ctctg 685

<210> 1888
<211> 609
<212> DNA
<213> Homo sapiens

<400> 1888
gtgtgttggg ggtggtgaga atgcgctctc ttcggcccgc cccgtccttt ccaaagaaac 60
gtgctcataa tggggtgacc taattacatc gcaatggaac tcaatcttag ccactccgca 120
gcaccgggtt tcataacaga ctcggcggcc tcgagtgctg ggaagaaacg tgcgagggcc 180

0556269.0N2000

gagggggggcg gcggagcccg cgtggaaatc ggaaagaagc gcagccctgc gacttccgcc 240
tgggtcatca cgccagcagt cgggccaagg cgcaggggcc gggtggggga cacgttaact 300
ttttatttgg gtgggcggca tccaaaccta acagtatata ttttatcatt ttcaagggag 360
tcatgctcca ttgcgggccc ttcggtttcg tggctcccat gtccccctct ccacctcccg 420
ccaaaacggc gcagcgtgac aagccatatg ttccactccg gtgggggcga gagagaagca 480
acaataagtt aaaagtgccg cctccctcca cctctttacc ttcattctta ccaaagtaac 540
ctttttttcat tgttctagag tcttgaggtg tgtgtgggga ggatggagga aganggaagg 600
ttgnggncc 609

<210> 1889
<211> 853
<212> DNA
<213> Homo sapiens

<400> 1889
aagtaaaatg gactaaaatt ttgcctagat ttacctaaag gcaaaatata aaaattaatt 60
tctaaataca taagatgcac actgaaagaa gagtaagtca gtccagattt agactataaa 120
ttcaaatgtg aaaattcaag catctgaaat gagagaggga gcacagcctt ttgaagaaaa 180
ataaagcact aaatttaaaa agtattattt ttatttcagg aaagaagaag cctgagcttc 240
caaaataact ttttcagact gtttattaac ccagtcaaac caagaaaaca aatgtacaat 300
tagcttatta aaaataggga ctccaatatg ggcaacaaag caagaccctg tctctacaaa 360
aaattaaata agtagctggg catggtcgtg ggcgccaata attctagcta ctcaggaagc 420
tgaggtggga ggaccgcttg agcctgggag attgaggctg cagtgagcta tgattgagtg 480
cacttcagcc tgggcaacag agtgagaccc cgagtcaaaa aaaaaaaggg gggggggaggg 540
gactactatt aattaaaatc tggaaggaga aaggatacaa aaaaattaac ttttgctgaa 600
cacttacatg ccaagtgttt tcgaatatga tatgtgactt aatcctgaac aaactagagt 660
aatacaaact attattgctt tttaagaatt cagtatttat ttatttatta aacagataag 720
gaaatanggg ttttaaaact gcagaaagtg ttagaaccag gatagaaact ttcatttttn 780
cctttggtta aaagaatttt ttttttttt ttttggaaaa cgggggctta acttcttggc 840
attnccaggn ctt 853

<210> 1890
<211> 761
<212> DNA
<213> Homo sapiens

<400> 1890
acccgcggca accccggcaa cccagggctc ggcgtcgctg ccaccatgac gggaagcaat 60
atgtcggacg ccttggccaa cgccgtgtgc cagcgctgcc aggcccgctt ctcccccgcc 120
gagcgcattg tcaacagcaa tggggagctg taccatgagc actgcttcgt gtgtgcccag 180
tgcttccggc ccttccccga ggggctcttc tatgagtttg aaggccggaa gtactgcgaa 240
cacgacttcc aaatgctgtt tgctccgtgc tgtggatcct gcggtgagtt catcattggc 300
cgcgtcatca aggccatgaa caacaactgg cacccgggct gcttccgctg cgagctgtgt 360
gatgtggagc tggctgacct gggctttgtg aagaatgccg gcaggcatct ctgccggcct 420
tgccacaacc gtgagaaggc caaaggcctg ggcaagtaca tctgccagcg gtgccacctg 480
gtcatcgacg agcagccccc catgttcagg agcgacgcct accaccctga ccacttcaac 540
tgcacccact gtgggaagga gctgacagcc gaggcccgcg agctgaaggg tgagctctac 600
tgcctgcctg ccatgacaag atgggcgtcc ccatctgcgg ggcctgncgc cggccatcga 660

0056204.0002

gggccgagtg gtcaacgcgc tgggcaacag tgcacgtgaa cactttgntg tgcaagtgtg 720
aaancattct gggcaccgcc tatagaagan ggctggctat g 761

<210> 1891
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1891
aagatgtctt gtatggtctt aatctttgtt gtgtactatt tttttatagt cttaagttat 60
aatgaaaaaa caaaaagtag gaaccaaaca taaaaggtct agtaaagcca aaaattaatt 120
tcatattgat tttaaagtga tctagctgag tttttacact gaaagcaaag attatagcaa 180
ttgtagtcca tggtatttat tttcagtcaa accaaagtta catataattc tgcctctgct 240
tatacgggat attaacacta acaatacact cccttcaaag acttgcacag gccaaattgt 300
tggaatgctg gttttcttga caattccaaa ccccaaaact atgataatga gttatgatgt 360
agttgaaaat agcatagtca gatgtttgct taaaacctag aaacttaaca tgttgctttt 420
catgtgctgt gccaagtctt gataatactt tttcccccaa ccaagggacc tcataacctg 480
attatggtta ttgctttaca aacagttttg acagaaggtg gctgctagag cttaacatac 540
gttcccgttc catgtgatgg aaccggttct tgcaaactaa gctcatcatt gattctttgc 600
tgaagtcagc aaatagagtt agagagatac ccagtcatct atcacaccaa ataaaaggac 660
ataacggctt tcaaaanggt tttcccactt acccaaaagg ctttctgaaa gcttctacct 720
ctgcaaaaaa aaaaaaggaa nn 742

<210> 1892
<211> 882
<212> DNA
<213> Homo sapiens

<400> 1892
cttttagtga gagtaactgc caaaatatca aaagatcctt taattatcag gtatttgaat 60
ccaggagttc tctgcttaaa aagaatacca gttaccagac tattgtatga gtatttaaaa 120
aatcaggaaa agcagcaaaa acagatttca aagttattat attcatttta aaaaagtaga 180
ttcttgaaat taatattagt ggaaagcaat atttcaaact acacccattt catttatagt 240
atatgacgaa ttatgtagcc acggctggcc ttagggaaac ttggggcgta ggtagttctt 300
tctggtgttc tgcttggctg tgttgtcagg aggtttcttt ttctcagtct cctagggttg 360
cccacggctt tctgtcagtc tggtggctta caaggcttca cactctctat cctcttccag 420
aaccaagcct ttctctttcc tccctttctt ttaatatata acatctgcat ctagaaaaat 480
gtccttgcat ttgatagcac aatagattaa atgagataca aattggaaat aaacaggtag 540
tcttggtggg aaactctttt taggtaggag tatcattccc agggccttag atcaagatct 600
agaagctata aagggttata gtggtgttgt agaactttgn ctttagttga gctaaaaacg 660
gggttctcgt cacacaacca tgacaaatta ggctcacaga cactttgaag ggtgaccagg 720
acaggggttt attggatgaa aaagggaaaa gaaggactat cagccaaagc cgaggaagcc 780
cggctagccc agttttncac cttggcacac tggaattcca nggtactatg ctgcaacagg 840
aaaaggccag gcttcttccc cactgcaaaa ggcgnggacc tt 882

<210> 1893
<211> 840
<212> DNA

0950250.0076800

0002-0050-0002-0000-0

<213> Homo sapiens

<400> 1893
attgagctgt ctgctcgctg tgcccgctgt gcctgctgtg cccgcgctgt cgccgctgct 60
accgcgtctg ctggacgcgg gagacgccag cgagctggtg attggagccc tgcggagagc 120
tcaagcgccc agctctgccc gaggagccca ggctgccccg tgagtcccat agttgctgca 180
ggagtggagc catgagctgc gtcctgggtg gtgtcatccc cttggggctg ctgttcctgg 240
tctgcggatc ccaaggctac ctcctgccca acgtcactct cttagaggag ctgctcagca 300
aataccagca caacgagtct cactcccggg tccgcagagc catccccagg gaggacaagg 360
aggagatcct catgctgcac aacaagcttc ggggccaggt gcagcctcag gcctccaaca 420
tggagtacat gacctgggat gacgaactgg agaagtctgc tgcagcgtgg gccagtcagt 480
gcatctggga gcacgggccc accagtctgc tggtgtccat cgggcagaac ctgggcgctc 540
actggggcag gtatcgctct ccggggttcc atgtgcagtc ctggtatgac gaggtgaagg 600
actacaccta cccctacccg agcgagtgca acccctggtg tccagagagg tgctcanggc 660
ctatgtgcac gcactacaca cagatagttt gggccaccac caacaagatc ggttgtgctg 720
tgaacacctg ccggaagatg actgtctggg gagaagtttt gggaaaaccg gnctaatttg 780
nctgcaatta ttcttccaaa gggggaactg gatttggaaa aanccccctt acaagaatgg 840

<210> 1894
<211> 786
<212> DNA
<213> Homo sapiens

<400> 1894
gtgcgttcct cgtctgccag ccggcttggc tagcgcgcgg cggccgtggc taaggctgct 60
acgaagcgag cttgggagga gcagcggcct gcggggcaga ggagcatccc gtctaccagg 120
tcccaagcgg cgtggcccgc gggtcatggc caaaggagaa ggcgccgaga gcggctccgc 180
ggcggggctg ctacccacca gcatcctcca aagcactgaa cgcccggccc aggtgaaggt 240
gagggcccgg cacccgcgt ggagggcgag gggagggagg aggcggaaat gggggatcag 300
gggcgtcccg gggtcggcct ggtcagggga ccattgggat agccagggac aggaagccta 360
cgagccagag aggacctggg ggtgccctgg gacagggggt gacggagaaa agctgtgggc 420
gccctcgccc ccctttgctc acccgcactc cacgctctgc ggagaggctc tgccggcagc 480
cccatgtgat tccccgctct gcctagccgg tttccattct tccgtgttga gcggctgggg 540
cttgccgccc caaaccccag agatgacccc agaaatctgg gaaactcccc ttggttcccc 600
atctctcatc ccctaccttc cactccaccc acctactctt gcgcctcaac tctgctgtta 660
gggccgctca agttcattca taagaacaag agctcttgct cttaaaggaa cccgcgttcc 720
ttangcattt tgtcttgaat tgttggattg tttcgcgccg ggnaaccgtg ctttttgcgc 780
cattng 786

<210> 1895
<211> 888
<212> DNA
<213> Homo sapiens

<400> 1895
agaaaaaata gaaacacagg tcaggaaatt agcttatgac acctcagact gtgatcctca 60
caacagcact agtgaggtaa gtaataacct ggccctgttt tgtagattaa gaactgtggc 120
cctaagaggt aagggcacac acccgaggtc acgttgctat gtattgtgta atttgggaac 180

caacagcaag acatttcctt tttccctcaa acacattctt ttggtctaag cttgaaagcc 240
gcttcttccc aaagccttta gaattcctgg accacatgaa ttgctctgtc tataggcttt 300
cctagcatcc tctctttccc ctttgatagc attttatccc tggtttaagg ggttgttaaa 360
cagtccgtct tccacatcag acagtagtct ctatgaaggc aggaaccctg tctatcttgt 420
tcactcttgc cccttgtgtg gcatgtgctt agtataccta aatggtgact gaatggatga 480
gtaatagcac acaagatcgg cagcaatgct ccagtgttta aagcaatcaa ggtattggaa 540
catatcttct aattgtaatt ctttggtttt tgcagtgttc aacatttgct gttgtaataa 600
tatatgaagc atttagactt gtagcttttg gggcagaaat gctcatagat gaactaccag 660
gaactccact gtttccctgg ctttccttcc tttgggctgg ggattttaat aaactgtcag 720
tcacagaacc atncccaatt ccccttggaa cacacactag aacaataata tgaggaagtg 780
agcagcaatc tcaggaactt aacttancgt catcagatgg nagttttgga atgaccattt 840
gcaacttcat gctggtgagt ttcccagatt tcccctggtn ctacttta 888

<210> 1896
<211> 852
<212> DNA
<213> Homo sapiens

<400> 1896
actccggaga ctgagccatg gggggaaagc agcgggacga ggatgacgag gcctacggga 60
agccagtcaa atacgacccc tcctttcgag gccccatcaa gaacagaagc tgcacagatg 120
tcatctgctg cgtcctcttc ctgctcttca ttctaggtta catcgtggtg gggattgtgg 180
cctggttgta tggagacccc cggcaagtcc tctaccccag gaactctact ggggcctact 240
gtggcatggg ggagaacaaa gataagccgt atctcctgta cttcaacatc ttcagctgca 300
tcctgtccag caacatcatc tcagttgctg agaacggcct acagtgcccc acaccccagg 360
tgtgtgtgtc ctcctgcccg gaggacccat ggactgtggg aaaaaacgag ttctcacaga 420
ctgttgggga agtcttctat acaaaaagca gcaacttttg tctgccaggg gtaccctgga 480
atatgacggt gatcacaagc ctgcaacagg aactctgccc cagtttcctc ctcccctctg 540
ctccagctct gggacgctgc tttccatgga ccaacattac tccaccggcg ctcccaggga 600
tcaccaatga caccaccata cagcagggga tcagcggtct tattgacagc ctcaatgccc 660
gagacatcag tgttaagatc tttgaagatt ttgcccagtc ctggtattgg attcttgttg 720
ccctgggggt ggctctggtc ttgacctact ggttatcttg cttctgcgcc tggtggctgg 780
gcccctggtg ctggtgctga tcctggagtg ctggcctnct ggcatacngg atctactact 840
gctggganga gt 852

<210> 1897
<211> 917
<212> DNA
<213> Homo sapiens

<400> 1897
aggaatagtc ttccactaat tcgctaggag tttgctctcc ccactcctat gggcttgtga 60
gaggcatgca cagagtccta taatgcccac tatgcatgcc tgtagcaact ttgaattctg 120
ttacatcatc tggcacaatg gccaagcaac ttgggccaga ctctatatct gctatagagc 180
ccgtttttgt ttcgggtttg acttgagaca agcagccctt gcaaactcct ttagtgagtc 240
agagaaatat ccttaaatgt ggtatatgtt gaattcaaaa ccccaataag cccccataaa 300
actgtatttc ccttttagtg ataggaagta tatatatata gggcaacatg ccatttactg 360
taaaaaggat gttttgacaa aaggaccaga agcattggac ccctataaac ttcatctatg 420

0205205.0205800

ttataggtct ttgaatctgc tgaagtttat gtctcttctt ccagtatttt acttctgttc 480
aatgttataa tattttacta tacttaagga acttgccact tcctgcttat gggtaccact 540
ttatgtaata ttattaatat attgaattaa catgatgttt tgcaaaatgt caattaaact 600
gaaagcagaa gtgacagccc tgacagaaaa cagtgaagca gtgttcttgt ttttaccaca 660
ccaaagcaaa ttgntttgat tttcctccac aatgtgtgta gattaaaaag cattagctaa 720
atcaaaagcc gcatacaaag tgctggaaac cacattctgc tcagtgaaga taccacatcc 780
tagagcgaat ggtgcaagtg tgacttaagt tatgctaatg ngcattcatc ctataatcca 840
tctgggtttg acagaagncc attagggtaa ctggaataag gatttaaaat ggaccaaccg 900
cccctgggaa cntttga 917

<210> 1898
<211> 838
<212> DNA
<213> Homo sapiens

<400> 1898
gctcaagcat ggcggcggcg gcattgggca gctcctcagg ctcggcgtcc ccggccgtgg 60
ctgagctctg ccagaacacc ccggagacct ttttggaggc ctccaagctg ctgctcacct 120
atgctgacaa catcctcagg tgcagggcaa cggggtcgga cggcgggtac cggggtgggt 180
gggccgcggc accttgttcg gccagggact ggggcgtccg gcctgagctt cagagggcag 240
cgacgcccgg acagaccggg acctggagct ggttctgctc ctaacgtccg agcccgccgg 300
ccaggggcct cgggacccgg ccaagtccca cccccgctcg agaaaaggaa gtttctttgc 360
agttgtgact tggcacctgc agtcagggtg ctgcgggtga actggagtcc cggaagcggg 420
gccgggcgga ggagaggtag gaaggcgtgc ttcagacact gccgctcttc tcgtcgttta 480
acggcctcag atatcgggac acaacggtaa ccgcaccgcg cgtgtcattc cccctgcgtg 540
cattttcga gcggagtggc ttacatttcc acatacttat cagaagttac tcactgacaa 600
agtgatgttt tcttcccatg ttgagactat ccgagtacta aagcataatg cttctgaagt 660
ggtgggtttt aaaatttta attttttttc tgcccacttt tgntgattga aacattatag 720
tattttgaag ttacagtttt tatattaata cctggattct actatgtaac ataacccttt 780
aagaattcgt gganggaatc gccttggatg anagtaattt ccttnattct tcttgtca 838

<210> 1899
<211> 915
<212> DNA
<213> Homo sapiens

<400> 1899
agcggaggga gaagtaggtt gcgagctcag cacaggctcc ggcgctggct cccgcagctg 60
agtttgggag atgtctaagt gatttttttt tttttcccgg aaggcaaatg gctggcgtgg 120
aagcacaacc cgctttcact cttcgaattt gtgcttagct cttttcttgt accttgcgac 180
tcgtgaccaa catgctgtga tgtgtgccga gggaggaatt ggtaagagtg agacggcgaa 240
tccctctgac tgtcccagcc ttctgcttca ccgcccaccc gcttttcctt tctgtttctc 300
tctcctgttt ctccccgctc cacttcccta gtcgtgttta gatttgatga catggctcaa 360
aactacagtt ctgggctgtt actgaactta aaaaaaaaaa caacaaaaga taaaatgatt 420
acaccatttt caatcatttg ttaaagggga atttaaaaat ctattttaaa tgctggattt 480
tgtaaaaagg taaactgcac acgcgggcgc acacgggcac gtacctacac gcattctcac 540
acacacacct ttgtacacgc gggcatacac gggcacgcac acacacgcat tcacacacac 600
acacactcct ttgtcatccc gttgtgaaat aagcagttta aagaaatttt ggttatctgc 660

0050345 - 07/02/2008

ctcaaaggtg atgaaaaggg aaggtgttga agatttagcc cagcagattg attccttaag 720
gttgattccc taaggttgat tccttaggaa gaaaaagggg ttgtattgga gctttctcgg 780
aaatagtttt caaaggagtg ctacaaaaaa acccccatgc tttccccaaa acactaactt 840
ttaaagaacc tagttggtat tcggggcacc ctttatttta cgttgtaaaa catgtnnttt 900
aattaccncg tccag 915

<210> 1900
<211> 754
<212> DNA
<213> Homo sapiens

<400> 1900
gttgattaat atttattaaa cttccatatg ccagttgcca aggatgtaaa aatatgacag 60
ggtgtctggc ctcaaaggag catagtctag tgggaagact tgacatgtaa acatataata 120
atattaaaag cattgcatag taattgggga acacaaagga ggagaaactg tttcaagaaa 180
ggatagaaat aaatggtcaa ggcagacatg aagtagtgtt ctgattagtt ttaagagaaa 240
tgtaggtgtt ttacatgttg gtggatgggg aaagtgcaga ggtatgtgtg tgaaatgtgc 300
atggtgtctc tggagagctt taactagttc catgtgacct gaggtatagg ttaggctgtg 360
agactgaaaa aggggagaga agggatactg taaaggcttt atatattatg ctgagttatc 420
taaggtgcga aatgatcaga cttacattct agccaaaatg agtcagatga gtgttgatga 480
tgctttggtg gaaaggccgc aacagaaact ggtaagaata cacacatgca agcgattctt 540
aactacattg taatcagtaa atgaagataa cgacaatatt ctcattaggg tacttactgg 600
ctgaaacaaa actaactttg tcaggccggt gcagtggctc acacccgtaa tcccagcact 660
ttggggaggc tgangcagga ngatggcttg agcccaggag tttgagacca gcctgggcaa 720
catagtgaaa ccccatcgct accaaaaaan aaaa 754

<210> 1901
<211> 830
<212> DNA
<213> Homo sapiens

<400> 1901
aggacagccc ccacaccaaa caacagtcca gcccagaatg tccctagtgt ccagggggag 60
aaaccctgct ctaactcaag agcgaagagc ctgcatttca ctcggcgtga attctacact 120
ttctgagcag agtatctgac gaagcctctc tacagaaagt gaataaacgt tgttcagatg 180
acttcgacaa ctcttgttga aagtgactat gcagatgatg taaatgatgt cgttcctttc 240
atgagccttt ggtgtacttg agctttcagc agcctgaggc aagactggac aagtgtggtt 300
ttccccactt tgcatgtgca gagctctgcc aggaggataa gctaaaggaa tcacattatc 360
aagataaaaa gaatatgcaa atagtgcagg ctgtgtggcc tctcctttct tacagcaggc 420
cctccgctgt aggcgagggc tacgtaaatc agccaaggag tctcttccag tttagccttc 480
ctggtgccca gtagacattc atggagtgca tggaggatgg cacggtctga cgcccacagg 540
ctcccacgtg gaaatcttgc acctctcagg ggcctgctgg ggtgtgaagc tggagaatgc 600
ccagcgagta cctgagggcc ttaccccacg ctcacacctt gagagccctc tcttggggac 660
ttcagagact ggcctgaggg aacangtggt aaaacctctg ccacagcagt ccccataagg 720
ctgaagattc ctggatcccc tctgctcata ctgggccagt ttcctcgcca cccgtcctgc 780
tgactctggc caaactaaaa agactctcta ttnactttcc ttnggnattt 830

<210> 1902

0962945.02800

0962946.0702800

<211> 740
<212> DNA
<213> Homo sapiens

<400> 1902
cttgcaagat gcttctctgc cgccataggc tggaggttcc ccgggaactt tcccttcctt 60
cctagctgag gaagatccct cacttccgct cgccgcgcca ccggtcccac ctccccgccc 120
cccgctgggt cctagcgccg gcccctgttt ggcagggtcc gggctccgtc ggtgcgagga 180
gccgacgccg acgccacgga gtcagcacaa gtctcatcag agaaaccccg ttcaccaagg 240
ccatggaagt ggaggctgca gaggccccggt ccccagcccc cggctacaag cgctcgggcc 300
gccgctacaa gtgcctgtcc tgtaccaaga catttccaaa cgcgcccagg gcagcgcgcc 360
acgctgccac acatgggccg gcagactgct ctgaagaggt ggccgaggtg aagccaaagc 420
cagagacaga agctaaggca gaggaagcca gtggggagaa ggtgtcaggc tccgcggcca 480
agcctaggcc ctatgcgtgt ccgctatgcc ccaaggccta caagacggca cccgagctgc 540
gcagccacgg gcgcagccac acgggggaga agcccctttcc gtgccccgag tgcggccgcc 600
gcttcatgca gcccgtgtgc ctgcgcgtgc acctggcctc gcacgctggc gaactgccct 660
tccgctgtgc gcactgcccg aaggcctatg gcgcgctctn caagctcaag atccaccagc 720
gtggccacac angcnagcgg 740

<210> 1903
<211> 913
<212> DNA
<213> Homo sapiens

<400> 1903
cgggcagatg tggtggatct gttcccaggg acttttgagg ttgtggagat ggtggccagc 60
aaccctggga catggctgat gcactgccat gtgactgacc atgtccatgc tggcatggag 120
accctcttca ctgtttttc tcgaacagaa cacttaagcc ctctcaccgt catcaccaaa 180
gagactgaaa aagcagtgcc ccccagagac attgaagaag gcaatgtgaa gatgctgggc 240
atgcagatcc ccataaagaa tgttgagatg ctggcctctg ttttggttgc cattagtgtc 300
acccttctgc tcgttgttct ggctcttggt ggagtggttt ggtaccaaca tcgacagaga 360
aagctacgac gcaataggag gtccatcctg gatgacagct tcaagcttct gtctttcaaa 420
cagtaacatc tggagcctgg agatatcctc aggaagcaca tctgtagtgc actcccagca 480
ggccatggac tagtcactaa ccccacactc aaaggggcat gggtggtgga gaagcagaag 540
gagcaatcaa gcttatctgg atatttcttt ctttatttat tttacatgga aataatatga 600
tttcactttt tctttagttt ctttgctcta cgtgggcacc tggcactaag ggagtacctt 660
attatcctac atcgcaaatt tcaacagcta cattatattt ccttctgaca cttggaangt 720
attgaaattt ctagaaaatg tatccttctc acaaagtaga gaccaagaga aaaactcatt 780
gatgggtttc tacttctttc aaggctcagg aaatttcact tttgaactga gggccaantg 840
agctgttaag atacccacac tttaacttaa aggctaanaa tntaggcttg atgggaaaat 900
tgaaaggtag ctt 913

<210> 1904
<211> 762
<212> DNA
<213> Homo sapiens

<400> 1904

agacatttat ttctcacagt tctggaagaa agtttaaaat caaggtcttg gcaaatttgg 60
tttctggtga gggctgtctt tctagcttgt agatgcctgt ctgccttgtc ttcacatgat 120
ctttcctaag ggtgtgtgtg tgtgtgggtg tatctgtgtg tgtgtttgtg cgcacacaca 180
cgcgtgtgca cagggctggt anagagtgag ctctctggtg tctcttattg atnctttttc 240
ttttttctta ccttgttatt ttctaatcta gtcttcagag agatggtgtc tcttcttata 300
aaggcactca tcctaacaga tcagtgctgt acccttgtga cctaatttaa ccttaaatac 360
ttccttagag gccccatctc caaatgcaac tacactgctg tttagggcta taacatgaat 420
tttggggtat acaagaattc agttaataat acttgattac cctttatctg cccctganag 480
ggtggttcat cttacccttt tttagtcaaa tcacatttgg taacatgaat tgaggtgggt 540
cagctatggt ggcagactca ctaagagtgt catcctcaac tatcctgtat tgcttgtggc 600
atacctagac attctatggc cgaaagagct tgcatgttta aatatttcta tagttttagt 660
ccttggcaca tggacttgag tccatttctc tgtcaaatgg ccgatagttg ntcctcanag 720
ttggtactgg tcatanttta aagggaaaat atattttgaa cc 762

<210> 1905
<211> 662
<212> DNA
<213> Homo sapiens

<400> 1905
ttttgcgctc ggaccttcgc cagaggggcc gggacatcat gacggtggga gccaggctcc 60
gaagcaaggc ggagagcagc ctcctgcgcc gcgggccccg agggcgaggg cgaaccgagg 120
gggacgagga ggcggccgcc atcctggagc acctggagta cgcggacgag gcggaggcgg 180
cggccgagag cgggacgagc gcggcggacg agcggggccc ggggacccgg ggcgcgcgga 240
gggtgcactt cgccctcctg cccgagcgct acgagccact ggaggagccg gcgccgagcg 300
agcagcccag gaagaggtac cggaggaagc tgaagaagta cggcaagaat gtcgggaagg 360
tcatcatcaa aggatgccgc tacgtggtca tcggcctgca aggcttcgct gcagcctact 420
ccgccccgtt tgcggtagcc accagcgtgg tatccttcgt gcgctaatgg gagctgctgt 480
ggcaggtgcc cccagagtga acgggagccc ctgctgtggg aactttgtga atcctggagc 540
atctcagact tgaacacaca gcatatttgg aagagaaaac atgcctttct ttgntgaatc 600
acattagtat gatgagtgag tcatccctgc ccatcttgct tgagcttntc acatctctna 660
gt 662

<210> 1906
<211> 874
<212> DNA
<213> Homo sapiens

<400> 1906
ctagagagag gacatttcct gagtaaaatg aaaatcaaag ctaggagcta atcatatttt 60
taaagtcaga tatgttgggg gtataactgg aagctaattt ttaaaagaat cctgccatat 120
ctttgataag gaagttctat ggcttaaaga gtgtaaccac tagttttagc agagatgttt 180
cctttagttt tgaaacattc ttcaacattt caggttcatg atgaaaaatg gctgactgga 240
tttaagtcct ttattttcta tactcctgag caaaattctg aaaaactggc tggtctagtt 300
tagagaagaa cgctgatgtg ggagtatttt caccatgcat tcctgctcta aatcctttgc 360
ttctactgat agactattct actttcgaaa taagttcaca ttgctctaac acttcataag 420
ttcaatcttt ttctcattct gtttaaaata accaccatga ccaccaaacg cctgaaattc 480
actgtagtta aaattatgac tgaaatagac agggaaaacc tgagagtgaa cgttacccag 540

0050505.00000

caaatctggg ttaaacaggt tcgagttttt ccagagcaca ctgtttagga tttcagcttc 600
ctgttcaacc atctcggaaa cagggtgttt ctctgctcct ttgtgaggac taaccatgtg 660
tccccgccac tttgcaccaa agctgaatat catcccaaac tctggatcct tctgacgggc 720
atttgtgtgg acacagggaa ggggtgcatt atgaatatgc aattacctgg catggaatgg 780
tgncttctgc ttaaaatncn aaaagggtac tctgatctca gagttgggag ctggatttct 840
ggatttcaag cctaaacagg tctggcttaa aact 874

<210> 1907
<211> 806
<212> DNA
<213> Homo sapiens

<400> 1907
tttatgtgag ttcatattcc tccttgcaag ggcccagaga aatctaggat ccttatagtt 60
tagaatttct ttgccccccc agatattttg aatctgaagg aaagaatggt acaacacata 120
tcatgaactg gctgatatgt agatggtgtt tttgtgttgt tgttgttact ataggagttt 180
aatacagaaa tattttaaaa ttagcaaatt ttagaaacag agattatgca tgtcacttga 240
atataactgt agggcaaact tgtcaggagt ggagtagcag tggttctctc cagagagtgc 300
atttcttgtc cctgccactt tcagccttac tctgtctggc tagccacctc ggtctcaacc 360
ctggctcttt ttagcattta gacttgtagc tgcctaagta aattcaagtg ctgtgggttg 420
ttataggtat gctgagatag tgattttctc tgacacttgg agaatgatgg gaataaagtt 480
gggagatgcc cagttagcct tttggtaact tcaggcacag cctggcattc cccaggatgt 540
cccaaggtta ggggttcggg gaatccgttc ccatgagggg cctttcttgt gttcgtaccc 600
agctgttgaa gactgccaac tcttaaaggc cttccacaga catagaagaa agaaatctac 660
atgttcttta ccaggcgggt gcctctaatc ccacctactc gggaggctca ngcaggagaa 720
tcacttgaac tcgggaagtc gaggntgcag tgagcccgag atcgcaccac tgngcttcag 780
cccagccgac agtgtgagac tccgct 806

<210> 1908
<211> 752
<212> DNA
<213> Homo sapiens

<400> 1908
actccgatca gctgatccca actgacaaca ggagaggagg aagcccggga ggcaacgaag 60
gaggagggtg gcggagatgg agatgaggat ggatctgccg gtgtcctgag gaatagcctc 120
tgcccccact ggcgccctgc ggcccccccga cgccgccttg ctgcggccga gcttctcagt 180
ggtatcccct gaaatactga cttcaggtcg aattatattg aaaagctcct gaccactttc 240
tttcattacc aaaactttgt agctgatgtc caaccgatga acccaccacc gtgaacccat 300
cagacctctc tcagatagcc ataaaagacc cttccaagtc aattttgacc acatctttgc 360
ttgcacttta tggaggatga aaccatcaaa ccaaatcaac gttgctgcta atacaagagt 420
cttagaggca gcaaattaaa aatttgaaca tttgtttgtg aagaactata acaggacatg 480
aaaggtgttc ttttttaaag tgttcagaac cctgtggaag tttcgtgcag tcttcagact 540
caaatcttcg tcttcacccc cggggcaagc tcagtgacta ttatatggtg ggtgtgtttc 600
cttaccagcg tgagtatgag tgcccagact tncccagcag agaagggcct gaatccgggg 660
ctgatgtgcc aggaaagtta cncttgcagc gggactgatg aagctatctt tgatgtgatg 720
agtgctgcan tctgcaatgt cttccgctgc na 752

0960304.0042000

<210> 1909
<211> 760
<212> DNA
<213> Homo sapiens

<400> 1909
atacaaaaaa attagccggg catggtggtg ggtgcctgta atcccagcta ctcgggaggc 60
tgaggcatga gaatcacgtg aaaggcgggg gttgcagtga gccaagatcg caccactaca 120
ctccaactgt gcaccacagc gagaccccat ctcaaaaaaa aaaataataa taataataaa 180
atcatctctg ccccaaagct atttcctcag atgcaaacat tttccttgac catagccaat 240
taacctctca acatctaatc cacctccctt tggaactggc tgataccttg agaaaccttt 300
cttctccaca gagggtctgc cagttcagat gctgaaaagt ttttctatct ggagaaaccc 360
ataagccata ctattagacc tatgccccaa agagctaagc taagttaaac acacagtgtt 420
tacaaatgag cagctgaaaa ggcacacaag cttaagttgc agaagacaca cacttgattt 480
tccttgctat ggagggcccc ttagaacatt ccctacaaag ttattttaga atgtgaagag 540
acagctggga gcggtggctt gagtctctaa tcccagtact ttgggaggcc aaggcgggca 600
gattgcttga gcccaggagt ttgagactag cctgggcaac atagtgaagc cctggtctct 660
acaaaaaata gaaaaaaaat tagccgggtt tggtggcatg cgcctagacc cagctactgg 720
gangctaagg tggganggat ggctttgagc ctgggangca 760

<210> 1910
<211> 702
<212> DNA
<213> Homo sapiens

<400> 1910
gatgtatatg tttaattgct tgggtagtaa aagtactctt tgctgacgtg tttgccactt 60
attgcattaa tgattaatca ttttaatgca ttttgatagt ataaaaagac gcctttatta 120
tgtgtgtgtc tctataccaa taacagagct tagtgaactt tgaattactt gcttggcaat 180
tgtttttga agttgtcagc tgtatttgca aatttgcttg tttcagttta gaaccaggct 240
tttcccagca gagacactta attgacattt ggggccagat aattcatagt tggacgggca 300
ggctgtcctg tgtatagcaa caaagatggc ctccactcac tagatgccag tagtagtacc 360
cttatccccc accacctagt tgcgacctag ttgccacacc aaaatgccac cagtcattgc 420
caatttttt ttgtccccta cctctggggg acaaaaatct cacagttgag aatcactgct 480
ttagaacaaa atttgctata ggtgacctta gagatggaag tagggattgg tggtagaaag 540
gggtttgttt tagagcatac agaatattgg tatggtattt tgaattgtat aacaattgta 600
taataattag gaaaagtcag ttgnttaatg cgattattag gggaagtagc cagatcttag 660
gaaagcctgt tttaaacctg aaatcggccg ggcnnccggg gt 702

<210> 1911
<211> 737
<212> DNA
<213> Homo sapiens

<400> 1911
agttttaatg ttggagctag cccagttgta tgagtgtgct gaagaagcca gtctctgctt 60
gccttcctat agctccaatt agacattttt aattacagtg caatcgctgc aactattctg 120
ggccatttca acccatccca ctccacgaat actcagctca gtcttagcat tggacatcag 180

09529456.030200

tagcaagcaa ctagatgctc ccacctcagg aagcttctaa ttttgtgggg actacccctg 240
ttgtgcttat tgctaaactt atacttcagt gaacctttca attctacata atatattcca 300
actcattttg tggaatctga ttttttttt ttttttgctg actttccttt cacaggtatt 360
tagtaagtca atgacgggca gcagcaagcc aggcttctat tatagtaata ataatcagat 420
aaccaataat cactgaggat tctgtacatt ccaaagccat gccaggggg ggggccacgc 480
gggaggcccg ggttcgtttc ccggccaatg caccacagcg gccttgggtt tgggctccag 540
ccccagccgg gccccctcgc gccgctgcgg ctgctgcgcg gtgaggtcgt gacaagtcac 600
agctaacttg cccttcgngc cattccacgc caccaggaag cgcaccggtg cctntcggga 660
tcggcgaaaa gccttgccgg acccggcgcc cagcccttca gctgtcgagc tgtcgtcctc 720
catggncgcg cggnagc 737

<210> 1912
<211> 797
<212> DNA
<213> Homo sapiens

<400> 1912
actagctggg cgcagtagtg cgcacctgta atcccagcta ctcgagaggc tgaagcaaga 60
gaatcgcttg atcccgggag gcagaggttg tgtgtggtga gctgagatcg cgccactgca 120
ctccagcctg ggcaacagag caagattccg tctcataaaa caaaaaaaaa ttatgagatt 180
tttaatgtgt ggcccaattc ctcttcttgc agtgtggccc agggaagaga aaagattgga 240
caccccagca taaagccttc ctcccattct gcagtggcgt gggatcaggg aacagaaact 300
cattttcatc ctactgttgt ggggaaccat tcagtacttc ctacagggca ggaggacgcc 360
aacatgcgac caccttcctc ccctcgccga cctccgactc ccgcccagcc caggcgcccc 420
ccaggctcct ggaggttgct ccgcgttgct gttgctgcag gtgaagggac acaggttgag 480
gcccctcctt gtaggacttc tgagcctcac ccccgagccc tcgtaagata cctgtggagc 540
tgatctcaaa gaaatctcca catctaattc agaaccatca tctcaccaga acacaacggc 600
cttgctcctg cctgggtgct gtaccatgat ggcaccacaa tggtccaagt gaccaccacc 660
tttgctggaa cggctgcatg cacacagcac tgggcacaac cacgtctgca gtgcccatga 720
ctggtcacca tgtcagccct taacacggaa caggggggcaa cancaccatg aatatncttc 780
agcccaactg ancctttg 797

<210> 1913
<211> 822
<212> DNA
<213> Homo sapiens

<400> 1913
atgaaaatta ttagcatagc atataagata atttataaag aatctagaat ctaaaatgta 60
caggaggatg tggataggtt atatgcagat actataccac tttgtataag agtctgaagc 120
attcgaggat tttgatattc agggggggttc tggaacaaat ctggatactg agggatggct 180
ctacagcctt tcagaattaa attttctatg attttaatgg ttctttcaaa gaccatgaca 240
gtaatcactg acgcctgttg ccttacaaat ctgcttgtac aagtaacatt tccatgatta 300
tatgtacaag taaaaaatac ccactataca aataacaaat ccaagatcag tgaaattgag 360
tacgatgaca attaaaatgg tttgcataaa tgtcctataa cacatggaac acatgattca 420
tcctcttgct aatgttccca gtttggcatc ttctaagatc atattatttg agcacaattc 480
ttgatgcaga atcatctctc tgttccccta ctcgcttgtg agagggaaca tttcctcctt 540
atgtgtctta gaatattttt acctaacatg cttaaacaaa acaaatttca ttcttaacat 600

0050050.0050800

caggctctga aagttccttt tagttagcat ttgctatatt gacagctggt ttgacaagta 660
catattttag cataagaaaa aaacagcagg ccgggtgcag tggcccttgc ttgtaatccc 720
agcactttgg gangccaagg angcagattg cttgagctca ggagatcaag ggcagcctgg 780
gcagcatacc aggaccccgt ctttacccaa aaaaaaaang aa 822

<210> 1914
<211> 745
<212> DNA
<213> Homo sapiens

<400> 1914
tggtgcgttt gatgtggcac agttccacat gtgagggatg gtgatttgga tagcacgaca 60
gaagtacgtg ccaagaataa ttggcttctg tcttgcggaa cagctcaaat actatgtgta 120
tcacagtatg taatttgggt gtacaaaatg cctgtagttg aaagtgcttt actcctctgc 180
agtggcaagc tgagcttcct gttggctgat tccttatgtt tgcagtaaac aggctgggtg 240
cagttagaaa gaaagcatcc atctagtaag tgcattcaca tcatccttca aatgccatag 300
gccttagctc caggacattt tctgcctgtc tccttccctc cctcctttct ttcttttcct 360
ctctccttcc ctctttcctt tgttccttct ttcctccctc cccttccctc cttttcttcc 420
tagttccccc tttctttcct ttcttctatt gaataaaacg caaagtaatt ctttttctac 480
ttactttgat tcttatcagc tttcttaagc agtttccttg ccgctgttgt gaattacatg 540
gggctgtggt aaaatgtggc acatttcaag gctatgtatc cctttagatt ctggttcact 600
aagcttggaa ataaatagga gagcttacgc ttttaactac tagcctgcga ttcgtataat 660
catgttagnt tgagaaacac ttcagtaatc acacatgtaa nggctttgga gtaagatgga 720
ccttgggtat ncaacgctta ctggg 745

<210> 1915
<211> 809
<212> DNA
<213> Homo sapiens

<400> 1915
acagatagaa cccaaagaaa ggcaaagagt cctgcccggc accggcgccg cgtgggccaa 60
acctgcgccc gtggaggggc gcgcagaggg caccgggcgc cgggagcagg cggcgcagca 120
ccagcattgt gttagtgccg ggaggccact gtgtcagcaa gctgagaggg aaactgaagc 180
aagatgtcgg gccggagtgg gaagaagaaa atgtccaatc tgtcccgttc agctagggca 240
ggtgtcatct ttccagtggg gaggctgatg cgttatctga agaaagggac gttcaagtac 300
cggatcagcg tgggcgcccc tgtctacatg gcggcagtca ttgagtacct ggcagcggaa 360
attctagaat tggccggcaa tgccgcgagg gacaacaaga aggcccggat agccccgaga 420
cacatcttgc tggcagttgc caatgacgag gagctcaacc agctgctaaa aggagtgacc 480
atcgccagtg gaggcgtcct gcccagaatt caccccgaac tgctggccaa aaagcgaggg 540
accaaaggca agtcggaaac gatcctctcc ccacccccag agaaaagagg caggaaggcc 600
acgtcaggca agaaggggag gaagaaatcc aaggctgcca aaccacggac gtncaaaaag 660
tccaaaccaa aggacagcga ttaagaagga acttcaaatt ccacctctga agatggccan 720
gggatggatt caccattctg tcttctaaaa ccttgntctg ggacagaact gtcntaaccc 780
agatgacata gccatattgc ttcatgaga 809

<210> 1916
<211> 833

0962945.0020800

0050204-000800

<212> DNA
<213> Homo sapiens

<400> 1916
atttgccctc cttccccccct tcgtccgctc tcattggctc tgctgccttc atgtgcttca 60
gccctacgtt gtttatgtcc agaatcagat attggagctg actctgcctg tccagggcct 120
gcagagtggc tgagctccct tcgggcccat gttgtgcgca ctggcattgg acgagcccgg 180
gcagaactct ttgagaagca gattgttcag catggcggcc agctatgccc tgcccagggc 240
ccaggtgtca ctcacattgt ggtggatgaa ggcatggact atgagcgagc cctccgcctt 300
ctcagactac cccagctgcc cccgggtgct cagctggtga agtcagcctg gctgagcttg 360
tgccttcagg agaggaggct ggtggatgta gctggattca gcatcttcat ccccagtagg 420
tacttggacc atccacagcc cagcaaggca gagcaggatg cttctattcc tcctggcacc 480
catgaggccc tgcttcagac agcccttttct cctcctcctc ctcccaccag gcctgtgtct 540
cctccccaaa aggcaaaaga ggcaccaaac acccaagccc agcccatctc tgatgatgaa 600
gccagtgatg gggaagaaac ccaggttagt gcagctgatc tggaagccct catcagtggc 660
cactacccca ccttccttga gggagattgt gagcctagcc cagcccctgc tgtcctggat 720
aagtgggtct gtgcacagnc ctcagccaga aggcgaccaa tcacaacctt catatcacag 780
agaanctgga agttcttggn caaaagccta cagtggtcaa ggagacaagt gga 833

<210> 1917
<211> 861
<212> DNA
<213> Homo sapiens

<400> 1917
gaaacgatga atgtttgaga tgatgaaaat gctaaatacc ctaatttgat catttcacaa 60
tgtgtatatg tattgagaca tctcactgta cccccaaaat atgtacagtt attattatgt 120
gtcgattaaa aatttaattt ttttttgaga tggagtctca ctctgtcacc cagggttaga 180
atatcaaaat atctaattta tatctaatca tatgggttag gatatctaac ccatatgatt 240
atgcaattta ggctctctag tgtgattcca ggccttctgg tttgcttata ttgatcccta 300
ccctagctag agagaaagag ccattctaat gaagattttt gcagttagat acttagttat 360
tggtttttcc aaaaggaatc caatttactt ttgctgtgag ctattttgac aaatagtgag 420
aactctgaaa gttaatagtt tgtatcttct ttaggggtat cgctggagaa tttccccctc 480
tgtaaagaat tgctcattcc acctggaacc caaaactata tggtgagaat gcgactctat 540
gacgtcaacc gtcggcagct gaacctcacc atccggattg tgtgtcgagc agaaggatcc 600
ttaaagatct tcatttctgc tccatattgg ctgattaaca aaacaggtac atacaggggc 660
tgctcaagta ggtctttggc gttagtcatg ggaattcaga tttatttgct tagctaacta 720
aatggagcca atgcaaatag attacttcaa cagtctgagc tgctggaaca ttnctgcttn 780
catcataaat gcttaatcat gctcaaaact ggctttttan gcaagaactg agcccactaa 840
atagattcag tttcctcttt c 861

<210> 1918
<211> 860
<212> DNA
<213> Homo sapiens

<400> 1918
agaaaataaa tatatcttac ccttcaacta atatgtttct gaatcttaga aaattactat 60

gatattagta ttcaatttct tatattctct gtctccctct tctctcattt cctttcccct 120
tttcttcccc tctgttcctt cccccaatca ttctcttctc tattctatgt ctctgaagct 180
atcctggcct tttagtcgta cctcaagctg tacaggacag tagtttacca agagtagctc 240
gctgctatcg acacaatcgc ctgcctgttg tatgttggaa gaactcaaga agtggtactc 300
tgctcctccg atctggagga accataagtg gcagctcttc ccgttcaaga cccgagtatt 360
ttagaattac tgcctccaac aggatgtatt cactctgccg gaggtaagtg tgtcagtggg 420
ctccaaaaag aggtcttcct tcctttcttc ttatttgaat ctttaatagg ccatttgcat 480
ccatagccct gagatagata aaaatgcctg aaaataagaa caaggtctcc aggatacgag 540
caagcatctc attggcattc tcggaacaat taccttactg aaagtacctc tagtaggtga 600
gaaggtgaaa ggtaaagtac tcacccccta tgaatttctc ttgnctttct cttcccagtt 660
tgcttctttt ctagcatgac taaagataac ttgaagaaca ggattttccc agcccaatag 720
aggacatgaa agtcttttgt aggctgggga gcccaaactc tttctataaa gggcaagtgg 780
gaaatanttt cagttatgag ccatagagtc tctggtgcag ctattcaact gtgccgaaaa 840
gcagccncag acagtaagga 860

<210> 1919
<211> 758
<212> DNA
<213> Homo sapiens

<400> 1919
gttgtagaga taaatgaaaa gttcacagag ttacttttgg caattaccaa ttgtgaggag 60
aggttcagcc tgtttaaaaa cagaaacaga ctaagtaaag gcctccaaat agacgtgggc 120
tgtcctgtga aagtacagct gagatctggg gaagaaaaat ttcctggagt tgtacgcttc 180
agaggacccc tgttagcaga gaggacagtc tccggaatat tctttggagt tgaattgctg 240
gaagaaggtc gtggtcaagg tttcactgac ggggtgtacc aagggaaaca gctttttcag 300
tgtgatgaag attgtggcgt gtttgttgca ttggacaagc tagaactcat agaagatgat 360
gacactgcat tggaaagtga ttacgcaggt cctggggaca caatgcaggt cgaacttcct 420
cctttggaaa taaactccag agtttctttg aaggttggag aaacaataga atctggaaca 480
gttatattct gtgatgtttt gccaggaaaa gaaagcttag gatattttgt tggtgtggac 540
atggataacc ctattggcaa ctgggatgga agatttgatg gagtgcagct ttgtagtttt 600
gcgtgtgttg aaagtacaat tctattgcac atcaatgata tcatcccaga gagtgtgacg 660
cangaaagga ggcctccaaa cttgccttta tgtcaagagg tgttggggac aaaggttcat 720
ccagtcntaa taaaccaaag gcttccngga tctacctt 758

<210> 1920
<211> 865
<212> DNA
<213> Homo sapiens

<400> 1920
ttctcagtct cttttggtga attcttttc tctactatct tttaaataaa taaatgttga 60
tgtgcccagg cttctacact gtatcttctc cccagatgat ctcatcccac atttatttat 120
ttataaatag agatagggtc ttgctgtatt gcccaggtct tgagctcctg ggctcaagcg 180
gacctcccac ctcagcctcc caaaatgcca gaattaacag atgtgagcta ccgatcctag 240
cccatcccca cactcttgaa tttcacacca cccaaatttg agccactaac tcagagttct 300
ccccatggct tcactatatc tagcttcctc ctgtgctcca tctgaacaca tattattcat 360
tccctcatat aagatatgct gctcttcttg ttttccctat catattagtt ggtgctacta 420

0050204350

gccaccaaga ctctcaagcc aaaagactga aaattatcct agtttacact ttccctcacc 480
ccactcttaa tcagtcactt tattcttcct ctgtgtatct gaatctcatc cacttctctc 540
catcctcaca gccatcgccc gtttgcccac ctggtttcac tagactggac tctaccctca 600
aatctcacca tcctccaccc tattctccca ttccccctgt cagacacttc ctcacgttgc 660
ataaaaggtt agttatcata aatgattcac tacaatctgg tcccaagctt taccccttcag 720
cactgctaag acacttcatt ttggcatgca ccattttgga agatctcaaa atccttttcg 780
ggacaatnaa atatcntacc cttgatacct gaagtgtggt tctgangccc tgaagcgttt 840
gcattactgg attaaaaatc acagg 865

<210> 1921
<211> 772
<212> DNA
<213> Homo sapiens

<400> 1921
cttgtaagat ggcggcgccc aggtggagcg cgtcgggccc ctggatccgg ggaaacggcc 60
aaggttgcgg gagtctcttc actctcgtct cagagccatt ttgtgccgct gccgctgcct 120
ctacggccat aaatgcccgg agattagcgg agaagctccg agcccagaaa cgggaacaag 180
acacaaagaa ggagccggtg tccacaaacg ctgttcagcg gagagtgcaa gaaatagtgc 240
ggttcacacg gcagctgcag cgagtccacc ccaacgtgct tgctaaggca ctgacccgag 300
gaattctcca ccaggacaag aaccttgtgg tcatcaataa gccctacggt ctccctgtgc 360
atggtggccc tggggtccag ctctgcatca ctgatgtact acctatcctg gcaaagatgc 420
ttcatggcca caaggcagag cccttgcatc tgtgccaccg gctggacaag gaaaccacag 480
gtgtaatggt gttggcttgg gacaaggaca tggcacatca agtccaagag ttgtttagaa 540
cccgtcaggt ggtgaagaag tactgggcca tcactgtgca tgtccccatg ccctcagcag 600
gagtcgtgga catccccatt gtggagaagg aggcgcaagg ccagcagcaa caccacaaga 660
tgacattgtc cccgagctac cgnatggacg atgggaaaat ggtgaaagtg cggcgcaacc 720
cggaatgcgc aagtttgctg taacttagta ccaggtgctt aacancactn tt 772

<210> 1922
<211> 800
<212> DNA
<213> Homo sapiens

<400> 1922
tcctaaatag gagcgaggag ggggacaatc tttcccttca cccccacatc ttcctttcct 60
cttccctacc tccctgtatt aatactgaga aaccacacct gaacaatgaa atgactagga 120
actacggttt ctggttgtgt tcccaagtgg gaatatgggc tgttcacgac ctcggaatgt 180
agaatgccct cattatttat tcagtagaca tccaataaat gcggatcaac agcttgccta 240
tctttgatag tttttggcag tgtgtgctgg ttttaatctt tgtacttgtc ccataagtga 300
ccccatgact agagagtggg ctcttccatc ttgtaagagc cttctgttca cgttctgttc 360
tttttatgag aaggaagttc cagtgcatat cccaacataa agagaaacgt tgaatacgta 420
ctgtttttct cttatatata tgctcaaaat aacgactgta gtaaacagtc gtcatgatta 480
taggatgaat tacgcagcca ttcatagatt tttgtagttg tcatttacaa gtggactatg 540
caatagttca taggcttatg aatacataat ctaacaatat tagctgggtg cagtggctca 600
cacctgaaat cccagcactt ancgaggcca aggtagcttg attgctagag cccaggagtt 660
caagactagc ccgggcaaag ggcaaaaccc catctctaca aaaactacaa aaagaaatta 720
gccgggcatg gtggtgcttn ccgggagtcc cagctacttg ggangcaaan gtgggaaggc 780

0050204.0050204

acctgacctg ggggtgtcaa 800

<210> 1923
<211> 814
<212> DNA
<213> Homo sapiens

<400> 1923
cttcttactg ttctttctgt cttactgtaa ctcctcctcc ctccctgatt taaaagaatt 60
ttttttttt ttttaaaaga aaaaagactt tctggccggg cgcggtggtt cacgcctgta 120
atcccagcac tttgggaggc agaggcgggc ggatcacgag gtcaggagat taagaccatc 180
ctgattaaca tggtgaaacc ccgtctctac taaaaataca aagagttggc cggatgtggt 240
ggtgggcgcc tgtggtccca gctactcgga aggctgaggc aggagaatgg cgtcaacctg 300
ggaggcggag gttgcagtga gccgagatcg cgccactgca ctccagcctg ggtgacaggg 360
cgagactctg tctcaaagaa aaaagaggaa aaaaagaaaa aagactttct tattaagaga 420
gcattataca ggccaggcgc ggtggctcat gcctgtaatc tcagcacttt gggaggccga 480
ggcaggtgga tcacgaggtc aggagatcga gaccatcctg gctaacatgg tgaaatcccg 540
tctctactaa aaatacaaaa aattagcggg gcgtgatggc gggcgtctgt agtcccggct 600
actcgggcgg ctgangcagg agaatggagt gagcctggga ggcgganctt gcaacgggct 660
gagatctcac cactgnactt caacctgggc aacagagcga gacttcgtct caaagagaga 720
gagagacagc attatncaga gaacaaattg ggtagacttt tttagaatga tagantgcag 780
tactcttata cctgnggggg aaagaaaaag gctt 814

<210> 1924
<211> 688
<212> DNA
<213> Homo sapiens

<400> 1924
tactgaaaat gtggctttca taattgtctt agcttagacc attcatagca ttattaccca 60
ccttgggagt gggaatggta ggaggaggat aatgaactgg ggaagcttcc tttagctccc 120
cagtaccaaa accacactaa ataagttttg atttcctggg cttccttgtt ttatgttgaa 180
attggtggtg aggctcagta atagtttctt aaatgttaag gctagaagtt gtacaccacc 240
tagtggctgt gtacattaaa acaggaagca gaaaccggcc aggaagaggg agccggatct 300
ggatgtgtct attggagtga ctgcagcact ccatatagaa cctgggcatt gctctcttta 360
tttttaattg aagtaaaatt tgngatagca ttttacaaat tgaaaatagc tgtgtcattt 420
aaaaaattcc cattaaattt gttcccagta cccctcatgt ttccagtgat ttccttctac 480
tctgtcagtg tgcggttaag ccgtatagac tcattttaat actaatgtca gccaaataaa 540
attaataagt taaacttatt tcccttatca ttatatacat cctaaagcca atgtatttta 600
aaattgcttg tccattgcct gctctccttt gataaaaatt gtagnttcac ttagcatatg 660
gtnattgatt atagtcncaa aatagacc 688

<210> 1925
<211> 674
<212> DNA
<213> Homo sapiens

<400> 1925

0050-0050-0050

tggtgaccaa gatggcggcg gagctggtgg aggccaaaaa catggtgatg agttttcgag 60
tctccgacct tcagatgctc ctgggtttcg tgggccggag taagagtgga ctgaagcacg 120
agctcgtcac cagggccctc cagctggtgc agtttgactg tagccctgag ctgttcaaga 180
agatcaagga gctgtacgag acccgctacg ccaagaagaa ctcggagcct gccccacagc 240
cgcaccggcc cctggacccc ctgaccatgc actccaccta cgaccgggcc ggcgctgtgc 300
ccaggactcc gctggcaggc cccaatattg actaccccgt gctctatgga aagtacttaa 360
acggactggg acggttgccc gccaagaccc tcaagccaga agtccgcctg gtgaagctgc 420
cgttctttaa tatgctggat gagctgctga agcccaccga attagtccca cagaacaacg 480
ggaagcttca ggagagcccg tgcatcttcg cattgacgcc aagacaggtg gagttgatcc 540
ggaactccag ggaactgcag cccggagtta aagccgtgca ggtcgtcctg agaatctgtt 600
actcagacac cagctgccct nangaggacc agtacccggc caacatcgct tgtgaaggtc 660
aaccacagnt actg 674

<210> 1926
<211> 625
<212> DNA
<213> Homo sapiens

<400> 1926
agcatcgagt cggccttgtt gggaaaaaga aagaggcagt aattcctctt gtgggcaagg 60
ttctgcagaa tgatttggct cctgcaggtt aagtgcccag tcataggtgt gggatagagc 120
agactcctac ggatgccagt ggagacgttg tgggcctggg tctgctgccc actccccagt 180
gggtcaggac tccggcaggg tctcctgggc taaagcatgg aggtgactgt gtcccaaggc 240
actggcagct ctgcccagcc tgttcctttc ccaccctctg gccctcagcg actttggctg 300
catgtgcctc tggcagggca gaaccagaag tgggggccta gtggccttcc aatttggggt 360
tcttggagaa ggagcctggc gtgccctcct tggggagcag gtggacagac tggatgtttt 420
atggagtctg ggggagtcct gcggcagcta tatctgttaa atgccaagaa gccaagttgg 480
tttaatatga ttgtagctgc tgctttgata aatcaaaata attaaaaata ataaatttga 540
ttcctcaacc aacaggctgt gtgtgggcgc agggcctggg ctgccnagtc agggccgang 600
aggtgggagt gggcacggng acaca 625

<210> 1927
<211> 859
<212> DNA
<213> Homo sapiens

<400> 1927
catgagctta aaggaaaagt gtaaaaattc taatcagaaa agaagctttt attctcccta 60
aattatgggt aacatgttca gcaaactctt catttaattc ttttgcatgg tgttatgtaa 120
acatgctaga tctgggctag gagacttgga ttctaggcct ggctctacct tgaacttgct 180
ctgagacctt gggcaagtca ctatacatct ctgggcctct aatttttcat gtgtagaaat 240
aggaggctaa ggaaaaagat taaattagca tttcgtagat cactaggtat catatcaggc 300
atttcacacg catcatctca tttactcaac aaagattaat ggatgtctac agtgtgatac 360
agcctgtctt caagcagcaa tcaatttaga agggaagaca gccctaggat ctaaaagcat 420
gaagtctggg atgtgcagag ggaggtagga agcccagccc agaagagggg attccagcat 480
tagagtccta tgattataag ttttgaacag attgttttat tttaaaaatg cccttgaaaa 540
ctggaatgtg cttacaaata ttttaggctc aaatcaggat gaattgacta tattgcagta 600
ctttctggaa tatgctgtat ttcccaaatc tgcattaccc cacattccaa taattgctgg 660

0956045.0002

tggtctctgc tttttgctta gcccaaccaa gtataaaaag cttccaggac tccttgcagc 720
cactgggcta gactgcccaa aagaccacaa cttccatact attagagaga aagacctcta 780
gttccttttc cctttggtgg atctggtccc tttcttatat atcgagacta ttatgaaccc 840
gtaaccacaa tttcttnca 859

<210> 1928
<211> 756
<212> DNA
<213> Homo sapiens

<400> 1928
gtaacgcctt caaccgcccg ccgcgataga gtgcccacga ccctgcctcg ggaatcccgc 60
tctgcaccgc cccaccagac ccggactcgg agccgcgagc ggcccgagat gagcagcaat 120
gactcctccc ttatggctgg gatcatttac tatagccagg aaaagtactt ccaccatgtg 180
cagcaggctg cagctgtggg cctggaaaaa ttcagcaatg accctgtgtt gaagttcttt 240
aaagcctatg gagtcctcaa agaaggcaat gtacttcatg atgcagcaga actactcaga 300
ggccctggag gtggtgaacc agatcactgt gacttcaggg agcttcctgc cagccctcgt 360
cctgaagatg cagctgttct tagctcggca ggactgggag cagacagtag aaatgggaca 420
cagaatccta gaaaaagatg agagcaatat tgatgcctgc caaattctaa ccgtgcatga 480
gcttgcaaga gaaggaaaca tgaccacagt aagttctttg aagactcaga aggtgatcct 540
tgaaacagaa tcaaggagga acccttcatg acctgtgcac ctgacccaaa gcccttgtag 600
ggagctcctg gatctcagct tctcttttct accccacccc tatactcgct gccaaggagg 660
cctgctctgg tttgactctt tgagttgtgt ancttgggag tcangcanca ttaggcagtg 720
agattgattc taggctctgg catgtgctat ctgtgg 756

<210> 1929
<211> 718
<212> DNA
<213> Homo sapiens

<400> 1929
agcaccggaa gccgctcccc tgtgaggctg cggaccggga gcagcggccg caggtccggg 60
cgccatggct gcagagcgga cccggccgct gcaaggctct ggcggtccga gcgtgcctag 120
tagctgtgaa cccggcgcga ggtcccgggc cccggggcgc tcgctcaggt aaatttttcc 180
ataaccttat ggagagaaag gactttgaga catggcttga taacatttct gttacatttc 240
tttctctgac ggacttgcag aaaaatgaaa ctctggatca cctgattagt ctgagtgggg 300
cagtccagct caggcatctc tccaataacc tagagactct cctcaagcgg gacttcctca 360
aactccttcc cctggagctc agtttttatt tgttaaaatg gctcgatcct cagactttac 420
tcacatgctg cctcgtctct aaacagtgga ataaggtgat aagtgcctgt acagaggtgt 480
ggcagactgc atgtaaaaat ttgggctggc agatagatga ttctgttcag gacgctttgc 540
actggaagaa ggtttatttg aaggctattt tgagaatgaa gcaactggag gaccatgaag 600
cctttgaaac ctcgtcatta attggacaca gtgccagant gtatgcactt tactacaaag 660
atggacttct tttgtcaggg tcanatgact tgcttgnaaa ctgtggaatg tgagcaca 718

<210> 1930
<211> 795
<212> DNA
<213> Homo sapiens

0050250-0050950

0050050-000800

<400> 1930
tttccctgga aaaacaatga tttgaattca aggaggggag gagaacaggt ttcccccaac 60
tccaagcttg aggactttct tttccttttg aagtaggaat ggagttctgt ccccggcccc 120
cgaaggcgtc cttacagctg atatttttcc agctgcctat ctccccagag cgtggagcgg 180
cctccagagt ggggtcaggg atggggcgag agggccagac ctgcctgggc cgggcagctc 240
agcatctctc tgagctgctg aacacctatg gaggctgtgc tcatgttcac tggtggtgtg 300
actttgtgtg accttgccac ttcactcttt cacagcctcg tttcctttat ctgtcaaatg 360
gggatcatga gtccactggg tggcttttga agaacgtgcc acaatcagag aaggtctgag 420
ctgggaaatg caacagaggc cttctcctcc ttgaccagtg gggaaacaga ggctcttaaa 480
actggcatag atccagcttc ctgcccctag tctctgtctt tcccattcca tcaggaccag 540
atctcagaat aggggattgg cattttcatg ctggggagct gggtatcatt ttcttttcag 600
agacttagta gaaaataaaa ggatccctga gaaattcttt atgtgcaggt gcttgtcnat 660
ggtaggggtg acctcaggac ccgnactgtc tgcccatgac caaggagtga gactgcttgg 720
acattggcct tgngtccccc ctgggggtct ggatcaaaag cccanccttg aaggtgacaa 780
cccttacctn cagaa 795

<210> 1931
<211> 707
<212> DNA
<213> Homo sapiens

<400> 1931
tttaagtgca aagttcagta gttaagtaca ttaatattgt tgtatagcca tcaccgtcat 60
ctatctccag aactctttct atcttgcaaa actgaaattc tgtacccgta aacagtaact 120
ccatttctct tctgcagcat tggcaatcac cattctcctt cctctctctg tttttgactg 180
ttctgcctca taaaagtacc tcatgtgaat ggaatcatac agtatttgtc tttttgtgcc 240
tgatttattt cactcagcat aatgtcctca tggttcatcc gtgttaatag catgtgtcag 300
aatttctatc ctttttaagg ctaaatgacc cattgtatgt acgtatcact gtttatctat 360
tcatccattg atgaacactt gatcacatat ttttatttaa aacattttta aagccaggca 420
caatggctca tgcctgtaat cccagcactt tggaaggttg aggtgggcag atctcttgag 480
gtcaggagtt cgagaccagc ctggccaaca tggcaaatcc catttctact aaaaatacaa 540
aaattagccg ggcgtggtgg caggcgccta taatcccagc ttcttgggag gctgtggcag 600
gaaaatcact tgaaccccgg aggcggaggt tgcagtgagc caagactgtg gccactggac 660
tccagtctgg gcaacagagc aagactctgt ctcaaaaaaa aaaannn 707

<210> 1932
<211> 865
<212> DNA
<213> Homo sapiens

<400> 1932
tgtggaaatg aagcatctct ttctgttttc tctttgagat ggtttgagtt agattgtgtc 60
tcttccaagc ttgccacacc ccagtgcctc cagtcatctg ctttcttgaa ggatggccac 120
gctggtgaat tctagacaaa ttctaacccg gggagagggc tggagaattt ctggtcctgg 180
ttgggagata ctccctgtta aaccttcgga tatgctgacc tagctgaggt agccaggggc 240
tatttaaaaa ttcaaaatct cagatctggc tgtggataaa cccccaaggt ggtacgtgca 300
gtacttggag gcgtgagggc agaaggtcct ccccagcagt ttgtacggga cacatcatct 360

atgggatatt agtaaatatc cttaaggaaa ggcttctgtg gtcaaaacca ggttcagcag 420
gttatttcac tatggggctt ctcaggacgc ttaacctact catccccctc tgggctttgc 480
aaacgaggcc gccattgctt tctttctgct atgtagaaat agattgaggc gtaagggtcg 540
gatgtccttt ctccattcat caggctccct cttcctgagg agctgctgtc agaacagcct 600
ggggctgctg tgttgcaggt tatggtggca tatccttggc ggtggaaggc cccagcaaag 660
tggacatcca gacggaggac ctggaagatg gcacctgcaa agtctcctac ttccctaccg 720
tgcctggggt ttatatcgnc ttcaccaaat tcgctgacga acacgtgcct gggagcccat 780
ttacccgtga agacantggg gaaggaaagt caaggagagc ataaccggac cagtcggccc 840
cgtccgnggc actgcnggaa cattg 865

<210> 1933
<211> 802
<212> DNA
<213> Homo sapiens

<400> 1933
gaaaaaagtc gtggggactg agttcaggac accctgaaac tatgcgacca gtaatttttt 60
taaggtactt tttcctacaa gtaaggtatc tgaaaagtca acgttttgag ggtggaatca 120
agacttttca cttctcctgg caaagagcaa caaggctctt gtctcgtgtc cttctgtgtg 180
tctctgtcag gatcacagca gctgtgctct tggtctgctt actcctctgt aatccacgta 240
tgcagaaggg agttaataag gtgatcacca tctccccaga attcaaaggt ctttgcctct 300
ataaggtctg cccctatggg gccaggaaaa tgtaaaccta tataaggact tgcaagagag 360
cataaagaag gtagaaaagg tttacttgtt gggttttcaa gccttcaagt tgaatgagtc 420
ttagcttttg ctgggcagtt gttctggaca agtcatcagt ttcatgtgga gaactcagtg 480
taagcccaag gctaatgaat gagaggggtc ccatggaaac acagctgaaa tgaaatggga 540
ctttatccat cttctttgag aatggaagag cttttgtgaa gcagtacatc attgctcaag 600
ataatggttg ataagcatta gattttatag atctaataag gaaaatattt tattatctca 660
agttaacaaa acatttttt acctctcgag tgcctcatag gaccaactat tactctttgg 720
cttttatttt tctttttgna ttatttntat atattcttta accttgctga ctagtattga 780
ctgaaatctt tanactttgc ct 802

<210> 1934
<211> 789
<212> DNA
<213> Homo sapiens

<400> 1934
gtgacggagc ggcggccccg cccggtgcgc tggaggtcga agcttccagg tagcggcccg 60
cagagcctga cccaggctct ggacatcctg agcccaagtc ccccacactc agtgcagtga 120
tgagtgcgga agtgaaggtg acagggcaga accaggagca atttctgctc ctagccaagt 180
cggccaaggg ggcagcgctg gccacactca tccatcaggt gctggaggcc cctggtgtct 240
acgtgtttgg agaactgctg gacatgccca atgttagaga gctggctgag agtgactttg 300
cctctacctt ccggctgctc acagtgtttg cttatgggac atacgctgac tacttagctg 360
aagcccggaa tcttcctcca ctaacagagg ctcagaagaa taagcttcga cacctctcag 420
ttgtcaccct ggctgctaaa gtaaagtgta tcccatatgc agtgttgctg gaggctcttg 480
ccctgcgtaa tgtgcggcag ctggaagacc ttgtgattga ggctgtgtat gctgacgtgc 540
ttcgtggctc cctggaccag cgcaaccagc ggctcgaggt tgactacagc atcgggcggg 600
acatccagcg ccaggacctc agtgccattg ccgaaccctg caggaatggt gtgtggcttg 660

0052945 0052800

tgaagtcgtg ctgtcaggca ttgaggaaca ngtgagccgt gccaaccaac acaaggagca 720
caactggcct gaagcagcag attgagagtg angttgccaa ccttaaaaaa acccttaagg 780
ttcnacgga 789

<210> 1935
<211> 828
<212> DNA
<213> Homo sapiens

<400> 1935
aggatgcaag agtcagagtg agggatctgt ccctggatgg ggacaataag gggtcagttc 60
agggggactt ccttgagctc tgaagtttca cctgagaatg ggagattcag aacttggtga 120
cagagtttgt ggagctcact gtgtctttgc tgatccttca gcaaaggaag tgagattgtt 180
tctagctttt ctgtttgggg tgcttctctg tcaactaaaa gtcttcatcc tttaaatatt 240
gcatcatttg tgtatacttc attcattcac ttactcatga cccactcctc gagtgcctgc 300
aatgggcaag cgtctgtcct aggagccgtg tgctgggcca cagttaaatc tgagagatca 360
tgtgtggcat ttctcatgga ttgagatgtc tgagtgtcat tgttttgaga gagctagtgg 420
catggtttat aaagctgttt ttcatttttct ccatacagga caacagcttt gagcagttca 480
ttattaatta ttgtaacgaa aagctgcaac aaatcttcat tgaacttact cttaaagaag 540
agcaggagga gtatatacgg gaggatatag aatggactca cattgactac ttcaataatg 600
ctatcatttg tgacctaata gaaaataaca caaatggaat cctgccatgc tggatgaaga 660
gtgcctcaga cctggcacag tcactgatga gaccttctta gaaaagctga accaagtatg 720
tgccacccac cagcattttg aaagcaggat gaaccaagtg ctctcggntc ctcaatgaca 780
cgtntttgc ttacagctgn tttaggatcc accattatcc tggaaaag 828

<210> 1936
<211> 820
<212> DNA
<213> Homo sapiens

<400> 1936
gtctgtgagg gcagactgat ccgagcaccc aaaccctcgg cggacagcgg agccagtggt 60
agccgcacgg ccctaaaacc atggaggagg gcggcagcac tggcagtgct ggcagtgaca 120
gcagcaccag cgggagtggc ggggcgcagc aaagggagct ggagcgcatg gctgaggtct 180
tggtcaccgg ggaacagcta cggctcaggc tgcacgaaga aaaggttatt aaagatagac 240
gtcatcatct caagacctac ccaaactgtt ttgtcgcaaa agaactgatt gactggctga 300
ttgaacacaa agaggcttct gacagagaga cggcaattaa actcatgcag aaattagcag 360
accggggcat tattcaccat gtgtgtgatg agcataagga attcaaggat gtcaaactct 420
tctaccgctt tagaaaggat gacggcacct tcccattgga taatgaagtg aaggccttta 480
tgagaggaca gaggctatat gaaaagctga tgagccctga aaacacactc ctgcagccca 540
gggaggagga aggggtcaag tatgagcgca ccttcgtggc atctgaattc ctggactggc 600
tggttcagga aggtgaggcc accacgagga aagaggcaga gcagctttgc caccggctta 660
tggagcatgg catcatccag catgtgtcca gcaagcaccc atttgtggac agcaatcttc 720
tctaccagtt cagaatgaac tttcggcgga ngcgaanact gatggagctg ctcaatgaaa 780
aagtcccctt cttccaggaa actcatgaca gtcccttntg 820

<210> 1937
<211> 844

09509450.030200

<212> DNA
<213> Homo sapiens

<400> 1937
ttggagggcc gagaggagtg atgcgggcac ttataaagag gagagaaagg aggagaggct 60
caccctcacg aggcttctga gaaggggtg aactgcagaa gtgcagaggg caggagagac 120
ctcagcatct acccagtatg aggagtgtat cagagctggg aaggtgattc cagagcaggg 180
gaaaatgcaa gctccactaa tacaaatgag gtgaggcaac cagtgcacag cgaggggttc 240
cacaagaccc aacaacctca caaatccaac agacgaccaa caatagctgg ggacatgctc 300
aagacccaca gagcaagtgc atgaagccag ggcaaggggc agcagtgagg acaaatctct 360
ccatgagtac tgtgggtctt agcctcaact cactaaaagg cctctagaga caataattaa 420
aataaccagt ggctcctcga ggaatggagg ctaaggagca aactgccaaa cttattctgg 480
ctggaattgg tggctgtttt ctatggaaca cacaagactc aagaatggcc aatgaccact 540
ctcactgggg ggttgcagtt ggcaactgga gggatgctca tatttaactg acttagaatt 600
ggcttgtgtt tagcttggca tgatggtatt cccattgntt agtatttcaa tttcaacatc 660
aaaataaagg ctggataagg gtgaatgang aggtagctgc tacccaagac aagtcttcat 720
ttgaaagggt ggctaattac attttcctta atttacaaat tggatttgac ccactgggna 780
tttctttaaa gntcgcacag agtttggggt attcanttte agaagagaaa cgttatggat 840
cttg 844

<210> 1938
<211> 795
<212> DNA
<213> Homo sapiens

<400> 1938
gtgcggatgc ggggaggctg cgtgtgtgcg cagggagaga acgccggcca ccttcccgct 60
tccgagctgg gtgcgcgccg agcacaggag attgcctgcg tttaggaggt ggctgcgttg 120
tgggaaaagc tatcaaggaa gaaattgcca aaccatgtct ttttttctgt tttcagagta 180
gttcacaaca gatctgagtg ttttaattaa gcatggaata cagaaaacaa caaaaaactt 240
aagctttaat ttcatctgga attccacagt tttcttagct ccctggaccc ggttgacctg 300
ttggctcttc ccgctggctg ctctatcacg tggtgctctc cgactactca ccccgagtgt 360
aaagaacctt cggctcgcgt gcttctgagc tgctgtggat ggcctcggct ctctggactg 420
tccttccgag taggatgtca ctgagatccc tcaaatggag cctcctgctg ctgtcactcc 480
tgagtttctt tgtgatgtgg tacctcagcc ttccccacta caatgtgata gaacgcgtga 540
actggatgta cttctatgag tatgagccga tttacagaca agactttcac ttcacacttc 600
gagagcattc aaactgctct catcaaaatc catttctggt cattctggtg accttccacc 660
cttcagatgt gaaagccagg caggccatta gagttacttg gggtgaaaaa aagtcttggt 720
ggggatatga nggtcttaca tttttcttat tangccaaga agctgaaaaa ggaagacaaa 780
atggtggcat tgncc 795

<210> 1939
<211> 856
<212> DNA
<213> Homo sapiens

<400> 1939
aggacaagag aaaccaagcc cagctacagt cagaagcaca gatcctgtca cgacaaagga 60

0050-0050-0050

gactaaagca gtctcagaaa tgtctactga aataggaaca atgatctcgg tatcatctgc 120
agaatatggt actaatgcaa aggagtctgt aacagactat actacaccct cttcttcttt 180
gcctaacacc gtggctacta ataatacaaa gatggaggat actttggtta ataatgtgcc 240
cctgcccaac acccttcccc tccctaagag ggagactata caacagagct ccagcctaac 300
ttcagttcct cccactactt tcagcctcac cttcaagatg gagtctgcac gcaaagcatg 360
ggagaattct ccaaatgtaa gggaaaaggg gtctccagta acttccacag cacctccaat 420
tgcaactgga gtcagcagta gtgccagtgg accaagcact gctaattaca attcgttctc 480
aagtgcatcc atgccccaga ttcctgttgc ttcagtcact cctacagcat cactatcagg 540
agctggtaca tacactacct cttctttgag cacaaaatct acaaccacat cggaccctcc 600
aaatatttgt aaagtgaaac ctcagcagtt acagacaagc agcctgcctt ctgcaagtca 660
tttttcacag ttaagctgta tgccttcctt attgcccagc agcaacagaa tnccgcaggn 720
ttatgtgtct cagtctgcag caagctcaaa tcccagcctt ctatatgggc cccaagtcat 780
ttattcaata cccaacatgc cccgaatggc ttccgccatc cttgggtcaa caacaggggt 840
ttccaancag gtcttt 856

<210> 1940
<211> 838
<212> DNA
<213> Homo sapiens

<400> 1940
agatctgaat ccagaggctc tcggaggaag agctcaggcc actgaggcgg ctcccagctg 60
cgttggcgac atggccgaca cccccagaga tgccgggctc aagcaggcgc ctgcatcacg 120
gaacgagaag gccccggtgg acttcggcta cgtggggatt gactccatcc tggagcagat 180
gcgccggaag gccatgaagc agggcttcga gttcaacatc atggtggtcg ggcagagcgg 240
cttgggtaaa tccaccttaa tcaacaccct cttcaaatcc aaaatcagcc ggaagtcggt 300
gcagcccacc tcagaggagc gcatccccaa gaccatcgag atcaagtcca tcacgcacga 360
tattgaggag aaaggcgtcc ggatgaagct gacagtgatt gacacaccag ggttcgggga 420
ccacatcaac aacgagaact gctggcagcc catcatgaag ttcatcaatg accagtacga 480
gaaatacctg caggaggagg tcaacatcaa ccgcaagaag cgcatcccgg acacccgcgt 540
ccactgctgc ctctacttca tccccgccac cggccactcc ctcaggcccc tggagcagaa 600
agtgccttta tctcagccat ccgcagactg ctcggccaga tgcggggaca ggctggaatg 660
agggaggcgt cttcatctcc tggcatcccc tctnacgcca cccccggccc caccgggctt 720
gaagtgctgc tgatgccctg ggatctgatt gaggatnaaa anggaaggag agatgacccc 780
taccttatt ccccagtttt gaaaaggtct aaccaagtga atctggtgga agaactna 838

<210> 1941
<211> 658
<212> DNA
<213> Homo sapiens

<400> 1941
agtcgcgcag agtggagtca aaggcaacca gtgctcgctg cggtctctgg ggatcgggac 60
cgcggcggcg gcccgcgagc gggatgttcc ggggcttgag cagttggttg ggcttgcagc 120
agccggtggc aggcggtggg cagcccaatg gagatgctcc acccgagcag ccgtccgana 180
cggtggctga gtctgcggag gaggagctgc agcaagcggg agaccaggag ctcctccacc 240
aggccaaaga cttcggcaac tatttattta actttgcatc tgctgccaca aaaaagataa 300
ctgaatcagt tgctgaaaca gcacaaacaa taaagaaatc cgtanaagaa ggaaaaatag 360

0062960.0012000

atggcatcac tgacaagaca attataggag attttcagaa ggaacagaaa aaatttgttg 420
aagagcaaca tacaaagaat cagaagcagc tgtgccccca tgggttgaca ctaacgatga 480
anaaacaatt caacaacaaa ttttggcctt atcanctgac aagaagaatt tccttcgtga 540
ccctccggct ggcgtgcaat ttaatttcna ctttgatcag atgtccccgt ggccctggtc 600
atgctccang aagataactg ctaanccaga tganatttgc cctcnttcct aaacttgt 658

<210> 1942
<211> 398
<212> DNA
<213> Homo sapiens

<400> 1942
aggcccggcg ctcctcaaga tggctgccga cagtgagccc gaatccgagg tatttgagat 60
cacggacttc accactgcct cggaatggga aaggtttatt tccaaagttg aagaagtctt 120
gaatgactgg aaactgattg gaaactcttt gggaaagcca ctcgaaaagg gtatatttac 180
ttctggcaca tgggaagaga aatcagatga aatttccttt gctgacttca gttctcagtc 240
actcatcatt atcttgtaca gagtccactg ataagaagga aggatgatta tagaggatgt 300
gtcccacaac ctatgccaag aattggctgg ggtttgaatt aanaacttcc ncccaaaacc 360
acntggccng ttaaaatggt ttgggctnct taattcct 398

<210> 1943
<211> 641
<212> DNA
<213> Homo sapiens

<400> 1943
gttatggcgg ccgcctaagt cccacagaga cgggagtcgg gtgggatccc aggctgggcc 60
ccgcggcggc tggattctct tccctggcca agtctctgag atcttctccc agggcgatgc 120
aaagctactc gctaccagct tggacctgtc tgcagtatct cctctgggac ctgccatgct 180
gaggacccat tctcacctct gagggactcc tgtcctagga ctaaggtgga gcctgggcca 240
tggtacagct ggctcctgcg gcagccatgg acgaggtcac ctttaggagc gacactgtgc 300
tgtcagatgt ccacctctat accccgaacc atanacatct catggtacgg ctgaacagcg 360
tggggcagcc agttttcctg tcccaattca agcttctatg gagccaagac tcttggacag 420
attcaggagc caagggtggc agtcacagag atgttcacac aaaggagcct ccttctgctg 480
agacaggcag cacagggtcc cctccaggaa gtggccatgg taatgagggt ttctccctcc 540
aggccgggac tgacaccact ggccangaag tggctgaagc tcanctggat gangatgggg 600
atttggacgt ggtganaaaa cacnaaccgc ctctgattcc a 641

<210> 1944
<211> 845
<212> DNA
<213> Homo sapiens

<400> 1944
actttccggg atggcagcaa ggtgacttcg gctgaggatg accctgactg aaaggctgcg 60
tgagaagata tctcgggcct tctacaacca tgggctcctc tgtgcatcct atcccatccc 120
catcatcctc ttcacagggt tctgcatctt agcctgctgc tacccactgc tgaaactccc 180
cttgccagga acaggacctg tggaattcac cacccctgtg aaggattact cgcccccacc 240

0056376.0002

tgtggactct gaccgcaaac aaggagagcc tactgagcag cctgagtggc ganattttcc 300
cctaccttgt ggtggttatt gggttagaga atgtgttggt gctcaccaag tctgtggtct 360
caaccccggt agacctggag gtgaagctgc ggatcgccca aggcctaagc agcgagagct 420
ggtccatcat gaaaaacatg gccacggagc tgggcatcat cctcatcggc tacttcaccc 480
tagtgcccgc catccangag ttctgtctct ttgctgtcgt ggggctggtg tctgacttct 540
tccttcagat gctgtttttc accactgtcc tgtccattga cattcgccgg gatggagcta 600
gcagacctga acaagcgact gccccctgaa gcctgcctgc cctcanccaa nccagtgggg 660
cagccaacgc gctacgaacg gcaactggct gtnaagccgt ccacacccca caccatcacg 720
ttgcagccgt cttccttccg aaaactgcgg ntccccaana agctgctttt gtctacttcc 780
tggcccggca ccncctggca cagcgcctca tcttggtgga cgttgttnga ttggctctgn 840
ataac 845

<210> 1945
<211> 821
<212> DNA
<213> Homo sapiens

<400> 1945
gacaagaaga ggaagtgaag gctacagggt atccacgtgg gttctgagcg tgtttctacg 60
tccctggaag ccggtcattt aagctcattc ctcgccacgg cttagtcaac atgggtcgct 120
cgggaaagtt gccctctggt gtctcagcta agttgaagcg ctggaagaaa ggccacagca 180
gcgacagcaa ccccgccatc tgccgccacc gtcaggccgc ccgcagccgc ttcttcagcc 240
ggccgtcagg aaggagtgac ctgacagtcg atgctgtgaa gttacataat gagctgcagt 300
cagggtcctt gcgcttgggc aaaagcgaag ccccggagac gcccatggaa naagangcgg 360
agctggttct caccgaaaag tcctcgggca ccttcctgag tggcctttcc gactgcacaa 420
acgtcacctt cagcaaagta cagcgcttct gggagtccaa ctcggctgcc cacaaggaga 480
tctgtgctgt tctggctgct gtcactgang tgattcgctc ccagggaagg gaaggagacg 540
gagactgagt actttgctgc tctgatgaca acaatggaan cagtggagtc ccggagtccc 600
tggccgccgt tgcttacctg ctgaaccttg tcctgaaacg tgttcccanc cctgtgcttt 660
attaanaant tctctgaatg cctccaaaag ccttcatgga tatcatgttc agctcaaggc 720
cancaacggg ttccacctct gtcctccgaa tggggttcct tnctgccntg gccacccttc 780
ctgcngaaac caaaaacttg gaaaggcctg ggggctnccc c 821

<210> 1946
<211> 570
<212> DNA
<213> Homo sapiens

<400> 1946
aagtaactcg ggaagacgac caagcgggag cgggagcggg agcgggagcc ggagcgagag 60
cgcgcgggcg cggccgacag tgcctgattt gagatggggt cccaggtctc ggtggaatcg 120
ggagctctgc acgtggtgat tgtgggtggg ggctttggcg ggatcgcagc agccagccag 180
ctgcaggccc tgaacgtccc cttcatgctg gtggacatga aggactcctt ccaccacaat 240
gtggctgctc tccgagcctc cgtggagaca gggttcgcca aaaagacatt catttcttac 300
tcggtgactt tcaaggacaa cttccggcag gggctagtag tggggataga cctgaagaac 360
canatggtgc tgctgcaggg tggcgaggcc ctgcccttct ctcatcttat cctggccacg 420
ggcagcactg ggcccttccc gggcaagttt aatgaggttt ccagccagca ggccgctatc 480
cangcctatg angacatggt gaggcaggtc cagcgctcac ggttcatcgt ggtggtggga 540

US 2005/0048500 A1

ngaagctcgg ctggantgga aatggcanca 570

<210> 1947
<211> 535
<212> DNA
<213> Homo sapiens

<400> 1947
attataatta cgatgatgaa gatgaagatg aaaatgcaat ggatgctgat ggtggtgatg 60
atgatgatca agggagtgat gatgaataca gtgatgatga tgacatgagt tggaaagtga 120
gacgtgcagc tgcgaagtgc ttggatgccg tagttagcac aaggcatgaa atgcttccag 180
aattctacaa gaccgtctct cctgcactaa tatccagatt taaagagcgt gaagagaatg 240
ttaaggcaga tgtttttcac gcataccttt ctcttttgaa gcaaactcgt cctgtacaaa 300
gttggctatg tgaccctgat gcaatggagc agggagaaac acctttaaca atgcttcaga 360
gtcaggttcc cnacattgtt naagctcttc ncaaacagat gaaagaaaaa agtgtgaaga 420
cccgacagtg ttgttttaac atattaactg agctggtaaa tgtnttacct gggggcctaa 480
ctcaacacat tcctgtnctt gtnccangaa tcattttctc nctgaatgat aaatc 535

<210> 1948
<211> 562
<212> DNA
<213> Homo sapiens

<400> 1948
aaaagggaag cctgcaacaa gttaagctga agaccgaagc aagagctggt tcagcctgcc 60
agtggagaca ctgggcccgg catccaggat ggacccagaa tctgagagag ccctgcaggc 120
ccctcacagc ccctccaaga cagatgggaa agaattagct gggaccatgg atggagaagg 180
gacgctcttc cagactgaaa gccctcagtc tggcagcatt ctaacagagg anactgaggt 240
caagggcacc ctggaaggtg atgtttgtgg tgtggagcct cctggcccag gagacacagt 300
agtccagggg agacctgcag gagaccaccg tggtgacagg cctgggacca gacacacagg 360
acctggaagg ccagagccct ccacagagcc tgccttcaac ccccaaagca gcttggttca 420
nggaggangg ccgctgctcc ancagtgacg atgacaccga cgtggacatg ganggtctgc 480
ggaaacngcg gggccgggaa gccggcccac ctcacccatg gtgcccctgg ctgtggaaaa 540
ccangctggg ggttanggtn ca 562

<210> 1949
<211> 584
<212> DNA
<213> Homo sapiens

<400> 1949
agacgattgg tcgggccacg ccagcccagg cccaagccag cccggagaga aaagacctga 60
ggaggtggcc ctggggctgc accaccgcct cccagcactg ggaagagccc tggggcacag 120
cattcagcaa cgagcgacct ccacagccaa gacttggtgg gacagatatg aagagtttgt 180
tggactcaac gaggttcgag aggcccaggg gaaaggtgac agaggctgag aaagtgttca 240
tggtggctcg agggcttgtc cgagaggctc gggaggactt ggaagttcac caggccaagc 300
tgaaggaggt gagggaccgc ttggaccgtg tctccaggga ggacagtcag tacttggaac 360
tggctactct cgagcacagg atgctgcagg aggagaagaa gcttcgcaca gcctatctgc 420

0505450.02800

gtgcagaaga ctctgagcga gagaagttct ccctcttctc tgcagctgtg cgggaaagtc 480
atgaaaagga ncgcacaagg gctgananga ccaanaactg gtccctcatt ggctcatcct 540
gggggccctg attggtgtng ctggctcccc tatgttaacc gtgt 584

<210> 1950
<211> 567
<212> DNA
<213> Homo sapiens

<400> 1950
tcgttggttc cggaggtcgc tgcggcggtg ggaaatgctg gcgcgcgcgg cgcggggcac 60
tggggccctt ttgctgaggg gctctctact ggcttctggc cgcgctccgc gccgcgcctc 120
ctctggattg ccccgaaaca ccgtggtact gttcgtgccg cagcaggagg cctgggtggt 180
ggagcgaatg ggccgattcc accggatcct ggagcctggt ttgaacatcc tcatccctgt 240
gttagaccgg atccgatntg tgcagagtct caaggaaatt gtcatcaacg tgcctgagca 300
gtcggctgtg actctcgaca atgtaactct gcnaatcgat ggagtccttt acctgcgcat 360
catggaccct tacaacgcna gctacggtgt ggaggaccct gagtatgccg tcacccagct 420
agctcnaaca accatganat naganctcgg caaactctct ctggacaaag tcttccggga 480
acgggagtcc ctgaatgcca gcattgtnga tgccatccaa ccaagctgct gantgctggg 540
gtatccgctg cctccgttat nanatcn 567

<210> 1951
<211> 568
<212> DNA
<213> Homo sapiens

<400> 1951
gaaatccaag atggcggcgc taggctgacc ctcctgctgg tgacggaagt accgcctcct 60
cccgtctgac gcccctcagg ggaccctgca tcgctccagc cgccgcggcc atgtctgggc 120
caggcaacaa acgcgccgcc ggcgacgggg gctcagggcc cccggaaaag aagctgagtc 180
gtgaggagaa gaccaccacg actcttatcg agcccattcg tcttggaggc atctcttcca 240
cggagganat ggacctgaag gtactacagt tcaaggacaa gaaactggca gagcggctgg 300
aacaacggca ggcttgtgaa gatgaactcc gagaacgaat tgagaagttg gagaagcggc 360
aggccacaga tgatgccaca ctcctcatcg tcaatcgcta ctgggcccag ctggatgaaa 420
ctgtggaagc ccctctccga tgccatgaga gccaggggga gctgtcttca ncgcctgagg 480
cacctgggac ccanganggg ccaacatgtg atgggactcc tctcccanaa ccggggacat 540
canaactgaa aaacccccttg ctgatgca 568

<210> 1952
<211> 573
<212> DNA
<213> Homo sapiens

<400> 1952
actttcccct ctccgtctcc tgcgggcgca atggaggagg aggatgagga agcgcgggcg 60
ctcctggcag gcggccctga cgaggccgac agaggtgccc cggccgcccc tggagccctg 120
ccggccctct gcgaccccag tcgcctggcg caccggcttt tggtgctgtt actgatgtgc 180
ttccttggct ttggcagcta tttttgctat gataatcctg ctgcccttca gactcnagtt 240

0050504.0050800

aaacgagata tgcaagtgaa taccacgaaa ttcatgctgc tgtntgcctg gtattcttgg 300
cccaatgtan ttttgtgttt ctntggtggc tttttgatan accgagtatt tggaatacga 360
tggggcacaa tcatttttag ctgctttgtt tgcattggac aggttgtttt tgccctgggt 420
ggaatattta atgctttttg gctgatggaa tttggaanat ttgtatttgg gattggtggc 480
gaatccttan cagttgccca caatacattt gctgtganct ggtttaaagg cnaagaatta 540
aacctgggtg tttggacttc anctttanca tgg 573

<210> 1953
<211> 690
<212> DNA
<213> Homo sapiens

<400> 1953
tttacgatat ccaaataaac tggacaccat cacatggacg tggcaaggac ctggagcgct 60
ggaaatcctg tggctcacgc tgtgtcagtt tcacaaccaa gtggaaatcg agttccttcc 120
tgtgtacagc ccttctgagg aggagaagag gaaccccgcg ctgtatgcca gcaacgtgcg 180
gcgagtcatg gccgaggcct tgggtgtctc cgtgactgac tacacgttcg aggactgcca 240
gctggccctg gcggaaggac agctccgtct ccccgctgac acttgccttt tagaatttgc 300
caggctcgtg cggggcctcg ggctaaaacc agaaaagctt gaaaaagatc tggacagata 360
ctcagaaaga gccaggatga agggaggaga gaagataggt attgcggagt ttgccgcctc 420
cctggaagtc cccgtttctg acttgctgga agacatgttt tcactgttcg acgagagcgg 480
cagcggcgag gtggacctgc gagagtgtgt ggttgccctg tctgtcgtct gccggccggc 540
ccggaccctg gacaccatcc anctggcttt caagacgtac ggagcgcaan aagacggcag 600
cgtccgcgaa ngtgaactgt cctgcatcct ccanacggcc tgggggtggc agaactcacc 660
gtgaccgacc tattccgaac cnttgaccnn 690

<210> 1954
<211> 772
<212> DNA
<213> Homo sapiens

<400> 1954
aaaagacaat caagacggcc ggccgaggcc cctggaacgg cttaggcggc tgcggctgct 60
acggcggcgc atgctagggg attctgccgg gtagaaaagc tgggcctgga acccagccct 120
gaggacatcc tgcggcccag gggcaagtga cacctgctga gagaggccca ggatggtgga 180
ggctgaggaa ctggcacagc tgcggctgct caatctggag ctcctgaggc agctgtgggt 240
ggggcaggat gctgtgcggc ggtcagtggc cagggcagcc tcggagtcaa gcctggaatc 300
cagcagcagc tacaactcag agactccatc gaccccagag acgtcctcaa cttccttgag 360
cacctcctgc ccacggggcc ggtcctccgt gtggggccca ccagatgcct gtcgagggga 420
cctccgtgat gtggccagat cgggggtggc ctctctccca cctgccaatt gccagcacca 480
ggaatccctg ggccgaccga gaccccactc agcaccctcg ctgggcacct caagcctgaa 540
ggacccagag ccctcaggga agctgggtga tccaggaccc aggaggcaca gaccccgagg 600
tcatcctggc tcaacagagc aactgtccaa gcccagggtg acttctctga agaatctgca 660
ttccctgaaa agaacttgcg cctccaggnc ataccttggg tatgaatgga ttgcnttttt 720
cttgaaacca nctctttcca tcaccanccc accctaaggn cttcttctcc aa 772

<210> 1955
<211> 623

0562945.0420000

0050945 0050945

<212> DNA
<213> Homo sapiens

<400> 1955
tccgccggct cacgtgaccg tctttgggcc ggcgcgaacc atggccggca tggtggactt 60
ccaggatgag gancaggtca agtccttttt ggagaacatg gaggtggagt gcaactacca 120
ctgctaccac gaaaaggacc cggacggttg ctatcggctg gtggactatt tggaagggat 180
ccggaanaat tttgatgagg ctgccaaggt gttgaagttt aactgtgaan anaaccagca 240
cagtgatagc tgctacaaac tgggggccca ctatgtgact ggaaaaggtg gtctgaccca 300
ggacctgaaa gctgccgcca ggtgcttttt gatggcgtgt ganaancctg gaaagaantc 360
aatagcagca tgtcacaacg ttggcctcct ggcacatgat ggacaggtta atgaggatgg 420
ccagcctgac ttgggaaagg ccaggggact actacacaag ggcctgtgat ggtggctata 480
cttccagttg cttcaacctc agtgccatgt tcctgcaggg tgccccangc tttcccaang 540
acatggacct ggcatgtnaa tactccatga aagcctgtga cctgggtcat atctgggcct 600
gtgccaatgc cantcccatg tnc 623

<210> 1956
<211> 830
<212> DNA
<213> Homo sapiens

<400> 1956
gtaactttta agtggtcgga acacgccccg cgctgctggg tcccgccaga cacgccgccg 60
ccgcaggaaa gtctacagtt tggtacccca ggactcgctg gtcaggaaag ccctgcagga 120
catgantgtt aggcccgacg cctggccctt ggcagcttgg gangtggctg gggctgcttt 180
tgcctttgcc aganacagct ccaactgang acctctccaa cgggcccatc cacagtcctt 240
ccttccccta gtgtctggga anacaggcgc gatgatggac tccccgttcc tggagctgtg 300
gcagtccaag gcagtgtcca tcagggagca gctgggactc ggggaccggc ccaacgactc 360
ctattgctac aactcggcca aaaacagcac cgtgctccag ggggtcacct ttggtggcat 420
ccccactgtc ctgctcatag acgtcagctg cttcctgttc ttaatcttgg tgttttctat 480
tataagaaga aaattctggg actatggccg cattgccctg gtgtcagaan cagacagcga 540
ntccagattt caganattgt catcgacttc ctcctcaggt caacaagact ttgaaaatga 600
actggggatg ctgtccctgg gctgacttgc catcttccgt ctgcatgatg aacaaatcct 660
ggaatggtgt tgggaagacc catccactac ctgtccttcc anaaggcaca tcatcttccc 720
tgtttggtgg gtggtcactt ttttgtccct gtgttttcac ctgnctgtta anctctccag 780
gggaatttct tggganaaaa aancctttta atttttnggg aagaaaacca 830

<210> 1957
<211> 457
<212> DNA
<213> Homo sapiens

<400> 1957
aaaaggccag cggcgcaaaa tggcggcggc gatgaccttc tgccggctgc tgaaccggtg 60
tggcgaggcg gcgcggancc tgcccctggg cgccaggtgt ttcggggtgc gggtctcgcc 120
gaccggggan aangtcacgc acactggcca ggtttatgat gataaagact acaggagaat 180
tcggtttgta ggtcgtcaga aagaggtgaa tgaaaacttt gccattgatt tgatagcaga 240
gcancccgtg agcgangtgg anactcgggt gataccgtgc gatggcggcg ggggagctct 300

tggccaccca aaagtgtnta taaacttgga caaagaaaca aaaaccggca catgcggtta 360
ctgtgggctc cagttcanac ancaccacca ctanagcgtg tggcacgccg ggggtcccgc 420
ancatcctgt gagcatttcc gcggggaagc tgancac 457

<210> 1958
<211> 734
<212> DNA
<213> Homo sapiens

<400> 1958
gtcggagggc ggcgggcgcc gacctcagcg cgcacctatg ggctcgctac caggacatgc 60
ggagactggt gcacgacctc ctgccccccg aggtctgcag tctcctgaac ccagcagcca 120
tctacgccga caacgagatc agcctgcgtg acgttgaggt ctacggcttt gactacgact 180
acaccctggc ccagtatgca gacgcactgc accccgagat cttcagtacc gcccgtgaca 240
tcctgatcga gcactacaag tacccagaag ggattcggaa gtatgactac aaccccagct 300
ttgccatccg tggcctccac tatgacattc agaagagcct tctgatgaag attgacgcct 360
tccactacgt gcagctgggg acagcctaca ggggcctcca gcctgtgcca gacgaggagg 420
tgattgagct gtatgggggt acccagcaca tcccactata ccagatgagt ggcttctatg 480
gcaagggtcc ctccattaag cagttcatgg acatcttctc gctaccggag atggctctgc 540
tgtcctgtgt ggtggactac tttctgggcc acagcctgga atttgaccaa ncacatctct 600
acaaggacgt tacggacccn tccgaaactt catgttaaag ggcctcatgt tccanttgga 660
ttcaaccagg acatggaaaa aattcntcct gaaaagggga tnaaaacttt gcttttcctn 720
aancccctg gtgg 734

<210> 1959
<211> 676
<212> DNA
<213> Homo sapiens

<400> 1959
tttacgatat ccaaataaac tggacaccat cacatggacg tggcaaggac ctggagcgct 60
ggaaatcctg tggctcacgc tgtgtcagtt tcacaaccaa gtggaaatcg agttccttcc 120
tgtgtacagc ccttctgagg aggagaagag gaaccccgcg ctgtatgcca gcaacgtgcg 180
gcgagtcatg gccgaggcct tgggtgtctc cgtgactgac tacacgttcg aggactgcca 240
gctggccctg gcggaaggac agctccgtct ccccgctgac acttgccttt tagaatttgc 300
caggctcgtg cggggcctcg ggctaaaacc agaaaagctt gaaaaagatc tggacagata 360
ctcngaaaga gccaggatga agggaggaga gaagataggt attgcggagt ttgccgcctc 420
cctggaagtc cccgtttctg acttgctgga agacatgttt tcactgttcg acgagagcgg 480
cagcggcgag gtggacctgc gagagtgtgt ggttgccctg tctgtcgtct gccggccggc 540
ccggaccctg gacaccatcc agctggcttt caagacgtac ggaacgcaag aagacggcag 600
cgtcngcgaa agtgacctgt cctgcatcct cnanacggcc tgggggtggc agaactcacc 660
gtgaccnanc tattcc 676

<210> 1960
<211> 586
<212> DNA
<213> Homo sapiens

WO 2004/050705 PCT/US2003/038000

<400> 1960
cttgtgggtg gaaacgcgct ggctgactgg ggtcggcgtt tagttcagcg cagcgactcg 60
gggacctgga gctgacgcct agacacttgt attagcttta atagaagana aatggaggag 120
ccatagaata ttaaggatga attcaggaag gcctgagacc atggaaaact tgcctgctct 180
ctacactatt ttccaaggag aggttgctat ggtgacagac tatggggcct ttatcaaaat 240
cccaggctgt cggaagcaag gtctggtcca tcgaactcat atgtcatcct gtcgggtgga 300
taagccctct gagatagtan atgttggaga taaagtgtgg gtgaagctta ttggccgaga 360
gatgaaaaat gatagaataa aagtatccct ctccatgaan gttgtcaatc aagggactgg 420
gaaagacctt gatcccaaca atgttatcat tgagcaagaa nanangcgga agcgatcctt 480
ccaggattac actgggcana aaatcaccct tgaagctgtc ttgaacacta cctgcaanaa 540
atgtggctgt aaaggccact ttgcaaaana ttgtttcatg cnaccn 586

<210> 1961
<211> 721
<212> DNA
<213> Homo sapiens

<400> 1961
tgttaccact acggtgacca gcccagttct gtgtaataac aacatctccg agggcgaagg 60
gtatgtggag tctccagatc tggggagccc cgtcagccgc accctggggc tcctggactg 120
cacttacagc atccatgtct accctggcta cggcattgan atccaggtgc agacgctgaa 180
cctgtcacag gaagaagggc tcctggtgct ggctggtggg ggatccccag gcctggcccc 240
ccgactcctg gccaactcat ccatgcttgg agaaggacaa gtccttcgga gcccaaccaa 300
ccggctgctt ctgcacttcc agagcccacg ggtcccaagg ggcggtggct tcaggatcca 360
ctatcaggcc tacctcctga gctgtggctt ccctccccgg ccggcccatg gggacgtgag 420
tgtgacggac ctgcaccctg ggggcactgc caccttcac tgtgattcgg gctaccanct 480
gcagggagan ganaccctca tctgcctcaa tggcacccgg ccatcctgga acggtgaaac 540
ccccanctgc atggcatcct gtggtggcac catccacaat gccaccctgg gccgcatcgt 600
gtcccanaac ctgggggaac cgtanggccc aacctcacct gccgttgggt ccttgaaaca 660
actnaagggc cccngctgca cctgcacttt naaaaggtct ccctggatga agaacatnaa 720
c 721

<210> 1962
<211> 762
<212> DNA
<213> Homo sapiens

<400> 1962
atattccatg gagaccctgg ctggaggatt gcaggagagt cccaggaggc aggactgcca 60
atggcaccag gcttcgcagc catgcacctg cagccctcag gcagcactgt ccattgtcat 120
acgantgtgg caggtgtgag gcatcgcatc tgctcacccc gggggataat gcacagcagc 180
tacaggcaga tttcgggcca ganancaacc gagtgagcct tgcagcctct gctgccagca 240
caggcttgtt ccttcaacac tggtgganan agacacgctg tcatcaggcc caagaaatac 300
tgccttcccc atcctatccc cggtcactgg gtgcccgcag agtgtcccag angagggagg 360
gagggaccct ccactggttc aaatggcctg ttctcagaga tgcagcaatg gaccctcgtg 420
aatactgaac tgataatcat gggaaggaga ctggctctcc tggattccct catgattcct 480
ctgantgaca atgtgatgtt ggccgactgt gtcttcttca gaatatcata tacacttgag 540
gtctccagga ancctccaat tacattattt tcctggctca tacagtgaca agtaattctt 600

0056030.0020

atcctggatt cctcgttact ganacttttc ttgccttttt tgttanctta tgatttattc 660
taaggacttc ctccaacagg ttatacttaa ctgtctacct cantctctgg aantttaaa 720
aatgttcanc ttaattaaaa aaatnaattc tcctggnaaa cc 762

<210> 1963
<211> 829
<212> DNA
<213> Homo sapiens

<400> 1963
agttgctgca gggaatcttt taaacgagag cgagaaggac tgcgggcagg accggcgggc 60
tcctggggtt cagccgtgcc gcctcgttac gatgaccagt gtggttaaga cagtgtatag 120
cctgcagccc ccctctgcgc tgagcggcgg ccagccggca gacacacaaa ctcgggccac 180
ttctaagagt ctcttacctg ttaggtccaa agaagtcgat gtttccaaac agcttcattc 240
aggaggtcca gagaatgatg ttacaaaaat caccaaactg agacgagaga atgggcaaat 300
gaaagctact gacactgcca ccagaaggaa tgtcagaaaa ggtacaacta ttattacagc 360
tacaaaccac tgagtaagca aaaatcagag gaagagctca aggacaagaa ccagctgtta 420
gaagccgtca acaagcagtt gcaccagaag ttgactgaaa ctcagggaga gctgaaggac 480
ctgacccaga aggtagagct gctggagaag tttcgggaca actgtttggc aattttggag 540
agcaagggcc ttgatccagc tttaggcagt gagaccctgg catcacgaca agaatccact 600
actgatcaca tggactctat gttgctgtta gaaactttgc aagaaggact gaagcttttt 660
aacgaaacag ccaaaaagca gatggaagan ttncaggnct taaaggttaa gctggagatg 720
aaagaagaaa gaatccgatt cctagaacag caaaccttat gttacaatcc agttaantga 780
tttaaccacn gcccttaaag aaaatgganc ngcttattan aaaatgtta 829

<210> 1964
<211> 462
<212> DNA
<213> Homo sapiens

<400> 1964
gtgcggccgg cgcatccccg atggatcgcg gcggcggcgg ctccgggacg ggatcccggc 60
ctgaggggac tgcncgggga acctctctcc caggggaaga tcgcagaacc gggcgcggtg 120
cggacctctc agcccaacta ccggcctcaa ggcatggagg gatttttgaa atcagatgag 180
aggcagagat tggccaaaga aagacgagaa gaaagagaaa aatgtctggc tgctcgggag 240
caacagatcc tggagaaacn gaaaanagcc aggctgcagt acgaaaagcn aatggaggag 300
cgatggcgaa aactggaaga gcagcggcag cgggaggacc aaaagagagc tnctgtggaa 360
gagaaaagga aacataaanc tccgggagga ngacganccg ctggaggcga tgatgcgccg 420
gtccctngag cgcacacagc agctgggagc tgaaaaanaa gt 462

<210> 1965
<211> 671
<212> DNA
<213> Homo sapiens

<400> 1965
agctggagcc cgcggagccc acggagccca cggaggagcc cacggaggag ccccagcgtc 60
cgaacgggca gacccccctcg agccgcgaag gagcccgaga agcagccacg atgtgcggaa 120

0082750.6462350

tctttgccta catgaaccac agagtccccc ggacgaggaa ggagatcttc gaaaccctca 180
tcaagggcct gcagcggctg gagtacagag gctacgactc ggcaggtgtg gcgatcgatg 240
ggaataatca cgaagtcaaa gaaagacaca ttcagctggt caagaaaagg gggaaagtca 300
aggctctcga tgaagaactt tacaaacaag acagcatgga cttaaaagtg gagtttgaga 360
cacacttcgg cattgcccac acgcgctggg ccacccacgg ggtccccagt gctgtcaaca 420
gccaccctca gcgctcagac aaaggcaacg aatttgttgt catccacaat gggatcatca 480
caaattacaa agatcttgag gaaatttctg ggaaagcnaa ggctacgant ttgagtcaga 540
aacagatnca gaagaccatc gccaaagctg attaaattat gtgttcgaca acagnanaaa 600
ctgaaggaca ttacgttttt ccaccgttgg ttccaaaaaa anttcattcc ancaantttg 660
ggaaaggtgc a 671

<210> 1966
<211> 738
<212> DNA
<213> Homo sapiens

<400> 1966
gtcactgcaa ggcgccgggg ggacacgttg gctgcgtttt cggcgggctt cccgggtaca 60
aaaatggctg tggctagcga tttctacctg cgctactacg tagggcacaa gggcaagttt 120
gggcacgagt ttctggagtt cgaatttcgg ccggacggaa agcttagata tgccaacaac 180
agcaattaca aaaatgatgt gatgatcaga aaagaggctt atgtgcacaa gagtgtaatg 240
gaagaactga agagaattat tgatgacagt gaaattacaa aagaagatga tgctttgtgg 300
cctccccctg atagggttgg ccgacaggag cttgaaattg taattggaga tgagcacata 360
tcttttacca catcaaaaat aggttctctt attgatgtna atcagtcaaa ggatcctgaa 420
ggccttcgag tattttacta tttggtacaa gacttgaaat gtttantttt cagtcttatt 480
gggattacac ttcaagatta aaccaattta aattgtntgt tttcaggctg tttgtatatt 540
taattaangg atgggnangg gttatttgtc atttacngta ttgggggttt ttatgaaatg 600
ttgaagccaa accaaaaaaa atttgttatg ttaaactgga aaaataaaga aaaatacatt 660
tanccaaagc tntaaatggt tatcccttta actttgantt cccccattgg ggnttgggac 720
aagtcccccc acaacaac 738

<210> 1967
<211> 533
<212> DNA
<213> Homo sapiens

<400> 1967
aatgccaaaa tggcgatgcc taccacctan aactggattg tgcgctccat ttctttcacc 60
tcaaagctgg ccgccaccgc tgccacctgc tcagagtgaa ataatgaagg tggtcaacct 120
gaagcaagcc attttgcaag cctggaagga gcgctggagt gactaccaat gggcaatcaa 180
catgaagaaa ttctttccta aaggagccac ctgggatatt ctcaacctgg cagatgcgtt 240
actagagcag gccatgattg gaccatcccc caatcctctc atcttgtcct acctgaagta 300
tgccattagt tcccagtttg atgacttttc tcgggacctg tgtgtccagg cattgctgga 360
catcatggac atgttttgtg accgtctgag ctgtcacggc aaagcagang aaatgcatcg 420
gactgtgccg agcccttctt ancgccctcc actggctgct gcgctgcacg gcagcctctg 480
canaacggct gcgggganggg ctggangccg gcactccagc cgctggggga naa 533

<210> 1968

09825463.070800

0052545.00000

<211> 613
<212> DNA
<213> Homo sapiens

<400> 1968
aagaaggcgg cgggggaaga ggcggtcctg gggtagagtt tgcaagcttt ctgactaggc 60
tagtcgagta actattcggg tcatggcgtc aaactcaact aagtctttcc tggcagatgc 120
cggctatggc gaacaggaac tggatgccaa ctctgccctt atggaattgg acaaaggcct 180
aagatctggc aaacttggtg aacagtgtga agcagttgtt cgctttccca gactttgtca 240
gaagtatcca ttccctattc ttatcaattc tgcattccta aagttagctg atgttttcag 300
agttggaaat aatttcctga ggctatgtgt tcttaaagtt acccancaaa gtgagaaaca 360
tttggagaac attctaaatg tggatgaatt tgtgaagaga attttttctg tgattcatag 420
taatgatcct gtggcaatag ccatcaccct ccggatgttg ggaagtctgg catcaataat 480
tcctgagagg aagaatgctc atcatagtat tcgtcagaat ttagattcac atgataatgt 540
tacaanttga agcttgctgt ttttggctgc ctgcaaactt ctctggcncc ngtccnaaan 600
ggattttgct tgt 613

<210> 1969
<211> 741
<212> DNA
<213> Homo sapiens

<400> 1969
aanatggcgg cgcgctggga gcgtatcatc tgcgtttcta ggagcttcgc tatgcggctg 60
ctttaagatt ctagggttgt acaggcccac gccagacacg acgtctggca ggaacctcgg 120
cctcagagat ggctctgagt aaatcaatgc atgcaagaaa tagatacaag gacaaacctc 180
ctgactttgc atatctggca tccaaatatc canattttaa gcagcatgtt cagataaatc 240
tggatggaag agtgagcctt aattttaaag accccgaagc agtcagagct ctgacgtgta 300
ctctcctaag ggaagatttt ggactttcta ttgatattcc attggagaga ctaattccca 360
cagttccctt gagactcaac tatattcact gggtagaaga tctgatcggt caccaggatt 420
ctgacaaaag tnctctccga agaggaattg acataggcac gggggcatct tgcatctacc 480
ccttacttgg agcaaccttg aaatggctgg gtatttcctc gcaacagaaa gtggatgata 540
tgtgtttcaa ctatgcaaaa gaaaaatgtg gaacagaata acttatctga tctccataaa 600
aagtggtgga angttgccac agaaagacac tccttgaatg ggatgctcct taaagaaaga 660
aatctgaaga ataatcctat gaacttttg cattgttgcc aaaccctcc cctttttttt 720
tggccaaatt ccaatttggg a 741

<210> 1970
<211> 727
<212> DNA
<213> Homo sapiens

<400> 1970
aacaagaggg gtcnagtgac acaacnagct gactcccgtn agaggaagac actgtggagg 60
ccagttctgg agctattgca gcctcggttg cccggccggg ggacccgagc cgaaaagtta 120
tcgtcagaat gtcgggcaaa gaccgaattg aaatctttcc ctcgcgaatg gcacagacca 180
tcatgaaggc tcgtttaaag ggagcacaga caggtcgaaa cctcctgaag aaaaaatctg 240
atgccataac tcttcgattt cgacagatcc taaagaagat aatagagact aaaatgttga 300

tgggcgaagt gatgagagaa gctgcctttt cactagctga agccaagttc acagcaggtg 360
acttcagcac tacagttatc caaaatgtca ataaagcgca agtgaagatt cgagcgaaga 420
aagataatgt ngcaggtgtt actttgccag tatttgaaca ttaccatgaa aggccaaagc 480
agtggaaact actggtggaa actagcttct ctgcagactt cttttgttac tttggatgaa 540
gctattaaga taaccaacag ggcgtgtnaa ttgccattgg aacatgtcat ccattccccc 600
gggattggaa cgttactcct tggcttatta tcatccacca gaaactggga atgaagaaga 660
agaagccgaa gaaaggggtt cctattaggg tttaaaaaga aaaattnccn ggaagaaaga 720
aannnag 727

<210> 1971
<211> 609
<212> DNA
<213> Homo sapiens

<400> 1971
acaatccttt gcggtggttc aagatggcgg cgcccagtgg cactgtgagc gattcggaaa 60
gtagtaacag cagtagcgat gcggaggagc tggagcggtg ccgcgaggcg gcaatgccgg 120
cttggggctt ggagcaacgc ccgcacgtgg cagggaagcc aagagccggt gctgcaaata 180
gccagttgtc aacctcccaa ccgagcctca ggcataaggt gaatgagcat gaacaagatg 240
gcaacgagct tcagaccacc cctgaattcc gagcccacgt ntccaanaag ctgggagccc 300
tgctggacag cttcattacc atctcagaag cagcaaagga gccagcaaaa gctaaggtac 360
agaaagtcgc tttggaggat gatggtttcc gccttttctt cacatctgtc cctggangcc 420
gtgagaaaga aaatctcccc aaccccgccg aaagcgacag cctccanctc cagtgaagac 480
agtgacnaag attgcggcgg tgcccggaag cactgtttcg gcttcgacat cctacaggaa 540
ttcnncctcc acagccttga actgtggana aagaagccaa gaaaaaaang aagttgaaaa 600
anaaaccca 609

<210> 1972
<211> 739
<212> DNA
<213> Homo sapiens

<400> 1972
agagcgcggg tgagacccca gccctgtgag cctgtaggag tagaatggct ccccaaatgt 60
atgagttcca tctgccatta tccccagagg agttgttgaa aagtggaggg gtgaatcagt 120
atgttgtgca agaggtactg tccatcaaac atcttccacc acagcttaga gcttttcagg 180
ctgcctttcg agctcagggg cccctggcta tgctgcagca ctttgatact atctacagca 240
ttttgcatca ctttcgaagt atagatcctg gcctcaaaga agatactctg gaattcctga 300
taaaagtggt atcccgccac tcccaggagc ttccagctat cctggatgat acaactttga 360
gtggatcaga tagaaacgcc catctaaatg ccctcaaaat gaactgttat gctctgatac 420
gtctcctgga atcctttgag accatggcca gccagacaaa ccttgtggac ctggaccttg 480
gtgggaaagg taagaaagct cggaccaagg cagcccatgg ctttgactgg ggaagaaaan 540
aagcaaccaa ttcttcagct tttaacacag cttacttcca nttgggacat ccgttcacct 600
gtgggaacca ctccaataaa tttggaaaga aanaaatttg ttcagtttgg gttactgggg 660
ctgtttggct taacccggcc cttccttggg aanaaatccc cacccatttt aaattcaccc 720
cagaaaanaa aaccggccc 739

<210> 1973

0050-0050-0050-0050

0002702-050202

<211> 181
<212> DNA
<213> Homo sapiens

<400> 1973
ataaggaatg cacatgagat ggcacacata tttatgctgt ctgaaggtca cgatcatgtt 60
accatatcaa gctgaaaatg tcaccactat ctggagattt cgacgtgttt tcctctctga 120
atctgttatg aacacgttgg ttggctggat tcagtaataa atatgtaagg cctttctttt 180
t 181

<210> 1974
<211> 747
<212> DNA
<213> Homo sapiens

<400> 1974
ataatcgttg cgggctccgc gcggtcccac ttcccggctc ccttcgcctc caggatgcgc 60
tgagccctac aacaccccca gcggccgccg gctcccccac gaggtgtgaa tgacagaggt 120
ggtgccatcc agcgcgctca gcgaggtcag cctgcgcctc ctctgccacg atgacataga 180
cactgtgaag cacctgtgtg gcgactggtt ccccatcgag tacccagact catggtatcg 240
tgatatcaca tccaacaaga agttcttttc ccttgctgca acctacagag gtgccattgt 300
gggaatgata gtagctgaaa ttaagaacag gaccaaaata cataaagagg atggagatat 360
tctagcatcc aacttctctg ttgacacaca agtcgcgtac atcctaagtc tgggcgtcgt 420
gaaaganttc aggaagcacg gcattaggtt ccctcttact tgaaaagttt aaaggatcac 480
atatcaacca ccgcccagga ccactgcaaa agccatttac ctgcatgtcc tcaccaccaa 540
caacacagca ataaacttct attnaaaaac agaaaacttc aagccaagca accactaatc 600
tccccttant tacttactcc attccaaagg ggttcctcca aaaaatnggc ttccacccta 660
atgttcctcc ttacattcaa accgggggggg gggcaacccc tccccttggg naacnaattt 720
ttggggaact taacattccc aagccaa 747

<210> 1975
<211> 734
<212> DNA
<213> Homo sapiens

<400> 1975
atagaagatc ctcggagagc gctgcctctg ggttggcggg ctggcaggct gtagccgagc 60
gcgggcagga ctcgtcccgg cagggttcca gagccatggg agcggaaagg aggctgctgt 120
cgattaagga ggcctttcgg ctggcgcagc agccgcacca gaaccaggcg aagctggtgg 180
tggcgctgag ccgcacctac cgcacgatgg atgataagac agtttttcat gaggagttca 240
ttcattacct taaatatgtt atggtggtct ataaacgtga accagctgtg gagagggtaa 300
tagaatttgc agcaaagttt gttacctcat ttcaccaatc agatatggaa gatgatgagg 360
aagangaaga tggtggcctt ttaaattatt tgtttacttt tctcttaaag tctcatgaag 420
caaacagcaa tgcantgggg atttanagtg tgcctgctca taaacaanct tttgggaagt 480
atgccanaaa aatgctcana ttgatgatga tgtttttgat aaaattaata aagccatgct 540
ttattaanat tgaaagataa gattcccnaa tgtttaaaaa taccagggca gttctggcgc 600
tttcacgact tccagggatc ccccaaggga ttgaatnaat gccccanttg gttaaatgnc 660
attattgcct acttttgaa ttggaaaaat tgaattccca attcccanaa aattttaaaa 720

ccggggccat ttnt 734

<210> 1976
<211> 743
<212> DNA
<213> Homo sapiens

<400> 1976
agtagcgcct ctgccgccgc ggagcttccc gaacctcttc agccgcccgg agccgctccc 60
ggagcccggc cgtagaggct gcaatcgcag ccgggagccc gcagcccgcg ccccgagccc 120
gccgccgccc ttcgagggcg ccccaggccg cgccatggtg aaggtgacgt tcaactccgc 180
tctggcccag aaggaggcca agaaggacga gcccaagagc ggcgaggagg cgctcatcat 240
cccccccgac gccgtcgcgg tggactgcaa ggacccagat gatgtggtac cagttggcca 300
aagaagagcc tggtgttggt gcatgtgctt tggactagca tttatgcttg caggtgttat 360
tctaggagga gcatacttgt tncaaatatt ttgcacttca accagatgac gtgtactact 420
gtggnaataa agtacatcaa agatgatgtc atcttaaatg agccctcttg cagatgcccc 480
agctgctctc taccagacaa ttgaagaaaa tattaaaatc tttgagaaga agaagttgaa 540
tttatcaagt gttgcctgtc ccanaanttt gcagaatagt tgatccctgg ccaacatttg 600
ttccaatgaa cttttaacaa agaaaacttt acagccttan ttttaanant cttaaccctt 660
gggaataaag ttgcttattg ttgaatcccc tctttgaaac actttcccat tttggtttat 720
tgccaccccc aanaaaaacc ctt 743

<210> 1977
<211> 727
<212> DNA
<213> Homo sapiens

<400> 1977
aagagtgctc cggccgcggc cctgggagct ggaggaacgc gtctgggccc gcaggcaagc 60
cgcttcttgc cctctgcccg gagctctccc gcatcctccc cagagctgcc ctggcgacct 120
cgaggtctcc tcaaccttcc ccgaagccgc tcacagcctt gtgatctgga tgcccgcaaa 180
actggggtca agcggcgcca cgaggaagac ccccggcgtc tgcggccttc gttggacttt 240
gacaagatga atcagaaacc atactcagga ggtctttgtc tccaagaaac agcccgggaa 300
ggcagcagca tctctccacc atggttcatg gcctgtagcc ccccacccct ctctgcttcc 360
tgcagcccca ctgggggttc ctcccaggtg ctgagtgaaa gcgaagagga ggaggagggg 420
gctgtgcggt ggggtcggca ggcgctgagc aagcggacac tgtgccagcg ggactttggg 480
gacctggact tgaatttgat tgaggaaaac taaaactgag aggctacttc ctggggccac 540
acagactgac tctctcatgg ctactaacaa gtgttcgaag ccccaaggct gggggggccc 600
naaccttggg gaatgggggg tttaattgga agggctcccg actccaaggg cancttggga 660
aaaatcttnc ttccgcctcc aagcaaaagc tccgaaccaa ttgcccaaag aaaaacttgg 720
gccnggg 727

<210> 1978
<211> 732
<212> DNA
<213> Homo sapiens

<400> 1978

CO 2005/080590 PCT/US2005/004950

aatatgttgc tgctggagat caatgaagcc gagtggatgg gggctgaatg tgcgagtcca 60
tagctgaaga ggagcgccag atggtggagg aatacactta tttatgaagt ggacttagta 120
gttttaagca gaaccatgaa aacctctgtg acaactccct ccagctccaa gagtgccggg 180
aggtgggggg cggcgcatcc gcggcctcga gcttgctacc tcagcccatc cccaccaccc 240
ctgacatcga gaacgctgag ctcaccccca tcttgccctt cctgttcctt ggcaatgagc 300
aggatgctca ggacctggac accatgcagc ggctgaacat cggctacgtc atcaacgtca 360
ccactcatct tcccctctac cactatgaga aaggcctgtt caactacaag cggctgccag 420
ccactgacag caacaagcag aacctgcggc agtactttga agaggctttt gagttcattg 480
gaggaagctc accagtgtgg gnaaggggct tctcatccac tgccaggctg ggggtgtccc 540
gctccgccac catcgtcatc gcttacttga atgaaagcac acttcgggat gaccatggac 600
tggatgcttt ataaatttgt tcaaagggca aaancgaacc aatttaatct tcccccaaaa 660
cctttaactt ccattggggg gcaagtttgc taaaaanttn cgaaaggaaa gaaccttaaa 720
accaaacggg tt 732

<210> 1979
<211> 765
<212> DNA
<213> Homo sapiens

<400> 1979
ctccaggctg ccgagactat aaaggcgcca ggttttctca atgaagccgg gacgcactcc 60
ggagcgcact gcgtggtcgc accctacccg ggctgccttg gaagtcgtcc ccgccgcccc 120
tccgcaccgg catgaagctt atcgtgggca tcggaggcat gaccaacggc ggcaagacca 180
cgctgaccaa cagcctgctc agagccctgc ccaactgctg cgtgatccat caggatgact 240
tcttcaagcc ccaagaccaa atagcagttg gggaagacgg cttcaaacag tgggacgtgc 300
tggagtctct ggacatggag gccatgctgg acaccgtgca ggcctggctg agcagcccgc 360
anaagtttgc ccgtgcccac ggggtcagcg tccagccaga ggcctcggga cacccacatc 420
ctcctcctgg aaggcttcct gctctacagc tacaagcccc tggtggactt gtacagccgc 480
cggtacttcc tgaccgtccc gtatgaagag tgcaagtgga gganaaatac ccgcaactac 540
acagtccctt gatccccccg gcctcttccn atggccacgt tgtggcccat tgttacccan 600
aaagtatang caggaaaatg ggaagccaac gggtgttgga aaattggtct acctggaacn 660
gcattgaaat tccccgaaaa aagaactctt cccgttgaaa ttccttggaa aaaaaatttc 720
anaaactccc cttgcttgaa anccgcctcc ccaangaaaa ttcan 765

<210> 1980
<211> 556
<212> DNA
<213> Homo sapiens

<400> 1980
gtgtncgnan ccgccgccgc accgcgtcgn tctccaacgc cagcgccggc tctcgctcgc 60
cgagctccag ccgaaggaga agggggggtaa gtaaggangt ctctgtacca tggctcgtac 120
aaagcagact gcccacaaat cgaccggtgg taaagcaccc aanaagcaac tggctacaaa 180
agccgctcgc aanantgcgc cctctactgg aggggtgaaa aaacctcatc gttacaggcc 240
tggtactgtg ncgctccntg aaattagacg ttatcagaag tccactgaac ttctgattcg 300
caaacttccc ttccagcgtc tggtggcgan aaattgctca agactttaaa acagatctgc 360
gcttccagaa cgcaactatc ngtgctttgc aagaagcaaa tgaggcctat ctggttggac 420
tttttgaaaa caccaacctg tgtgctatcc atgccaaaca tgtaacaatt atgccaaaag 480

0050204.0050205

acatccanct tngcacgccg catacgtgga naacgttgct taanaatcca ctatnatggg 540
aaacatttca ttctcc 556

<210> 1981
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1981
tactggatcc ggtctccgtt ttggaagacc cgcctcggca cagccaggct cagtccggcc 60
ttgcgctgag aaaagatgac agcaatcaag catgcattac aaagagacat ttttacacca 120
aatgatgaac gcctgctgag cattgtgaat gtctgcaaag caggaaaaaa gaaaaagaac 180
tgtttttttat gtgccacagt gacaactgaa cgccctgtgc aggttaaggt ggtcaaagtc 240
aagaaatccg atnagggaga tttctacaaa aggcagattg catgggccct tcgaggtctt 300
gctgtggtag atgccaaaga tgctatcaaa gaaaatcctg aatttgattt acactttgaa 360
aaaatatata aatgggttgc cagcagcact gctgaaaaga atgcatttat ttcatgcatt 420
tggaaattga atcagcgata tctccgggaa gaaaattgat tttgtcaatg ttagctcaca 480
gcttttggaa agaatctgtt ccaagtggga gaaaatcaga gtgtgacagg gaggtgatga 540
aagaaagtag tagatgaata ccaagaagtt aaattgccaa gaagaagaaa caggatatcg 600
aaattaatga tggnaaggct gttgaatatt gcaatctccg aaatgccggn aagcctttgg 660
cagaaaaaat ttgtcccaaa aaancttgcc agggttgctt anaatggggg cttaacantc 720
ccagttccaa tccatngggc at 742

<210> 1982
<211> 763
<212> DNA
<213> Homo sapiens

<400> 1982
acatcagctt tgaaagccaa cacatcctcc tgagagggga caagacaagc agggatatgt 60
gggccactgg atctttgcca gacttcccgg ctgcagccaa gttcttaggg ttccgtcagc 120
gctgcatccc caggagcctc tgcctcagtg agtgtcctct ggagccccca agcctcaccc 180
gcctctgtgc cactctgaag gactgcccgg gacccctgga actgcaattg tcctgtgagt 240
tcctgagtga ccagagcctg gagactctac tggactgctt acctcaactc cctcagctga 300
gcctgctgca gctgagccag acgggactgt ccccgaaaag ccccttcctg ctggccaaca 360
ccttaagcct gtgtccacgg gttaaaaagg tggatctcag gtccctgcac catgcaactt 420
tgcacttcag atccaacgaa ggaggaggaa ggcgtgtgct gtggtctctc agcaaacctg 480
ctgggcgaca gcgggactca gatgccttct ggaatgtctg ccgcaggtgc ccatctccgg 540
tttgcttgat ctgagtcaca acagcatttc tcagggaaag tgccctgtta cctgctggaa 600
aacactggcc ctccttgccc cacgttgtcc ggggaaggcc tccagttgaa accttggggc 660
tcttgaaaca aaaacttccc gggattccac tttctcccag aaaaaaagga accaagggct 720
tgggggaaaa aaaaactcca gggcttaaaa tttnaagttg ccn 763

<210> 1983
<211> 480
<212> DNA
<213> Homo sapiens

0305205.0002000

<400> 1983
ggggaaaaaa atatgttttg gccgcttcaa gatggcggtg caggagtcgg cggctcagtt 60
gtccatgacc ctgaaggtcc aggagtaccc gaccctcaag gtgccctacg agacgctgaa 120
caaacgcttt cgcgccgctc agaagaacat tgaccgggag accagccacg tcaccatggt 180
ggtggccgag ctggagaaga cgttgagcgg ctgccccgcc gtggactccg tggtcagcct 240
gctggacggc gtggtggaga agctcagcgt cctcaagagg aaggcggtgg aatccatcca 300
ggccgaggac ganagcgcca agctgtgcaa gcgccggatc gagcacctca aagagcatag 360
cagcgaccag cccgcggcgg ccancgtgtg gaanangaag cgcatggatc gcatgatggt 420
ggaacacctt gctgcgtttg cggctactta caacacggct tgttccnaan cgccccccc 480

<210> 1984
<211> 778
<212> DNA
<213> Homo sapiens

<400> 1984
gacagtggag tgaggccaca cttccctgcc cccaggcatg cagcaccctg ccagtggccc 60
agctgaggta ctcagttcca gccccaagct ggatcctccc ccatctcccc actccaaccg 120
gaagaagcac cggagggaaa aagagcaccg ggacccccg accagacggc cccagcagtg 180
ctactgaaga ggcagaggag tcgtttgaat ttgtggtggt gtccctcact gggcagacgt 240
ggcacttcga ggcttcaacg gcggaggagc gggagctgtg ggttcagagt gtgcaggccc 300
agatccttgc cagcctgcaa ggctgccgca gtgccaagga caagactcga ctggggaacc 360
agaacgcagc tctggctgtg caggccgtcc gcaccgtccg cggcaacagc ttttgtatcg 420
actgcgatgc acccaatcca gactgggcca gcctgaacct gggtgccctg atgtgcattg 480
agtgctcagg catccaccga cacctggggg ctcacctgtc ccgggtgcgc tccctttgac 540
ctccnatgac tggccgcctt ganctgcttg gctgtcatga ctgccatggg caatgccctc 600
cgccaacaag cgtctgggga aaggggggcct tggggttggc ttactccaaa gcccaagggg 660
ccttgaatgc ccttgccaga aaaagggaaa aaaggaaacg cctgggaatn ccggggccca 720
aantttttg aaacangaaa ancttccttc ccttggggcc cccccncttg gcccaaaa 778

<210> 1985
<211> 787
<212> DNA
<213> Homo sapiens

<400> 1985
aatgaangca ggccacttcc ggcgtagcca tggcggctaa cgctactacc aacccgtcgc 60
agctgctgcc gttagagctt gtggacaaat gtataggatc aagaattcac atcgtgatga 120
agagtgataa ggaaattgtt ggtactcttc taggatttga tgactttgtc aatatggtac 180
tggaagatgt cactgagttt gaaatcacac cagaaggaag aaggattact aaattagatc 240
agattttgct aaatggaaat aatataacaa tgctggttcc tggaggagaa ggacctgaag 300
tgtgaatgag tttccttgac ttacactaga ttttgttttg gcttataatg acaagaaaat 360
ggaatttttt ttcccacttt ctaatgttta aatcccataa agctaagttt cccgttaaag 420
ggaagtgctt tgaagatgtg tacccatttt tgtaagttaa tcatgattat cctggnaaaa 480
agaagaaaag agcttcttct ttgcagatga aaaataaagg tgtttttggt taactgtcat 540
tttgtttatt ctactgcagt agccagtgga aacaaaagtt tgtagttatt tttgccactt 600
acttttctgt cattatatgc ttatttgttt ttgtcatttt acgttgacca tttgnattct 660
caaacaaaaa agttgttccc aaacaaaaan tgaatgaaac tttttgaatt ttgnaaacaa 720

0050450 = 0050450

gggttggcat ttttaaaacc aaaccccggg aaaantggat ccacttttaa naaaaaaatt 780
cccattn 787

<210> 1986
<211> 698
<212> DNA
<213> Homo sapiens

<400> 1986
gaaaaacatg acaataactt gtctcagtct ggatcagact caagttgctc tccagaatgc 60
ctctgggagg aaggcaaaga agttatccca actttcttta gtaccatgaa cacaagcttt 120
agtgacattg aacttctgga agacagtggc attcccacag aagcattctt ggcatcatgt 180
tgtgctgtgg ttccagtatt agacaaactt ggccctacag tgtttgctcc tgttaagatg 240
gatcttgttg aaaatattaa gaaagtaaat cagaagtata taaccaacaa agaagagttt 300
accactctcc agaagatagt gctgcacgaa gtggaggcgg atgtagccca ggttaggaac 360
tcagcgactg aaagccctct tgtggctgaa gagangtctc aaatttttga aagggatttt 420
tgacagaaag tgaaaaatgg ggaaaaggat atccagacag ccctgaaata acgcatatgg 480
taaaacattg cggcaacacc atggctgggt aattcgaggg gtttttgcgt tagctttaag 540
gggcaactcc atcctatgaa gattttgtgg ccgcgttaac cgtaaaggga aggtgaccac 600
cgggaaagaa gctttccagt tttttgggga tnccnaaaag gggaccccnc cctttaaccc 660
ccccggcccc tngaaaaaaa cccaaantgg gccttccc 698

<210> 1987
<211> 766
<212> DNA
<213> Homo sapiens

<400> 1987
gctggagagg gggcgctgag ctgttgggat gagctttgat ccaaaccttc tccacaacaa 60
tggacataat gggtacccta atggtacttc agcagcactg cgtgaaactg gggttattgt 120
aaaactgtta acctcttacg gatttattca gtgttcagaa cgtcaagcta gacttttctt 180
ccactgttca cagtataatg gcaacctgca agacttaaaa gtaggagatg atgttgaatt 240
tgaagtatca tcggaccgac ggactgggaa acccattgct gttaaactgg tgaagataaa 300
acaagaaatc ctccctgaag aacgaatgaa tggacaagaa gtgttttatc tgacttacac 360
ccctgaagat gtcgaaggga acgttcagct ggaaactgga gataaaataa actttgtaat 420
tgataacaat aaacatactg gtgctgtaag tgctcgcaac attatgctgt tgaaaaaaga 480
aacaagcccg ctgtcagggg aagtagtttg tgccatgaaa ggaaggcatt tggctttatt 540
gaaaagaagt gatgtttgta aaaagaaaat attcctttcc actattagtt gaaatttaag 600
gggttgactt taaaaaacct taanagccct gggcgaatga atgttggaaa tttccacaaa 660
tcccaaggga accagaaaaa ttggttaaaa naaaaatttt gccaaaccag aatnttccag 720
aaacttaatt ngccctccaa aggggaaaac angttccntt tttttt 766

<210> 1988
<211> 698
<212> DNA
<213> Homo sapiens

<400> 1988

09521980.030200

tagctgatca tgtgacaatc caagatggcg gtgcccggcg aggcggagga ggaggcgaca 60
gtttacctgg tagtgagcgg tatcccctcc gtgttgcgct cggcccattt acggagctat 120
tttagccagt tccgagaaga gcgcggcggt ggcttcctct gtttccacta ccggcatcgg 180
cctgagcggg cccctccgca ggccgctcct aactctgccc taattcctac cgacccagcc 240
gctgagggcc agcttctctc tcagacttcg gccaccgatg tccggcctct ctccactcga 300
gactctactc caatccagac ccgcacctgc tgctgcgtca tctcggtaag ggggttggct 360
caagctcaga ggcttattcg catgtactcg ggccgccggt ggctggattc tcacgggact 420
tggctaccgg gtcgctgtct catccgcaga cttcggctac ctacggaggc atcaggtctg 480
ggcccctttc ccttcaagac ccgggaagga actgcagagt tggaaggcag agaatgaagc 540
cttcaccctg gctgacctga agcaactgcc ggagctgaac ccaccagtgc tgaatgccca 600
aaaagggaaa tgttgggggn actccccctt ggccggggtt ctttttttgg gnaattttna 660
atccnggggc cctngcccgc ccttaacccc cctcccgg 698

<210> 1989
<211> 475
<212> DNA
<213> Homo sapiens

<400> 1989
actcagcttt gaaagccaac acatcctcct gagaggggac aagacaagca gggatatgtg 60
ggccactgga tctttgccag acttcccggc tgcagccaag ttcttagggt tccgtcagcg 120
ctgcatcccc aggagcctct gcctcagtga gtgtcctctg gagcccccaa gcctcacccg 180
cctctgtgcc actctgaagg actgcccggg acccctggaa ctgcaattgt cctgtgagtt 240
cctgagtgac cagagcctgg agactctact ggactgctta cctcaactcc ctcagctgag 300
cctgctgcag ctgagccaga cgggactgtc cccgaaaagc cccttcctgc tggccaacac 360
cttaagcctg tgtccacggg ttaaaaaggt ggatctcagg tccctgcacc atgcaacttt 420
gcacttcaga tccaacgaan gaaggaagga aggcgtgtgc ttggtttttt tgngn 475

<210> 1990
<211> 463
<212> DNA
<213> Homo sapiens

<400> 1990
gtgcagttgc ggctccaggg ccatggcgga ggagcagggc cgggaacggg actcggttcc 60
caagccgtcg gtgctgttcc tccacccaga cctgggcgtg ggcggcgctg agcggctggt 120
gttggacgcg gcgctggcgc tgcaggcgcg cgggtgtagc gtgaagatct ggacagcgca 180
ctacgacccg ggccactgtt tcgccgagag ccgcgagcta ccggtgcgct gtgccgggga 240
ctggctgccg cgaggcctgg gctggggcgg ccgcggcgcc gccgtctgcg cctacgtgcg 300
catggttttc ctggcgctct acgtgctgtt cctcgccgac gangagttcg acgtggtant 360
gtgcgaccag gtgtctgcct gtatcccant gttcangctg gctanacggc ggaagaagat 420
cctattttac tgtcacttcc canatctgct tctcaccaag ana 463

<210> 1991
<211> 281
<212> DNA
<213> Homo sapiens

0050204800

<400> 1991
atccctgagg cagtggcgac agcggcggcg agaggatgaa caacaagttc gacgctttga 60
aagatgatga cagtggggac catgatcaga atgaagaaaa cagcacacag anagatggtg 120
agaaggaaaa aacggaacga gacaagaatc agagcagtag caacagaaag gctgttgtcc 180
ctggaccggc agagcatccc ctgcagtaca actacacttt ttggtnctcc aggagaaccc 240
ccggccgtcc cacgagctca cagagctntn aacagantnt c 281

<210> 1992
<211> 725
<212> DNA
<213> Homo sapiens

<400> 1992
cctttgcctt cggacttctc cggggccagc agccgcccga ccaggggccc ggggccacgg 60
gctcagccga cgaccatggg ctccgtgtcc aaccagcagt ttgcangtgg ctgcgccaag 120
gcggcanaac aggcgcccga ngaggcgccg gaggacncgg cccgggcggc ggacgancct 180
cagctgctgc acggtgcggg catctgtaag tggttcaacg tgcgcatggg gttcggcttc 240
ctgtccatga ccgcccgcgc cggggtcgcg ctcgaccccc cagtggatgt ctttgtgcac 300
cagagtaacc tgcacatgga agggttccgg aacttgaang agggtgaggc agtgggantt 360
caccttaag aaatcagcca agggtctgga aatccatcca tgtcaccgga cctggtggaa 420
atattctgta ttgggantga gangcggcca aaaggaaaga gcattgcana ancgccagat 480
ctaaaaggag acaggttgct acaacttgtg gaaggtctaa gatcatcatg cccaaaggga 540
atgcaagctt gcccaccccc agcccaaaga aaatgccact tcttgccant aagcatcgag 600
cccatnttgg taancctcc attgttccgc cttgaaaagg gccccnaccc aaggggcccc 660
tnacttgccc ccacggggga aaaagcccat acccccttaac ttttttcccn aagnaantgg 720
aaaag 725

<210> 1993
<211> 499
<212> DNA
<213> Homo sapiens

<400> 1993
gacgcagtta gtcggctgca atggcgccgg tgaggcggtc cgcgaagtgg cggcctggtg 60
gtattgaggc gcgtggtgaa ggggtttcca ctgtcgggta caggaataag aatgtgagac 120
agaagacatg gcggcctaac cacccgcaag ccttcgtggg gagcgttcgc gagggacaag 180
gctttgcttt tcgaagaaaa ctgaaaatac agcaaagtta caagaaattg ctacggaagg 240
aaaagaaggc tcaaacgtca ctggaatctc aattcacaga tcgataccca gataatctga 300
aacatctcta tttagctgaa gaggaaagac ataggaagca agcaagaaaa gtcgaccatc 360
ctttgtcaga acaagttcac cagccgttgc ttgaagaaca gtgtagcatt gacgagcctt 420
tatttggaga tcagtgtanc tttgaccagc ctcagccaga agaacaatgt attaaaacag 480
taaactcctt tacaattcc 499

<210> 1994
<211> 762
<212> DNA
<213> Homo sapiens

09/25/2003 10:30 FAX 002

09/25/2003 08:42:00

<400> 1994
tatgccttga tgactaaaag gcactagaaa ggttgtgtct actaacttca gccctaatca 60
gaacagatgc ctagaaggag cattttgtg acaacttcat agtgattaga atcagtggag 120
aactccatct tagtggcagg aatataatga aactacccac gcaagaacat ggttgaatca 180
catttgcttg acttagggca aagtacgaaa gagagacaaa agggttctct tggaaacaag 240
aagagtgact ccagatgtgg cctgaataat tgccatgtta agttaatgca aaagatcaga 300
acagggctac atttgcacag gcagtttctc tccgggccgt agttttcact gatgatcacc 360
tttcacagca ttttccccaa ccagcatttc acttagtctt ctctataccc agcacctccc 420
ccggcacccc cggcaagccc actatcactt ccgacttcca acgtggcatc cgtgagatct 480
gtccacatta ggcgaagcag ggagaacact gagancanca ggatgggttt gggaaagaac 540
atgcctctgg gaaacacagc ttcctgggga attcacattg aaggccagtc cttaccgaag 600
aacaaagatn cacccccagg gatttcttcc attttcttaa taaaattttg gggaattgct 660
cccattttcc cccgaacagg cgaaatttcc ccccttgaag aaaaacnaat nccttnnaac 720
ccctggggtt ttggccccac ccttggttaa cttccttccc tt 762

<210> 1995
<211> 758
<212> DNA
<213> Homo sapiens

<400> 1995
tctttgccaa gactggaaac cctagtagct gaggttcagg cttggaaaga atgtgctgtt 60
aatacattct tgactgagaa ttctccatat tctctcttag aggtgctgtg tcctcgatgt 120
gatattggcc ttttgggatt gaaagggaag cagagaaagt taaaggagcc cttgccaaat 180
ggaaagaaaa aaagcaccaa attagagagt ctgagtgacc tggagagagc tttaactgaa 240
agcaaggaga ctgcttcagc tatggcaact cttggggaag ctcgcctaag ggaaatggaa 300
gccttgcagt ctctcagact cgccaatgaa gggaaattgc tgtcgcctct ccaagatgtg 360
gatataaaaa tctgcctatg tcagaaggcc ccagctgccc ctatgattca atgtgaactc 420
tgcagggatg ctttccacac cagttgtgtg gcggtaccca gtatttcaca gggcctgcga 480
atctggcttt gtccccattg tcggaggtca gagaaacctc cattagagaa aattctgccc 540
ctgctcgcct cccttcagcg tatccgagtt cgccttcctg agggagatgc acttcgatat 600
atgattgaaa agaaaccgtg gaactggcag cacaagaacc caagccaaac tgcttttcgt 660
tcaggggaaa tcttaaattt tgttgncaaa gaatccaant tggggctcca nggacttgtt 720
tattattagc cagaattggg caaagcctcc agccaang 758

<210> 1996
<211> 766
<212> DNA
<213> Homo sapiens

<400> 1996
cttttattac aacattcaca gacacagcat taaaggaatg aatatgccaa agttaaaaaa 60
gtttttgtgc tatttatctc aagcaggctt tcgagtaagc cgaactcatt ttgacccaat 120
gggtgtacgc acagatgcac ctctgatgca gtttaaatct atccttttaa agtacagcac 180
ccccacctac actggaggac agtcagaaag ccgtgtccag tcagcatctg aagatacagt 240
aactgaaaga gttgaaatgt cagtgaatga caaagcagaa gcaagtggct gcagaagatg 300
gtaaacgtag agaagaattg gttctcaggt gtctgtatag atggcctaat agttctctat 360
accaactgta gttctttttc tgttctttca attcagtaga gtaaaaataa aaaacagtgt 420

cattttcatt cagaaactga gcagtttcta acttagctgg tttgggagct ttgctttcca 480
agtttttttt gttttaaggc aaacttaaaa ttttaatggg aaacatttca tatgaaagcc 540
aagtctcact gagatcaccc tactgcttta ataattcaga aaaattttca catggcaaaa 600
gtgtttggga attttatgnt atgtttatga aaagccatct ttttaacaat ttcttaaatc 660
cacatctctg gccttaaact ggattccatg aatggtttaa tggtttttcc ctggtttngg 720
taagttgtta ccaaaaaatg gaaagcttga aaagggctcc accatn 766

<210> 1997
<211> 784
<212> DNA
<213> Homo sapiens

<400> 1997
tggttggttg tgcaagatgg atctgtgann ctatttcaaa ttaccccaga caaaatccag 60
tttgaaagaa attttgatcg gcagaaaagt cgcatcctga gtctcagctg gcatccctct 120
ggtacccaca ttgcagctgg ttccatagac tacattagtg tgtttgatgt caaatcaggc 180
agcgctgttc ataagatgat tgtggacagg cagtatatgg gcgtgtctaa gcggaagtgc 240
atcgtgtggg gtgtcgcctt cttgtccgat ggcactatca taagtgtgga ctctgctggg 300
aaggtgcagt tctgggactc agccactggg acgcttgtga agagccatct catcgctaat 360
gctgacgtgc agtccattgc tgtagctgac caagaagaca gtttcgtggt gggcacagcc 420
gagggaacag tcttccattt tcagctggtc cctgtgacat ctaacagcag tgagaagcag 480
tgggtgcgga caaaaccgtt ccagcatcac actcatgacg tgcgccactg tggcccacag 540
cccaacagcg ctgatatctg gaggcactga cacccactta gtctttcgtc ctctcatgga 600
agaaggtgga agtaaagaat ttacgaatgc ccggctcctc ccgaaaaaaa tccanccttt 660
tcccccaccc gaatgttctc catcctccct ggtttcctaa aaaaaagaaa ggccaaggct 720
ttcctccctt cctttcccca agttttngcc ntccattcca acttttaaaa aaacttttt 780
gggg 784

<210> 1998
<211> 500
<212> DNA
<213> Homo sapiens

<400> 1998
ggttacgcct cccagcaatg gcgccaccat cggtcccgga gtcccagtga tgctctgtgc 60
catagagccc ccataacttc actactacgt gatagtaaat ccccggcaaa aaccagcagc 120
gccttgcaag cccacgccan cccaagcatc ccaggactct tctgagacga ctccgggcta 180
ccagatcggc cgtccagttg gaatcaaccg atngaggctc cgctgcaaac tggaatggcg 240
cttggcgtga tgatcggggc cggantggcg gtggtggtca cggccgtgct catcctcctg 300
gtggtgcgga ggctgcgagt gccaaaaacc ccancccccgg atggcccccg gtatcggttc 360
cggaagangg acaaagtgct cttctatggc cggaagatta tgcggaaggt gtcacaatcc 420
acctcctccc tcgtggatac ctctgtctcc gccacctccc ggccacncnt gaggaaagaa 480
actnaanatg ctcaacnttg 500

<210> 1999
<211> 754
<212> DNA
<213> Homo sapiens

0050504050 = 0050504050

<400> 1999
agagaaaatg ttaaagaggt attggaagat tttgctgaag atggtgagaa gaagattaaa 60
ttgcttactg gtaaacgcgt tcaactggcg gaagacctca agaaagttag agaaattcaa 120
gaaaaacttg atgctttcat tgaagctctt catcaggaga ataaaattaa aatcgtactc 180
ataatcagct ctgcatacat ctgaagaaca aaaacatcaa cgtcttttgt ccagcctctt 240
tttcttctgc tgttccacct ttctaaacgt acaataaagt catgggataa aaataatcga 300
tgtatgttac gggcgcttta accatcagct gcctctcgaa tggaagaaca gtggtaatgg 360
attaacatcc tattttgttg tactaaagtg acaaatcgga ataatataat tggtatggcc 420
attaggttca gtccttgaaa gataagaagc ttgttctctg tttgttgtct tatttgtggt 480
ggcactcgtt taatggatta acttgaggtt gctcaatgtt cagtttcttt tccagaaata 540
caatgctagg tgttttgaaa attaaaactt atatagcaat tgtttaaaag ttatcaattg 600
gtattattaa aaatccacca gttagccctg gcttaaaatc atttgttatg ttgttctggt 660
agttattcta ttccccaaga aaacttattt ggaaccatgg aataattcca gtttttaata 720
tttccccccac cattggaaaa agaaaaaaaa ttng 754

<210> 2000
<211> 745
<212> DNA
<213> Homo sapiens

<400> 2000
agatccccac gcggcacctg gccatgctct cagctctccc gccgcgggat ggtgccttga 60
gtgaatgacc cccttggaga acattcttcc gcatccctcg cctcaagcca gcctcagaca 120
gaaaactgaa gattcagcag atccagtgct tcctgctcct cttctgccca ggaacacgct 180
tgccttcccc aaggcttcca gaagctctga ggcaggaggc accaagttct acctcatgtt 240
tggaggatct tgctagctat ggccctcgta ctcggctccc tgttgctgct ggggctgtgc 300
gggaactcct tttcaggagg gcagccttca tccacagatg ctcctaaggc ttggaattat 360
gaattgcctg caacaaatta tgagacccaa gactcccata aagctggacc cattggcatt 420
ctctttgaac tagtgcatat ctttctctat gtggtacagc cgcgtgattt cccagaagat 480
actttgagaa aattcttaca gaaggcatat gaatccaaaa ttgattatga caagattgtc 540
tactatgaag cagggattat tctatgctgt gtcctggggc tgctgtttat tattctgatg 600
cctctggtgg gggttatttc tttttggtat tgttgttcgt tgcttgttaa caaaatgttg 660
ggttgggaan aaaatgcacc aagccgaaca gaaanggaaa aantgggggc ccttccctga 720
aagnaaaatt gcttttggcc aatct 745

<210> 2001
<211> 750
<212> DNA
<213> Homo sapiens

<400> 2001
aaacttcaac atggccgaag caagtagcgc caatctaggc agcggctgtg aggaaaaaag 60
gcatgagggg tcgtcttcgg aatctgtgcc acccggcact accatttcga gggtgaagct 120
cctcgacacc atggtggaca cttttcttca gaagctggtc gccgccggca gctaccagag 180
attcactgac tgctataagt gcttctacca gttgcagcct gcgatgacac agcaaatcta 240
tgacaagttt atagctcagt tgcagacatc tatccgggag gaaatctctg acatcaaaga 300
ggaggggaac ctagaagctg tcttgaatgc cttggataaa attgtggaag aaggcaaagt 360

0502450.02700

ccgcaaagag cagcctggcg ccccagcggg atcccagaga aggatctgca cagtgttatg 420
gcaccctact tcctgcagca acgggacacc ctgcggcgcc atgtgcagaa acaggaggcc 480
gagaaccagc agctggcaga tgccgtcctg gcagggcgga agcaggtgga nganctgcag 540
ctacaggtcc aggcccagca gcaggcctgg caggctctac acagaanaac agaaggagct 600
ggttgctgtg ctgaaggaac ctgantgang anaccgccag ccccagaagc agaaggcagt 660
cnaggtcaag aacctgtggt ccaacatgcc tggcctgggc gggctacctc tgaaaaacng 720
ctgaaattng ttgccaatcc atcanccatn 750

<210> 2002
<211> 806
<212> DNA
<213> Homo sapiens

<400> 2002
cacggagtgg ctacatgaag ttctgaagga tgttcagccc cgggtcactc cacttggcta 60
tgtcttgccc agccacgtga ctgaggagat gctatgggag tgcaagcagc ttggggctca 120
ctccccctcc accttgctga ccaccctcat gttctttaat accaagtact tcctattgaa 180
gacagtggac cagcacatga agctggcctt ctccaaggtc ttgcgacaga caaagaagaa 240
cccctctaat cccaaggata aaagcacgag tatccggtac ttgaaggccc ttggaataca 300
ccagactggc cagaaagtta cagatgacat gtatgcagaa cagacggaaa atccagagaa 360
tccattgaga tgtcccatca agctctatga tttctacctc ttcaaatgcc cccagagtgt 420
gaaaggccgg aatgacacct tttacctgac acctgagcca gtggtggccc ccaacagccc 480
aatctggtac tcagtccagc ctatcagcag agagcagatg ggacaaatgc tgacgcggat 540
cctggtgata aganaaattc aggangccat cgcagtggcc aatgcaagca ctatgcactg 600
agatgccttg gccatggcac aagaaaaaac cagccaggaa aaaaccagac agactttcac 660
actaaagaaa aaggctccat ttttttttt ccttttttta ttgggtgtta nttaccaaan 720
cctttccagg ctgcttctgt ttaaaatata aaaaaaaact tttgcccctt tgcatcttcc 780
taaaacctgc tgcnggaaaa tcnccn 806

<210> 2003
<211> 720
<212> DNA
<213> Homo sapiens

<400> 2003
attgcttttg ctgcttttct ggctttccct ttcggacatg cgcgctcgga gcaaggcgcc 60
ctcgcactca gcttaccgcg catgtacgtt gccaggggta acgcaggtag ccaaagtggc 120
ttgtggagtg gcgaccgtta gtgaggcggt tgctgagaca gacgctgagg cgggtaggag 180
gagcccgagc cgtaagggaa gccgtgatga gagccgtgtt gacgtggaga gataaagccg 240
agcactgtat aaatgacatc gcatttaagc ctgatggaac tcaactgatt ttggctgccg 300
gaggcagatt actggtttat gacacctctg atggcacctt acttcagccc ctcaagggac 360
acaaagacac tgtgtactgt gtggcatatg cgaaggatgg caagcgcttt gcttctggat 420
cagctgacaa aagcgttatt atctggacat caaaactgga aggcattctg aagtacacgc 480
acaatgatgc tatacaatgt gtctcctaca atcctattac tcatcaactg gcatcttgtt 540
cctccagtga ctttgggttg tggtctcctg aacagaantc tgtctccaaa cacaaatcaa 600
gcagcaagat catctgctgc agctggacaa atgatggtca gtacctggcg ctgggggatg 660
ttcaatggga tcatcacata cggaacaaaa atggcnaagn aaaaanttaa natcnaacgg 720

0050303-090200

<210> 2004
<211> 848
<212> DNA
<213> Homo sapiens

<400> 2004
acctaagcaa gcctgggcaa tggcgggcgc ccctccccca gcctcgctgc cgccttgcag 60
tttgatctca gactgctgtg ctggcaatca gcgagactcc gtgggcgtag gaccctccga 120
gccaggctgc tatccatgtc cagggccaaa catgaatcct attgctcttg ggagccgctg 180
gcttgcttat gcagaaaaca agttgattcg atgtcatcag tcccgtggtg gagcctgtgg 240
agacaacatt cagtcttata ctgccacagt cattagtgct gctaaaacat tgaaaagtgg 300
cctgacaatg gtagggaaag tggtgactca gctgacaggc acactgcctt caggtgtgac 360
agaagatgat gttgccatcc acagtaattc acggcggagt cctttggtcc caggcatcat 420
cacagttatt gacaccgaaa ccgttggaga gggccaggtg cttgtgagtg aggattctga 480
cagtgatggc attgtggccc acttccctgc ccatgaaaag ccagtgtgct gcatggcttt 540
taatacaagt ggaatgcttc tagtccaaca gacacccttg gccatgactt tcatgtcttc 600
caaattctga ctcatccttg gtcagtactc tccggggtac ttcccacgtt ttccccatca 660
acccttaatg gttggccaac cttgttgttc gtacncatat gtcaccacna attattgaat 720
cccattgaac ccgtttccaa aaaaaattgc tgggaactgg aaanaaaatt gaaacaaaga 780
aattgnacgt tctaaaccaa aggaaggtcc cttgtttacc cctgtttcca agnttcttat 840
naaancca 848

<210> 2005
<211> 859
<212> DNA
<213> Homo sapiens

<400> 2005
cacagctatg aataagcttt caggttttat taaaacctag aggaaaaaat caggaatgac 60
ctgaatctca acccaaatat taaacaaaat ccacataatc cctcatttca atttccaatt 120
ccattaaggg accctctctt tttggatggc agagatggtt ttttaatgaa atcccaccat 180
ctatctgagt gagtctggca ggctttttag ttcctgagtt aaatttgtaa tagaaccaag 240
gcaatgctgc tgactttgat atgtatgact cagtctttca atatgtggtt ttcaaaaaat 300
tgttgaagac gtgacttcat agcaatatat agagaataaa ttaaaatcag cagattgagt 360
tttcaacatt gcaaaatcag ttttttacct ctttcctacc aatttcacat tttgcagaaa 420
cttgttcaca tttccaacaa tatcagaatt agaaaacagt tcagataaca agaaagatta 480
agaattaggg aaattctgat atcaccataa agcactattt tacatttaga gattacattt 540
aagataaagt catcatacac aaaaacaata aatatttata actttctcta taaggtccgc 600
atatactgta tatattgaaa caatctgaat gactagtaga tttcatatga ncattgttat 660
ttccactttc tccaatactt gntattttat gctacatgtt aatgaaagtt gggancttt 720
tattatttan taattcctat atgttcccaa tacttttcat tttccaaaat gaatggctct 780
attgtttcnt gnttgtttcn aaccaatata tctccatgaa aaatatgccc tcctgtttcn 840
tattggaaaa attntaaaa 859

<210> 2006
<211> 756
<212> DNA
<213> Homo sapiens

09053450.0070000

0050250400 = 20050400

<400> 2006
aggcgctcag gagcgctagg gtttgaggcc tgctttctgc tcgcgccagc agagcactac 60
ctgaggcagc gaggcgcagc gagcctagcc tccccgcgcc ctgggcagtg tggccatgga 120
gaatcaggtg ttgacgccgc atgtctactg ggctcagcga caccgcgagc tatatctgcg 180
cgtggagctg agtgacgtac agaaccctgc catcagcatc actgaaaacg tgctgcattt 240
caaagctcaa ggacatggtg ccaaaggaga caatgtctat gaatttcacc tgaagttctt 300
agaccttgtg aaaccagagc ctgtttacaa actgacccag aggcaggtaa acattacagt 360
acagaagaaa gtgagtcagt ggtgggagag actcacaaag caggaaaagc gaccactgtt 420
tttggctcct gactttgatc gttggctgga tgaatctgat gcggaaatgg agctcagagc 480
taagggaaga agancgccta aataaactcc gactgggaaa gcgaaggctc tccttgaaac 540
tcttacaaac ttaagggaaa ggatacctgt ttatgtataa tcttgntgcc aattcttggg 600
ggattctcct gggaatcttt tgttcaaccc tgactgttgn cgaattctgt tatccttggg 660
ggaaaaaana attccttttt aatgacacat ttccantaac ttggttgggc ttgaacattg 720
aatgttattt tncttgccca naattgcttg gggcaa 756

<210> 2007
<211> 753
<212> DNA
<213> Homo sapiens

<400> 2007
aactccagga gctagcagcg ggcgcggacc gggcagtttc cgcgctcagc acaggcagct 60
cgcggtcatg ggcggctcag cctccagcca gctggacgag ggcaagtgcg cttacatccg 120
agggaaaact gaggctgcca tcaaaaactt cagtccctac tacagtcgtc agtactctgt 180
ggctttctgc aatcacgtgc gcactgaagt agaacagcaa agagatttaa cgtcacagtt 240
tttgaagacc aagccaccat tggcgcctgg aactattttg tatgaagcag agctatcaca 300
attttctgaa gacataaaga agtggaagga gagatacgtt gtagttaaaa atgattatgc 360
tgtggagagc tatgagaata aaggggccta tcagagagga gctgctccta aatgtcgaat 420
tcttccagcc ggtggcaang tgttaacctc agaagatgaa tataatctgt tgtctgacag 480
gcatttccca gaccctcttg cctccagtga gaagganaac actcagccct ttgtggtcct 540
gcccaaggga attcccagtg ttacctgttg gcagcccttc ttcagacacc ggcttacttc 600
tgcttccacg aaggctgctg gacccagaaa naaagtttta attggccctc cttggaattn 660
gacttgccgt tcagggcatt ctccaatnca ttgaaattac cttgaaaagc cagaatgaac 720
atttttggaa agccccaaag ncccttttt taa 753

<210> 2008
<211> 753
<212> DNA
<213> Homo sapiens

<400> 2008
gcgatcttta agtgactgag gcagatcccc acgcggcacc tggccatgct ctcagctctc 60
ccgccgcggg atggtgcctt gagtgaatga ccccccttgga gaacattctt ccgcatccct 120
cgcctcaagc cagcctcaga cagaaaactg aagattcagc agatccagtg cttcctgctc 180
ctcttctgcc caggaacacg cttgccttcc ccaaggcttc cagaagctct gaggcaggag 240
gcaccaagtt ctacctcatg tttggaggat cttgctagct atggccctcg tactcggctc 300
cctgttgctg ctggggctgt gcgggaactc cttttcagga gggcagcctt catccacaga 360

tgctcctaag gcttggaatt atgaattgcc tgcaacaaat tatgagaccc aagactccca 420
taaagctgga cccattggca ttctctttga actagtgcat atctttctct atgtggtaca 480
gccgcgtgat ttcccagaaa gatactttga gaaaattctt acagaaaggc atatgaatcc 540
aaaattgatt atgacaaaga ttgtctacta atgnaagcag ggattattct atggctgttg 600
tcctgggggc tgctgtttta ttattcctga atgcctcctg gggtgggggg tatttccttt 660
ttgttatgtt gttcgttggc ttgttaaaca aaattgttgg ttgggaaaaa aaattgccac 720
ccaagcgaac aagaaaagga aaaaantggg ggc 753

<210> 2009
<211> 769
<212> DNA
<213> Homo sapiens

<400> 2009
gctggagagg gggcgctgag ctgttgggat gagctttgat ccaaaccttc tccacaacaa 60
tggacataat gggtacccta atggtacttc agcagcactg cgtgaaactg gggttattgt 120
aaaactgtta acctcttacg gatttattca gtgttcagaa cgtcaagcta gacttttctt 180
ccactgttca cagtataatg gcaacctgca agacttaaaa gtaggagatg atgttgaatt 240
tgaagtatca tcggaccgac ggactgggaa acccattgct gttaaactgg tgaagataaa 300
acaagaaatc ctccctgaag aacgaatgaa tggacaagaa gtgttttatc tgacttacac 360
ccctgaagat gtcgaaggga acgttcagct ggaaactgga gataaaataa actttgtaat 420
tgataacaat aaacatactg gtgctgtaag tgctcgcaac attatgctgt tgaaaaagaa 480
acaagcccgc tgtcagggan tagtttgtgc catgaaggan gcatttggct ttattgaaag 540
aagtgatgtt gtaaaagana tattctttca ctatagtgaa tttaanggtg acttanaaac 600
cttacagcct ggcgatgatg tggaattcnc aatcaaggac agaaatggta aagaaattgc 660
aacagatgtc anactattgc ctccaggaac agtcattttt gaaaaatatc acattgaaca 720
ttttgaaagg aactgttacc aaanttatcc cnaaaattnc cngttaaaa 769

<210> 2010
<211> 884
<212> DNA
<213> Homo sapiens

<400> 2010
tttaaaaagc cccacacaac aaaatggaaa catacatgta caactcctgt gagggctgga 60
gtcttggggt tcaggaggag gttagaagtt acaggcatct cttcaggctt gcttggtact 120
tggcacacac aggatggtgt tttaaagagt gggctgcacc ccccacacgc catttacatc 180
agcttcataa acacttttct tcctccctgt aacttaacct tttttccctt ttatgaagtt 240
ganaggcttt atgaaataag tttgcattgc acatccgtgc agaaatcttt ctgactttga 300
aattttcagg acgtcagctg tcagatacga aaggtagata tcaggtaaga atctggactt 360
aggaaatagt cacaaaactg tcataggttg taattttatc aacattcgct tctagtaaaa 420
ttaaagtcaa ttaagaaata gaacttgggt caaaattctg ttacaaagct tcataatttg 480
tcccgaagca tatggtggag cattctgaga aatttgcttt ttgtgtgttt gacattccta 540
atttgggant ccttcagctg aattactatt cttttagaan ttgagacagc aggtaagcaa 600
angaactant tcatgttaac atggacatca tgatggctat ttaaaaaata tttgttctac 660
accttctccc ctgaagcttg ggggaatgtt ttcaaccnct tgcantttct ctgctcatgg 720
aaagtcttgt ttggatctgt tgctgggcgg ctgaaacatt taatgtttan cccattgaac 780
catgaacttt gccgctcctt tttaaggggc caaaattcng ggcccatcct tanttaattg 840

0502450.0007000

gggcctgaaa ngnccttccc aaaaaccttt taatnttccc ccct 884

<210> 2011
<211> 787
<212> DNA
<213> Homo sapiens

<400> 2011
agcgatccga ggcccggccc cggccccgcc ccgcgccgcg ccgcgccgct tgccgccggg 60
ctagcactga cgtgtctctc ggcggagctg ctgtgcagtg gaacgcgctg ggccgcgggc 120
agcgtcgcct cacgcggagc agagctgagc tgaagcggga cccggagccc gagcagccgc 180
cgccatggca atcaaatttc tggaagtcat caagcccttc tgtgtcatcc tgccggaaat 240
tcagaagcca gagaggaaga ttcagtttaa ggagaaagtg ctgtggaccg ctatcaccct 300
ctttatcttc ttagtgtgct gccagattcc cctgtttggg atcatgtctt cagattcagc 360
tgacccttc tattggatga gagtgattct agcctctaac agaggcacat tgatggagct 420
agggatctct cctattgtca cgtctggcct tataatgcaa ctcttggctg gcgccaagat 480
aattgaagtt ggtgacaccc caaaagaccg agctctcttc aacgggagcc caaaagttat 540
ttggcatgat cattactatc ggccagtcta tcgtgtatgt gatgaccggg atgtatgggg 600
accttctgaa atgggtgctg ggaatttgcc tgctaatcac cattcanctc tttgttgctg 660
gcttaattgt cctacttttg gatgaactcc tgcaaaaang atatggnctt gggctctggt 720
atttctctct tcnttgcaac taacatctgt naaaaccatc cttttgggaa aggattccan 780
ccccact 787

<210> 2012
<211> 523
<212> DNA
<213> Homo sapiens

<400> 2012
gtaacagggc ggagcgcgca cctgggcacc tgggcagccg ccgcggcgct ggctagacgt 60
gcgcgatgga gggcgacggc gggaccccat gggccctggc gctgctgcgc accttcgacg 120
cgggcgagtt cacgggctgg gagaaagtgg gctcgggcgg cttcgggcag gtgtacaagg 180
tgcgccatgt ccactggaag acctggctgg ccatcaagtg ctcgcccagc ctgcacgtcg 240
acgacaggga gcgcatggag cttttggaag aagccaagaa gatggagatg gccaagtttc 300
gctacatcct gcctgtgtat ggcatctgcc gcgaacctgt cggcctggtc atggagtaca 360
tggagacggg ctccctggaa aagctgctgg cttcggagcc attgccatgg gatctccggt 420
tccgaatcat ccacgaaacg cggtgggcat gaacttcctg cactgcatng gcccnccact 480
cctgcacctg gaacntcaag cccncgaaan atcctgctgg ata 523

<210> 2013
<211> 851
<212> DNA
<213> Homo sapiens

<400> 2013
ttgaccagga atataaaatc aattctcgac tacttcagaa cattctagat gcaggtttcc 60
aaatgcctac gccaatccaa atgcaagcca tcccagttat gctgcatggt cgggaacttc 120
tggcttctgc tccaactgga tctggaaaaa cattagcttt tagcattcct attttaatgc 180

US 2005/0059006 A1

agctgaaaca acccgcaaat aaaggcttca gagccctgat tatatcacca acacgagaac 240
ttgccagcca gattcacaga gagttaataa aaatttctga gggaacagga ttcagaatac 300
acatgatcca caaagcagca gtggcagcca agaaatttgg acctaaatca tctaaaaagt 360
ttgatattct tgtgactact ccaaatcgac taatctattt attaaagcaa gatccccccg 420
gaatcgacct agcaagcgtt gagtggcttg tagtagacga atcagatnaa ctgtttgaag 480
atggcaaaac tgggttcaga gaccagctgg cttccatttt cctggcctgc acatcccaca 540
aggtccgaag agctatgttc agtgcaactt ttgcatatga tgttgaacag tggtgcaaac 600
tcaacctgga caatgtcatc agtgtgtcca ttgggagcaa gggaattctg cagtagaaac 660
tgtagaacaa gaancttctc tttgtttggg atctgaagaa cgggaaaact tctggccgtg 720
aaganaactt gttaaaaang gtttcaatcc accttgttct tgtttttgtt tcagtcccat 780
tgaaaagggg ttaaaagaaa ttttttncat ganctcatat tttgaaaggt attnaatgnt 840
ggnatgttat t 851

<210> 2014
<211> 841
<212> DNA
<213> Homo sapiens

<400> 2014
tcttctgtcc tctgaagcag tgcttcctga cctgaccgat gaacttgccc ctgtttttct 60
ccttcgatgg ttctactctg cttctgacta catctcagac tgctgggata gcatttttca 120
caacaactgg agggaaatga tgcccctgct gtccctgatc ttctctgccc tcttcatcct 180
cttcggcact gtcatcgttc aggctttcag cgactctaat gatgagcgag agtcaagccc 240
tccagaaaaa gaggaagccc aagagaagac tgggaaaact gagccaagct tcaccaaaga 300
aaacagcagc aagattccta aaaaaggctt tgtggaggta actgaactca cagatgtaac 360
atacaccagt aacttggtac gtctgaggcc aggccacatg aatgtggtcc tcatcctgtc 420
gaattctacc aagaccagcc tactacagaa atttgctttg gaggtctaca catttactgg 480
gagcagctgc ctacacttct ccttcctgag tctagataaa cacagagaat ggctagaata 540
cttactagaa tttgctcaag atgcagctcc aatcccaaac caatatgata agcatttcat 600
ggagcgtgac tacactggtt atgtactggc tctgaatggc cacaagaaat acttctgcct 660
cttcaagccc caaaagacag tcgaagaaga agaaccatag ggtcctgcag tgatgttgac 720
tcttccctct acctgggtga atctcgaagg aaancttcct gttgncttgg attcaagccc 780
atccaaagga aanttgaacc aanctctctt ttatngaatt ggaacccctg ctgggaaggg 840
c 841

<210> 2015
<211> 424
<212> DNA
<213> Homo sapiens

<400> 2015
atcgctctcc cgggcttaga aggnccggct actgacgcgc agtgccagac cttacccctc 60
acggtcctta agtctcggtc gccctcgcct cgcagcctgc cacccgcgct cagctgcccg 120
cctcctcagc cagccatgct ggagcatctg agctcgctgc ccacgcagat ggattacaag 180
ggccagaagc tagctgaaca gatgtttcag ggaattattc ttttttctgc aatagttgga 240
tttatctacg ggtacgtggc tgaacanttc gggtggactg tctatatagt tatggccgga 300
tttgcttttt catgtttgct gacacttcnt ccatggccca tctatcgccg gcatcctctc 360
aagtggttac ccgttcnaca atcnagcaca gacnacaaga aaccagggga aagaaaaatt 420

0005345250

naga 424

<210> 2016
<211> 669
<212> DNA
<213> Homo sapiens

<400> 2016
tgggcgatcc gctcgtattg aaggggaag agacctggga aattaagttt cttgcggagt 60
acggtgggga ttgcagctgc tgagcaggga ttctggaaag cattgcgtac ctgagccccc 120
agcatggcgg gcctaaagcg gcgggcaagc caggtgtggc cagaagagca tggtgagcag 180
gaacatgggc tgtacagcct gcaccgcatg tttgacatcg tgggcactca tctgacacac 240
agagatgtgc gcgtgctttc tttcctcttt gttgatgtca ttgatgacca cgagcgtgga 300
ctcatccgaa atggacgtga cttcttattg gcactggagc gccagggccg ctgtgatgaa 360
agtaactttc gccaggtgct gcagctgctg cgcatcatca ctcgccacga cctgctgccc 420
tacgtcaccc tcaagaggag acgggctgtg tgccctgatc ttgtanacaa gtatctggag 480
gagacatcaa ttcgctatgt gacccccaga gccctcagtg atccagaacc aaggcctccc 540
cagccctcta aaacagtgcc tccccactat cctgtggtgt gttgccccac ttcgggtcct 600
canatgtgta ncaagcggnc agcccgaagg aaaaccacac ttggggaacc ancgaaaacc 660
cngaagccc 669

<210> 2017
<211> 774
<212> DNA
<213> Homo sapiens

<400> 2017
aggccagcta tggcccccga cccggtggcc gccgggaccg cggctcaggg acctaccccg 60
cgctacttca cctgggacga ggtggcccag cgctcagggt gcgaggagcg gtggctagtg 120
atcgaccgta aggtgtacaa catcagcgag ttcacccgcc ggcatccagg gggctcccgg 180
gtcatcagcc actacgccgg gcaggatgcc acggatccct ttgtggcctt ccacatcaac 240
aagggccttg tgaagaagta tatgaactct ctcctgattg gagaactgtc tccagagcag 300
cccagctttg agcccaccaa gaataaagag ctgacagatg agttccggga gctgcgggcc 360
acagtggagc ggatggggct catgaaggcc aaccatgtct tcttcctgct gtacctgctg 420
cacatcttgc tgctggatgg tgcagcctgg ctcacccttt gggtctttgg gacgtccttt 480
ttgcccttcc tcctctgtgc ggtgctgctc agtgcagttc aagcccaagc tggctggctg 540
cagcatgact ttgggcacct gtcngtcttc agcacctcaa antggaacca tctgctacat 600
cattttgtga ttggccacct gaaaggggcc cccgccaatt tggtggaacc acatgcactt 660
ccagcaccat gccaanccca actgcttccg caaaagaccc anaaattcaa catngcatcc 720
cttncttcct ttgccttggg ggaaaaatcc tctctgtngg aacttgggga aacc 774

<210> 2018
<211> 762
<212> DNA
<213> Homo sapiens

<400> 2018
ggagaccgaa catggcgacc gcgcgcacct tcgggcccga gcgggaagcc gagccggcca 60

0962945.0972000

aggaagcgcg cgtcgtgggc tcggagcttg tggacactta tacggtttac atcatccagg 120
tcactgatgg cagccatgag tggacagtaa agcaccgcta cagcgacttc catgacctgc 180
atgaaaagct cgttgcagag agaaagattg ataaaaacct gcttctgccc aaaaagataa 240
ttgggaaaaa ctcaagaagc ttggtggaga agagggagaa ggatctggag gtctacctcc 300
agaagctcct ggctgccttc cctggcgtga cccccagagt actggcccac ttcttgcatt 360
ttcacttcta tgagataaat ggcatcaccg cggcactggc tgaagagctc tttgagaaag 420
gagaacagct cctgggggcc ggcgangtct ttgccattgg acccctgcag ctgtatgccg 480
tcacggagca gctgcagcag ggaaagccca cgtgcgccag tggggatgcc aagaccgacc 540
tcgggcacat cctggacttc acctgtcgcc ttaagttcct taaggtttct ggcacagaan 600
gacctttgg gaccagcaac attcagganc actcctgccg ttcgacctat caatattcaa 660
gtccctgcat caggtggana taantcctgt gatgcttaac acatcnaaag ggctggtcnc 720
atccaaaccc accttaaccc nccctgaatt tttcgcttct ca 762

<210> 2019
<211> 580
<212> DNA
<213> Homo sapiens

<400> 2019
aagttctgcc ttgtctccgc cgcgggtcag gggtgagagc tggaatctct gcacgggcct 60
tggaaaacga ctgtcttctt ctgccaaaat gtcaggaatt ggaaataaaa gagcagctgg 120
agaacctggc acctccatgc ctcctgagaa gaaggcagct gttgaagatt cagggaccac 180
agtggaaaca attaagctag gaggtgtctc ttcaacggag gaactagaca ttagaacact 240
gcaaaccaaa aaccgcaagc tggcagaaat gttggatcag cggcaggcca ttgaagatga 300
acttcgtgag cacattgaaa aactggaacg acgacaggcc actgatgatg cctcactatt 360
gattgtcaac cgatactgga gtcagtttga tgaaaacatc cgtatcatcc ttaaacgtta 420
tgatctggag cagggcttgg gagacctact cacagaacga aaagcccttg ttgtgcctga 480
accagaacca gactctgata gcaatcaggg agcgtnaaga tgaccganag anaagggaag 540
ggcaagancc ancttctct ttccttgcta ctttgggcca 580

<210> 2020
<211> 673
<212> DNA
<213> Homo sapiens

<400> 2020
gagactggcg tccggtgtgc aggtggccac atgggatcct ggcagccggt ggcggaacct 60
gcccagcggg cctagcctaa agcacttgac tgacccctct tatggaatcc cgcgggaaca 120
gcaaaaggca gcgttgcagg agctgacgcg ggcgcacgtg gagtccttca actacgctgt 180
gcacgagggt ctcggcctcg cggtgcaggc tgatatcaac tgggcagtga atggaatctc 240
aaaaggaatc attaagcagt ttcttggcta cgttcccatc atggtgaaat ccaagctttg 300
caacttacgt aaccttcccc cacaagccct cattgagcac catgaggagg cagaggaaat 360
gggggggctat tttataatca atggcattga aaaagtcatc cgaatgttga ttatgcctcg 420
ganaaatttt cccattgcaa tgataagacc aaaatggaaa accaganggc ctggttatac 480
tcagtatgga atttcaatgc actgtgtgag ggaagaacat tccgctgtca atatgaacct 540
ccactacttg gaaaatggca cagttatgtt gaactttatt taccgaaaag aactgttctt 600
tcgtcctttg ggatttgcac ttaangcact tgtcagcttt tctgattatc anatctttca 660
gganctcntc cna 673

0060-0202-0950-0450-0

0952946-0920000

<210> 2021
<211> 576
<212> DNA
<213> Homo sapiens

<400> 2021
gagacttgtt ggccgcggag actgcgaccc tcttctctca gtctgcctta ctaccatgcc 60
gctctacgag ggcctgggga gcggcgggga naagacggcg gtcgtgatcg acctgggana 120
ggcctttacc aagtgtggat ttgctggaga aactggtcca agatgtataa ttcctagtgt 180
gataaaaaga gctgggatgc ctaagcctgt cagagttgtt cagtataata tcaatacaga 240
agaattatat tcctacctaa aggaattcat ccacatacta tatttcaggc atctattggt 300
gaatcccaga gaccgccgag ttgtgattat cgaatcggta ttatgtcctt ctcacttcag 360
anagacactc actcgtgttc ttttcaaata ttttgaggtt ccatctgtct tgcttgctcc 420
aagtcatcta atggctcttc tgacgcttgg aattaattct gccatggtcc tanattgtgg 480
atatagggaa agcctggtgt tacccatata tgaangaatc ccagttctaa attgttgggg 540
ancactaccc ctangangaa aagctcttca caaana 576

<210> 2022
<211> 605
<212> DNA
<213> Homo sapiens

<400> 2022
aaagtcatgg aggccatggg gttggattga aaccagcttt gggggttcg tttccttcct 60
tttttgccaa attatactac aggcacatat atgccaaagt cagtggggga ccttccttgg 120
agcagaggtt tgaatcctat tacgactact gcaatctctt caactacatt cttaatgccg 180
atggtcctgc tccccttgaa ctacccaacc agtggctctg ggatattatc gatgagttca 240
tctaccagtt tcagtcattc agtcagtacc gctgtaagac tgccaagaag tcagaggagg 300
agattgactt tcttcgttcc aatcccaaaa tctggaatgt tcatagtgtc ctcaatgtcc 360
ttcattccct ggtagacaaa tccaacatca accgacagtt ggaggtatac acaagcggag 420
gtgaccctga aagtgtggct ggggagtatg ggcggcactc cctctacaaa atgcttggtt 480
acttcagcct ggtcgggctt ctccgcctgc actccctgtt aggagattac taccaggcca 540
tcaaggtgct ggagaacatc gaactgaaca anaanantat gttttcccnt gttgccanaa 600
tgcca 605

<210> 2023
<211> 784
<212> DNA
<213> Homo sapiens

<400> 2023
agtctagtta gtatcggcct gttatctcct tttgcgcgac acggtctcag ctgttccgcc 60
tgaggcgagt gacgctggcc gccaacgang tatacgtact gggaccctcg ccctcagtct 120
cgtctccggc gcggctacct gccccgtttt ccctgtgagt tgacctgctc cgggccgcgg 180
gccgccaatg gcaggggccg ctccgaccac ggccttcggg caggcggtga tcggcccgcc 240
gggctcaggg aanactacgt actgcctggg catgantgag ttcctgcgcg cgctgggccg 300
gcgcgtggcg gtggtgaacc tggacccggc caacganggg ctgccgtacg agtgtgccgt 360

ggacgtgggc ganctggtgg ggctgggcga cgtgatggac gcgctgcgcc tggggcccaa 420
cggcggcctg ctctactgca tggagtacct ggaagccaac ctggactggc tgcgtgccaa 480
gctcgacccc ctccgcggcc actacttcct cttcgactgc ccaggccang tgganctctg 540
cacgcatcac ggggccttgc gcancatctt ctcccaaatg gcgcagtggg acctcaggct 600
gactgccgtc cacctcctgg attctcacta ctgcacanac cctgccaant tcatttcant 660
actgttgtac ctcccttggc caccatgctg cacgtngaaa ctgcccacat caacctcctt 720
tcccaagaat gganctcatt gaaccnttat ggggaaactn ggncttcaac ctggaactaa 780
ctac 784

<210> 2024
<211> 631
<212> DNA
<213> Homo sapiens

<400> 2024
tcctgagata gaaccgtttg gttcaatgag ggactgtgtt gctaagaacg ttgggggcaa 60
agccaggctg gttccttggc ctcggggttt cctgggtcgg ggacacggtg aagaggctcc 120
agcgggacct gcccatcagt cctgggccag gaggggctcc aagcagcacc cagcggtccg 180
ggggagtctc agacccggca tgcgtggctg gcagacctgg gagagccagg gcagggtttt 240
gcgttcagag aaggattgcc ccagagaccc gtggtggact tcatgggtgc tgagtggccc 300
gtgtgacagt gatgacacga aggcttcggc gtttgagtgg gtgcaggtgc acgccagggc 360
ttggtgcttc cctgcctggc cctggaggga gctgggtggc ctggcttcag gggaagacag 420
gagccaggac acacgtcagc ccancaggtg tgggggggtgc tgcagccctc ggcagtgggg 480
tcaggccctg ggggatgttt ccaatggtgg gcagcctggc caggccggag aagacatgtt 540
cacgggcatc tatcagatgc ccccttgaag aagctgggtt atttnaaggc tgctgcaaan 600
tncctangct caaattctct tttcccancc a 631

<210> 2025
<211> 717
<212> DNA
<213> Homo sapiens

<400> 2025
aaaaggagcc aagaccatgg cgaaagccgg ggataagagc ggcagcagcg ggaagaaaag 60
tctaaaacgg aaagccgctg ccgaagaact tcaggaggct gcaggcgctg gggatggggc 120
gacggaaaac ggggtccaac ccccgaaagc ggctgccttt ccgccaggct ttagcatttc 180
ggagattaaa aacaaacagc ggcgacactt aatgttcacg cggtggaaac agcagcagcg 240
gaaggaaaag ttggcagcta agaaaaaact taaaaaagaa agagaggctc ttggcgataa 300
ggctccacca aagcctgtnc ccaagaccat tgacaaccag cgagtgtntg atgaaaccac 360
agtagaccct aatgatgaag aggtcgctta tgatgaagct acagatgaat ttgcttctta 420
cttcaacaaa cagacttctc ccaagattct catcacaaca tcagatagac ctcatgggag 480
aacagtacga ctctgtgaac agctctccac agttatncca aactcacatg tttattacag 540
aagaagactg gctctgaaaa aaattattcc acagtgcatc gcaagaagat ttcacagacc 600
tgattgttat taatgaagat cgtaaaaccc aaatggactt attttgantc ncttgcccaa 660
tggccaactg ctccttttaa aatgancatg ttcctcttcc ttnagaaatt aanaaaa 717

<210> 2026
<211> 866

0020050048350 A1 20050303

0950204650 - 07 Sep 2007

<212> DNA
<213> Homo sapiens

<400> 2026
aaaaaaaaac gcgcctccgc ggaggtagcc gttccctgac ctagccatgg cacagaacac 60
tgaaaaccac gaccctgtcg gatccatctt aatccagatc catgaagacc tttatcagtt 120
aaaggagaaa ttaacaaaat tctcacctga ggaaaaagga gagactctag acattcagag 180
tcttgaaaca gcaatcaaaa ggactgaagt ggggttaaga ggattttaag tatgatagaa 240
cgagggctga ttccaccaac agcaaggatt acctttcaga atccacccat tacacccaga 300
gcagctcctc tgcatagttt tgatgaagca cgtnagattc caactgtagc cactttcact 360
atacctcggg aaccacctcc atctccagca gaagtgaagt tctttcccaa gaaacaaaga 420
tcaaagggga aaagcagaag gtcaagagga catcatgata ggaagatttg tgatcctaat 480
ccacctggga cagccccaga tatgttccta agaagaaacc agacttaaga ataaaagaac 540
acgtgtcaag agaaacctaa gaatgacaaa gggcatgaaa gtcaaaacac ctttgagagc 600
cctgaaatca ctgtggggat tatgactttt taatttatga tggtgtcata gacaatacag 660
cccccagact tcttagcatt ccagggaaca ttttanctta acttggggaa gtatttttc 720
tctcttggga acacgttcaa naaatttctc aggaactatg ctattccaga aatccaaatt 780
aaaagggaat aatttgggtg ggcctccctt cccnaatttt gaagcttgac gaaataaact 840
ttncccnaat ntgaacctnc cctcca 866

<210> 2027
<211> 760
<212> DNA
<213> Homo sapiens

<400> 2027
ataataccaa aaagtctgat aaaactctgc aagcaattca gcgtgtagga caagctgtca 60
acttggcagt tggaagattt gttaaagtag gagaagctat agccaatgaa aactgggatt 120
tgaaagaaga aataaatatt gcttgtattg aagctaaaca agcaggagaa acaattgcag 180
cacttacaga cataaccaac ttgaaccatc tggaatctga tgggcagatc acaatttta 240
cagacaaaac aggagtgata aaggctgcaa gattacttct ttcttcagtg acaaaagtgt 300
tgttgctggc agaccgagta gtcattaaac agataacaac atcaagaaat aaggttctcg 360
caactatgga aagactagag aaagtgaata gctttcaaga gtttgtccaa atattcagtc 420
aatttggaaa tgaaatggtg gagtttgcac atctgagtgg agatagacaa aatgatttga 480
aagatgaaaa gaaaaaggca aaaatggcag cagctagggc agttcttgaa aagtgtacaa 540
tgatgcttct cacagcttca aagacatgtc tgaagcatcc taactgcgaa tcagcccatn 600
aaaacaaana aggagtattt gaccgtatga aagtggcatt ggataangtc cttgaaattg 660
tgactgactg ttaaccgaat ggaganactg acatttcatc tatcagtatt tttactggga 720
attaanggaa ttcnanatga atattgaagc tcttccngga 760

<210> 2028
<211> 692
<212> DNA
<213> Homo sapiens

<400> 2028
tcccccgggt ggggccccgg gccgaggcga tggcgccctg ggcgctcctc agccctgggg 60
tcctggtgcg gaccgggcac accgtgctga cctggggaat cacgctggtg ctcttcctgc 120

acgataccga gctgcggcaa tgggaggagc agggggagct gctcctgccc ctcaccttcc 180
tgctcctggt gctgggctcc ctgctgctct acctcgctgt gtcactcatg gaccctggct 240
acgtgaatgt gcagccccag cctcaggagg agctcaaaga ggagcagaca gccatggttc 300
ctccagccat ccctcttcgg cgctgcagat actgcctggt gctgcagccc ctgagggctc 360
ggcactgccg tgagtgccgc cgttgcgtcc gccgctacga ccaccactgc ccctggatgg 420
agaactgtgt gggagagcgc aaccacccac tctttgtggt ctacctggcg ctgcagctgg 480
tggtgcttct gtggggcctg tacctggcat ggtcaggcct ccggttcttc cancctggg 540
gtctgtggtt gcggtccaac gggctcctgt tcgccacctt cctgctgctg tcccacttct 600
tctgtggatg gncctcangg tcctggggaa acctctgggc tgangaagaa gaaaaaggca 660
ncancccaac tgtttaaggt tgcttggaag cc 692

<210> 2029
<211> 914
<212> DNA
<213> Homo sapiens

<400> 2029
cagcaatgag tcggcaattg acttctacag gaagtttggc tttgagatta ttgagacaaa 60
gaagaactac tataagagga tagagcccgc agatgctcat gtgctgcaga aaaacctcaa 120
agttccttct ggtcagaatg cagatgtgca aaagacagac aactgaacaa attacaaatg 180
aactttctta cacttgcttg tcgccaaata aaagagaggc ccattgattc ctcccccacc 240
ccaacacttt tcttttaaag cttttctccc tccttgttct tgtttttctt tcttcctttc 300
ctttttctg agagttttaa tacttccaag gactttaaaa aaataatcat gtttgaattg 360
ttttctctta tttttgtgag gtggtttgaa ggaaggacaa ggtagatctg tttagttttg 420
cagttgaagt tagatggtcc taaacattta attgtcaaat aatttcaaat ttaatgtcct 480
gctttcacat tgaagggcag ancctacaaa acattgtata tttcaaaaga caaaaagaag 540
cagcagcagt atcttgttct ctaattcata gacaanttga ntgtgtttct ggtactttgg 600
gtttttaaac actttggaat actaatccct aaacattgnc ttcactccan ctttantcct 660
tctgaacact ctctcgggan ttggaacatt gttatccttg ttaanaaata ctaagcttat 720
gttgaatttt aagttattat atcttcnctc ctgccggtgg gttngggcat ttnggttaat 780
gttatacttt gggtctaagt ttttgaattt aactggcntt tttggctaat gaattgggct 840
ggtttttan caaggtttgt ttttncccgc tgtttgaatg gttnccaatt gggcnttaac 900
tttttaaaaa attt 914

<210> 2030
<211> 799
<212> DNA
<213> Homo sapiens

<400> 2030
agggggaaaa atgcggcctt tgactgaaga ggagacccgt gtcatgtttg agaagatagc 60
gaaatacatt gggganaatc ttcaactgct ggtggaccgg cccgatggca cctactgttt 120
ccgtctgcac aacgaccggg tgtactatgt gagtgagaag attatgaagc tggccgccaa 180
tatttccggg gacaagctgg tgtcgctggg gacctgcttt ggaaaattca ctgaaaccca 240
caagtttcgg ttgcacgtca cagctctgga ttaccttgca ccttatgcca agggttttgg 300
ggtggcagcc aaatctacac aagactgcag aaaagtagac cccatggcga ttgtggtatt 360
tcatcaagca gacattgggg aatatgtgcg gcatgaagag acgttgactt aaaacgaagc 420
cattccaagg acagacggct gtatggaaag gccgagcttt gtttcctgtg tttgtgtgga 480

0000270.950.2000

ctccaccatc atgttgaatt ttgtcaacac tctggcctct tcagggactt cttatttact 540
gtactctcta tcactgacaa atgcangctg gattcttatt atatacagag atggctcaaa 600
aatggggttt cagatctttg tgacgaaata aaatactgtt tcatatttga atcagaaggc 660
ttcttgttct gaaaaaataa gttcaaaatc attggaacca ngaaacaana ataacttatt 720
gttatctgtg ataacactgt cttctaaaac accaaggatt tctttttttat taatatgcca 780
catanacntt gccntaacc 799

<210> 2031
<211> 722
<212> DNA
<213> Homo sapiens

<400> 2031
gtccaanatg gcggcgtgcg gttccgctgt gtgaaacgag cgcggggcgg cgggttactc 60
agctccgcgg agacgacctc cgacgacccg caacaatgaa gggaaaagag cgctcgccag 120
tgaaggccaa acgctcccgt ggtggtgagg actcgacttc ccgcggtgag cggagcaaga 180
agttaggggg ctctggtggc agcaatggga gcagcagcgg aaagaccgat agcggcggtg 240
ggtcgcggcg gaatctcctc ctggacaagt ccagcagtcg aggtggcagc cgcgagtatg 300
ataccggtgg gggcagctcc agtagccgct tgcatagtta tagctccccg agcaccaaaa 360
attcttcggg cgggggcgan tcgcgcagca gctcccgggg tggaggcggg gantcacgtt 420
cctctggggc cgcctcctca gctcccggcg gcggggacgg cgcggaatac aagactctga 480
agataagcga nttggggtcc cancttaatg acgaagcggt ggangacgcc tgtttcatga 540
gttcaaacgc ttcggtgatg taagtgtgaa aatcagtcat ctgtcgggtt ctggcacggg 600
gatgaacggg taccttttgtg aacttccggc ggccaaaaga cgcgcgggcn gncaancatg 660
ccanaaggcc gcctggtgct ctatgaaccg gcctctgaaa ataaaaactg tttttgtnaa 720
cc 722

<210> 2032
<211> 772
<212> DNA
<213> Homo sapiens

<400> 2032
ttatgctaac atgaagaaaa gagaagggac tcagctttct tcccaacagt ctgtgatgtc 60
taaacttgca tcatttttgg gcttttcaaa gcaatctccc caaaaaaaga atcatttggt 120
tttggaaaag aaaacagaat cagcaacttt tcgggtgtgt ggtgaaaatg tcacgtgtgt 180
ggaatatgct atctcctggc tacaagacct gattgaaaaa gaacagtgtc cttacaccag 240
tgaagatgag tgcatcaaag actttgatga aaaggagtat caggagttga atgagctgca 300
gaagaagtta aatattaaca tttccctgga ccataagaga cctttgatta aggttttggg 360
aattagcaga gatgtgatgc aggctagaga tgaaattgag gcgatgatca agagagttcg 420
attggccaaa gaacaggaat cccgggcaga ttgtatcagt gagtttatag aatggcagta 480
taatgacaat aacacttctc attgttttaa caaaatgacc aatctgaaat tagaggatgc 540
caggagagaa aagaaaaaaa cagttgatgt caaaattaat catcggcact acacagtgaa 600
cttgaacaca tacactgcca cagacacaaa nggccacagt ttatctgttc agcgcctcnc 660
gaaatcccaa gttgacatcc ctgcccactg ggagtgatat gaancaccaa anttctgtgt 720
tgtggaactg ctgcctantg atnctgaatt acacacggtg gccagccant tt 772

<210> 2033

09052450.0020000

0052945.0002000

<211> 747
<212> DNA
<213> Homo sapiens

<400> 2033
aaaaaaaaaa acatcaactc tgacctgcca atcatcatat cgattgagaa ccactgttca 60
ttgcctcagc aacgaaaaat ggcagaaatt ttcaagaccg tgtttggaga aaagctggtg 120
actaaattct tatttgagac tgatttctca gatgatccaa tgcttccttc acctgaccaa 180
ctcagaaaga aagttcttct taaaaacaag aagctaaaag cccatcagac gccagtggat 240
atcttaaagc aaaaggctca tcagttagca tctatgcaag tgcaggctta taatggtggg 300
gatgccaacc cccgacctgc caataatgag gaagaggaag atgaggagga cgaatatgat 360
tatgactatg aatccctttc tgatgacaac attctggaag acagacctga aaataaatca 420
tgtaatgaca agcttcagtt tgaatataat gaagaaatcc ccnagaggat aaagaaagca 480
gataactctg cttgcaacaa aggaaaggtt tatgatatgg aactgggaga agaattttat 540
cttgatcaga ataaaaagga aagcagacag attgcaccag aagctttctg accttgttat 600
ctattgtcaa gcagtaaaat ttccaggact gtcaactcta aatgcatctg gctctagccg 660
aaggaaaaga aaggaaaagc cggaantcct ttttggcaac catctgggcn gaatganccc 720
nggggganaca gcatccttta acaaaac 747

<210> 2034
<211> 550
<212> DNA
<213> Homo sapiens

<400> 2034
gacatttttg gcgccggccc cagcctgagc ggggacggcg gccgggaggg cgcggcccgg 60
gttcccgttc cccgcggagc catgcggtac aacgagaagg agctgcaggc tctgtcccgg 120
cagccggccg agatggcggc cgagctgggc atgaggggcc ccaagaaggg cagcgtgctg 180
aagcggcggc tggtgaagct ggtggtgaat ttcctcttct actttcggac agacgaggcc 240
gagcccgtcg gagccctgct gctggagcgc tgcagagtcg tccgggaaga gcccggcacc 300
ttctccatca gcttcattga ggaccctgag aggaagtatc actttgagtg cagcagcgag 360
gagcagtgtc aggagtggat ggaggctctg cgtcgggcca gctacgantt catgcggaga 420
agcctcatct tctacaggaa cgaaatccgg aangtgacgg gcaaggaccc cctggaacag 480
ttcggcatat ccgaagaagc cangttccan ctgaatggct tgcangcgtn agcgcagggc 540
acggtggtca 550

<210> 2035
<211> 736
<212> DNA
<213> Homo sapiens

<400> 2035
gtgtgcaatg atggctgggg gaatcgtcat gactgccaat ctcaacatca attataaaag 60
acctatccct ctttgttctg ttgttatgat aaatagccaa cttgataaag ttgaaggaag 120
gaaatttttt gtttcctgta atgttcagag tgttgatgag aagaccctat actcagaggc 180
gacaagctta tttataaagc tgaatcctgc taaaagtctg acataaagag ctgctggtga 240
actccatctc attctcgccc ctccagaaga agcagttgtc ccccaaatac tctgctccct 300
cactgctgaa tccctgtagg gagaagcctg ccaacagtga ccttccgaaa cagccttctg 360

aatacaaaga ggattcagtt tccatcttct caacttgtta acacagaaac acttcctgcg 420
agcatatcga caactctcgg gccaggcgct gtggctcaca cctgtaatcc cagcacttta 480
ggaggccgan gcaggcggga ttgcctgagc tcaggagttc aagatcagtc tgggcaacac 540
gatgaaaact ccgtctctac taaaatacaa aaaattatcc aggcatggtg gcgtacgcct 600
gtagtcccag ctactcagga ngctgaagca gganaattgc ttgaacccag gaaggaanag 660
gtgcagtgaa gccaagaaca tgccacatca ctccaacctg ggcaacagaa caagaaacca 720
tctcnaacaa acnaac 736

<210> 2036
<211> 721
<212> DNA
<213> Homo sapiens

<400> 2036
ggagcgtcgt ggaaagcatt ggacacattt ccaccatgct aatggcattt taaatatatt 60
tggcaatttt cccaattttt tactgaagaa aactgtaagt ttatacttga ggactgaagt 120
gtgactctgc cgattatcag gctttcaaga tgaatctgga aaaactcagc aagcctgaac 180
tcctgacact atttagtatt cttgaaggag agcttgaagc aagggacctt gttatagaag 240
ccttaaaggc ccaacacaga gttactttca ttgaagaacg ctatggaaaa tataacatca 300
gtgatccttt aatggctcta cagagagatt ttgaaacact gaaggagaaa aatgatggcg 360
aaaagcagcc agtctgcaca aatccactct ctattcttaa ggttgtgatg aagcagtgca 420
agaacatgca ggagcgcatg ctgtcccagc tggctgctgc tgagagcagg caccgaaagg 480
tgatcctaga ccttgaggaa gaaaggcagc ggcatgcaca ggatacggct gaangagatg 540
atgtccctac atgctanaga aggaaagana gaagctgact caacagttgg aatttgaaaa 600
atcccaagtg aaaaagtttg aaaaagaaca gaanaanctc tctattccgc tggaaaaaga 660
acgctcccgc cacaagcagc tctcatccat gctantgctt gaattgcaan aaagccncaa 720
c 721

<210> 2037
<211> 781
<212> DNA
<213> Homo sapiens

<400> 2037
atttatgaat gtaatcaagt tcaaaagttc atcagccaca gttcttcagt ttcgccactt 60
caaagaattt actctggggt caaaacccac atatttaata aacataggaa tgattttgtt 120
gattttccat tgctgtcaca agaacagaaa gcacacatta ggagaaaacc ttacgaatgt 180
aatgagcagg gcaaagtctt cagagtgtct tcaagccttc ctaatcatca agtaatccac 240
actgcagata aacctaacag atgtcatgaa tgtggtaaaa ccgtcaggga caagtcaggc 300
ctcgcagaac attggagaat tcgtacaggg agagaaacct tacaaatgta aagagtgtgg 360
caagctcttc aatcgaattg cataccttgc acgacacgag aaagtgcata ctggagagag 420
tccttacaaa tgtaatgagt gtggcaaggt cttcagtcna attacatacc ttgtacgaca 480
tcagaaaaat tcatactaga naaaaaacct cataaatgta acaaatgtgg caaggtttat 540
agtancagtt catacctagc acaacattgg anaattcata caggananaa actttacaaa 600
tgttaataaa tgtggcaaaa aatttagtgg gcattcaagc ctcaccaccc atctgttaat 660
ccacactgga aaaaaacctt acaaatgtta agaatgtgac aaagctttta ggcacaantt 720
ctccctgaca gttcntcnaa aaaatcttaa tgggaaaaaa accttataan tntcctgaaa 780
t 781

0050204.0002

<210> 2038
<211> 780
<212> DNA
<213> Homo sapiens

<400> 2038
ttgcccagca agtgtgtggc tatcgactgt gagatggtgg gcacgggacc ccgagggcgg 60
gtaagcgagc tggcccgctg ttccattgtg agctaccatg gcgatgtcct ctatgacaag 120
tacatcaggc ctgagatgcc catcgctgac taccgtaccc gctggagtgg catcactcgg 180
cagcacatgc gcaaggctgt ccccttccag gtggcccaga aagagatcct taagctcctg 240
aagggcaagg tggtggtggg gcacgcgctg cacaacgact tccaggcgct caagtatgtc 300
caccctcgga gccagacccg ggataccacc tatgtcccaa acttcctcag cgagcccggc 360
ctccacaccc gggcccgggt ctctctaaag gacctggccc tgcagctgct gcacaagaag 420
atccaggtgg gccagcacgg gcactcatca gtagaagatg ccacgacagc catggagctc 480
taccggctgg tggangtgca gtgggaacag caggangccc gcagcctctg gacctgcccc 540
gangacagan aacctgacag cagcacagac atggaacagt acatggaaga acagtactgg 600
cccgatgacc tggcccacgg cagcanaaga agaaccaggg aagcacagga canaaggaat 660
tgaaaaaggg gcggggctcc ctggctgggc ttccngtgtn gccngtaaga aattgggggg 720
caagaaaaac aacgggcact ccttccctgg gcanggttgg ggcaggattc anttaaaccc 780

<210> 2039
<211> 629
<212> DNA
<213> Homo sapiens

<400> 2039
agcggcgggc aggccgggca tggcgtccat ggcggcggcg atcgcggctt cgcgctcggc 60
ggtcatgagc gggaaccggc ctctggacga ccgggagcga aagcgcttca cttacttctc 120
gtcgctgagc cccatggcca ggaagatcat gcaggacaag gagaagatcc gcgagaagta 180
cgggcccgag tgggcgcggc tgccgcccgc gcagcaggac gagatcatcg accggtgcct 240
ggtggggccg cgcgccccgg cgccccgaga ccccggggac tcggaggagc tcacgcgctt 300
ccccggcttg cgcgggccca cgggccagaa ggtggtgcgc ttcggggacg angatctaac 360
ttggcaagat gagcactctg ccccttttctc ctgggaaaca aagagtcaga tggagttcag 420
tatctccgcc ctatccatcc aggagccgag caacggcacc gccgccagcg agcccagacc 480
actgtccaaa gcttcccagg gctcccaggc cctcaagtcc tcccaaggca gcaggtcctc 540
cancctggac gccctgggcc ccaccaggaa ggaagangaa gcgtcattct ggaanatcna 600
tgctgaacgg tcccnaaggg gaagggcct 629

<210> 2040
<211> 524
<212> DNA
<213> Homo sapiens

<400> 2040
gtgctcggcg ttgagctcct gcagccgccg ccgctgcagt ggtcgtccct gccctccccg 60
gccccggggt gcaccccgca aggctcccgc tggtgtccct ggancatggg aggctgctga 120
ncgtgagtgg cggtgtctgg cagganctgc gtggcaggga nggcgtccat ggctgcancc 180

0538203.0037800

aacaagggca acaagcccag agtccggagt atccgctttg cggcaggcca cgatgcanaa 240
ggatcccaca gccacgtcca ctttgatgaa aaactgcatg actcggtggt catggtcacc 300
cagganagtg acagcagctt tctggtcaag gttggcttcc tgaanatcct gcacaggtat 360
gagattacct tcactctgcc cccactgcac aggctgagca aggatgtccg cgaggcacct 420
gtccccancc tgcacctcaa gctcctcagc gtggtgcccn tccctgaaag ttatantgtc 480
aagtgtgagt actcngcgca caaanaaggc gtcctcaaag aaga 524

<210> 2041
<211> 855
<212> DNA
<213> Homo sapiens

<400> 2041
gcttgctaac cacaaaaccc gccaggccgg tgcgggagct gcggagcatc cgctgcggtc 60
ctcgccgaga cccccgcgcg gattcgccgg tccttcccgc gggcgcgaca gagctgtcct 120
cgcacctgga tgacagcagg ggcgccgggg tcctctcgac gccagagaga aatctcatca 180
tccgtgcagc cttcttaaag caaactaaga ccagagggag gattatcctt gacctttgaa 240
gaccaaaact aaactgaaat ttaaaatgtt cttcgggggа gaagggagct tgacttacac 300
tttgggaatc agaggcaatg agcccgtata tacttcaact caagaagact gcattaattc 360
ttgctgttca acaaaaaaca tatcagggga caaagcatgt aacttgatga tcttcgacac 420
tcgaaaaaca gctagacaac ccaactgcta cctatttttc tgtcccaacg angaagcctg 480
tccattgaaa ccagcaaaag gacttatgag ttacaggata attacagatt ttccatcttt 540
gaccanaaat ttgccaagcc aagaattacc ccangaagat ctctcttaca tggccaattt 600
tcacaagcat cactccccta ncccatcatc acacagatta ttccaagccc accgatatct 660
catgganana cacactttct canaaatttg gattctcaag atccttggan aaactattta 720
agatngatga aacaattgcc actccttgct tataaggaaa aaggccatcc tccaaattcc 780
caaattttcc tctgatcaaa aaattactcc tctgctgcct nnaaaaatnt taatnccctc 840
cccactacgg tggcn 855

<210> 2042
<211> 577
<212> DNA
<213> Homo sapiens

<400> 2042
tggtagaccc aatgaaatcg aacctccacc cccagagatg ccaccgtggc agaagaggca 60
agatggcccc cagcagcaaa caggaggccg aggaggaggg agaggtggct atgaacattc 120
ctcatacgga ggacgaggag gtcatgaaca aggaggcggg agaggtggac gtggtggcta 180
tgaccatggt ggccgagggg gaggaagagg aaataagcat caaggaggct ggacagatgg 240
agggagtggt ggaggaggtg gctaccaaga tggtggttat cgagattcag gtttccagcc 300
aggtggctat catggtggcc acagcagtgg tggctatcaa ggcggaggtt atggtggctt 360
ccaaacatct tcttcatata caggaagtgg ataccagggt ggtggctacc agcaggacaa 420
tagataccaa gatggcgggc accatggtga tcgtggtggt ggtcgtggtg ggcgaagtgg 480
tcgtggaagc cgaagtggtc gtgcangcca nggangagct ggggangaag aaggaccaga 540
attatcncca agggggtcaa tttgaacagc atttcca 577

<210> 2043
<211> 836

0050204050

<212> DNA
<213> Homo sapiens

<400> 2043
gagtctctga ggaaggaatg tgatttggca agtcagggta ctaagcatgg gtgggaactc 60
ctgccttata aaaattgttt ttgtgttctt aaagataata tgttgttttt ctgttttttg 120
ttttttccat tttatgggga atttaaaaac cattcttgta tcagaaggtg aattaggcgc 180
atggtctttg ttttattaat aatttccact agagggtgtt ctcaggtcac tttgcagtga 240
agtggactta gttcctcctt gttctgtaca aaatgtctcc agactttgta aaggagctgc 300
ccagtttggc ctcctgtccc gaaaagaccc taataactag gcagagtgtt gtcctgcttt 360
cttcgtctcg taggatgtgc tatgattggt gccaggcctc actaacacag gggctacctg 420
tctcttattc tcagcacctg tgtcctgaga tacgctgcct gagacagaga gagtccctca 480
ttaacagcct gtgtggctgt cagcttttg cctaaattgt gattcagatg cttttgttct 540
ctctcctttc acttattgcc acagttgagg aaaagtgtca gattaccctg cagcaagaca 600
agccaaggac tgggagaaaa aaaaaaccac tctggaggca actgagaaaa tcactgcttt 660
tggataagga atcagtangg tgggctgttt tccctttggt tgaatcctac tnagaagtga 720
caagggaaag ggactcccaa gccccttttc aaggtaaact tatcaaagga gccccctgaa 780
aaccgggtaa gaagggcaac tngccaatnc ccttgggggg ggantaactc aaaaag 836

<210> 2044
<211> 749
<212> DNA
<213> Homo sapiens

<400> 2044
cttgtatata aaaatgctaa atgtacgttg aaacgataca ccaatcagac ttttgataaa 60
gtgatggggc ccatgttgga tgctgctaca aggaaaccta tctggcgaca tgaaatctta 120
gatgcagatg gtatttgttc tccaggtgag aaagtagaaa acaaacaagt gcttgtaaat 180
aagtccatgc ccacagtgac tcagattcct ttggaaggaa gtaatgtacc acagcaacca 240
cagtacaaag atgtacccat aacctacaaa ggagcaacag actcatatat tgaaaaagtg 300
atgatatctt caaatgctga agatgctttt ctgatcaaaa tgctgctgag acagacaagg 360
cgtccagaaa ttggagacaa attcagcagt cgtcatgggc aaaaaggtgt ttgtggcttg 420
atcgtccccc aggaagacat gccattttgt gattctggca tctgtccgga catcatcatg 480
aacccacacg gcttcccatc acgaatgacg gtggggaagc tcattgagct gctggctggc 540
aaggccggtg tgctggacgg cagattccac tacggcactg cgtttggagg cagtaaagtg 600
aangatgtgt gtgnggacct cgtttgccat gggtataact acttggggaa agactatgtt 660
acatccggca tcacangtgg agcccttata agcatacatc tattttgggc cccgtgtact 720
atcagaagct gnaacacatg gngctagat 749

<210> 2045
<211> 839
<212> DNA
<213> Homo sapiens

<400> 2045
gtttttactg tttgccggaa cagcgcacgg ctcaagttgt cgtctgggat ttgagagaag 60
actcaaggct gcattactct gtgacgctga gcgatggctt ctggacgttc cggaccgcca 120
cgttttccac cgatggaatc cttacctcag taaaccaccg aagccctctt caagcagtag 180

0962946 JP2008

aacctatctc aacgtccgtc cacaaaaagc agagctttgt gctttcaccc ttttctactc 240
aagaagaaat gtcaggtttg tccttccaca tcgcttcctt ggatgagagt ggggttctca 300
atgtatgggt ggttgttgaa ttaccaaagg cagacatcgc aggttcaata agtgatttag 360
gtctgatgcc tggagggagg gtcaagctgg tacatagtgc tctgatccag ttgggtgaca 420
gtctttctca taaaggtaat gaattttggg gcactacaca aacactgaat gttaaatttc 480
tgccttcaga tcctaatcac tttattattg gcacagacat gggtctcata agccatggca 540
caagacaaga tttgagagtg gctcccanac tattcaaacc tcagcaacat ggtataagac 600
cagtgaaagt taatgtcatt gatttttcac catttggaga accaatattt ttgggccggc 660
tgttcggacg gaagcatcaa ggctgcaaca actgagctcc gcgtttccgc tcctgcagtg 720
ggacaacagc acggacagcc atgcggtcac cggccctgca attggncccc caaaccaagg 780
cctggcccgt tgtttccctg gtgcaanggc caacacattc caaacaatcc tanaatcct 839

<210> 2046
<211> 773
<212> DNA
<213> Homo sapiens

<400> 2046
ttttttgtag agatgagctc tcactatgtc acccaggttc gtctcaaact cctgaaccct 60
agtaattctc ctatctcagc ctcccaaagt gctagggtta cagacatgag ccactgtgcc 120
tgtctagact tgtactttca actgtccatt tctccctgtc tgtcccatgg gcactcatga 180
aaaaacagaa tgctcccaac tttattcatc ttccaagcct gtagctcttg gtatactcac 240
tgttgcaagt cagaagcttg atttcatcat tgatgttttt ctcacgtttc acatctcact 300
catcaccaag tcatgttggt gttaatttct gattaaccct tgaatttacc gtcttctcat 360
cctctgtaca aaagcctcaa gtgagggtca aattcaacat tatcctgatc tagacagccc 420
ccattctcaa tccacccttt tccaagttga ttgcccaagg acttctaaca ataaactctc 480
ttttgcacca cagacttctt tgaaaatata catgctgttg accctctctg tagaaaaccg 540
cacacataaa acttaccaac agatttcatt ggttcttggg ttctcccgaa gcctatccat 600
ggtttataga ttaagaattg atgaggtagc tgggcacagt ggctcacacc tacgatcaca 660
gcacttcggg aaggctgaag caagcanatc acttgaggtc aaggagtttg agacaagcct 720
gggccaacaa tggggaaacc ctgtcctcaa ctaaaaattc aaanangtaa cca 773

<210> 2047
<211> 771
<212> DNA
<213> Homo sapiens

<400> 2047
tattagaagt tggatttctg gtgaaagggt ttgagtgttt ttgaggcttt ggcacagaat 60
acccagctgg tcccagaaag gtggttccca tttacctgcc cgaaggtaat tcacccttac 120
tgatactgag tactgttttc taaaagaaca ttaaaaattg gataggttaa aaacaggtga 180
atacattttt ttagttgcat ttttttggtt acccgtgaga gtgaacatgt tgccatgtgt 240
ttgctgacct cctaaatggt ctatttgctc ctacctttgt accccaaaag tctgctctca 300
agatggtagc cagaatgatc ctttttgaga cataagtcaa aatttcactc ttctccttaa 360
agctctgcaa tggttctcag gttaaaggcc aaagtcctgt tcaaggcctc cagggtcctc 420
accacttggt cccttgctct ttctgttcta gccaacttgg ccttctcctg cccctccgcc 480
gcaccatggc aatttccccc gctctgtgtg gtcaactacc tgaatctgtt caaagctttg 540
ctcaaatgtc tccttcctga tgagacctcc ccagcccctg agctccccat gccccactcc 600

0356203-20070800

tgatcgcctt acttaaacct tctttttctt ttttgccaag tagtacttat caccgtctaa 660
aatacttcat aatttacttg tttantggtt gcccctctcc aatagaatgg tagctccntg 720
ggggcaggga cctttggcct ttgnnctgtt caactgctgg ggtcccaagg t 771

<210> 2048
<211> 752
<212> DNA
<213> Homo sapiens

<400> 2048
aagatggccg ccccggctcg ggctgttttc agatgcttca agtgttgtga acagagactt 60
gtttggatta tgcatttctc agctagacta aataaatgct agcaatggat acgtgcaaac 120
atgttgggca gctgcagctt gctcaagacc attccagcct caaccctcag aaatggcact 180
gtgtggactg caacacgacc gagtccattt gggcttgcct tagctgctcc catgttgcct 240
gtggaagata tattgaagag catgcactca agcactttca agaaagcagt catcctgttg 300
cattggaggt gaatgagatg tacgtttttt gttacctttg tgatgattat gttctgaatg 360
ataacgcaac tggagacctg aagttactac gacgtacatt aagtgccatc aaaagtcaaa 420
attatcactg cacaactcgt agtgggaggt ttttacggtc cctgggtaca ggtgatgatt 480
cttatttctt acatgacggt gcccaatctc tgcttcaaag tgaagatcaa ctgtatactg 540
ctctttggca caggagaagg atactaatgg gtaaaatctt tcgaacatgg tttgaacaat 600
cacccattgg nagaaanaag caagaaagaa ccatttcaag gaaaaaaata gtagtaaaaa 660
ngagaagtaa agaaaaagac ggcagggaat tgggagtatc aagttaaagc anaattggga 720
aaagtangcc tccaagaaag agtttacgtt ta 752

<210> 2049
<211> 666
<212> DNA
<213> Homo sapiens

<400> 2049
ctagtgttaa attggaaaat atcaataatt aagagtattt tacccaagga gtcctctcat 60
ggaagtttac tgtgatgttc cttttctcac acaagtttta gccttttca caagggaact 120
catactgtct acacatcaga ccatagttgc ttaggaaacc tttaaaaatt ccagttaagc 180
aatgttgaaa tcagtttgca tctcttcaaa agaaacctct caggttagct ttgaactgcc 240
tcttcctgag atgactagga cagtcggtac ccagaggcca cccagaagcc ctcagatgta 300
catacacaga tgccagtcag ctcctggggt tgcgccaggc gcccccgctc tagctcactg 360
ttgcctcgct gtctgccagg aggccctgcc atccttgggc cctggcagtg gctgtgtccc 420
agtgagcttt actcacgtgg cccttgcttc atccagcaca gctctcaggt gggcactgca 480
gggacactgg tgtcttccat gtagcgtccc agctttgggc tcctgtaaca gacctctttt 540
tggttatgga tggctcacaa aatagggccc ccaatgctat ttttttttt ttaagtttgn 600
ttaattantt gttaaagatt gtctaaaggg caaaggnaat tgcgaaaatc aagtccgtca 660
agtaaa 666

<210> 2050
<211> 692
<212> DNA
<213> Homo sapiens

0356355 - 070208

<400> 2050
ttttgatgag cgggatcttc aatattcatg ttattttctc ctttggtctt atatgattgt 60
tacctttatg aagctttagt gattacaaag cacttttttt gtccattttt acctgagctt 120
tgtaaactct gatttgcagg atggctggct gtggtgaaat tgatcattca ataaacatgc 180
ttcctacaaa caggaaagcg aacgagtcct gttctaatac tgcaccttct ttaaccgtcc 240
ctgaatgtgc catttgtctg caaacatgtg ttcatccagt cagtctgccc tgtaagcacg 300
ttttctgcta tctatgtgta aaaggagctt catggcttgg aaagcggtgt gctcttcgtc 360
gacaagaaat tcccgaggat ttccttgaca agccaacctt gttgtcacca gaagaactca 420
aggcagcaag tagaggaaat ggtgaatatg catggtatta tgaaggaaga aatgggtggt 480
ggcagtacga tgagcgcact agtagagagc tggaagatgc tttttccaaa ggtaaaaaga 540
acactgaaat gttaattgct gggtttctgt atgtcgctga tcttgaaaac atgggtcaat 600
ataggagaaa tgaacatggg cgtcncaagg aagattaagc caagatataa taggatattc 660
caaaagnaaa ggganttaac tgggccttaa gg 692

<210> 2051
<211> 302
<212> DNA
<213> Homo sapiens

<400> 2051
tagagggcca ccttagcacc cgccgcgtcg cagctccggg actggccccg gccgcgacgc 60
cgccgcgatg ggcaacgccg ccgccgccaa gaagggcagc gagcaggaga gcgtgaaaga 120
gttcctagcc aaagccaagg aagatttcct gaaaaaatgg gagacccctt ctcagaatac 180
agcccagttg gatcagtttg atagaatcaa gacccttggn accggctcct ttgggcgagt 240
gatgctggtg aagcacaggg agagtgggaa ccactacgcc angaagatct tagacaggca 300
gn 302

<210> 2052
<211> 653
<212> DNA
<213> Homo sapiens

<400> 2052
cctgctgacc accgacgacg ccatggtctc catcgacccc accatgcccg cgaattcaga 60
acgcactccg tacaaagtga gacctgtggc catcaagcaa ctctccgaga gagaagaatt 120
aatccagagc gtgctggcgc aggttgcaga gcagttctca agagcattca aaatcaatga 180
actgaaagct gaagttgcaa atcacttggc tgtcctagag aaacgcgtgg aattggaagg 240
actaaaagtg gtggagattg agaaatgcaa gagtgacatt aagaagatga gggaggagct 300
ggcggccaga agcagcagga ccaactgccc ctgtaagtac agtttttgg ataaccacaa 360
gaagttgact cctcgacgcg atgttcccac ttaccccaag tacctgctct ctccagagac 420
catcgaggcc ctgcggaagc cgacctttga cgtctggctt tgggagccca atgagatgct 480
gagctgcctg gagcacatgt accacgacct cgggctggtc agggacttca gcatcaaccc 540
tgtcaccctc aagaggtggc tgttctgtgt ccacgacaac tacaggaaac aacccttcca 600
caacttccgg gactgcttct gcgtggccca agntgatgta cannatggtc tgg 653

<210> 2053
<211> 558
<212> DNA

EP 1 574 586 A2

<213> Homo sapiens

<400> 2053
aaacaaagag atgccacccc tgtgtgatgg ctttggtacc cgaacactga tggttcagac 60
attttcccgt tgcatcttgt gttccaagga tgaagtggac ttggatgagt tattagctgc 120
tagattggta acgtttctga tggacaatta ccaggaaatt ctgaaagtcc ctttggcctt 180
gcagacctct atagaggagc gtgtggctca tctacgaaga gtccagataa aatacccagg 240
agctgatatg gatatcactt tatctgctcc atcattttgc cgtcaaatta gtccagagga 300
atttgaatat caaagatcat atggctctca ggaacctctg gcagccttgt tggnggaagt 360
cataacagat gccagactct ccaacatnga gaaaaggaag agactgaanc agtttcagaa 420
atcctatcct gaagtctatc aagaacgatt tcctacacca gaaagtgcag cacttctgtt 480
tcctgaaaaa cccangccga aancacagct gctaatgtgg gcactaaaga agcctttcga 540
accatttcaa gagnacta 558

<210> 2054
<211> 738
<212> DNA
<213> Homo sapiens

<400> 2054
ctacatcaaa actcctcgga agatgttccg gcacacggac agcctctttc ccatcctact 60
gcagacgtta tcggatgaat cggatgaggt gatcctgaag gacctggagg tgctggcaga 120
aatcgcttcc tcccccgcag gccagacgga tgacccaggc cccctcgatg gccctgacct 180
ccaggccagc cactcagagc tccaggtgcc cacccctggc agagccggcc tactgaacac 240
ctctggtacc aaaggcttag aatgttctcc ttcaactccc accatgaatt cttactttta 300
taagttcatg atcaaccttc tcaagagatt cagcagcgaa tggaagctcc tggaggtcag 360
aggccctttc atcatcaggc agctgtgcct cctgctgaat gcggagaaca tcttccactc 420
aatggcagac atcctgctgc gggaggagga cctcaagttc gcctcgacca tggtccacgc 480
cctcaacacc atcctgctga cctccacaag agctcttcca gctaaggaac cagctgaagg 540
acctgaaaga ncctggagaa gccanaacct gttctgctgc ctgtaccgct cctggtgcca 600
aaacccagtc aacaaggtgt ccctctggtt cctcaaccaa gaactaccgg gaacgcctat 660
gacctcatcc aaaaatttgg ggacctggag ggcaacgtgg acttcctccc aaaaggtgga 720
naanctgggn gcaactga 738

<210> 2055
<211> 670
<212> DNA
<213> Homo sapiens

<400> 2055
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480

09/20/2005 08:50:50

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 600
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 660
nnnnnnnnnn 670

<210> 2056
<211> 615
<212> DNA
<213> Homo sapiens

<400> 2056
atgagcatca ccgaggagat ggcggaaaag atgaccgtgg ccaaggactc ctcggacctg 60
cctgaggagt cgcggcggga gctgctggag cagatagcag actgctgcat gcgccagggc 120
agctaccacc tggccaccaa gaagtacacg caggccggca acaagctgaa ggccatgagg 180
gcgctgctca aatccggaga cacggagaaa atcacgttct tcgcgagcgt gtccaggcag 240
aaggaaatct acatcatggc tgctaactac ctgcagtccc tggactggcg gaaggagccg 300
gagatcatga agaacatcat cggcttctac accaaggggc gggccctgga cctcctggct 360
ggcttttatg acgcttgtgc ccaggtggag attgatgaat accagaacta cgacaaagcc 420
cacggggcgc tgacttgagg cctacaagtg cctggccaag gccaaggcca agagcccccc 480
ggaccatgan gaccaggctg gcgcanctgc agagcaagat ggcactggtg aagaggntca 540
tccaagcccc gcaggacgtt cacagaggac cccaaggagt ccatcaagca gtgtganctg 600
ctcctggagg aanca 615

<210> 2057
<211> 724
<212> DNA
<213> Homo sapiens

<400> 2057
ctgggtctgg cttcagggca cagacttcat gccggacccc agctccgagt ggctgtaccg 60
ggtgacggtg gccaccatcc tctatttctc ctggttcaac gtggctgagg gccgcacccg 120
aggccgggcc atcatccact tcgccttcct cctgagtgac agcattctcc tggtggccac 180
ctgggtgact catagctcct ggctgcccag cgggattcca ctgcagctgt ggctgcctgt 240
gggatgcggc tgcttctttc tgggcctggc tctgcggctt gtgtactacc actggctgca 300
ccctagctgc tgctggaagc ccgaccctga ccaggtagac ggggcccgga gtctgctttc 360
tccagagggg tatcagctgc ctcagaacag gcgcatgacc catttagcac agaagttttt 420
ccccaaggct aaggatgagg ctgcttcgcc agtgaaggga taggtgaacg gcgtcctttg 480
aagcaggatc agacccagcc agcagagatg gagagtgact ctgttggcag aaggcaggcg 540
aggataagct aacgatgctg ctgtggcctc tatgcactca gcaagagcgg gacgcctgtg 600
ctgggccggg caccaaggat ggtgctgagt cgggcaaaag gnctcctttc aaggagttca 660
aaagtgaaca agatgagaan ggctggggcc ctgganggGt caagaagccc caatttatgt 720
tcaa 724

<210> 2058
<211> 791
<212> DNA
<213> Homo sapiens

0956450.02000

<400> 2058
taaaaaaccc gctccagcac ccccgaaacc gggcaaccca cctcctggcc accccggggg 60
ccagagttct tcaggaacat ctcagcatcc acccagtctg tcaccaaagc cacccacccg 120
aagcccctct cctcccaccc agcacacggg ccagcctcca ggccagccct ccgccccctc 180
ccagctctca gcaccccgga ggtactccag cagcttgtct ccaatccaag ctcccaatca 240
cccaccgccg cagcccccta cgcaggccac gccactgatg cacaccaaac ccaatagcca 300
gggccctccc aaccccatgg cattgcccag tgagcatgga cttgagcagc catctcacac 360
ccctccccag actccaacgc cccccagtac tccgccccta ggaaaacaga accccagtct 420
gccagctcct cagaccctgg caggggtaa ccctgaaact gcacagccac atgctggaac 480
cttaccgaga ccgagaccag taccaaagcc aaggaaccgg cccagcgtgc ccccaccccc 540
ccaacctcct ggtgtccact cagctgggga cagcaagcct caccaacaca gcaccaacag 600
cttccaagat agtaacaggg tttcagaacc gcatcgcagc atctttcctg aaatgcactc 660
agactcagcc agcaaagacg ttgcctgggc cgcatcctgc tggatataga caattgatac 720
cggagaagca ctgcccctgt tgaaggaaaa ggccctttc cangcccttc caacaanttt 780
ccaaccctgg n 791

<210> 2059
<211> 639
<212> DNA
<213> Homo sapiens

<400> 2059
angctcttag gctccacccg gccctgaaca gctggcttgt cttggngtct cttgtgccac 60
cctccccagg aacagnggct tccttgtatt ggcgccagcg atgatgggcc agctctgtgc 120
taaacggagt cttgctctgt tgcccaggct ggagtgcaat ggtgcgatct cggctcactg 180
cagtctccgc ctcttgggtt caggctcatc cacctgcaga catggggcgc agaaagtcaa 240
aacgaaagcc gcctcccaag aagaagatga caggcaccct cgagacccag ttcacctgcc 300
ccttctgcaa ccacgagaaa tcctgtgatg tgaaaatgga ccgtgcccgc aacaccggag 360
tcatctcttg taccgtgtgc ctagaggaat tccagacgcc cataacgtat ctgtcagaac 420
ccgtggatgt gtacagtgat tggatagacg cctgcgaggc ggccaatcag tagcgacaca 480
gaggacccgc cccctgagca gccccgcgta ctgtggatcc agctgttcgg ttctggtcca 540
nagacattcc aggggtccag ggtgtgggtc ctgggctgtc acagccgtgt gtgtgtgtgt 600
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt annggggtgt 639

<210> 2060
<211> 744
<212> DNA
<213> Homo sapiens

<400> 2060
cagctggcgg ccagtgctgg cttcaggagg ttgattacag tggcccttca ccgaggtcag 60
cagtatgaaa gcatggacca catccaagct gagctgtcgg ctagagtcat ggagctggcc 120
ccagctggga tgcccaccca gcagcaggtc ccctttctgt ctgtgggtgg ggacattggg 180
gtccggaccg ttcagcacca agactgcagc cccttgagcg gtgactatgt cattgaggat 240
gtgcaagggg atgacaagcg atacttccgt cgactgatct tcctcagcaa caggaatgtg 300
gtgcagtccg aagccaggtt gctgaaggat gtgtctcaca aagcccagaa gaagcggaaa 360
aaggacagga agaagcagcg gcctgctgat gcggaggacc tccctgcagc cccggggcag 420
tccattgata agagttacct gtgttgtgaa caccacaaag ccatgatcgc tggccttgcc 480

0052056-0052056

ctgctgagaa acccagagct actcctagag atcccactgg cattgttggt ggtaggcctg 540
ggcgggggca gcctcccccct ctttgtccac gatcaatttc caaagtcctg cattgatgct 600
gtggagatcg atccctccat gttggaagtg gccacccagt ggtttggctt ctcccagagt 660
gaccgaatga aggtccacat tgcagatggc ctggactata tcgccagctt ggcaggagga 720
ggagaacacg gccttgcttc naaa 744

<210> 2061
<211> 805
<212> DNA
<213> Homo sapiens

<400> 2061
annaaatatg ccccagatgg caaactttgt atacaacatg tacatgcatt tgatacagac 60
tacacatcat tatcatcaga ctttattaca actaccacct gctatggtag aagagggtga 120
ggaagttcaa aatcaagaaa cagaattgga aacagaagaa gaggccatga ctgttcaagc 180
tgacatcata cccagtccaa cagacaccag ctgccgtcaa gaaactccag cctttcaaac 240
tgacaccacc cccagtgaga caggagccac ttccactcca gaagccatcc ttgctttatc 300
tgagaccacc cctactgtgg taggagctgt atctgcaccg gcagaagcta acacacctca 360
ggatgccaca tctgccccag aagagaccaa gtagccaaac tgtagtcctt ctaaaggagg 420
acatggcagt caaaaagtct gagtaaagct gtttttgta ttttatattt gcttctgcca 480
ttttactgtc actaattaat gtttagttct tatatttgtt aactgatttc ggtgtcttga 540
atatattttt ttaaattatg tgtatgaaca attctagttt catttgttca atcagaagag 600
caaataacca ttcctttcat gttttgatca ctgagtgtgt ctgtaatcat acctacatta 660
aaatcatttt ctatgaatat ataatatata cttcacattt ttagtgaact tctctaaaga 720
agaggacaga atatactgga cttaaccacg aataccctg agtgtccaaa ttgggaagga 780
acttgnttct tctggtatac tatca 805

<210> 2062
<211> 805
<212> DNA
<213> Homo sapiens

<400> 2062
actgggctgt gcggagaaat cnacttacta aatnagagat taagaaagaa tactatgcgt 60
taactaaatt taatgttcac aaaaccagat ttggcttaac tgangcagga gatctgtctg 120
ctgaagacat gaagaaaatc cgccatctct ctctgattga attgactgcc ttttttgatg 180
cctttggaat tcaactgaaa aggaacaaaa cagagaaagt aaaaggacga gacaatggga 240
tttttggagt tccacttaca gtcctcctgg acggtgaccg aaagaaagac cctggagtga 300
aagttcccct ggtattacaa aaatttttg agaaagttga ggaatcaggt ctggaatctg 360
aaggaatttt tcgactttca ggatgtactg ctaaagtcaa gcaataccgt gaagaacttg 420
atgccaagtt taatgctgat aaatttaaat gggacaaaat gtgccataga gaagctgcag 480
taatgttgaa agcgtttttc agagaactac ccacctctct cttccctgtg gaatatatac 540
ctgccttcat cagtctaatg gaaagagggc ctcacgtcaa agtacagttt caagccttac 600
acctcatggt catggcgctg cctgatgcca acagagatgc agctcaggcc ctcatgacat 660
tcttcaataa agtgattgcc aatgaatcaa aaaaccgaat gagtctgtgg aacatttcta 720
cagtgatggc accgaacctt ttcttcagta gaagcaaaca ctctgattat gaagaattac 780
tggtagcaaa cactgggggc cacat 805

US 2005/0042600 A1

<210> 2063
<211> 599
<212> DNA
<213> Homo sapiens

<400> 2063
cagatagtag cgatagtgag tatatcagtg atgatgagca gaagtctaag aacgagccag 60
aagacacaga ggacaaagaa ggttgtcaga tggacaaaga gccatctgct gttaaaaaaa 120
agcccaagcc tacaaaccca gtggagatta aagaggagct gaaaagcacg tcaccagcca 180
gcgagaaggc agaccctgga gcagtcaagg acaaggccag ccctgagcct gagaaggact 240
tttccgaaaa ggcaaaacct tcacctcacc ccataaagga taaactgaag ggaaaagatg 300
agacggattc cccaacagtc catttgggcc tggactctga ttcagagagc gaacttgtca 360
tagatttagg agaagaccat tctgggcggg agggtcgaaa aaataagaag gaacccaaag 420
aaccatctcc caaacaggat ggcattggct agttgtaggt aaaactccac catccacgac 480
ggtgggcagc cattctcccc cggaaacacc ggtgctcacc cgctcttncg cccaaacttc 540
cgcggctggc gccacagcca ccaccagcac gtnctccacg gtcaccgtca cggncccgg 599

<210> 2064
<211> 791
<212> DNA
<213> Homo sapiens

<400> 2064
gcgtgccggg tgtcatggcg gcctgcaggt actgctgctc gtgcctccgg ctccggcccc 60
tgagcgatgg tcctttcctt ctgccacggc gggatcgggc actcacccag ttgcaagtgc 120
gagcactatg gagtagcgca gggtctcgag ctgtggccgt ggacttaggc aacaggaaat 180
tagaaatatc ttctggaaag ctggccagat ttgcagatgg ctctgctgta gtacagtcag 240
gtgacactgc agtaatggtc acagcggtca gtaaaacaaa accttcccct tcccagttta 300
tgcctttggt ggttgactac agacaaaaag ctgctgcagc aggtagaatt cccacaaact 360
atctgagaag agaggttggt acttctgata aagaaattct aacaagtcga ataatagatc 420
gttcaattag accgctcttt ccagctggct acttctatga tacacaggtt ctgtgtaatc 480
tgttagcagt agatggtgta aatgagcctg atgtcctagc aattaatggc gcttccgtag 540
ccctctcatt atcagatatt ccttgnaatg gacctgttgg ggcagtacga ataggaataa 600
ttgatggaga atatgttggt aacccaacaa gaaaagaaat gtcttctagt actttaaatt 660
tantggttgc tggagcacct aaaaagtcag attggcatgn tggaagcctc tgcagagaac 720
attttacagc aggacttttg ncatgctatc aaagggggag tgaaatatcc caacaaataa 780
ttnagggcat t 791

<210> 2065
<211> 650
<212> DNA
<213> Homo sapiens

<400> 2065
tctgaaatat ggcattgccc tcctcatctt acaggtggaa aaactgaagc ttgagataag 60
caacctaaac agtatcacac agctaatgag gagtcaaatg caggcctgcc tgtccccaaa 120
gtccagattc ttcctttcct agaatgtcag ggctagggaa gtgctgagac cctctggtct 180
acccccaccc cctaatttta tgaaagacaa ggataaagtc ccagggaaac aatgtgttca 240

09/02/2004 09:45:03

aggctaccca gtgacgcatg accccataca ggctctataa ggatgttaca ctcggtcatc 300
tctacatgcc tggtacctag cacaggatcc tggtacattg gaggtgcttg agtaactgtg 360
aatacaggaa catagtcatt taatagcaaa gctagagccc tgtcccccaa ggccagctta 420
ctgcctcccc tccccctcac gcctggcatc ccacctggat gtatgcatgg ttggtcggat 480
gaaactcctc cccaacagga ttaggacact cgccctcaca gcgataggcg ttgtactgct 540
tggggtagat gatccaggag ccccatncga tcaggttgaa gtccacctgg aacttgacct 600
tccgacacag ttgacttctg tctggcaagt gatgncgacg gtgcctnttg 650

<210> 2066
<211> 563
<212> DNA
<213> Homo sapiens

<400> 2066
agcgcgcggc tgatacccgg gactgggctg cggcggttag tcctctcccg gccgccgtcg 60
cctccgacat attgcccgca ggagctgcgg cggcgaagcg gagagcaccg gggggaggag 120
atgggaggac gaagaggtcc caacaggaca tcttactgtc gaaatccgct ctgtgagccg 180
ggatcctcgg ggggctctag tggaagccac acttccagtg caccggtgac cagtgttcgt 240
tcccgcacca ggagcagttc tggaacaggc ctctccagcc ctcctctggc cacccaaact 300
gttgtgcctc tacagcactg caagatcccc gagctgccag tccaggccag cattctgttt 360
gagttgcagc tcttcttctg ctagctcata gcactcttcg tccactacat caacatctac 420
aagacaggtgt ggtggtatcc accttcccac ccaccctccc acacctncct gaacttccat 480
ctgatcgggct tcaacttgct gatggtgacc accatcgttc tgggccgncg nttcattggg 540
tccatcgtga aggaggccta tca 563

<210> 2067
<211> 782
<212> DNA
<213> Homo sapiens

<400> 2067
tgagaacatt aagaaaagat tatgctcggt acagtaaaga ggaagaaatg gatgatatgg 60
atagagacct aggagatgaa tatggatgga aacaggtgca tggagatgta tttagaccat 120
caagtcaccc actgatattt tcctctctga ttggttctgg atgtcagata tttgctgtgt 180
ctctcatcgt tattattgtt gcaatgatag aagatttata tactgagagg ggatcaatgc 240
tcagtacagc catatttgtc tatgctgcta cgtctccagt gaatggttat tttggaggaa 300
gtctgtatgc tagacaagga ggaaggagat ggataaagca gatgtttatt ggggcattcc 360
ttatcccagc tatggtgtgt ggcactgcct tcttcatcaa tttcatagcc atttattacc 420
atgcttcaag agccattcct tttggaacaa tggtggccgt ttgttgcatc tgttttttg 480
ntattcttcc tctaaatctt gttggtacaa tacttggccg aaatctgtca ggtcagccca 540
actttccttg tcgtgtcaat gctgtgcctc gtcctatacc ggagaaaaaa tggttcatgg 600
agcctgcggt tattggttgc ctgggtggaa ttttaccttt tggntcaatc tttattgaaa 660
tgtatttcat cttcacgtct ttctggccat ataaagatct attatggcta tgggcttcat 720
gatgctggtg ctgggtatcc tgngcattgg gactgnctgn gtgactattg ggtgcacata 780
tt 782

<210> 2068
<211> 786

0002470-0002800 Original Document

0002703-030403

<212> DNA
<213> Homo sapiens

<400> 2068
aaaaaaaaaa aaacatatca gaatcacact gtggtttttc tgggatcaga gaagggaatc 60
atcttgaagt ttttggccag aataggaaat agtggttttc taaatgacag ccttttcctg 120
gaggagatga gtgtttacaa ctctgaaaaa tgcagctatg atggagtcga agacaaaagg 180
atcatgggca tgcagctgga cagagcaagc agctctctgt atgttgcgtt ctctacctgt 240
gtgataaagg ttccccttgg ccggtgtgaa cgacatggga agtgtaaaaa aacctgtatt 300
gcctccagag acccatattg tggatggata aaggaaggtg gtgcctgcag ccatttatca 360
cccaacagca gactgacttt tgagcaggac atagagcgtg gcaatacaga tggtctgggg 420
gactgtcaca attcctttgt ggcactgaat ggagtgattc gggaaagtta cctcaaaggc 480
cacgaccagc tggttcccgt caccctcttg gccattgcag tcatcctggc tttcgtcatg 540
ggggccgtct tctcgggcat caccgtctac tgcgtctgtg atcatcggcg caaagacgtg 600
gctgtggtgc ancgcaagga gaaggagctc acccactcgc gccggggctc catgagcagc 660
gtcaccaagc tnagcggcct ctttggggac actcaatcca aagacccaaa gccggangcc 720
atcctacgcc acttcatgca caacggcaaa gctcgccact cccggcaaca cggccaagat 780
gctnat 786

<210> 2069
<211> 770
<212> DNA
<213> Homo sapiens

<400> 2069
cacattctgg atctcagctg ctcttgaagg acagtgactt gttaccaccg caacagcaga 60
gcctgccatc cccaacagat caccagttgt ccctgacatc gtgccctacc ttgtctccct 120
ttgtggtctc ctaaatgccc atctcgttgg ccttggttcg gctagtggta tggaggggtg 180
ctgcctagca ctgacctgag agtgtgtgtg acccactgac ccaatggaca tcaaaggcca 240
gttctggaat gatgacgact cggagggaga taatgaatca gaggaatttc tctatggcgt 300
tcaggggaac tgtgcagccg acctgtatcg acacccacag cttgatgcag acattgaagc 360
cgtgaaggag atctacagtg agaactctgt atccatcaga gaatatggaa ctatcgatga 420
cgtggacatt gacctccaca tcaacatcag cttcctcgat gaggaagtct ctacagcctg 480
gaaggtcctn cggacagaac ctattgtgtt gaggctgcga ttttctctct cccagtacct 540
agatggacca gaaccatcca ttgaggtttt ccagccatca ataaggaag gatttgggct 600
gggtcttcag ttgaaaaaga tcctgggtat gtttacatcc caacaatgga aacatctgag 660
caatgatttc ttgaagaccc agcaggagaa gaggcacagt tggttcaagg caagtggtac 720
catcaagaag ttncgagctg gctcagcatn ttttnaccat tcccaagtct 770

<210> 2070
<211> 784
<212> DNA
<213> Homo sapiens

<400> 2070
atttaaatgg ttcaattgat ggcattcgcc acatgtttac ccctaagctt gaaataatgc 60
tggagcccaa ggtctggaga gaagctgcta ctcaagtgtt ctttgcctta ggtctgggat 120
ttggtggtgt cattgccttt tcaagctaca acaagagaga caacaactgc cactttgatg 180

ctgtcctggt gtccttcatc aatttttca cttctgtcct ggcaacattg gtggtgtttg 240
cagttctggg cttcaaagca aatgtcataa atgagaaatg cattacacaa aattcagaga 300
cgatcatgaa atttttgaaa atggggaaca ttagtcagga tattattccc catcatatca 360
acctttcaac tgttactgta gaagactatc atttagttta tgacatcatt caaaaagtga 420
aagaagaaga gtttcctgct cttcatctca attcctgtaa aattgaagaa gagctaaata 480
aagctgttca ggggaccggc ttagctttta ttgcctttac agaagcgatg acacattttc 540
ctgcatctcc cttctggtca gtgatgtttt tcctcatgct ggtcaatcta ggccttggca 600
gtatgtttgg aaccattgaa gggattgtca cgcctattgt ggacactttc aaagtgagga 660
aagaaattct tactggtatc tggtggcttc tggcattttg nattggcctg atattgngca 720
acgctctgga aattactttg gtacaatggt tgatgattat tctgctacac tgnctctgct 780
aaat 784

<210> 2071
<211> 788
<212> DNA
<213> Homo sapiens

<400> 2071
tgcaagtatg acttttgctg gatttgcctt gaagagtgga aaaaacatag ttcgtccact 60
ggaggttatt acagatgtac tcgctatgaa gtcattcaac acgtggagga gcaatccaag 120
gaaatgactg tggaggctga gaaaaaacac aaacgatttc aggaacttga cagatttatg 180
cactattata caagatttaa aaaccatgag catagttatc agctagaaca acgccttctt 240
aaaacagcca aagaaaagat ggagcaattg agcagagctc tcaaagaaac tgaaggaggc 300
tgtccagata ccactttcat tgaagatgca gttcatgtgc tcttaaaaac tcggcgcatt 360
ctcaagtgtt cttatccata tggatttttc ttggaaccta aaagcacaaa gaaagaaatt 420
tttgaactaa tgcaaacaga cctagaaatg gtcactgaag accttgccca gaaagtcaat 480
aggccttacc ttcgcacacc ccgccacaag atcatcaaag cagcatgcct tgtacagcag 540
aagaggcaag aattcctggc atctgtggct cggggagtag ctcctgcaga ctcaccagaa 600
gctccaaggc gcagctttgc tggtggaaca tgggattggg aatatttagg atttgcatca 660
ccagaggaat atgctgaatt tcagtatcgg aggaggcaca gacaacgtcg tcgaggagat 720
gttcacaggt ctactcagta atccttcaga ccctgttgag ccaagtgaaa gcactttaga 780
ttattccc 788

<210> 2072
<211> 762
<212> DNA
<213> Homo sapiens

<400> 2072
nactttcttc tgatgaagag atgaaaatgg cggagatgcg accancatta attgaaacct 60
ctattaacca gccaaaagtc gtagcactta gtaataacaa aaaagatgat acaaaggaaa 120
cagattcttt atcagatgaa gttacacaca atagcaatca gaataacagc aattgttctt 180
ctccatctcg gatgtctgat tcagtttctc ttaatactga tagtagtcaa gacacctcac 240
tctgctctcc agtgaaacaa actcatattg atattaattc caaaatcagg caagaagatg 300
aaaattttaa cagcctttta caaaatggag atattttaaa cagttcaaca gaggaaaagt 360
tcaaagctca tgataaaaaa gattttaact tacctgaata tgatttgaat gttgaagagc 420
gattagttct aattgagaaa agtgttgact caacagccac agctgatgac actcacaaat 480
tagatcatat caatatgaat cttaataaac ttataactaa tgatacattt caaccagaga 540

0052950.0078800

tcatggaaag atcaaaaaca caggatattg tgcttggaac aagcttttta agcattaatt 600
ctaaagagga aactgggcac ttggaaaatg gaaacaagta tcctaatttg gaatccgtaa 660
ataaggtaaa tggacattct gaggaaactt cccagtctcc taatcggacn ggaaccccat 720
gacagcgatt ggtcnccttg gacctcangt cctttcaaaa gc 762

<210> 2073
<211> 695
<212> DNA
<213> Homo sapiens

<400> 2073
aaatgcgtca aacctcgaca aggtgctaac agacatcaaa gctgacaaag accaagccaa 60
cgatggtctt tcctctgcat tgctgatctt gtacttggat tcagcaagga accttccgtc 120
agggaagaaa ataagcagca acccaaatcc tgttgtccag atgtcagttg ggcacaaggc 180
ccaggagagc aagattcgat acaaaaccaa tgaacctgtg tgggaggaaa acttcacttt 240
cttcattcac aatcccaagc gccaggacct tgaagttgag gtcagagacg agcagcacca 300
gtgttccctg gggaacctga aggtcccccc cagccagctg ctcaccagtg aggacatgac 360
tgtgagccag cgcttccagc tcagtaactc gggtccaaac agcaccatca agatgaagat 420
tgccctgcgg gtgctccatc tcgaaaagcg agaaaggcct ccagaccacc aacactcagc 480
tcaagtcaaa cgtccctctg tgtccaaaga ggggaggaaa acatccatca aatctcatat 540
gtctgggtct ccaggccctg gtggcagcaa cacagctcca tccacaccag tcattggggg 600
cagtgataag cctggtatgg aagaaaaggc ccagcccccc gaggccggcc ctnancggct 660
gcncgacctg ggcagaagct ccttcagcct tctgg 695

<210> 2074
<211> 608
<212> DNA
<213> Homo sapiens

<400> 2074
tacgcgctgc gggaccggca ggggaacgcc atcggggtca cagcctgcga catcgacggg 60
gacggccggg aggagatcta cttcctcaac accaataatg ccttctcggg ggtggccacg 120
tacaccgaca agttgttcaa gttccgcaat aaccggtggg aagacatcct gagcgatgag 180
gtcaacgtgg cccgtggtgt ggccagcctc tttgccggac gctctgtggc ctgtgtggac 240
agaaagggct ctggacgcta ctctatctac attgccaatt acgcctacgg taatgtgggc 300
cctgatgccc tcattgaaat ggaccctgag gccagtgacc tctcccgggg cattctggcg 360
ctcagagatg tggctgctga ggctggggtc agcaaatata cagggggccg aggcgtcagc 420
gtgggcccca tcctcagcag cagtgcctcg gatatcttct gcgacaatga gaatgggcct 480
aacttccttt tccacaaccg gggcgatggc acctttgtgg acgctgcggn cagtgctgtg 540
tggacgaccc ccaccagcat ggcgaggtgt ngcctgctga cttaaccgtg atggcaaagn 600
ggacatcg 608

<210> 2075
<211> 819
<212> DNA
<213> Homo sapiens

<400> 2075

0352456.0002000

tatccctgtt cagtactgcg cccagcccac caatggcatg gtgtatttcc gggccttctc 60
cagcctgaac acactccccg aggagctgag gccctatgtg ccccccttct gcagcatcct 120
caccaagctg ggctgcggcc ttcttgacta ccgggagcag gctcagcaga tagaattgaa 180
gaccggaggg atgagtgctt ctccccacgt gctccccgac gactcacaca tggacaccta 240
cgagcagggt gtgcttttct cctctctctg cctggatcga aacctgccag acatgatgca 300
gctatggagt gaaatattta acaacccgtg ctttgaagaa gaggagcact tcaaggtgct 360
ggtgaagatg accgcccagg agctcgccaa tggaattcct gactctgggc acctgtacgc 420
atccatcagg gcaggccgga ccctcacgcc cgcaggggac ctgcaggaga ccttcagcgg 480
gatggatcag gtgcggctga tgaagaggat tgcagaaatg acagatatca aacccatcct 540
gaggaagctc ccgcgtatca agaaacactt gntaaatggt gataatatga ggtgttcagt 600
gaatgcgact cctcagcaga tgcctnagac aggaaaaagc ggtcgaagac ttccttagaa 660
gcatcggtcg gagtaaaaag gaacggangc ctgtgcgccc acacacggtc gagaaacctg 720
tgcccagcag ctctggtgga gatgcccacg tccccatgng ttccaggtca ttaggnaact 780
ggcatgggaa cccacttnaa gcctggcaga tgaaaactc 819

<210> 2076
<211> 741
<212> DNA
<213> Homo sapiens

<400> 2076
gtgatccggg gagacaggaa cacgggcaag acagcgctgt ggcaccgcct gcagggccgg 60
ccgttcgtgg aggagtacat ccccacacag gagatccagg tcaccagcat ccactggagc 120
tacaagacca cggatgacat cgtgaaggtt gaagtctggg atgtagtaga caaaggaaaa 180
tgcaaaaagc gaggcgacgg cttaaagatg gagaacgacc cccaggaggc ggagtctgaa 240
atggccctgg atgctgagtt cctggacgtg tacaagaact gcaacggggt ggtcatgatg 300
ttcgacatta ccaagcagtg gaccttcaat tacattctcc gggagcttcc aaaagtgccc 360
acccacgtgc cagtgtgcgt gctggggaac taccgggaca tgggcgagca ccgagtcatc 420
ctgccggacg acgtgcgtga cttcatcgac aacctggaca gacctccagg ttcctcctac 480
ttccgctatg ctgagtcttc catgaagaac agcttcggcc taaagtacct tcataagttc 540
ttcaatatcc catctttgca gcttcagagg gagacgctgt tgcggcagct ggagacgaac 600
cagctggaca tggacgccac gctggaggag ctgtcggtgc agcaggagac ggaggaccag 660
aactacggca tctttctcgg aaatgatgga ggctccaanc cngggccatt gcgtncccaa 720
ttggccggct taacgggcag a 741

<210> 2077
<211> 819
<212> DNA
<213> Homo sapiens

<400> 2077
ncttgaggcg taggggtgg ccgctctccg ttcggcggcg ctcccntggn gcacattacc 60
attaaccagt acctgcagca ggtgtacgaa gccatcgaca gcagagatgg agcatcttgt 120
gcagagttgg tgtcttttaa acatcctcat gttgcaaacc cacgacttca aatggcctct 180
ccagaggaga agtgtcaaca agtcttggaa ccccccttatg atgaaatgtt tgcagctcat 240
ttaaggtgca cttatgcagt ggggaatcat gacttcatag aggcatacaa gtgccagacc 300
gtgatagtcc aatcattctt gcgagcattc caggcccaca aagaagaaaa ctgggctctg 360
cctgtcatgt atgcagtagc gcttgacctt cgagtgtttg ccaataatgc agatcaacag 420

0000200-0000000-0000000

ttggtaaaga aaggaaaaag caaagttggg gacatgttgg aaaaagcagc agagttactg 480
atgagctgtt tccgggtctg tgccagcgac acccgtgctg gtatagagga ctctaagaag 540
tggggcatgc tgtttctggt gaaccagctg tttaaaatct acttcaagat caacaaactc 600
catttatgta aacccctaat tagagcaatt gacagctcaa acctgaaaga cgattacagc 660
actgcacaga gagtaacata caaatactac gttggacgca aggctatgtt tgacagcgat 720
tttaagcaag ctgaggagta cctgncattt gcctttgaca tttcacccgt ctagtcagaa 780
gaacaaaagg atgatctgac tattgctttc agtaaaaan 819

<210> 2078
<211> 557
<212> DNA
<213> Homo sapiens

<400> 2078
ccaatnccat gtctgggctc ggaggctgac agngaccgca ggacccatcc gactctgggc 60
cttcgggggc caatcctggg gagcccccac actcccctct tcctgcccca tggcttggag 120
cccgaggctg ggggcacctt gccctctcgc ctgcagccca ttctcctcct ggacccctca 180
ggctctcatg ccccgctgct gactgtgccc gggcttgggc ccttgccctt ccactttgcc 240
cagtccttaa tgaccaccga gcggctctct gggtcaggcc tccactggcc actgagccgg 300
actcgctcgg agcccctgcc ccccagtgcc accgctcccc caccgccggg ccccatgcag 360
ccccgcctgg agcagctcaa aactcacgtc caggtgatca agaggtcaag ccaagccgag 420
tgagaagccc cggctgcggc agataccctc ggctgaagac ctggagacag atggcggggg 480
accgggccag gtggtggacg atggcctgga gcacanggga gctgggccat gggcagcctg 540
aaggcagaag ccccngn 557

<210> 2079
<211> 759
<212> DNA
<213> Homo sapiens

<400> 2079
agtgttcgga gccaggggcc tgggggcaag attgttacct gtgcacaccg atatgaggca 60
aggcagcgag tggaccagat cctggagacg cgggatatga ttggtcgctg ctttgtgctc 120
agccaggacc tggccatccg ggatgagttg gatggtgggg aatggaagtt ctgtgaggga 180
cgcccccaag gccatgaaca atttgggttc tgccagcagg gcacagctgc cgccttctcc 240
cctgatagcc actacctcct ctttggggcc ccaggaacct ataattggaa ggggttgctt 300
tttgtgacca acattgatag ctcanacccc gaccagctgg tgtataaaac tttggaccct 360
gctgaccggc tcccaggacc agccggagac ttggccctca atagctactt aggcttctct 420
attgactcgg ggaaaggtct ggtgcgtgca gaagagctga gctttgtggc tggagccccc 480
cgcgccaacc acaagggtgc tgtggtcatc ctgcgcaagg acagcgccag tcgcctggtg 540
cccgaggtta tgctgtctgg ggagcgcctg acctncggct ttggctactc actggctgtg 600
gctgacctca acagtgatgg ctgccagacc tgatagtggg tgccccctac ttctttgagc 660
gccaagaaaa acttgggggt gctgngtatg tgacttgacc aagggggtca ctggctggat 720
ctcoctttcg gttttgngnt ccctgctcat ttcggatca 759

<210> 2080
<211> 791
<212> DNA

0050-0050-0050

<213> Homo sapiens

<400> 2080
ncaagcccag catcagcctc tcagcccccg acatcctgcc tntntctgca ccatccgccg 60
gcaaccgctc ccggacagcg gccaggccgc ggggaggctg gtcctggagc ccatccccgg 120
ggcgcacatc tccgtcaact tctccgaggt ggggcacagg accgtggtgc tgcaccacgg 180
ggacctgctc tccctggggc tctactacct gctgctattc aaggaccccg cgcaggccca 240
gcccctgccc gcccgggcct tggcgcgcct ccgggctgtg ccgcagagct gccggctgtg 300
cggggccgcg ctcggggccc ggggagccgn ctcccctact caggccgncc tgccccggcg 360
ccagcagctg ctcctggagt ttgagcccca cctggaggac acgctgctgc agaggatcat 420
gacgttgatc gagccggggg gcgacgacca caagctgacc cccgncttcc tcctgtgcct 480
ctgcatccag cactcggcca cccacttcca gncgggcaca ttcgggcagc tcctgctcaa 540
gatagccagg ctgatccgcg agactgtctg ggagaaaacc aaagaactag cagagaagca 600
ggcgcaactc caggagccca tctcgctggc cagctgcgcc atggctgatc tggttccaga 660
cttgcagccc attcttttct ggatgtctaa ctcatnagct ctgtacttta tcagcagaat 720
gccatntaca tgcagacatg gangacactg gcatacaggt cgaagatcgt gttctgacct 780
tacgcagcag a 791

<210> 2081
<211> 815
<212> DNA
<213> Homo sapiens

<400> 2081
tccaggctct gctcagtgga cgccaggcaa aggggctgac ctcanggcgc tggttcctac 60
gccagggctg gctgttagtg gtgcctcccc atggggagcc tcggccccgc atgttcttcc 120
tcttcactga tgtgctcctc atggccaagc ctcggcctcc actgcacctg ctgcggagtg 180
gcacctttgc ctgcaaggcc ctctacccca tggcccagtg tcatctcagc agggtctttg 240
gccactcagg aggcccttgt ggtgggttgc tcagtctgtc cttccctcat gagaagctac 300
tgcttatgtc cacagaccag gaggagctgt cacgctggta ccacagtctg acttgggcta 360
tcagcagcca gaaaaactag aggaatctta tagattccag aactcaggat acctcaggga 420
gaggtcacag ccaagagtac aaaggaatct tcagtactga acaaaacaga acccttcatg 480
atttgacaaa ggtcactttc tgtttgcctg gaccaagcta ctccagatca tctgactaac 540
tcttaaaaat cacggccagg cacagtggct catgcctgta atcccagcac tttgggaagc 600
agaggtggca ggatcattcc agcccaggag ttcaagacca gcctgggcaa cacagtgagt 660
gagaccctgt ctctatttaa gaaaaaataa ttaagaaatt ttattaaaaa agaagaatca 720
ggaaaccaag tncaacccaa ctaaacctaa atgaaccagc ccctaacaca gatganggga 780
tttgggactg ataactttgg ctgggtccat ggccc 815

<210> 2082
<211> 817
<212> DNA
<213> Homo sapiens

<400> 2082
tgatgaatgg ctccaaaata cattttgtgc ccggctggga ttgttatggg ttgcccattg 60
aaataaaagt attatcagaa cttggtagag aagctcagaa tctttcagct atggaaatta 120
gaaagaaagc tagatcattt gctaaagcag ccattgagaa acagaaatca gcatttattc 180

0005205.0005205

gttggggaat aatggcagat tggaataatt gctactatac atttgatggg aagtatgaag 240
ccaaacagtt gagaactttt taccaaatgt atgataaggg cttggtttat cgatcttaca 300
aacctgtgtt ttggtctccg tcatctagga ctgcattggc tgaagcagaa cttgaatata 360
atcctgagca tgtcagtcgt tcaatatatg taaaatttcc tctcttaaag ccttctccaa 420
aattggcatc tcttatagat ggttcatctc ctgttagtat tttggtctgg accacacaac 480
cttggacgat tccagccaat gaagctgttt gctatatgcc tgaatcaaag tatgctgttg 540
tgaaatgttc taagtctgga gacctctacg tactggcggc agataaagta gcatctgttg 600
cttctacttt ggaaacaaca tttgagacta tttcaacact ttcaggtgta gatttggaaa 660
atggtcttgc agtcatccat taattcctga taaagcctct cctcttttac ctgcaaatca 720
tgtgaccatg gcaaaaggaa cgggattggn tcacacagnc ccagctcatg gtatggaaga 780
ctaccggtgg aaccgcttac cacaacctgn ccatggc 817

<210> 2083
<211> 821
<212> DNA
<213> Homo sapiens

<400> 2083
tgacaaacag ctggagctct tggctcaaga ctataagctg ctanttaagc agattacgga 60
ggaagtggag aggcaggtgt cgactgcaat ggccgaggag atcaggcgcc tctctgtact 120
ggtggacgat taccagatgg acttccaccc ttctccagta gtcctcaagg tttataagaa 180
tgagctgcac cgccacatag aggaaggact gggtcgaaac atgtctgacc gctgctccac 240
ggccatcacc aactccctgc agaccatgca gcaggacatg atagatggct tgaaacccct 300
ccttcctgtg tctgtgcgga gtcagataga catgctggtc ccacgccagt gcttctccct 360
caactatgac ctaaactgtg acaagctgtg tgctgacttc caggaagaca ttgagttcca 420
tttctctctc ggatggacca tgctggtgaa taggttcctg ggccccaaga acagccgtcg 480
ggccttgatg ggccacaatg accaggtcca gcgccccatc cctctgacgc cagccaaccc 540
cagcatgccc ccactgccac agggctcgct cacccaggag gagttcatgg tttccatggt 600
taccggcctg gcctccttga catccaggac ctccatgggc attcttgttg ttggaggagt 660
ggtgtggaag gcagtgggct ggcggctcat tgccctctcc tttgggctct atggcctcct 720
ctacgtctat ganccgtctg acctggacca ccaaggccaa ggagagggcc ttcaagcgcc 780
agttttgtgg aacatgccca ccgagaactt gcagnttgtc c 821

<210> 2084
<211> 687
<212> DNA
<213> Homo sapiens

<400> 2084
ccaatcccat tctgggctcg gaggctgaca gtgaccgcag gacccatccg actctgggcc 60
ttcgggggcc aatcctgggg agcccccaca ctcccctctt cctgccccat ggcttggagc 120
ccgaggctgg gggcaccttg ccctctcgcc tgcagcccat tctcctcctg gacccctcag 180
gctctcatgc cccgctgctg actgtgcccg ggcttgggcc cttgcccttc cactttgccc 240
agtccttaat gaccaccgag cggctctctg ggtcaggcct ccactggcca ctgagccgga 300
ctcgctcgga gcccctgccc cccagtgcca ccgctccccc accgccgggc cccatgcagc 360
cccgcctgga gcagctcaaa actcacgtcc aggtgatcaa gaggtcagcc aagccgagtg 420
agaagccccg gctgcggcag ataccctcgg ctgaagacct ggagacagat ggcgggggac 480
cgggccaggt ggtggacgat ggcctggagc acagggagct gggccatggg cagcctgagg 540

0962945.0720

ccagaggccc cgntcctctc cagcagcacc ctcaggtgtt gctctgggaa cagcagcgac 600
tggctgggcg gttccccggg gcagcaccgg ggacactgng ctgnttctct ggcccaaggt 660
gggcaccggc ctntgtcccc gggctaa 687

<210> 2085
<211> 762
<212> DNA
<213> Homo sapiens

<400> 2085
nccgaggtct ctgcagacaa actggtggca ctggggctgt tcagccagca ctttaatttg 60
gccaccttca ataagctcgt ctcctatcga aaagccatgt accatgctct ggagaaagct 120
agggtgcgag ctggcaagac cttccccagc agccctggag actcattgga ggaccagctc 180
aagcccatgt tggagtgggc ccacgggggc ttcaagccca ctgggatcga gggcctcaaa 240
cccaacaaca cgcaaccagt ggttaataag tcgaaggtgc gtcgtgcagg cagtaggaaa 300
ttagaatcaa ggaaatacga gaacaagact cgaagacgca cagctgacga ctcagccacc 360
tctgactact gncccgcacc caagcgcctn aagacaaatt gctataacaa cggcaaagac 420
cgaggggatg aagatcagag ccgagaacaa atggcttcag atgttgccaa caacaagagc 480
agcctggaag atggctgttt gtcttgtggc aggaaaaacc ccgtgtcctt ccaccctctc 540
tttgaggggg ggctctgtca gacatgccgg gatcgcttct tgagctgttt tacatgtatg 600
atgaccatgg ctatcagtct tactgcactg tgtgctgcga gggccgagag ctgctgcttt 660
gcagcaacac gagctgctgn cggtgtttct gtgtggagtg cctggaggtg ctggtgggca 720
caggcacang ggcccaggnc aagcttaagg agccctggac tg 762

<210> 2086
<211> 710
<212> DNA
<213> Homo sapiens

<400> 2086
ctgccaaatg gacccatctc actgagtttg aactgaaggg cctgaaagct ctggtggaga 60
aactggaatc cctcccggag aacaagaagt gcgtccccga gggcatcgag gacccccagg 120
cactcctgga gggtgtgaag aacgtcctga aggagcacgc agatgatgac cctagtctgg 180
ccatcactgg ggtccctgtg gtgacttggc caaagaagac tccaaagaac cgggctgtgg 240
gtcggcccaa ggggaagctg ggcccggcct ccgcggtgaa gttggccgcc aaccggacaa 300
cggcaggagc tcggcggcgc cggacgcgat gccgcaagtg cgaggcctgc ctgcggaccg 360
agtgcggaga gtgccacttc tgcaaggaca tgaagaagtt cgggggcccc gggcgcatga 420
agcagagctg catcatgcgg cagtgcatcg cgccagtgct gccccacacc gccgtgtgcc 480
ttgtgtgtgg cgaggcggng aaggaagaca cggtggaaga ggaggaaggc aagtttaacc 540
tcatgctcat ggagtgctcc atctgcaatg aaatcatcca ccctggatgc cttaagatta 600
aggagtcaga gggtgtggtc aacgacgagc ttcaaactgn tgggagtgtc cgaagtgtaa 660
ccacgccggc aagacccgga aacaaaagcg tggnccttgg ntttaagtac 710

<210> 2087
<211> 698
<212> DNA
<213> Homo sapiens

09623469 - 07-2006

<400> 2087
ctgcngagat aaatggttca gccctatgta gctacaacct aaagccttnt gaatacacta 60
catctccaaa atcttctgtt ctctgcccca aactaccagt cccagcgagt gcacctattc 120
cattcttcca tcgctgtgct cctgtgaaca tttcctgcta tgccaagttt gcagaggccc 180
tgatcacctt tgtcagtgac aatagtgtct tacacaggct gattagtgga gtaatgacca 240
gcaaagaaat tatattggga ctttgcttgt tatcactagt tctatccatg attttgatgg 300
tgataatcag gtatatatca agagtacttg tgtggatctt aacgattctg gtcatactcg 360
gttcacttgg aggcacaggt gtactatggt ggctgtatgc aaagcaaaga aggtctccca 420
aagaaactgt tactcctgag cagcttcaga tagctgaaga caatcttcgg gccctcctca 480
tttatgccat ttcagctaca gtgttcacag tgatcttatt cctgataatg ttggttatgc 540
gcaaacgtgt tgctcttacc atcgccttgn tccacgtagc tggcaaggtc ttcattcact 600
tgccactgct agtcttccaa cccttctgga ctttctttgc tcttggcttg gtttgggtgn 660
actggatcat gacacttntt tttcntggca ctacccgg 698

<210> 2088
<211> 718
<212> DNA
<213> Homo sapiens

<400> 2088
ntgaccgcct cctcggacaa ggcttttgaa gactggctga atgatgacct cggctcctat 60
caaggggccc aggggaatcg ctacgtgggg tttgggaaca cgccaccgcc tcagaagaaa 120
gaagatgact tcctcaacaa cgccatgtcc tccctgtact cgggctggag cagcttcacc 180
actggagcca gccggtttgc ctcggcagcc aaggagggcg ctacaaagtt tggatcccaa 240
gcgagtcaga aggcgtccga gctgggccac agcctgaacg agaacgtcct caagcctgcg 300
caggagaagg tgaaggaggg aaagattttt gatgatgtct ccagtggggt ctctcagttg 360
gcgtccaagg tccagggagt cggtagtaag ggatggcggg acgtcaccac ctttttttcg 420
gggaaagcag agggcccctt ggacagcccc tcggagggcc acagttatca gaacagcggt 480
ctggaccact tccaaaacag caacatagac cagagcttct gggagacctt tggaagtgct 540
gagcccacca agacccgcaa gtccccgagc agcgacagct ggacgtgcgc ggacaccttc 600
accgagagga ggagctcgga cagctgggag gtgtggggct cggnctcacc aacaggaaca 660
gcaacagcga cggcggngag gccggngagg gcaccaagaa ggcagtgccc gccggccg 718

<210> 2089
<211> 725
<212> DNA
<213> Homo sapiens

<400> 2089
cacttctgga agaacccgaa agatgtggct gcgcccacgc ccatggcctc tcaggggccc 60
caggcctggg acgtgaccac cactaactgc tcagccaata tcaacttgac ccaccagccc 120
tggttccagg tcctggagcc gcagttccgg cagtttctct tctaccgcca ctgccgctac 180
ttccccatgc tgctgaacca cccggagaag tgcaggggcg atgtctacct gctggtggtt 240
gtcaagtcgg tcatcacgca gcacgaccgc cgcgaggcca tccgccagac ctggggccgc 300
gagcggcagt ccgcgggtgg gggccgaggc gccgtgcgca ccctcttcct gctgggcacg 360
gcctccaagc aggaggagcg cacgcactac cagcagctgc tggcctacga agaccgcctc 420
tacggcgaca tcctgcagtg gggctttctc gacaccttct tcaacctgac cctcaaggag 480
atccacttcc tcaagtggct ggacatctac tgcccccaca tccccttcat tttcaaaggc 540

0626460-070800

gacgatgacg tcttcgtcaa ccccaccaac ctgctagaat ttctggctga ccggcagcca 600
caggaaaacc tgttcgtggg cgatgtctgc agcacgctcg gccattcgca ggaaagacaa 660
caaatactac atcccggggg cccctgtacg ggaaggncag ctattccggn cgnatgcaag 720
ggcgg 725

<210> 2090
<211> 672
<212> DNA
<213> Homo sapiens

<400> 2090
ccgttgtccc gaagagcgag atcgagcttg gccccctccc ccccntcctt ccctccctcc 60
ttccttccgc cgcaacatgg ctaacaacag ccccgcgctg acaggcaact cgcagccgca 120
gcaccaggcg gctgcagctg cggctcagca acagcagcag tgcggcggcg gcggcgctac 180
caagccggcg gtctccggca agcagggcaa tgtgctcccg ctctggggca gcgagaagac 240
catgaacctc aaccccatga tcctgaccaa catcctgtcg tcgccttact tcaaagtaca 300
gctctacgag ctcaagacct accacgaggt ggtggacgag atctacttta aggtcacgca 360
cgttgaacca tgggagaaag gaagcaggaa aacagcgggc cagacaggga tgtgcggagg 420
ggttcgaggt gttggaacag gaggaattgt ttctacagca ttttgcctgt tatacaaatt 480
atttaccctg aagttaactc gaaagcaagt gatgggtctt ataacacaca cagactctcc 540
atatattaga gcgcttggat ttatgtatat aagatataca cagccccta cagatctgtg 600
ggactggttt gaatccttcc ttgatgatga agaggaccta gatgtgaagg ctggnnggag 660
gcttgngtaa tg 672

<210> 2091
<211> 678
<212> DNA
<213> Homo sapiens

<400> 2091
naaaaaaaaa aaaaacaatg gtacattttt acatgggaac aaaaggncct gaaaatcctc 60
aagttgaagt gttatcagag gaagaagggg aagaagaaga ggaggaagaa gatatcctct 120
ctctggcaga agaaaaatac aggccagctg cccttgaaaa gatgatagct ttagttgctc 180
ttttggttga acagtctcga tcagaaaggc atttgacatt atcacagact gacatggcag 240
cattaacagg aggaaaggga tttcccttct tgtttcaaca tattcgtgat ggcatcaata 300
taagacaaac ttgtaatctg attttcagcc tgtgtcgata caataatcga cttgcagaac 360
atattgtatc tatgcttttc acatcaatag caaagttgac tcctgaggca gccaatcctt 420
tctttaagtt gntgactatg ctaatggagt ttgctggtgg acctccagga atgcctccct 480
ttgcatctta tattctgcan aggatatggg aggtgattga atacaatcct tctcagtgtc 540
tagattggtt ggcagtgcag acaccccgaa ntaaactggc acacagctgg gtcttacaga 600
atatggaaaa ctggntcgag cggtttcttt tggctcacaa ttatcctaaa gtgaggactt 660
ctgcagctna tnttctgg 678

<210> 2092
<211> 665
<212> DNA
<213> Homo sapiens

0050050.0012000

<400> 2092
ctcagtcacc ctgtggcaga gcccagctcg agccaggctg gcagcatgag cagtgcaggc 60
ccaagaccac tacccagtgg cccagcatcc cccaaacgca agctggaagc agccgaggaa 120
ccacctggtg aagaactcag caaacgggcc cgggtggcag agttgccaac cccagagctg 180
ccgagcaagg atgcctgaga ctgcagagcc cttgctccgt gagcaaagcc tgggtgccca 240
agcagccacc gcagcagcag agtacaacct gcagagaagc tgatcaccgg gcagagatag 300
agcgagcatg tgtgtgtgtg tgcgcgtgtg cagaggaggg agtggtgtgc ctgtttgtgt 360
gtgcatgcat ctgttgacac tcatgattct gaatgttgcc tgggctgggg gagtacctgt 420
agcacgccag tgctgtttcc cggcctccag acacaaggct cgaggttatg gcagtgactt 480
tcagctgaga cctgttcctg caagccagct gccttgtctg aacagaacgt agtggtagga 540
ccctagctgg gattctggca tctgcctccc tagacctcct tccctccctt ctnacgtcag 600
gcttgtggaa gcaggagcac aagcagttct tggctgnttg tccaaagcat tgggnatttt 660
tggga 665

<210> 2093
<211> 701
<212> DNA
<213> Homo sapiens

<400> 2093
ctctcttgga actcaatgac tctcctgtct tcaaaaccgt nttggaaaga atgcagcgtt 60
tcttctctac cctctatgaa aactgttttc atatcctagg gaaggcaggc ccttccatgc 120
agcaagactt ctatactgtg gaggaccttg ctacccagct tctcagctca gcctttgtca 180
acttgaacaa tattcctgac taccgactca gacccatgct tcgggtcttt gtaaagcctc 240
tggtgctctt ctgtccccca gagcactatg aagccctggt atcccccatc ctcggacctc 300
tttcacctac ctccatatga ggctttctca gaaatggcaa gttatcaacc aaaggagcct 360
gctgtgtgga gaagatgagg ctgcagatga aaacccagag tctcaagaga tgctggagga 420
gcaactggtg aggatgttaa cccgagaagt catggaccta atcacggttt gctgtgtttc 480
aaagaagggt gctgaccaca gtagtgctcc cccagcagat ggagacgatg aagaaatgat 540
ggccacagag gtcaccccct cagctatggc agagcttaca gacctgggca aatgtctgat 600
gaagcatgag gatgnttgta cagcgctatt aattacaggc ttcaattccc tggcctggaa 660
agatactctg cctgccagag gacaacctta cagntnttgt g 701

<210> 2094
<211> 796
<212> DNA
<213> Homo sapiens

<400> 2094
ngatgcggtt taaacagagg ctgaaagtga tccagtcctt ggaggacacg gccaagagga 60
gtgtggtccg agctatacct gtggacattg gtttctccat tgaagagctg gaggaccttt 120
acatggtgtt taaggccaag cacctggcta gccagtactg ggggtgcagc cgcacaatgg 180
ccggccgtcg ggaccccagc ctgccctacc tggagcagta ccggattgat gccagccagt 240
tccgggaact ctttgccagc ctgacaccct gggcctgtgg ctcccacaca cctctgctgg 300
cagggcgcat gttcaggctc ctggacgaaa acaaggactc gctgatcaac ttcaaggagt 360
tcgtgacagg gatgagcggg atgtaccacg gggacctgac agagaagctc aaggtgctct 420
acaagctaca ccttccccca gctctgagcc cagaggaagc cgagtcagcc ctggaggcgg 480
cccattattt cacagaggac agctcctcag aagaagcact accacaggaa gagcaagaag 540

0956294650 - 02/28/2008

gaagtggaag tgaggagaga ggagaggaga aggggaccag ctctccggac tatcggcact 600
accttcgaat gtgggccaag gagaaagagg ctcagaagga gacgattaag gatcttccaa 660
gatgaaccag gagcagttca ttgagctgtg caagacgctt tacaacatgt tcagtgaaga 720
ccccatggag caggacctgt accacgccca tcggcaccgt ggccagnctt ctgnttccgc 780
atcggaaaag gttggn 796

<210> 2095
<211> 751
<212> DNA
<213> Homo sapiens

<400> 2095
anagcttttc tgtgtttctc cggacttcga gccatggcgg tgacggaagc gagcctgttg 60
cgccagtgcc ccctgcttct gccccagaac cggtcgaaaa ccgtgtatga gggattcatc 120
tcggctcagg gaagagactt ccaccttagg atagtgttgc ctgaagattt acaactgaag 180
aatgcaagat tattatgtag ttggcagctg agaacaatac ttagtggata ccatcgaata 240
gtacaacaga gaatgcagca ccctcctgat ctaatgagct ttatgatgga gttgaagatg 300
cttttggaag ttgccttaaa gaatagacaa gagctgtatg cactacctcc tcctccccag 360
ttctactcaa gccttattga agagatagga actcttggtt gggataaact tgtgtatgcg 420
gatacctgct tcagtaccat caagttaaaa gcagaagatg cttctggtag agagcattta 480
atcactctca agttgaaggc aaagtatcct gcagaatcac cagattattt tgtggatttt 540
cctgttccat tttgtgcctc ctggacacct cagagctcct taataagcat ttatagtcag 600
tttttggcag caatagaatc actaaaggca ttctgggatg ttatggatga aatcgatgag 660
aagacctggg tacttgagcc agaaaaacct tcacggagtg caacagcacg cagaattgca 720
ttaggtaata atggttccat aaatataggg n 751

<210> 2096
<211> 749
<212> DNA
<213> Homo sapiens

<400> 2096
atttaacgta ccaggactct acattgcagt tcaggcagtg ctggccttgg cggcatcttg 60
gacatctcga caagngggtg aacgtacgtt aacggggata gtcattgaca gcggagatgg 120
agtcacccat gttatcccag tggcagaagg ttatgtaatt ggaagctgca tcaaacacat 180
cccgattgca ggtagagata ttacgtattt cattcaacag ctgctaaggg agagggaggt 240
gggaatccct cctgagcagt cactggagac cgcaaaagcc attaaggaga aatactgtta 300
catttgcccc gatatagtca aggaatttgc caagtatgat gtggatcccc ggaagtggat 360
caaacagtac acgggtatca atgcgatcaa ccagaagaag tttgttatag acgttggtta 420
cgaaagattc ctgggacctg aaatattctt tcacccggag tttgccaacc cagactttat 480
ggagtccatc tcagatgttg ttgatgaagt aatacagaac tgccccatcg atgtgcggcg 540
cccgctgtat aagaatgtcg tactctcagg aggctccacc atgttcaggg atttcggacg 600
ccgactgcag agggatttga agagagtggt ggatgctagg ctgaggctca ncgaggagct 660
cagcggcggg aggatcaagc cgaagcctgt ggaggtccan gtggtcacgc atcacatgca 720
ccgctacgcc cgtgtggntc ggaggcttc 749

<210> 2097
<211> 751

09625465.070800

<212> DNA
<213> Homo sapiens

<400> 2097
atcgacgggc tgcgggagct caaacgcctc aaggtgctgc ggctcaagag caacctaagc 60
aagctgccac aggtggtcac agatgtgggc gtgcacctgc agaagctgtc catcaacaat 120
gagggcacca agctcatcgt cctcaacagc ctcaagaaga tggcgaacct gactgagctg 180
gagctgatcc gctgtgacct ggagcgcatc ccccactcca tcttcagcct ccacaacctg 240
caggagattg acctcaagga cgacaacctc aagaccatcg aggagatcat cagcttccag 300
cacctgcacc gcctcacctg ccttaagctg tggtacaacc acatcgccta catccccatc 360
cagatcggca acctcaccaa cctggagcgc ctctacctga accgcaacaa gatcgagaag 420
atccccaccc agctcttcta ctgccgcaag ctgcgctacc tggacctcag ccacaacaac 480
ctgaccttcc tccctgccga catcggcctc ctgcagaacc tccagaacct agccatcacg 540
gncaaccgga tcgagacgct ccctccggag ctcttccagt gccggaagct gcgggccctg 600
cacctgggca acaacgtgct gcagtcactg ncctccaagg tgggcgagct gaccaacctg 660
acgcagatcg agctgcgggg caaccggctg gagtgcctgc ctgtggagct gggcgagtgc 720
ccactgntca aagcgcaacg gcttggtggg n 751

<210> 2098
<211> 615
<212> DNA
<213> Homo sapiens

<400> 2098
actgtatcac ctatagggtg taattcctcc gatcccgctg acttcgaacc aatcccatct 60
ttttctgggt ttccgttaga ttctcccaaa accttggtgc ttgactttga gacagagggt 120
gaacgaaact cacctaatcc caggagtgtt aggatccctt ctcctaacat tttgaaaact 180
ggacttacag aaaatgttga ccgtggcttg gggggcctag agggaacaca ccaggccctt 240
gacctgttag caggaggaat gatgcctgag gaagtaaaag aatcttccca attagacaaa 300
caagagtcac tcggattgga attaaaaatt aattctgcag gccttgggcc atctccttgc 360
cttccagacc ttgttgactt tgtcacacgg acctctggag ttcaaaaaga taaactgtgt 420
tctccactct ctgagccagg tgacccttct aaatgtagtt ccctggagtt ggggccatta 480
cagctagaaa tatcgaatgc atccaccaca gaggtggcaa ttctgcangt agatgatgac 540
agnggcgacc ctctgaattt ggttaaagct ccagtgtcaa ggtccccttc aagggagcag 600
gtaattgaag acant 615

<210> 2099
<211> 827
<212> DNA
<213> Homo sapiens

<400> 2099
tcatactgga gagaagccct acgtttgtga agaatgtggc aaagccttta agtactcccg 60
tatccttact acacataaga gaattcatac tgaagagaaa ccatacaagt gtaataaatg 120
tggcaaagcc tttattgcat cctcaaccct tagtagacat gagttcattc atatgggaaa 180
gaaacattac aaatgtgaag aatgtggcaa agccttcatt tggtcctcag tcctaactag 240
acataagaga gttcatactg gagagaagcc ctacaaatgt gaagaatgtg gcaaagcctt 300
taagtactcc tctaccctta gttcacataa gagaagtcat actggagaga aaccctacaa 360

09025400.0702000

atgtgaagaa tgtggcaaag cctttgttgc atcctcaacc cttagtaaac atgagatcat 420
tcatactgga aagaaaccct acaagtgtga agaatgtggc aaagctttta accagtcctc 480
atcccttact aaacataaga aaattcatac tggagagaaa ccctacaaat gtgaagaatg 540
tggcaaagct tttaaccagt cctcttccct tactaaacat aagaaaatcc attctggaga 600
gaaaccatac gagtgtgata aatgtggcaa agcctttatt tcaccctcaa gccttagtag 660
acatgagata attcatactg gggagaaacc ctagaagtgt gaagaatgtg gcaaagcctt 720
caagtggtcc tacaccttac tatacactga gagtctgaac ttactctgta ccatnccaac 780
ttcttccagg cacagtctgc anaagtcctg ncattcggag acctgga 827

<210> 2100
<211> 862
<212> DNA
<213> Homo sapiens

<400> 2100
ttccngatgc tacttcgtaa atgttgtaat catccatatt tgattgaata tcctatagac 60
cctgttacac aagaatttaa gatcgatgaa gaattggtaa caaattctgg gaagttcttg 120
attttggatc gaatgctgcc agaactaaaa aaaagaggtc acaaggtgct gctttttca 180
caaatgacaa gcatgttgga cattttgatg gattactgcc atctcagaga tttcaacttc 240
agcaggcttg atgggtccat gtcttactca gagagagaaa aaaacatgca cagcttcaac 300
acggatccag aggtgtttat cttcttagtg agtacacgag ctggtggcct gggcattaat 360
ctgactgcag cagatacagt tatcatttat gatagtgatt ggaaccccca gtcggatctt 420
caggcccagg atagatgtca tagaattggt cagacaaagc cagttgttgt ttatcgcctt 480
gttacagcaa atactatcga tcagaaaatt gtggaaagag cagctgctaa aaggaaactg 540
gaaaagttga tcatccataa aaatcatttc aaaggtggtc agtctggatt aaatctgnct 600
aagaatttct tagatcctaa ggaattaatg gaattattaa aatctagaga ttatgaangg 660
gaaataaaag gatcaagana gaaggtcatt agtgataaag atctagagtt ggttggtaga 720
tcgaagtgat cttattgatc aaatgaatgc ttcangacca attaaaggag aagatgggga 780
tattcaagat ntagaaaatc tgaagattnc agtcctgaat tggagaccgg ggttcaccat 840
cttggcctga ctggcccgac tg 862

<210> 2101
<211> 718
<212> DNA
<213> Homo sapiens

<400> 2101
gagacaaaac aaaatgtggc cacctattaa taaagcaaac agtcttggtg ttcagacact 60
gctgccgttt agttcagaac agattattgt cattattata attttgttta ttaaaaagaa 120
aactcttggc agccgagcgc ggtggctcac gcctgtgatc ccagcacttt gggaggccaa 180
ggctggtggc tcacgaggtc aggagatcga gaccatcctg gctaacacgg tgaaaccccg 240
tctgtactaa aaataaaaaa aattagccgg ccttggtggt gggtgcctgt ggtcccagct 300
acttgggagg ctgaggcagg agaatggcat gaacccggga ggcagagctt gcagtgagca 360
gagatcgagc cattgcactc cagcctcggt gacagaatga gactccatct caaaaaaaac 420
aagaaaaaga aaagaaaact ctttagctgg gcacggtggc tcatgcctgt aatcctaaca 480
ctttgggagg ccaaggcaga tggatcacct gaagtcagga gttggagacc agcctggcca 540
acatggcaaa acttcatctc tactaaaaat acaaaaatga gctgggcatc gatgtacatg 600
cctgtagtcc cagctactca ggaggctgag gcaggagaat cgcttgaact cgtgaggcag 660

0050045.0050270

ttgcagtgag atcgcaccac tgcactccaa cctgggtgac agagcaagat tctgtctc 718

<210> 2102
<211> 880
<212> DNA
<213> Homo sapiens

<400> 2102
ctataactta ttacagtcat ccagccctgc tgtaaaatat gaagctgctg ggacattagt 60
gacactctct agtgcaccaa ctgcaatcaa ggctgctgct cagtgttaca ttgatttaat 120
tattaaggag agcgacaaca atgtaaaact catagttttg gatcgcttga tagaattaaa 180
agagcatcct gctcatgaac gagtactaca ggatctggtt atggatatcc taagagtatt 240
gagcacacca gacttagaag tacgaaagaa aactctgcag ttagcactgg atcttgtctc 300
ttctagaaat gttgaaaagc tggttattgt cctgaagaag gaagtgataa aaacaaataa 360
tgtgtctgag catgaagata ctgacaaata cagacaactc ctagtgcgaa cattgcattc 420
ctgttctgtc cgatttccag atatggctgc aaatgttatt cctgtgttaa tggaatttct 480
cagtgacaac aacgaagcag cagctgctga tgtcttggag tttgttcgtg aagccattca 540
gcgctttgat aacctgagaa tgcttattgt tgagaagatg cttgaagtct ttcatgctat 600
taaatctgtc aagatttacc gaggagcatt atggatcctg ggagaatact gtagtaccaa 660
ggaagacatt cagagtgtga tgactgagat ccgcaggtcc cttggagaga tcccaattgt 720
agagtcagaa ataaagaaag aagctggtga attaaaacct gagaagaaat acctgtaggg 780
ccagttcaga aattggtact ggaatgggta cctatgccac ctcaaaagtg cccttacagn 840
tctagacccc ccanggaagg angaagaccg accttccttt 880

<210> 2103
<211> 740
<212> DNA
<213> Homo sapiens

<400> 2103
tattgacgcc atattggggc cggcggcggg tgggagagtt ctacgaggga ggggaagcgg 60
ttggacgtgt tcgcttgggt tcctgctgcg gcagctacct cgcaatctct ctgcatcgat 120
cgccgctcgc aagctactga ccgtactcgg gcgtattagg agccgcgttc cagcctcaca 180
ccccacggtg ctgttttcga cttcagaaag gatctagtct cagcacagga gcgcctcagg 240
cgcggcgcaa agctcgagcg gacggcgggg gcggccggag cctctctcgg gggagccgcg 300
cctgaggagg cggaagaacc cccctgacgc gactggcgtg tgcttctgcc cgccaccgcc 360
cctcccgctc tcacccgggc cgtccctggc cactgccccc gccgcggagg cagcggcggc 420
agcggctctc ctttccacag ccggcgctcc gcgacccgct tggctcctga gcccgtcggg 480
taggctctcc tcgagttccc gctcttcacc ccttccctca ccctcttctt tcgtcacccg 540
tccccgaccc cacccgagcc cggcgcctca gctgcccccg gccatggcgt gcggagccac 600
tctgaaaagg actctggatt tcgacccgct tgttgagccc ggcgttcccg aagcgcangc 660
gatgtgcgcc attgtcggcg cccaccttgg ncgctgcctt cccgttgtcg gcggccgngg 720
gcaacggcgc ttcttctccg 740

<210> 2104
<211> 848
<212> DNA
<213> Homo sapiens

09053403 .DOC

<400> 2104
ntactcccct attgactaca gtgatggttc tggaatgaat ttgttgcaga tacaggataa 60
agtctggtcc caggcttgcc ttggtgcctg tgcacctcat ttagaggaga agcttagccc 120
accagtacca tcatgctcag ttgtgggagc catttcttcc tactacgtcc agcgctacgg 180
atttcctcca ggatgcaaag tggtggcctt cactggggac aacccagcgt cgctggcagg 240
catgagactg gaggaaggtg acattgcggt cagcctgggc accagtgaca ccctgtttct 300
ctggctccaa gagcccatgc ctgccctgga aggccacatc ttctgcaacc cggttgactc 360
ccagcactac atggcactcc tgtgctttaa aaatggctcc ctcatgagag agaagatccg 420
caacgagtct gtatcccgtt cctggagcga tttctctaag gcactgcagt ccacagagat 480
gggcaacggt ggaaacctgg gtttttattt tgatgtaatg gagatcaccc ctgaaattat 540
tggacgtcat aggtttaaca cagaaaacca caaggttgca gcattccctg gggatgtgga 600
ggttcgagca ctaattgaag gacaattcat ggccaagagg attcacgcag aaggcctggg 660
ctatcgagtc atgtccaaga caaagatttt ggccacagga ggagcatctc acaatagaga 720
aatcttacag gtgcttgcag atgtgtttga tgccccggtg tatggtatag acactgncaa 780
ctcggcctgt gtgggttctg cataccgagc ttttcatggt cttgcangtg gnacagatgt 840
gccctttt 848

<210> 2105
<211> 905
<212> DNA
<213> Homo sapiens

<400> 2105
ctcttaaaac ctctcctgcc aaggcccggt ctcccatcaa cagaagaggc tctgtctcct 60
ccgtctctcc caagccacct tcatctttca agatgtcgat tagaaactgg gtgacccgaa 120
caccttcctc atcaccaccc atcactccac ctgcttcgga gaccaagatc atgtcaccga 180
gaaaagccct tactcctgtg agccagaagt catcccaagc agaggcttgc tctgagtcta 240
gaaatagagt aaagaggagg ctagactcaa gctgtctgga gagtgtgaaa caaaagtgtg 300
tgaagagttg taactgtgtg actgagcttg atggccaagt tgaaaatctt catttggatc 360
tgtgctgcct tgctggtaac caggaagacc ttagtaagga ctctctaggt cctaccaaat 420
caagcaaaat tgaaggagct ggtaccagta tctcagagcc tccgtctcct atcagtccgt 480
atgcttcaga aagctgtgga acgctacctc ttcctttgag accttgtgga gaagggtctg 540
aaatggtagg caaagagaat agttccccag agaataaaaa ctggttgttg gccatggcag 600
ccaaacggaa ggctgagaat ccatctccac gaagtccgtc atcccagaca cccaattcca 660
ggagacagag cggaaagaca ttgccaagcc cggtcaccat cacgcccagc ttcatgagga 720
aaatctgcac atacttccat agaaagtccc aggaggactt ctggggtcct gaacactcaa 780
cagaantata gattctaatc tgagtgagnt actgagcttt ggtccctnaa acaagctgag 840
ctttgggcca ctaaaacagg tgaaaattcc aggaatggac tctataactc tgggctttaa 900
gaaac 905

<210> 2106
<211> 832
<212> DNA
<213> Homo sapiens

<400> 2106
gacntccact gggaagaacc cagcagccgg aaggagtctc gaggggccc ttcccgccgg 60

9962960.030800

ggtgtggccc tgcttcgccc agagcccctg caccggggga cagcagacac cctcctcaac 120
cgggttaaga agctgccttg tcagatcacc agctacctgg tggcgcacac cctagggcgc 180
cggatgctgt atccaggctc tgtgtacctg ctgcagaagg ccctcatgcc tgtgctgctg 240
cagggccagg cccgactggt ggaagagtgt aatgggcgcc gggcaaagct gctggcctgt 300
gatggcaatg agattgacac catgtttgtg gaccggcggg ggacagctga gccccaggga 360
cagaagctgg tgatctgctg tgaggggaat gctgggtttt atgaggtggg ctgcgtctcc 420
acgcccctgg aagctggata ttcagtcctg ggctggaatc atccaggctt tgctggaagc 480
acgggggtgc cattcccgca gaatgaggct aatgccatgg atgtggtggt ccagtttgcc 540
atccaccgcc tgggcttcca gccccaggac atcatcatct acgcctggtc catcggcggc 600
ttcactgcca cgtgggcagc catgtcctac ccagatgtta gtgccatgat cctggatgcc 660
tcctttgatg acctggtgcc cttggccttg aaggtcatgc cagacagctg gaaggggcct 720
ggtgaccaag gaccggtgag gcagcatctt caatctaaac aacgcggaag cacttgggca 780
agataccaag ggtcctggac tgnttgaatc ccggannaac caaagggatt ga 832

<210> 2107
<211> 844
<212> DNA
<213> Homo sapiens

<400> 2107
gtgcgaaact cattccccag agcaacagtg tagagaggtg gaacctgatg ggagccccgc 60
cctcacagac aaactcctgg agctgtcaag acagcttggg catggattcc tctctgcctt 120
ctgccatgtg gacacgtggc cttcctcccc tctctcctcc ggggaatgca gtgtttgggc 180
gccatcttgg aagcagagat caggcctcac cagacaccaa gcctgctggc accatgaccc 240
tggactccca acctccacag ctgggaaaga actctgctcc ctagaaatta cccaggctcg 300
ctcaggcacc cactgactcc agcctcatgg aaccaccatt caccaggctt gaggggagga 360
tgtcacggcg cgctgctccc ttcggtgcca gccaggatgg ggccgggtgg gtgcagctgg 420
tgaaaagaaa tgcagccccc cagcccctgc agaccaagcc gaacagccca gctcgcgggt 480
ggatcacagg gcacccagca gccgccttcc ctccggaaga gccaagaagg cttccaagac 540
cagaaatgcc cccagtgtgg ctgtgcctgt ccccggtgcc ccgcagctgg ggggcagcat 600
acccaaacag atgcaccctg cccatgatgg caccccaggg acccccatcc tcaggaccct 660
tcagtcgttc aagctggaat tggcaggttt ctgcctggat aggcatcggc ttcagaagtc 720
ttaagtgctg cttggcaagg aaaatgcagg gcaaggaagg gctgggcctt aggttcgagg 780
cttccaaggt gcaagccccc caatttcant tgnaggggcc caaggggggg cccaagaaca 840
agnc 844

<210> 2108
<211> 873
<212> DNA
<213> Homo sapiens

<400> 2108
gccgctcctg ctcgcctttc ccttcgctgg gcgagaggtg tctatggggc acccgctgcc 60
gccgccgcta ccgccaccgc caccgccacc gccgccgagt gctgtctcta tggcgaggag 120
gaggaggagg agcgcgagct cagcgataca agtacataaa taaaggataa aatattttat 180
gaaacaaatc ttcaatcaag tataacattt tgatgcttgg catctagact cccttgtgcc 240
ctcactatgc cagcggcaac tgtagatcat agccaaagaa tttgtgaagt ttgggcttgc 300
aacttggatg aagagatgaa gaaaattcgt caagttatcc gaaaatataa ttacgttgct 360

09025465-070208

atggacaccg agtttccagg tgtggttgca agacccattg gagaattcag gagcaatgct 420
gactatcaat accaactatt gcggtgtaat gtagacttgt taaagataat tcagctagga 480
ctgacattta tgaatgagca aggagaatac cctccaggaa cttcaacttg gcagtttaat 540
tttaaattta atttgacgga ggacatgtat gcccaggact ctatagagct actaacaaca 600
tctggtatcc agtttaaaaa acatgaggag gaaggaattg aaacccagta ctttgcagaa 660
cttcttatga cttctggagt ggtcctctgt gaaggggtc aaatggntgc atttcatagc 720
gggtacgact ttggctactt aatcaaaaat cctaaccaac tctacttggc tgaagaaaac 780
ttgcttcttg agancccttcg atgtttttct gcattatgat gtgaagacct natgaagagc 840
tgaaaaatct aaaggnggat accggaggtg gca 873

<210> 2109
<211> 691
<212> DNA
<213> Homo sapiens

<400> 2109
tcctgaattc gagcggctct cataaagatc tggctggcaa gtatcgtcag atcctggaaa 60
aagccattca gttatctgga gcagaacaac tagaagcttt gaaagctttt gtggaagcaa 120
tggtaaatga gaatgtcagt ctcgtgatct cgcggcagtt gctgactgat ttttgcacac 180
atcttcctaa cttgcctgat agcacagcca aagaaatcta tcacttcacc ttggaaaaga 240
tccagcctag agtcgtttca tttgaggagc aggttgcttc cataagacag catcttgcat 300
ctatatatga gaaagaagaa gattggagaa atgcagccca agtgttggtg ggaattcctt 360
tggaaacagg acaaaaacag tacaatgtag attataaact ggagacttac ttgaagattg 420
ctaggctata tctggaggat gatgatccag tccaggcaga ggcttacata aatcgagcat 480
cgttgcttca gaatgaatca accaatgaac aattacagat acattataag gtatgctatg 540
cacgtgttct tgattataga agaaaattca ttgaagctgc acaaaggtac aatgagctct 600
cttacaagac aatagtccac gaaagtgaaa gactagaggc cccaaaacat gctttgcact 660
gnacgatctt agcatcagca ggcancancc g 691

<210> 2110
<211> 720
<212> DNA
<213> Homo sapiens

<400> 2110
tcnnaagtcg agttagtcta gttagtatcg gtctgttatc tccttttgcg cgacacggtc 60
tcagctgttc cgcctgaggc gagtgacgct ggccgccaac gaggtatacg tactgggacc 120
ctcgccctca gtctcgtctc cggcgcggct acctgccccg ttttccctgt gagttgacct 180
gctccgggcc gcgggccgcc aatggcaggg gccgctccga ccacggcctt cgggcaggcg 240
gtgaccggcc cgccgggctc agggaagacc acgtactgcc tgggcatgag tgagttcctg 300
cgcgcgctgg gccggcgcgt ggcggnggtg aacctggacc cggccaacga ggggctgccg 360
tacgagtgtg ccgtggacgt gggcgagctg gtggggctgg gcgacgtgat ggacgcgctg 420
cgcctggggc ccaacggcgg cctgctctac tgcatggagt acctggaagc caacctggac 480
tggctgcgtg ccaagctcga ccccctccgc ggccactact tcctcttcga ctgcccaggc 540
caggtggagc tctgcacgca tcacggcgcc ttgcgcagca tcttctccca aatggcgcag 600
tgggacctca ggctgactgc cgtncacctc gtggattctc actactgcac agaccctgca 660
agttcatttc aatacttgtg tacctccctg gncaccatgc tgnacgtgga actgccacat 720

0302915.0302900

<210> 2111
<211> 460
<212> DNA
<213> Homo sapiens

<400> 2111
gctcccaggg ttgctagagc tccttgtaga atatttccga cgatgcctga ttgagatctt 60
tggcatttta aaggagtatg aggtgggtga cccaggacag agaacgctac tggatcctgg 120
gaggttcagc aaggtgtcta gtccagctcc catggagggt ggggaagaag aagaagaact 180
tctaggtcct aaactagaag aggaagaaga agaggaagta gttgaaaatg atgaggagat 240
agcctttca ggcaaggaca agccagcttc agagaatagt gaggagaagc tgatcagtaa 300
gtttgacaag cttccagtaa agatcgtaca gaagaatgat ccatttgtgg tggactgctc 360
agataagctt gggcgtgtgc aggagtttga cagtggcctg ctgcactggc ggattggtgg 420
gggggacacc actgancata tccagaccca nttnagagca 460

<210> 2112
<211> 800
<212> DNA
<213> Homo sapiens

<400> 2112
actctgcctc caaagccacc gtccccccga ggcaccactg catcccccaa ggggcgggtt 60
cggaggaagg aggaggcaaa ggagagcccc agcgccgcag ggcccgagga caagagccag 120
agcaagcgca gggccagtaa cgagaaggag tcagcagccc cagcctcacc ggcaccttcg 180
ccggcgccct cgcccacccc agccccgccc cagaaggagc agccccccgc ggagacccct 240
acagacgctg ctgtcttgac ctcaccccca gcccctgctc ccccggtgac ccctagcaaa 300
ccaatggccg gcaccacaga ccgagaagaa gccactcggc tcttggctga gaagcggcgc 360
caggcccggg agcagcggga gcgcgaggag caggagcgga ggctgcaggc agaaagggac 420
aagcgaatgc gagaggagca gctggcacgg gaggccgagg cccgggcgga gcgggaggcg 480
gaggcccgga ggcgggagga gcaggaggca cgagagaagg cgcaggccga gcaggaggag 540
caggagcggc tgcagaagca gaaagaggag gccgaagctc ggtcgcggga agaggcggag 600
cggcagcgtc tgnagcggga aaagcacttt cagcagcagg agcaagagcg gcaagagcgc 660
anaaagcgtc tggaggagat catgaanagg actcggaagt cagaagtttc tgnaaccaag 720
aagcaggaca agcaaggagg ccaacgccaa cggtttcaag ccnaaaacct gttaaagctg 780
ttggaggntc gttcccaagg 800

<210> 2113
<211> 516
<212> DNA
<213> Homo sapiens

<400> 2113
ctaaactggg ttaaggaagt aaccagagac ccttccatct tgactatccc catgcatttc 60
tgggcacttt tttaccgaaa gagagcaatg gaccaggctc gagaactggt caacatgttg 120
gagaagatag ccggccccat tggcatgcgt atgagcccac cggcctgggt tgaactaaag 180
gatgaccgaa tagagactta tgtcagaacc attcaatcca cgttaggagc tgaggggaag 240
atacagatgg ttgtttgcat catcatgggc ccacgagatg atctctatgg ggccatcaat 300
aagctgtgct gtgtgcagtc cccagtgccc tcccaggttg tcaatgttcg aaccattggt 360

0960960 - 070808

cagcccacca ggcttaggag tgtggcccag aagattttac ttcagattaa ctgtaaattg 420
ggtggtgagc tctggggagt ggntattcct ctgaaacagt taatggtgat cgggatggat 480
gcttaccatg accccagtan aggcatgcgc tccgcn 516

<210> 2114
<211> 800
<212> DNA
<213> Homo sapiens

<400> 2114
acaagaaaat gttactttaa tatataatcc atcagacaga ggaatcaata ataaaactgc 60
aacagaacta tcaactgtat acttatttgg tggagatgaa atttcaagac agcagtatcg 120
cagggccctg ttacataaac cagagatgat aaaacagata cttccagaac atagtgtgct 180
tcaaaacatt aattttgttg aagcatttca agatgagcta ttagtaactg aagtatatga 240
tcttccccaa cgacctaatg atgttcagct cttttatgga agcatgtgta aaattatact 300
ttcagtaatt ggagaattca gagattgcat ttctagcaga gaattccttc agccttcttc 360
caaagctagc ttggaatcta caagcgactt gggagcttct gggaaacatg gtggcaacgt 420
ctctttggat gttttaccag tcaaaggtcc tcagggttct cctcttctct cacgggcggc 480
tcgcccgcct ccggatcagc tggcctccga agagccgtgg actgtcctac ccgagcactt 540
gattctggta gctccttctc cttgtgacat ggcaaaaact ggacgtttcc agattgtgaa 600
taactctgtg aggttactga gatttgagct gtgctggcca gcgcattgcc tcacagtcac 660
gccgcagcat ggatgtgtcg cgccagagag taaactacaa attcttgtga gtcctaattc 720
ctncttatcc acaaaacagt caatggttcc cgggnagtgg gtttggacta tatacactgg 780
ggacgatgga cngaagaaaa 800

<210> 2115
<211> 813
<212> DNA
<213> Homo sapiens

<400> 2115
agtagccttt gtcccctgtc cctgttcccc ccaccccttc cctaaatctg gaccttggca 60
cctgctagga agagccttgg acccttccag ttgcgtaaag caaacctacc ccggatctct 120
ggcttcagcc gccagggggc agtggcagcc ctggggccct ttcccttctg gaggaagcac 180
aagcctcagg gaaggggaag caggatgcgg agggccaaag cccgggacct ctacttgaac 240
agttctactg gggaggctgg agaactaagg aaacacctgt acatagtgtc cgctaccctg 300
actcccgctt agcacaccct taggcaggcg ccccttccac ctttccccga gaccgtcgtc 360
gctggagggg gcagggtcca gcccgcctgg atcggtggtg tgcacctgat gggatttggg 420
aaatgggcta tccgtaaagc tttatcttgc ttggcttagc tgtgagaagt ggttctcttc 480
ctctggtccc ttctggggac tctgtttccc catttcttgc tgctgtgtcc ctcaccagtt 540
ccttgcagga ttccctcctt tttaaatgcc cttgaatcta gctttgcctt ggagacccca 600
gtgggtgctg ctcctgccgt tttcttcctg ccaaggcctg aatcaaatgg ttcatctcca 660
acccctttgcc aagtttggcc cctcaaaagc tttggtggct tcaaggactg gtagccctgg 720
cagaagccag ggggttgnaa ggggagnaag ctttttggaa caaggcaagg atgcccaacc 780
ggttgctttc aagcttgnct tccttggccc aag 813

<210> 2116
<211> 730

0050203.00200

<212> DNA
<213> Homo sapiens

<400> 2116
tttacgcccc caggatctgg ggcgtgcaaa tttatcggct cacttcattc gtacagtttc 60
tcctctaagc acacccgaga aaggccatct gtcccccgag agcccattga ccgcaagagg 120
ccgaagaaag atgtggaacc aagctgcagt gggagcagcc tgggacccga caagggcctg 180
gcccagagcc ctcccagctc atcacttacc gcgacaccgc agaagccttc ccagagcccc 240
tctgcccctc ctgccgacgt caccccaaag ccagccacgg aagccgtgca gagcgagcac 300
agcgacgcca gccccatgtc catcaacgag gtcatcctgt cggcgtcagg ggcctgcaag 360
ctcatcgact cactgcactc ctactgcttc tcctcccggc agaacaagag ccagntgtgc 420
tgcctgcggg agcaggtgga gaagaagaac ggcgagctga agagcctgcg gcagagggtc 480
aagccgctcc gacagccagg tgcggaagct acaggagaag ctggatgagc tgaggagagt 540
gagcgtcccc tatccaagta gcctgctgtc gcccagcccg cgagcccccc aagatgaacc 600
cagtggtgga gccactggtc ctggatgctg ggcacctggc tgtcnggacc cacctggagc 660
cgggacctac cccacacttg nagcccttc agtacctgga agganggttc acattttccc 720
acgtgggcca 730

<210> 2117
<211> 703
<212> DNA
<213> Homo sapiens

<400> 2117
ttcatgatta tagtgcagca gctgccccga gccccgtgct tggcaacatt ccccccaacg 60
atgggatgcc gggaggcccc atcccgccag gtttctttca gggtcctccg gggtcacagc 120
cctcgccgca cgcacagcct ccacctcaca atcctagcag catgatggga ccccacagtc 180
agccttttat gtcaccgcga tacgcaggcg gccccaggcc cccgatcaga atgggaaacc 240
agcctccggg aggagttcct gggacacagc cattgctgcc caattctatg gatcccacac 300
gacaacaagg ccaccccaac atgggaggat caatgcagag aatgaaccct ccccgaggca 360
tggggcccat gggtcccggc ccacagaatt acggcagcgg catgagacca ccacccaact 420
ccctcggccc cgccatgccc gggattaaca tgggcccggg agctggcaga ccctggccca 480
atcctaacag tgctaactca attccatact cctcctcatc acctggtacc tatgtgggac 540
cccctggtgg tggcggtcct ccaggaacac ccattatgcc cagtcccgca gattcaacaa 600
attccagtga caacatctac acaatgatta atccagtgcc gnctgggagg caagcggtcc 660
aacttcccga tgggtcccgg ctcggacggt ccnnatgggc ggg 703

<210> 2118
<211> 748
<212> DNA
<213> Homo sapiens

<400> 2118
gtgtctatgt caatgtgtct gtccttcact cctccattgt ctgccgccac tgctgctgct 60
gctgctgctg ccgctgctgc tgcacgaatc gccgcagccc ccagccttgc gcgtcgtcgc 120
tacctcctcg gacagaaatt ttatgaataa gcatcagaag ccagtgctaa caggccagcg 180
gttcaaaact cggaaaaggg atgaaaaaga gaaattcgaa cccacagtct tcagggatac 240
acttgtccag gggcttaatg aggctggtga tgaccttgaa gctgtagcca aatttctgga 300

US 2005/0260650 A1

ctctacaggc tcaagattag attatcgtcg ctatgcagac acactcttcg atatcctggt 360
ggctggcagt atgcttgccc ctggaggaac gcgcatagat gatggtgaca agaccaagat 420
gaccaaccac tgtgtgtttt cagcaaatga agatcatgaa accatccgaa actatgctca 480
ggtcttcaat aaactcatca ggagatataa gtatttggag aaggcatttg aagatgaaat 540
gaaaaagctt ctcctcttcc ttaaagcctt ttccgaaaca gagcagacaa agttggcgat 600
gctgtcgggg attctgctgg gcaaatggca ccctgcccgc caccatcctc accaggtctc 660
tttcaccgac agcttangtc aaaagaaggc atttggcggg cctcaatttg cttggcnaag 720
cnttttcaa aaggcattgg gattggcc 748

<210> 2119
<211> 802
<212> DNA
<213> Homo sapiens

<400> 2119
tacgtgaagc accgacacaa actggagaat ggtctggctg cgctcagtcc cttaagcaag 60
ggctccatgg aggctggccc ttacctgccc cgagccctgc agcagcctct ggaacagctg 120
actcggtatg ggcggctcct ggaggagctc ctgagggaag ctgggcctga gctcagttct 180
gagtgccggg cccttggggc tgctgtacag ctgctccggg aacaagaggc ccgtggcaga 240
gacctgctgg ccgtggaggc ggtgcgtggc tgtgagatag atctgaagga gcagggacag 300
ctcttgcatc gagacccctt cactgtcatc tgtggccgaa agaagtgcct tcgccatgtc 360
tttctcttcg agcatctcct cctgttcagc aagctcaagg gccctgaagg ggggtcagag 420
atgtttgttt acaagcaggc ctttaagact gctgatatgg ggctgacaga aaacatcggg 480
gacagcggac tctgctttga gttgtggttt cggcggcggc gtgcacgaga ggcatacact 540
ctgcaggcaa cctcaccaga gatcaaactc aagtggacaa gttctattgc ccagctgctg 600
tggagacagg cagcccacaa caaggagctt cgagtgccag canatggtgt ccatgggcat 660
tngggaataa acccttcctg ggacatcaaa gccctttggg gaagccggac ccttgaatgc 720
ccctggttna acttggaaag aagccccaag aaacactttg gacttctttc tggganaatg 780
gnggtccccc agggacccaa ag 802

<210> 2120
<211> 759
<212> DNA
<213> Homo sapiens

<400> 2120
ntnactttat gtcttttacc tcacacattg atgagttata tgaaagtgct aaaaagcagt 60
ctggaggaaa ggttgcagat tatattcctc aactggccaa attcagtccc gatttgtggg 120
gtgtgtctgt ttgtacagta gatggacaga gacattctac tggagatacc aaagttccct 180
tctgtcttca gtcctgtgta aaacctttga aatatgccat tgctgttaat gatcttggaa 240
ctgaatatgt gcatcgatat gttggaaaag agccgagtgg actaagattc aacaaactat 300
ttttgaatga agatgataaa ccacataatc ctatggtaaa tgctggagca attgttgtga 360
cttcactaat aaagcaagga gtaaataatg ctgaaaaatt tgactatgtc atgcagtttt 420
tgaataagat ggctggtaat gaatatgttg gattcagtaa tgcaacgttt cagtctgaaa 480
gagaaagtgg agatcgaaat tttgcaatag gatattactt aaaagaaaag aagtgttttc 540
cagaaggcac agacatggtt ggtatattag acttctactt ccagctgtgc tccattgaag 600
tgacttgtga atcagccagt gtgatggctg cgacactggc taatgggtgg tttctgccca 660
attactggtg aaagagtacc tgancctgg aagcaagttt cggaaatacc attggagttt 720

0960396.0702800

ggatgccatt cctgtggcca tggtatggac nttcttnaa 759

<210> 2121
<211> 804
<212> DNA
<213> Homo sapiens

<400> 2121
ccctatctgg aaggcattct ctcccaggtg attcatctgg agaaaatcac tagtgaaatg 60
ggttctgcgt cacaggctaa tatccgtctc acatctctta aaaagacact ggctaccaca 120
cttgcacccc gagtcctgtt gcccgccatc aaaaaaactt acaagcagat tgagaagaac 180
tggaagaatc acatgggtcc gtttatgagc atcttgcaag agcatattgg ggtgatgaag 240
aaggaagagc tcacctccca tcagtctcag ctaaccgcct ttttcctgga ggccctggac 300
ttccgagccc agcactctga gaacgatctg gaggaagttg gaaaaacgga aaattgtatc 360
attgactgtc tagtagccat ggttgtcaaa ctttccgagg tcacattcag gcccctgttc 420
ttcaagctgt ttgattgggc taaaacagaa gatgccccaa aggacaggtt gttgacattt 480
tacaacttgg cagattgcat tgctgaaaag ctgaaagggc tttttactct gtttgccggc 540
cacttagtga agccttttgc tgacaccttg aaccaggtga acatctccaa aacagatgaa 600
gcatttttg actctgaaaa tgaccctgaa aagtgctgct tgctgntgca gtttattttg 660
aactgtttat accaaaatct tccttttga tacccagcat tttataagta aaaggagaga 720
gcagaagcct tggatgaatg cccttggtgg gatcagcttg gaaaaacagg cttgggggg 780
angaagagga aatttccagg gcct 804

<210> 2122
<211> 802
<212> DNA
<213> Homo sapiens

<400> 2122
gaattacact attgtactgg agcttatcgg atttcacctg tagatgtaaa tagtagacct 60
tcctcctgcc ttactaattt tcttctaaat ggtcgttctg ttttattgga acaaccacga 120
aagtcaggtt ctaaagtcat tagtcatatg cttagtagcc atggaggaga gatttttttt 180
gcacgtcctt agcagttctc gatccattct agaagatcca ccttcaatta gtgaaggatg 240
tggaggaaga gttacagact accggattac agtagttcca ttagccagtg ttattgtgaa 300
agaatctctg acagaagaag atgtgttaaa ctgtcaaaaa acaatataca acttagttga 360
tatggaaaga aaaaatgatc ctctacctat ttccacagtt ggtacaagag gaaagggccc 420
taaaagagat gaacaatacc gtatcatgtg gaatgaatta gaaacccttg tcagagccca 480
tatcaacaac tcagagaaac atcaaagagt cttggaatgt ctgatggcat gcaggagcaa 540
acccccagaa gaggaagaac gaaagaaacg aggaagaaag agggaagaca aagaggacaa 600
gtcagagaaa gcagtgaaag attatgaaca ggaaaagtct tggcaagact cagagagant 660
aaaagggaat cttaagagcg tggaaaagga agaantggct gaagctgana ttataaaaag 720
attcgcctgg atccccagaa ccttccaaac aaaaaacccc cttggttgga aatgggatgn 780
aaccttcccc aagtgggaaa aa 802

<210> 2123
<211> 783
<212> DNA
<213> Homo sapiens

0050250 - 0250800

<400> 2123
agattgctcc aattgtgtca gcgaactatg gctcttcctg taggacgagg aatgtttacc 60
ttgttttcgt accatcctgt tccaacagag ccattgccta ttcctaaatt gaatctgact 120
gggcgtgccc ctcctcggaa cacaacagta gaccttaata gtggaaacat cgatgtgcct 180
cccaatatga caagctgggc cagctttcat aatggtgtgg ctgctggcct gaagatagct 240
cctgcctccc agatcgactc agcttggatt gtttacaata agcccaagca tgctgagttg 300
gccaatgagt atgctggctt tctcatggct ctgggtttga atgggcacct taccaagctg 360
gcgactctca atatccatga ctacttgacc aagggccatg aaatgacaag cattggactg 420
ctacttggtg tttctgctgc aaaactaggc accatggata tgtctattac tcggcttctt 480
agcattcgca ttcctgctct cttaccccca acgtccacag agctggatgt tcctcacaat 540
gtccaagtgg ctgcagtggt tggcattggc cttgtatatc aagggacagc tcacagacat 600
actgcagaag tcctgttggc ttgagatagg acggccttct ggtcctgaaa tgggaatact 660
gcactgacag agagtcatac ttccttanct gctgggcttg gccctgggnc atggtctgct 720
ttgggggcat ggcaagcaaa tttggatagg gtatggctgg atcttcaatg ngccctgaac 780
aag 783

<210> 2124
<211> 722
<212> DNA
<213> Homo sapiens

<400> 2124
ccctactgaa gtggaggagg tggtccccgc actggaaccc acagaaacgc tgctgagtga 60
gaaggagata aacgcaaggg aagagagcct tgtggaagag ctgtcccctg ccagcgagaa 120
gaagcccgtg ccgccgtctg agggcaagtc tagactgtcc cccgccggtg agatgaagcc 180
catgccgctg tctgagggca agtctatact gctgtttgga ggggctgctg ctgttgccat 240
cctggcagtg gccatcgggg tagccctggc tctgagaaag aaataggagg cttttcagaa 300
gagaaagaca gaaggatgta aggttggagt tgtattggct ggaatttgaa cctccagcag 360
ctgtctggac atttgtggaa cactctggga taattgggga cttctgctca acatggcagt 420
ggcatgttag gcatgttagg gcttgaggtg gggcattcac attcatctga ctgtaaatcc 480
caagggcctc cgctcatgct aaattgagaa tcttaggggt aaagcacccc ctccaggacc 540
ggtttgctca gccttggcac tagtgctgnt ctgaccattc tctgtgttgg ggctgtcctg 600
tgtatggtgg gctccaccca ctagatgcca gtggcacccc ctcccagaga tgacaaacga 660
aaaatgtctc tagacattgc caaatgtccc cttgtnaacn tnccctaatt gagaccccac 720
tg 722

<210> 2125
<211> 820
<212> DNA
<213> Homo sapiens

<400> 2125
ccaaacttat atatatactc caaaaagtct tcaacaagca gacgacagca ccctcttaat 60
aagcatctct ttaagccttc cactttcatg acttcacatg aaccgccagt gtatatggat 120
gaagatgatg accgatcttg ttttcatagc cacatgaaca ctgctgttga agatgcatca 180
gatgacgaaa gtattcctat catgtatagg aatttacctg aatataaaga actattacag 240
tttaaaaagt taaagaagca gaaacttcag caaatgcaag ctgaaagtgg atttgtgcaa 300

09/13/2005 15:03:00

catgtgggct ttaagtgtga taactgtggc atagaaccca tccagggtgt tcggtggcat 360
tgccaggatt gtcctccaga aatgtctttg gatttctgtg attcttgttc agactgtcta 420
catgaaacag atattcacaa ggaagatcac caattagaac ctatttatag gtcagagaca 480
ttcttagaca gagactactg tgtgtctcag ggcaccagtt acaattacct tgacccaaac 540
tactttccag caaacagatg acatggaaga gaacatcatt tactagtcct cttcaacacg 600
tagcaatggt atcattggta attatgtgca cagtttggaa agattctctg ctttcccaga 660
aatgacactc acagcatgag agcttcctga gtgttctcgc aagtcagctc tgcaccgntg 720
tggctctaga tcactgttca gcagctgaac attcctggtg agcaaaggtt tccctggggg 780
aattttcacc atgngnttta aggtggtgac ttaaatgggc 820

<210> 2126
<211> 623
<212> DNA
<213> Homo sapiens

<400> 2126
nggctcagat gtcacagggt ttctattgcc tgggctggag tgtagtggca tgatcatggc 60
tcactatagc cttgacttcc tgggctcaag cgatccttcc gcctcagcct cctgagtagc 120
tgggactaca gagacggggt ttcgctcttg tgaccaggct ggaatgcaat ggcgtgatct 180
cggctcaccg caacctccga cctctgggtt caagtgattc tcctgcctcc gcccatttca 240
tcttattgtc tcctttactg tgcaggagct tggatgtagt cccatttatt tattttgagc 300
ttttgatatg atatccaaaa aaatcattgc caaggccagt gtccaggagc ttttcccctg 360
ggctgtaaga gttttatagt ttctattttt atatttaggt cttttatcca ttttgagttg 420
atttttgtg tgtaatagaa gatatgggtc cagtttcatt cttttgcatg tggaaatcta 480
gtttattagc accatttatt gaagggatta tcttttctcc attgtgtctt cttggtaccc 540
tcatcaaaaa ttagttgacc catatgtgtt tggatttgnt tctggggtct ctattctgnt 600
tcactggtct atgngtctgt ttg 623

<210> 2127
<211> 804
<212> DNA
<213> Homo sapiens

<400> 2127
cacgaaatac gagaggcaat ccagcatcca gcagatgaga agttgcaaga gaaggcatgg 60
ggtgcagttg ttccactagt aggcaaatta aagaaatttt acgaattttc tcagaggtta 120
gaagcagcat taagaggtct tctgggagcc ttaacaagta ccccatattc tcccacccag 180
catctagagc gagagcaggc tcttgctaaa cagtttgcag aaattcttca tttcacactc 240
cggtttgatg aactcaagat gacaaatcct gccatacaga atgatttcag ctattataga 300
agaacattga gtcgtatgag gattaacaat gtaccggcag aaggagaaaa tgaagtaaat 360
aatgaattgg caaatcgaat gtctttgttt tatgctgagg caactccaat gctgaaaacc 420
ttgagtgatg ccacaacaaa atttgtatca gagaataaaa atttaccaat agaaaatacc 480
acagattgtt taagcacaat ggctagtgta tgcagagtca tgctggaaac accggaatac 540
agaagcagat ttacaaatga agagacagtg tcattctgct tgagggtaat ggtgggtgtc 600
ataatactct atgaccacgt acatccagtg ggagcatttg ctaanacttc caaaattgat 660
atgaaaggtt ggatcaaagn tcttaaggac caacctccta atagtgcgga aggtcttcta 720
aaatgctctc aggtcacaac aaaaaccatt tgnatgatga agactacctt ccaagcaaan 780
taaatccatg cttgcaanta acca 804

0950250.0950800

<210> 2128
<211> 555
<212> DNA
<213> Homo sapiens

<400> 2128
aaaaaaatct gatcccagcc acaccaggag ctgaagccat ggcctcaaag cctgagaaga 60
gggtggcatc gtctgtcttt atcaccctgg caccccgcg ccgcgatgtg gccgtggcgg 120
aggaagtgag gcaggcagtt tgtgaggccc ggcgtggccg cccctgggag gctcctgccc 180
ccatgaagac acccgaggct ggcttggcgg ggaggcccag cccctggaca acccctggca 240
gagctgcagc cacagtgccg gctgcaccta tgcagctctt caatggagac atctgtgcct 300
tctgccacaa gaccgtgttc ccccgagagc tggctgtgga ggccatgaag aggcagtacc 360
atgcccagtg cttcacgtgc cgcacctgcc gncgncagct ggctgggcag agcttctacc 420
agaaggatgg gcgacccctc tgcgaaccct gctaccagga cacactggag aggtgcggca 480
agtgtggcga ggtgntncgg gaccacatca tcagggccct gggccaaggc cttccacccc 540
tcctgcttca cgtng 555

<210> 2129
<211> 599
<212> DNA
<213> Homo sapiens

<400> 2129
gtatgctatg gatgcctttg taggacctat ttggagcatg gctgccagcc ccagtggctc 60
tcaacttttg gttggttgtg aagatggatc tgtgaaacta tttcaaatta ccccagacaa 120
aatccagttt gaaagaaatt ttgatcggca gaaaagtcgc atcctgagtc tcagctggca 180
tccctctggt acccacattg cagctggttc catagactac attagtgtgt ttgatgtcaa 240
atcaggcagc gctgttcata agatgattgt ggacaggcag tatatgggcg tgtctaagcg 300
gaagtgcatc gtgtggggtg tcgccttctt gtccgatggc actatcataa gtgtggactc 360
tgctgggaag gtgcagttct gggactcagc cactgggacg cttgtgaaga gccatctcat 420
cgctaatgct gacgtgcagt ccattgctgt agctgaccaa gaagacagtt tcgnggtggg 480
cacagccgag ggaacagtct tccattttca gctggtccct gtgacatcta acagcagnga 540
gaagcactgg ngtgccggac aaaaccgttc cagcatnaca ctcatgacgt gccgcactg 599

<210> 2130
<211> 781
<212> DNA
<213> Homo sapiens

<400> 2130
ataaaaaaaa aaaaaaaaaa aaaaactata actccaccag aaaagttttt tctttcccag 60
ctgatgctgg caccccccacg ggaactcttc aaaaagacgc ctcgccagat tgcactgatg 120
gacgttggaa acatgggcca gtctgtggac attagtgggc ttcagttagc cttggccgaa 180
cgccaatctg aattgccaac gcaaagcaaa gcgagcttcc ccagtattct cagtgaccca 240
gacccggatt cttctaattc tggatttgac agctcagttg cctctcagat cacagaagct 300
ttagtcagcg gaccaaagcc acctattgaa agccattttc gaccagagtt tattcgtcca 360
ccgcctccac tccacatttg tgaggatgaa cttgcttggc taaaccccac ggagcctgac 420

0503503.0002800

cacgcgatcc agtgggataa atcgatgtgt gttaagaata gcactggtgt ggagatcaaa 480
cgaataatgg ccaaagcctt caaaagcccc ttatcctctc cccaacaaac acagctactt 540
ggtgagttgg aaaaagaccc caaacttggc taccatattg gcctcacccc agccaaactt 600
cctgaccttg nggaaaacaa ccctttagtc gctatagaaa tgttgctgaa attaatgcag 660
tcaagccaga tcactgagta tttctctggc ctggtcaata tgggacatgt cnttacattc 720
aatggaaagt ggaaatcgnc taactacagc tgttgactac ctnctgaatt tattcccttt 780
a 781

<210> 2131
<211> 800
<212> DNA
<213> Homo sapiens

<400> 2131
gtccatgggg aagctgccat tttcttgaaa aagccagaat tgcacagaaa ggaggtgctg 60
aagcaatgtt agttgtcaat aacagtgtcc tatttcctcc ctcaggtgac agatctgaat 120
ttcctgatgt gaaaatactg attgcattta taagctacaa agactttaga gatatgaacc 180
agactctagg agataacatt actgtgaaaa tgtattctcc atcgtggcct aactttgatt 240
atactatggt ggttattttt gtaattgcgg tgttcactgt ggcattaggt ggatactgga 300
gtggactagt tgaattggaa aacttgaaag cagtgacaac tgaagataga gaaatgagga 360
aaaagaagga agaatattta acttttagtc ctcttacagt tgtaatattt gtggtcatct 420
gctgtgttat gatggtctta ctttatttct tctacaaatg gttggtttat gttatgatag 480
caattttctg catagcatca gcaatgagtc tgtacaactg tcttgctgca ctaattcata 540
agataccata tggacaatgc acgattgcat gtcgtggcaa aaacatggaa gtgagactta 600
tttttctctc cggactgtgc atagcagtag ctggtgtttg ggctgtgttt cgaaatgaag 660
acaggtggct tggattttac aggatatctt ggggattgct ttctggctga atttaattaa 720
aacactgaag ttgcccaact tcaagtcatg tgtgatcttc taggccttct cctcctctat 780
ganggatttt ttggtttcan 800

<210> 2132
<211> 717
<212> DNA
<213> Homo sapiens

<400> 2132
cgcacagacc tggtcagccc caagcacgcg ctcatggtgt tccgagtggc caaagtcttt 60
gcccagccca acctggctga gatgattcag aaaggtgagc agctattcct ggagccagag 120
ctggtcatcc cccaccgcca gcaccgactc ttcacggccc ccacattcac tgggagcttc 180
ctgtcaccct ggccaccagc ggtcactgat gcctccttca aggtgaagag ccacgtctac 240
agcctggagg gccaggaccg caagtacacc ccgatgtttg ggcccgaggc ccgcaccctg 300
gtcctgcgcc tcgctcagct catcacacag gccaaacaca cagccaagtc catctccgac 360
cagtgtgcgg agagcccggc tggccactcc ttcctctcat ggctgggctt tagctccatg 420
gacaccaatg gctcctacac agccaacgac ctggacgaga tggggcaaga cagtgtccgg 480
aagacagatg aatacctgga gaaggccctg gagtacctgc gccagatatt ccggctcagc 540
gaagcgcagc tcaggcagtt cacactcgcc ttgggcacca cccaggatga gaatggaaaa 600
aagcaactcc ccgactgcat cgtgggtgag gacggactna tccttacgcc cctggggcgg 660
taccagatca tnaatgggct gngaaggttt gaaattgagt accaaggggg acccgga 717

03503f03-0f4d-4e3d-8e3d-0f4d3e3d0f4d

<210> 2133
<211> 790
<212> DNA
<213> Homo sapiens

<400> 2133
tccttatgtg gcaagctttg gccattgtgt cttgaaattc tccctcagga aatgtgatag 60
gggatattat cccatgggat tttagtaaaa atcagcttgc ctaatttcat attcgtgttc 120
ataatgaaga aatgcgaagt ggtggtagtc ctcaggatta agtgtaaagg aaaatatgca 180
aggaaaaagt agcagtgtca gccctttttgg actgcttatg atttctgcct tagagctaca 240
agacttggaa caagaaataa caatacctca agaaaatgtc tggagagata gcaccactgt 300
ccctcaaaga cttcagccac tgcacattac caattcagct gtgaagcatt tacaactgta 360
ttatctgtga ttgtctgcat ttcctgttta catgcatgtg ctggggatat gctttagtgt 420
gtatggacta gagtttaaat cctgtcttta actgggctgc aaggatggct atcaatccca 480
aattctgttt tcaactcact ggaataatta atctggtgtt cctgatataa aacaggtggg 540
ttctattcac atgatggctg ctctttacca tatatttcac ctgaccctca ttttgccatg 600
ggcctcaacc tttatgtgtg ctttttatgg ctctgaaagg actggctccc gtgtgtggaa 660
tatacaaggt ataaacacca cccctcacat acccctgtaa cttaaatgct tncatttaac 720
tcacttagat tactttcccc ttagtggtaa acgggttggg ggatggntgg tagtgcaaag 780
aaggaagttg 790

<210> 2134
<211> 454
<212> DNA
<213> Homo sapiens

<400> 2134
cggcagcgga actatgctgg ccgctgggat gtcctgatcc agcaggccac ccagtgcctc 60
aaccgcctca tccagattgc tgcccgcaag aaacgcaact atatcctaga tcagacaaat 120
gtttatgggt cagcccagag acgaaaaatg agaccatttg aaggcttcca gcgcaaagct 180
attgtaattt gtcccactga cgaggaccta aaagaccgaa caataaagcg aaccgacgag 240
gaagggaagg atgtcccaga tcatgcggtc ttagaaatga aagccaactt cacgttgcca 300
gatgttgggg acttcctgga tgaggttctg ttcattgagc tgcagcggga ggaagcggac 360
aagctagtga ggcagtacaa cgaggaaggc cgcaaggctg ggccaccccc tgaaaagcgc 420
tttgacaacc gaggtggtgg tggcttncgn nccg 454

<210> 2135
<211> 604
<212> DNA
<213> Homo sapiens

<400> 2135
tcngggcctc gtgttgctgc tcactggatt gttggctctc ggggctagtg agtcggccct 60
ggttaccaaa gtgttcacag gcgtgaacct tttggttctt gggttcgtca tgatctctgg 120
cttcgttaag ggggacgtgc acaactggaa gctcacagaa gaggactacg aattggccat 180
ggctgaactc aatgacacct atagcttggg tcctctgggc tctggaggat ttgtgccttt 240
cggcttcgag ggaattctcc gtggagcagc gacctgtttc tatgcatttg ttggtttcga 300
ctgtattgct accactggag aagaagccca gaatccccag cgttccatcc cgatgggcat 360

09823456.0N2000

tgtgatctca ctgtctgtct gctttttggc gtattttgct gtctcttctg cactcaccct 420
gatgatgcct tactaccagc ttcagcctga gagcccttg cctgaggcat ttctctacat 480
tggatgggct cctgcccgct atgttgtggc tgctggctcc ctctgngctc tttctaccag 540
cctnctgggc tccatgttcc ccatgcctcg ggtgatctac gcgatggcag aggatggcct 600
nctg 604

<210> 2136
<211> 749
<212> DNA
<213> Homo sapiens

<400> 2136
agtctgagcc cctgagcctt atcgcaaatg tggtagctgg ctcatcctgc cggggccctc 60
cactgcccag agacctgcag ggctccaggc acagggctga agtcgcctct gccctgcgct 120
ccttctcccc gctgcaaccc gggcaggcgc ccacaggccg ggctcacagc accatgacag 180
gctctggggt ggatgccagg acagccagct ccgggagcag cgtgtgggaa ggacagctgc 240
agagcctggt gctgtcagaa tatgcatcca cagagatgag cctgcatgcc ctctatatgc 300
accagctcca caagcagcag gcccaggctg aacctgagcg gcatgtatgg caccgccggg 360
agagtgatga gagtggagaa agcgcccctg atgaaggggg agagggcgcc cgggcccccc 420
agtctatccc tcgctctgct agctatccct gtgcagcacc ccggcctgga gctcctgaga 480
ccaccgccct gcatgggggc ttccagaggc gctacggtgg catcacagat cctggcacag 540
tgcccagggt tccctctcat ttctctcggc tgcctcttgg agggtgggca gaagatgggc 600
agtcggcatc aaggcaccct gagcccgtgc ccgaagaggg ctcggaggat gagctacccc 660
ctcagtgcac aaggtataga caaggctgag cagggntcct gtggcccagg atggangcca 720
ccgnttgcct tgccattccg tctggcttg 749

<210> 2137
<211> 809
<212> DNA
<213> Homo sapiens

<400> 2137
gtatgaacgc agcggcggac ctgtgagggg atccgacttg ccggcagaac ttacgctgcg 60
ggaccccggg cactgttgct gctgcgggag tccagagagg caggaggatg gagctcggaa 120
ggatttcagc tccaggctgg ctgctggacc gacttttcaa catttttaa aaagtgcctc 180
agctcctcag gagaagctgt cttcagaagt ggaagaccca cctccctatc tcatgatgga 240
tgaacttctt ggaaggcaga gaaaagtcta cctcgagacc tatggctgcc agatgaatgt 300
gaatgacaca gagatagcct ggtccatctt acagaagagt ggctacctgc ggaccagtaa 360
cctccaagag gcagatgtga ttctccttgt cacgtgctct atcagggaga aggctgagca 420
gaccatctgg aaccgtttac atcagcttaa agccttgaag acaaggcggc cccgctcccg 480
ggttcctctg aggattggaa ttctaggctg catggctgag aggttgaagg aggagattct 540
caacagagag aaaatggtag atattttggc tggtcctgat gcctaccggg accttccccg 600
gctgctggct gntgctgagt cgggccagca agctgccaac gtgctgctct ctctggacga 660
gacctatgct gatgtcatgc cagtccagac aagcgccagt gccacgtctg cctttgggca 720
atcatgcgag gctgngacaa catgtggagc tactgcattg ttctctcacc cgggggcagg 780
gagaggagtc ggcctattgn cttcactct 809

<210> 2138

US 2003/0170800 A1

<210> 2138
<211> 576
<212> DNA
<213> Homo sapiens

<400> 2138
tncngagatt tttctacaga atcaatgtct ttggttccag caacaaatta tatatataca 60
cccctgaatc aacttaaggg tggtacaatt gtcaatgtct atggtgttgt gaagttcttt 120
aagcccccat atctaagcaa aggaactgat tattgctcag ttgtaactat tgnggaccag 180
acaaatgtaa aactaacttg cctgctcttt agtggaaact atgaagccct tccaataatt 240
nataaaaatg gagatattgt tcgctttcac aggctgaaga ttcaagtata taaaaaggag 300
actcagggta tcaccagctc tggctttgca tctttgacgt ttgagggaac tttgggagcc 360
cctatcatac ctcgcacttc aagcaagtat tttaacttca ctactgagga ccacaaaatg 420
gnagaagcct tacgtgtntg ggcatctact catatgtcac cgtcttggac attactaaaa 480
ttgtgtgatg ttcagccnat gcagtatttt gacctgactt gtcagctctt gggcaaagca 540
gaagtggacn gagcatcatt tcttctaaan gtatgg 576

<210> 2139
<211> 807
<212> DNA
<213> Homo sapiens

<400> 2139
aaaataaaga tgactatatc agagacttga aaaggatcat tctctgtttt ctgatagtgt 60
atatggccat tttagtgggc acagatcagg atttttacag tttacttgga gtgtccaaaa 120
ctgcaagcag tagagaaata agacaagctt tcaagaaatt ggcattgaag ttacatcctg 180
ataaaaaccc gaataaccca aatgcacatg gcgatttttt aaaaataaat agagcatatg 240
aagtactcaa agatgaagat ctacggaaaa agtatgacaa atatggagaa aagggacttg 300
aggataatca aggtggccag tatgaaagct ggaactatta tcgttatgat tttggtattt 360
atgatgatga tcctgaaatc ataacattgg aaagaagaga atttgatgct gctgttaatt 420
ctggagaact gtggtttgta aatttttact ccccaggctg ttcacactgc catgatttag 480
ctcccacatg gagagacttt gctaaagaag tggatgggtt acttcgaatt ggagctgtta 540
actgtggtga tgatagaatg ctttgccgaa tgaaaggagt caacagctat cccagcctct 600
tcatttttcg gtctggaatg gccccagtga aatatcatgg agacagatca aaggagagtt 660
tagtgagttt tgcaatgcac atgttagaag tacagtgaca gaactttgga caggaaattt 720
tgtcaacttc atacaaactg ctttgctgct ggtattgctg gctgatcact tttttggtca 780
aaaggaggan attgtttgac ttcacan 807

<210> 2140
<211> 643
<212> DNA
<213> Homo sapiens

<400> 2140
gaactgccac ctggaagata caggtggaaa cccgaaaaca gagtattgta tgggagtttg 60
aaaaatacca gcgattacta gagaaaaagc agccaccaca tcggcagctg ggggcagagg 120
tagcagcagc tctggccagc ctacagcggg aggcagcgga gaccatgcag aaactggagt 180
tgaaccatag cgagctcatc cagcagagcc aggtcctgtg gaggatgatt gcagagttga 240
aagagaggtc gcagaggcct gtccgctgga tgttgcagga tattcaggaa gtgttaaaca 300

0962945 - 0702000

ggagcaaatc ttggagcttg cagcagccag aaccaatctc cctggagttg aagacagatt 360
gccgtgtgct ggggctaaga gagatcctga agacttatgc agctgatgtg cgcttggatc 420
cagatactgc ttactcccgt ctcatcgtgt ctgaggacag aaaacgtgtg cactatggag 480
acaccaacca gaaactgcca gacaatcctg agagatttta ccgctataat atcgtcctgg 540
gaagccantg catctcctca ggcaggcact actgggaggt ggaagtggga gacangtctg 600
agtggggcct gngagtatgt aagcaaaatg tagaccggaa gga 643

<210> 2141
<211> 586
<212> DNA
<213> Homo sapiens

<400> 2141
naaaaaacaa ataccgaatt tccaacattc catcactaat attcctcgac gccaccactg 60
ggaaggttgt gtgcaggaac gggctgctgg tgatccgaga tgacccanaa ggtctggagt 120
tcccctgggg accgaaaccc ttcagggaag tcattgcagg gcccttgctt agaaacaatg 180
ggcagtctct ggagagcagc agcctggagg ggtctcacgt gggcgtctat ttctccgcac 240
attggtgtcc gccctgccga agcctcaccc gggtcctggt ggaatcctac cggaagatca 300
aggaggcagg ccagaacttc nagatcatct tcgttagtgc agacaggtcg gaggagtcct 360
tcaaacagta cttcagtgag atgccctggc tcgccgtccc ctacacggat gaggcccggc 420
tngtcgcgcc tcaaccggct gtacggaatc caaggcatcc ccacgctcat gatgctggac 480
ccgcagggcg aggtgatcac gcggnagggg cgggtggagg tgctgaacga cgaggactgt 540
cggnagttcc cctggcaccc caagcccgtg ctggagctct ncgact 586

<210> 2142
<211> 732
<212> DNA
<213> Homo sapiens

<400> 2142
tttccgacac aatccgtaca cggccttccc tcccgcagtg cccgggctgc ctccgggcct 60
cccgccggcc gtctcctttg gctccctgca gggggccttc cagcccaaga gcacgaaccc 120
tgagctgcca ccacgactgg ggccggtgcc gagcgggctc tcccagaagg ggacacagat 180
ccccgaccat ttccggccac ctttgaggaa accagggaag tggtgtgcca tgcacgtgcg 240
tgtggcttac atgatcctga gacaccagga gaaaatgaag ggtgactccc acaagcttga 300
ctttcggaat gacctcctgc cctgccttcc ggggccctat ggggccctgc cccctgggca 360
ggagctctcc cacccggcct ccctcttcac tgcgactggt gccgtccacg ctgcagccaa 420
ccctttcacg gcagctcccg gggcccacgg acccttcctg agccccagca cccacattga 480
tccctttggg cgtcccacaa gcttcgcctc tttggctgcc ctctccaacg gggcctttgg 540
aggcctgggc agccccacat tcaactccgg cgccgtcttt gcccagaaag aaagcccagg 600
ggccccacca gccttcgcct ccccaccgga cccatggggc cgctgcaccg cagtcctctg 660
acctttcctg cctgggtccg gccccctgan gccgtccgga cttcaagctc agacaaggaa 720
ccggnctgtg na 732

<210> 2143
<211> 737
<212> DNA
<213> Homo sapiens

03052003.ST25

<400> 2143
gacaaagaac aagctgcctg gcctcatcac atccatggag accatcggtg ccaaagcgct 60
ggaggacttc gcagacaaca tcaagaatga cccggacaag gagtacaaca tgccgaagga 120
cggcaccgta cacgagctca ccagcaatgc catcctcttc ctgcagcagc ttttggactt 180
ccaggagacg gcaggcgcca tgctggcctc ccaagagacc agctcttcgg ccaccagcta 240
cagctctgag ttcagcaagc ggctgctaag cacctatatc tgtaaagtgc tgggcaacct 300
gcagttgaac ttgctgagca agtccaaggt gtacgaggac ccagctctga gcgccatctt 360
cctgcacaac aactacaatt acatcctcaa gtccctggag aagtctgaac tgatccagct 420
ggtggcagtg acacagaaga ctgctgagcg ctcctaccgg gagcacattg agcagcagat 480
ccagacctac cagcgcagct ggttaaaggt gactgattac atcgcagaga agaatctacc 540
tgtgttccag ccgggagtca agctccggga caaggagcgg cagattatca aggagcgttt 600
taagggcttc aatgatggcc tcgaagaact gtgcaaaatc cagaaggcct gggctattcc 660
agacacagag cacagggaca ggattcgcca ggcccanaan accattgtca aggagaccnt 720
acggggcctt ttttaca 737

<210> 2144
<211> 751
<212> DNA
<213> Homo sapiens

<400> 2144
nngccagtcc atatggtccc cacagagctt gttgagaaag aattttggag actagtaagc 60
actattgagg aggatgtcac agtggaatat ggagctgaca ttgcctcaaa ggaatttggc 120
agtggctttc ctgtccgaga tgggaaaatc aaactctcac ctgaggaaga ggagtatctt 180
gatagtggct ggaatttgaa caacatgcca gtgatggagc agtctgtcct tgcacatatt 240
actgctgata tatgtggcat gaaacttcct tggttgtatg tgggaatgtg cttttcttca 300
ttctgttggc acattgaaga ccactggagc tattcaatta actacttgca ctggggtgag 360
ccaaaaacct ggtatggagt cccagggtat gctgctgagc agctagaaaa tgtaatgaag 420
aaactagctc cagaactctt tgtgtcccag ccggatctcc tccatcagct tgtgaccatc 480
atgaacccca ataccctgat gactcatgaa gtgcctgttt accgaactaa tcagtgtgct 540
ggggagtttg tgattacatt tccaagagcc taccacagtg gttttaacca gggttttaat 600
tttgctgagg ctgttaactt ctgcactgtt gattggctgc cattaggccg acagtgtgtg 660
gagcattatc gcttacttca tcgatattgn gtgttttccc atgatgagat gatctgcaag 720
atggcttnca aggctgatgt attanatgtt g 751

<210> 2145
<211> 812
<212> DNA
<213> Homo sapiens

<400> 2145
tctatacgtc caacatcccc atcatcctgc agtctgccct ggtgtccaac ctttatgtca 60
tctcccaaat gctctcagct cgcttcagtg gcaacttgct ggtcagcctg ctgggcacct 120
ggtcggacac gtcttctggg ggcccagcac gtgcttatcc agttggtggc ctttgctatt 180
acctgtcccc tccagaatct tttggctccg tgttagaaga cccggtccat gcagttgtat 240
acatagtgtt catgctgggc tcctgtgcat tcttctccaa aacgtggatt gaggtctcag 300
gttcctctgc caaagatgtt gcaaagcagc tgaaggagca gcagatggtg atgagaggcc 360

US 2003/0148309 A1

accgagagac ctccatggtc catgaactca accggtacat ccccacagcc gcggcctttg 420
gtgggctgtg catcggggcc ctctcggtcc tggctgactt cctaggcgcc attgggtctg 480
gaaccgggat cctgctcgca gtcacaatca tctaccagta ctttgagatc ttcgttaagg 540
agcaaagcga ggttggcagc atgggggccc tgctcttctg agcccgtctc ccggacaggt 600
tgaggaagct gctccagaag cgcctcggaa aggggagctc tcatcatggc gcgtgctgct 660
gcggcatatg gacttttaat aatgnttttg aatttcgtat tctttcattc cactgtgtaa 720
aagtgctaga cattttccaa tttaaaaatt ttgcttttta tcctggcact ggcaaaaaag 780
aactggngaa agtgnaaatt ttattcaagc cc 812

<210> 2146
<211> 817
<212> DNA
<213> Homo sapiens

<400> 2146
cggcccctac ccctgagtcc ccggggtccc ggccgccagg ccggagcgcg aatgtcgtgc 60
tcaccctgcc tccttcccgc cgccccctgg gctttttgat gacaagcttc aaaactgcaa 120
agaagatgaa cagagaaaga aaattgaaac tctcaaagag acaacaaata gcatggtaga 180
atcaattaaa cactgcattg tgttgctgca gattgccaaa agtactatta atcccgtaga 240
tgcaatatat caacctagtc ctttggaacc tgtgatcagc acaatgcctt cccagactgt 300
gttacctcca gaacctgttc agttgtgtaa gtcagagcag cgtccatctt ccctaccagt 360
tggacctgtg ttggctacct tgggacatca tcagactcct acaccaaata gtacaggcag 420
tggccattca ccaccgagta gcagtctcac ttctccaagc cacgtgaact tgtctncaaa 480
tacagtccca gagntctctt actccagcag tgaagatgaa ttttatgatg ctgatgaatt 540
ccatcanagt ggctcatccc caaagcgctt aatagattct tctggatctg gctcagtcct 600
gacacacagc agctcgggaa atagtctaaa acgcccagat accacagtaa tcacttaatt 660
cttccttgtc caatgggaac aagtgatgct gacctgtttg attcacatga tgacagagga 720
tgatgatgcc ggaggcaggg tctgttggag gagccccaag aagccgttat catgcatctn 780
ttgncgnaag gttagacttg gaatggatct tacttaa 817

<210> 2147
<211> 758
<212> DNA
<213> Homo sapiens

<400> 2147
tgacaccaag gcacctccaa cccttcaggc agagacggct accaaacccc aagccacatc 60
tgccccgtcc cccgccccca agcaaagctt cctgtttgga acacagaaca cctcaccttc 120
cagccctgcc gcccctgctg catcttcggc acctcccatg ttcaagccca ttttcacggc 180
tccacccaag agtgagaagg aaggccccac accgcctggc ccttcagtca cagccacagc 240
gccctccagc tcctccctcc ccacgaccac cagcaccaca gccccgacct tccagcctgt 300
ctttagcagc atggggccac ctgcatctgt gcccttgcct gctcccttct tcaagcagac 360
aactactccc gccactgctc ccaccacaac tgccccgctc ttcactggcc tggccagcgc 420
cacctctgct gtggctccca tcacctctgc cagtccatcc acagactctg cttcgaagcc 480
tgcgtttggc tttggcataa acagtgtgag cagcagcagt gtgagtacca cgaccagcac 540
cgccactgcc gcctcacagc ctttcctctt cggggcgccc caggcctctg ctgcagcttc 600
accccggcca tgggctccat attccagttt ggcaaacctc ctgccttgcc cacaaccacc 660
acagtcacca ccttcagcca gtcccttccc aactggccgn ggccaacggc caccaagcan 720

US 2003/0170800

caagcggntg cccgaacttt taaggggttt ttttgggg 758

<210> 2148
<211> 708
<212> DNA
<213> Homo sapiens

<400> 2148
cgcggcttct ggcgcggagg cgccgatgca gccgggcttc cccgagaacc tgagcaagct 60
gaagagcctc ctgacccagc tccgcgccga ggacttgaac atcgccccgc gcaaggccac 120
actgcagccg ctgccgccca acctgccgcc agtcacctac atgcacatct acgagacgga 180
cggcttcagc ctgggcgtgt tcctgctcaa gagcggcacg tccatcccgc tgcacgacca 240
cccgggcatg cacggcatgc tcaaggtgct gtacggcacc gtgcgcatca gctgcatgga 300
caagctagac gcgggcggcg ggcaacggcc gcgggccttg ccgcccgagc agcagttcga 360
gccgccgctg cagccccggg agcgagaagc cgtgcggccg ggcgtgctgc gttcgcgggc 420
cgagtacacc gaggncagcg gcccctgcat cctcacaccg naccgggaca acctgcacca 480
gatcgacgcc gtggaagggc ctgncgcctt cctggacatc ctggccccgc cctacgaccc 540
ggacgatggc cgggactgcc actattaccg ggtgctggag ccggtcaggc ccaaggaggc 600
ctcagctcgg cctgtgacct gcctcgagag gtgtggctnc tggagacccc acaggccgat 660
gacttctggt gcgaagggag aaccctatnc aggtnccaaa gggtcttt 708

<210> 2149
<211> 803
<212> DNA
<213> Homo sapiens

<400> 2149
atcctaccac tgcaagctca gcaggaactg acctggttgg caaagatgag ggacatcctg 60
gtcctgtcac tggggtcctt ggtgatgtgg cgaatgagct gcaacatggg tgtgatgcct 120
ggaacacagt gagcgagcag ccagctttct ccctgtctct gaagcccaca gtccctgacc 180
tgcagcaagc ttcatacctt cccccagccc aagttatcct tttctcactt ctgtccccaa 240
aactcaaagc aggaaacagc ccttcatttt ggttttcctt tctaatgcaa cagtaagtca 300
ggtagtcttt ctcattttca tatggcaaga tggaaagaac actctaagtt cttcagtgtc 360
ctcattcatc aaacaatgac gggtaaatgt gatcgtttta agaatgccta ttacagtgcc 420
tggcacattg tatgtctcct tcaaagactg ctctctttct tcaggcagtc attttcaagg 480
gatggggaga gtcaggcttg aactggatct aggagcccct gggacagcat gggtgggcct 540
gcccagcttg cccccaagcc tgacctgaaa ggtccccata aggctcctga gcagccacca 600
tattggttag gggaagcagg gtacacaggg tcaagtttca agacctgtca ctggttcatc 660
ggtcccacct tctacagctg gangcgaaat ctctcatgtt gtcccttcga ggatcaaatg 720
actcccaaag tcagaatggg tctcggggct cactctctgg atggagcccc taaaacctct 780
accttgtgcc ccacaatcat tnc 803

<210> 2150
<211> 805
<212> DNA
<213> Homo sapiens

<400> 2150

0502680.0502680

acctgtcccc tccagaatct tttggctccg tgttagaaga cccggtccat gcagttgtat 60
acatagtgtt catgctgggc tcctgtgcat tcttctccaa aacgtggatt gaggtctcag 120
gttcctctgc caaagatgtt gcaaagcagc tgaaggagca gcagatggtg atgagaggcc 180
accgagagac ctccatggtc catgaactca accggtacat ccccacagcc gcggcctttg 240
gtgggctgtg catcggggcc ctctcggtcc tggctgactt cctaggcgcc attgggtctg 300
gaaccgggat cctgctcgca gtcacaatca tctaccagta ctttgagatc ttcgttaagg 360
agcaaagcga ggttggcagc atgggggccc tgctcttctg agcccgtctc ccggacaggt 420
tgaggaagct gctccagaag cgcctcggaa ggggagctct catcatggcg cgtgctgctg 480
cggcatatgg acttttaata atgtttttga atttcgtatt ctttcattcc actgtgtaaa 540
gtgctagaca ttctccaatt taaaattttg ctttttatcc tggcactggc aaaaagaact 600
gtgaaagtga aattttattc aagccgactg ccagagaagt gggaatggta taggattgtc 660
cccaagtgtc catgtaactt ttggtttaac ctttgcacct ttctcagtgc tgnatgcggc 720
tgcaagccgc tnacctgttt cccacaaagg gaatttctta ctctggttgg aagcncaaac 780
acttgaatgg ctacgtttat tttgg 805

<210> 2151
<211> 807
<212> DNA
<213> Homo sapiens

<400> 2151
aaatatcata ttacaacatg ggaagaataa gattacagtg gtctcgaatt tgggaagtta 60
ttggagatca ttttaataag gttgggtgta atcctaatga agatgtagct atttttgcag 120
tagactcctt gaggcagttg tcaatgaagt tcttagagaa aggggagctt gctaacttca 180
gattccagaa ggatttctta agacctttg aacatataat gaaacggaac aggtctccaa 240
caattcgaga tatggttgta cggtgtatag cacagatggt taattctcaa gctgctaaca 300
ttcgatctgg atggaagaac attttctctg tatttcatct agctgcatct gatcaagatg 360
aaagcatagt ggaacttgca ttccaaacaa ccgggcacat tgtcaccctt gtatttgaaa 420
aacactttcc agcgaccatt gattctttcc aggatgcagt gaagtgtttg tctgaatttg 480
cgtgcaatgc agctttccca gacacaagta tggaagcaat tcgacttatt cgccattgtg 540
caaaatatgt gtctgataga cctcaggctt tcaaggaata cacaagcgat gatatgaacg 600
tagcacctga agacagggtg tgggtgagag gatggttccc aattctcttg agttatcctg 660
gnatcatcaa tagatgcaaa ttagaatgta agaacccagg ggtttaacag taatggtttg 720
aaataatgaa aacttatggn caccttttatg agaaacactg gtggcaggat ttaatttaan 780
aattggtttc agaatctttg gacnata 807

<210> 2152
<211> 808
<212> DNA
<213> Homo sapiens

<400> 2152
ttttggcctc actctttgtg gaccactaag gactttgctg ctatttgagc acagtgatat 60
tgttgtcatt tcactactca gtgttttgtt caccagttct ggaggaggac cagcaaagac 120
aaggggagct gctttttttca ttattgctgt gatctgttta ttgctttttg acaatgatga 180
tctcatggct aaaatggctg aacaccctga aggacatcat gacagtgctc taactcatat 240
gctttacaca gccattgcct tcttaggtgt ggcagatcac aagggtggag tattattgct 300
agtactggct ttgtgttgta aagttggttt tcatacagct tccagaaagc tctctgtcga 360

05539450.0720800

cgttggtgga gctaaacgtc ttcaagcttt atctcatctt gtttctgtgc ttctcttgtg 420
cccatgggtc attgttcttt ctgtgacaac tgagagtaaa gtggagtctt ggttttctct 480
cattatgcct tttgcaacgg ttatcttttt tgtcatgatc ctggatttct acgtggattc 540
catttgttca gtcaaaatgg aagtttccaa atgtgctcgt tatggatcct ttcccatttt 600
tattagtgct ctccttttg gaaatttttg gacacatnca ataacagacc agcttcgggc 660
tatgaacaaa gcagcacacc aggagagcac tgaacaccgt cctgtctgga ggagtggtag 720
tgaagtgcta tattcttcat tntgnctgcc aatatcttat catctccctc ttaanagagg 780
accaaaaagg acccccttaat tggatatt 808

<210> 2153
<211> 803
<212> DNA
<213> Homo sapiens

<400> 2153
ctaaaacatt acaggccggc ctgagcagca atcatgtgtc ccatngggaa gttctgcgga 60
aagtggagag gggttcacgg attgtcactg ttgtgcccca ggacacaaag cttgtattac 120
agatgccaag gggaaactta gaagttgttc atcatcgagc cctggtttta gctcagattc 180
ggaagtggtt ggacaaactt atgtttaaag aggcatttga atgcatgaga aagctgagaa 240
tcaatctcaa tctgatttat gatcataacc ctaaggtgtt tcttggaaat gtggaaacct 300
tcattaaaca gatagattct gtgaatcata ttaacttgtt ttttacagag ttgaaagaag 360
aagatgtcac gaagaccatg taccctgcac cagttaccag cagtgtctac ctgtccaggg 420
atcctgacgg gaataaaata gaccttgtct gcgatgctat gagagcagtc atggagaaca 480
taaatcctca taaatactgc ctatccatac ttacatctca tgtaaagaag acaaccccag 540
aactggaaat tgtactgcaa aaagtacacg agcttcaagg aaatgctccc tctgatcctg 600
atgctgtgag tgctgaagag gccttgaaat atttgctgca tctggtagat gttaatgaat 660
tatatgatca ttctcttggc acctatgact ttgatttggt cctcatggta nctganaagt 720
acagaaggat cccaaaagaa tatcttccat ttcttaatac acttaagaaa atggaaacta 780
attatcagcg gtttactata nac 803

<210> 2154
<211> 792
<212> DNA
<213> Homo sapiens

<400> 2154
tncgcccggg gatttcatgc ggcctagctc ggttccgcct cctcctcgcg cggccccagc 60
ggctgcccgc accccagccc cactccgggc ctccgtgtct ctcctgtgat cgcactgaca 120
cggccggggg gttagaatgg aacaaactga aggcccgatg agagaaaggg aaagttaagg 180
atgctggagc agaacaatgg atttctcttt ctctttcatg caagggatca tgggaaacac 240
aattcagcaa ccacctcaac tcattgactc cgccaacatc cgtcaggagg atgcctttga 300
taacaacagt gacattgctg aagatggtgg ccagacacca tatgaagcta ctttgcagca 360
aggctttcag tacccagcta caacagaaga tcttcctcca ctcacaaatg ggtatccatc 420
atcaatcagt gtgtatgaaa ctcanaccaa ataccannca tataatcagt atcctaatgg 480
gtcagccaat ggctttggtg cagttagaaa ctttagcccc actgactatt atcattcaga 540
aattccanac acaagaccac atgaaattct ggaaaaacct tcccctncac agccaccacc 600
tcctncttcg gtaccacaaa ctgtgatttc aaagaagact ggctcacctg aaattaaact 660
aanaataacc aaaactatcc agaatggcag ggaattgntt gagtcttccc tttgtggaga 720

EP 1 574 585 A1

cctttaaat gaagtacagg ccaagtgagc acacgaaatc aaagcatgaa agcanaatag 780
aaaagaggaa na 792

<210> 2155
<211> 839
<212> DNA
<213> Homo sapiens

<400> 2155
cagcccagag gaccccaggc gaccagagtc caggctgagg cccgangtgg ctcaccagct 60
gttcagatgc ttccagtatc aggaggacat ggggccacgg gcgtccctga gccggctccg 120
ggagctctgc ggccactggc tgcggccggc tctgcacacc aagaaacaga tcctggagct 180
gctggtgctg gagcagttcc tgagtgtgct gcctccgcac ctcctgggcc gcctgcaggg 240
gcagccgctc agggatgggg aggaggtggt gctgctgctc gagggcatcc accgggagcc 300
cagccacgcg gggccgctgg attttagttg taatgctggc aagagttgtc cccgtgcaga 360
cgtcaccttg gaggaaaagg ggtgtgcttc ccaggtcccc agccacagcc ccaagaagga 420
attgcctgcg gaagagcctt cagtgctggg cccatcggat gagcctcccc gaccccagcc 480
aagggctgcc cagcctgctg agccgggaca gtggaggctt cccccaagtt caaagcagcc 540
gctgagcccg gggccccaga agacattcca ggccctgcaa gaaagcagtc cccagggccc 600
ctcaccatgg ccagaggaga gttcccgaga tcaggagctg gcggctgtgc tggagtgcct 660
gacctttgag gatgtgccag agaataaggc gtggcctgca cacccccctgg gattcggaag 720
cagaacccca gaccaaggan gaatttaaac aagaagaccc aaaggggctt gcctggccac 780
tcccatctta canaatccca ggcagatagt cctggggtgc ccggaaaaac cttgcnccc 839

<210> 2156
<211> 805
<212> DNA
<213> Homo sapiens

<400> 2156
cangtactag agatgaattg cttagtgccc gagatgaaat tttgctcctt catcaagcag 60
cagcaaaggt tgcctctgag cgggacactg acattgcttc tttacaagaa gagcttaaga 120
aggtgagagc tgagcttgag cggtggcgga aagcagcgtc tgaatatgag aaagaaatca 180
caagtctgca aaacagtttt cagcttagat gtcaacagtg tgaggaccag cagagagaag 240
aagcaacaag gttgcaaggt gaactagaga agttgagaaa ggaatggaat gcattggaaa 300
ccgaatgcca ttctctaaaa agggaaaatg ttttgctatc atcagaactg caacggcaag 360
aaaaagaatt gcacaattct cagaagcaga gtttagagct taccagtgat ctcagcatcc 420
ttcaaatgtc taggaaagaa cttgagaatc aagtgggatc cttgaaagaa cagcatcttc 480
gggattcagc tgatttaaaa actcttctca gtaaggcaga aaaccaagca aaggatgtgc 540
agaaagagta tgaaaagaca cagactgtac tctcagaact gaagttgaag tttgaaatga 600
ctgagcagga aaagcagtca atcacagatg agctcaaaca gtgtaaaaac aacctgaagc 660
tgctccgaga gaaaggaaat aatccttcca tattacaacc cgtcccagcc gtattcatcg 720
gcctattcct ggctttcctg ntttggtgtt tcggtccatt ggtggtagag aaagaaaccc 780
tggncctgga tgcccntgtt ggctg 805

<210> 2157
<211> 840
<212> DNA

0050205-0050405

<213> Homo sapiens

<400> 2157
aaaaaaaaga aacagatatt aacaaactaa aaccccagca agaaccggga cgaacaatag 60
aagatctaaa aatgtatgaa caccttttcc ctgagcttgt tgatgatttt caggactatg 120
atttaatctc caaagaacca aagccttttg tatttgaggg aaaagtacgt ggtcctattg 180
ttgttcctac ggcaggcgag gaaacatctg ggaattctgg caatttaaga aaagttgtaa 240
tgaaggagaa catatcttct aaaggagatg aaggtgaaaa gaagtctacc tttatggatc 300
tagcaaaaga agatattaaa gataatgata gaacattaca acagcagcca ggtgatcaaa 360
atagaactat ttcatcagtc catggtttaa acaatgatat tgtaaaggcc ttggaccgaa 420
ttacattgca gaatattcct tctcaaacag ccccaggttt tactgcagaa atgaagaagg 480
actgcagtct tcctcttact gtccttacct gtgctaaagc atgtccacac gtggctactt 540
gtggaaatgt tctgtttgag ggaagaacag ttcagctagg gaagctttgc tgcactggag 600
ttgaaactga agatgatgaa gatactgagt caaattcatc ggtagaacaa gcatcggttg 660
aagtacctga tggaccaaca ctccatgacc cagacctcta tattgagatt gtgaaaaatc 720
gaagtctgtc ccagaatatt cagangtggc ttatcccgat tatttggtca cattccgcct 780
cattcaaaga gcctatttta gaaaggcctt atggtgtnca anggccaaaa ttgctcaaga 840

<210> 2158
<211> 784
<212> DNA
<213> Homo sapiens

<400> 2158
tgtactaagc aaaatgttac tgaatttcct atcataaaga tgtacaagaa aggcgagaac 60
ccagtatctt atgctggaat gttaggaacc gaagatctcc taaaatttat ccagctcaac 120
aggatttcat atccagtgaa tataacatcg atccaagaag cagaagaata tttaagtggg 180
gaattatata aagacctcat cttgtattct agtgtgtcag tattgggact atttagtcca 240
accatgaaaa cagcaaaaga agattttagt gaagcaggaa actacctaaa aggatatgtt 300
atcactggaa tttattctga agaagatgtt ttgctactgt caaccaaata tgctgcaagt 360
cttccagccc tgctgcttgc cagacacaca gaaggcaaaa tagagagcat cccactagct 420
agcacacatg cacaagacat agttcaaata ataacagatg cactactgga aatgtttccg 480
gaaatcactg tggaaaatct tcccagttat ttcagacttc agaaaccatt attgattttg 540
ttcagtgatg gcactgtaaa tcctcagtat aaaaaagcaa tattgacact ggtaaagcag 600
aaatacttgg attcatttac tccatgctgg ttaaatctaa agaatactcc agtggggaga 660
ggaatcttga gggcatattt tgatcctctg cctncccttc ctcttcttgn tttggtgaat 720
ctgcattcag gtggccaagt atttgcattt ncttcagacc aggctataat tgaagaaaac 780
cttg 784

<210> 2159
<211> 841
<212> DNA
<213> Homo sapiens

<400> 2159
nntctccact gaggcccagc tgttcctctc cttgaaaagt caaggnttgg ttcaagccag 60
atagcacctg aggacagaac atatcaggag ccaagttaca ccctgtttaa ccctgccttc 120
aaagggacga ctctgtaaga ttctctgcta cttattcaag ttgacacgat gcccttcaca 180

0950450-092800

ctccacctga ggtcccgcct tccctctgcc ataaggagtt tgattctaca aaagaaacca 240
aacatcagaa atacatccag catggctgga gagctccgac cagccagcct ggtggtcctg 300
cccaggtccc ttgctccagc ttttgaaaga ttctgccagg tcaacactgg tcctctaccc 360
ctgctgggcc agagtgagcc agaaaagtgg atgctgcccc ctcaaggtgc tatctcagag 420
accaggatgg gccatcccca gttctggaaa tacgagttcg gtgcctgcac cggtagcctg 480
gcttcgctgg agcagtactc ggagcagctg aaggacatgg tggccttctt cctgggctgc 540
agcttctccc tggaggaggc cttggagaaa gcggggctcc ccagaagaga cccagcaggt 600
cacagccaga caacagtgcc ttgtgttacc catgctggct tctgctgccc tctggtggtc 660
acgatgaggc ccattcccaa ggacaaagct ggaanggctg gtgcnggcct gctgttcctc 720
ggaggtgaac angggcaacc tgtcacatgg gcgaaccaaa actgttggga atcaaagagc 780
ttttcaaacc tgcctacggg gatgccatgg tgtgtccccc aagggangtt ccagtgttct 840
t 841

<210> 2160
<211> 839
<212> DNA
<213> Homo sapiens

<400> 2160
caaggtatag acttttttgg ttatgataca gttaagccaa aaacagctaa tctttgcatc 60
taaagcaaac taatgtatat ttcacatttt attgagccga cttatttcca caaatagata 120
aacaggacaa aatagttgta caggttatat gtggcatagc ataaccacag taagaacaga 180
acagatattc agcagaaaac tttttatact ctaattcttt ttttttttt ttttgagaca 240
gagttttagt cttgtttccc aggctggagt gcaatggcac aatcttggct cactgcaacc 300
tccgcctcct gggttcaggc aattttcctg cctcagcctc ccaagtagct gggattacag 360
gcacccacca ccatgcccag ctaatttttg tatttttaat agagagctaa taattgtata 420
tttaataaag acgggtttca ccatgttggc caggctggtc ttgaactcct gacctcaggt 480
gatcctcctg cattggcctc ccaaagtgct ggaattccag gcatgagcca ctgcgcccag 540
tctacacact aattcttgtt agcccaacag ctgttctgtt ctatctaccc ctcatttcac 600
gctcaaggag tcatacctag aatagttaca cacaagaggg aaactggaag ccaaacactg 660
tacagtattg tgtagaaagt cacctcccta ctccttttat tttacatgag tgctgatgtg 720
ttttggcaga tgagctttca gctgaggcct gatggaaatt gagataacct gcaaagacat 780
aacagtattt atgagttata tcttaattct tgaaattggg ggaatgcatg atggacatn 839

<210> 2161
<211> 841
<212> DNA
<213> Homo sapiens

<400> 2161
tttgtatgag aggagacatg tgtccttttg atcatggaag tgatccagta gttgtagaag 60
atgtgaatct tcctggtatg ctgcctttcc cagcacagcc tcctgttgtt gaaggaccac 120
ctcctcctgg actcccccca cctccaccaa ttcttacacc cccacctgtg aatctcaggc 180
ccccagtacc accgccaggt ccattgccac ccagtctccc acctgttaca ggaccaccac 240
ctccacttcc tcctttgcag ccatctggca tggatgctcc tccaaactct gcaaccagtt 300
ctgttcctac tgtagtaaca actggcattc atcaccagcc tcctcctgct ccaccctctc 360
tttttactgc agatacatat gacacagatg gctacaatcc tgaagcccca agcataacaa 420
acacttccag acctatgtat agacacagag tgcatgcaca aaggcccaac ttgataggac 480

0950204.0002600

taacatcagg ggatatggat ttgccaccca gagaaaagcc tcccaataaa agcagtatga 540
ggatagtagt ggactcagaa tcaaggaaaa gaaccattgg ttctggagag cctggagttc 600
ctacaaagaa gacttggttt gataaaccaa attttaatag aacaaacagc ccaggctttc 660
agaagaaggt tcaatttgga aatgaaaata ccaagcttga acttagaaaa gttcctccag 720
aattaaataa tatcaagcaa acttaatgaa cattttagtc gatttggaac cttggntaac 780
ttacaggttg cttataatgg tgatcctgaa ggggccctaa tccaatttga acatacgaaa 840
a 841

<210> 2162
<211> 756
<212> DNA
<213> Homo sapiens

<400> 2162
cgntctctgc tttctggcag acctccttcc ctttctctcc cctcgtctct cttgaacccc 60
ttccgctcag actcctgcac ccaccatggc acagagcagc tctcactgag gtcaccagcc 120
acctcctcca ctctgttggt ccagaggcca tgctgggccc tcatcctgtg gacctgccag 180
cagcatcttc tttcgtaaaa tgcccctgct tggggcagca ccctctggtc ctccctctgc 240
actggctggg cctctgtgtc tgtgggttct gctcatctcc ccgagctctc accatcgggg 300
cttctctggg ctcggtgctt cggcagcccc ccttttttaa ctccaggtgt tccttggggc 360
atctcatgtc atctccagca ttaaaccacg tctctgatga ttcctgaggc tgtttcctgg 420
agttctctcc taaactccag gctcaacagc ccagccatct acacagtccc tccacgtggt 480
ggcctcagag ctactgcaag cttccatgat cacagctgaa ttgctggtgg cctgccctgc 540
cccaaacctg tagctctgtc ctcttctcca tgggaatgga agctctttgc tctcattgct 600
caagcccaaa agcccggggg tcatcctcag ctgctccttc tctgtcatac actgcgtcct 660
attcgtcagc aaaatccatc tagaatctgn ccgcttctcg ctggtggcaa ccggcacctt 720
nctgaactan gggaaccttc atcttttggg gctctt 756

<210> 2163
<211> 841
<212> DNA
<213> Homo sapiens

<400> 2163
attcgagaat gggacatgga atgaggcgac ggccccagca agcccnagca gccccagccc 60
cagccccagg cccagcagca gcagcagcag cccctgctct cccgccgccc ggagaggctc 120
tgcagccatg aagccaaccg tcccgaggca ccgccggtaa gcagggagcc tccgcggagc 180
tcccgccgcc gctccccctt ggcgccaaag gcacccggtc ccggagcagc cacgcgcggc 240
ccgtgagcct cgccaccagc gggggctcag aggaggagga caaagacggc ggggtgctgt 300
tccacgtcaa caagagcggc ttccccatcg acagccacac ctgggagcgc atgtggatgc 360
acgtggccaa ggtgcaccct aaggggggag aaatggtggg cgccatcagg aacgccgcct 420
tcttggcaaa gccttcaata ccccaggtcc caaactacag gctgtcgatg acgatcccag 480
actggctcca ggcgatccag aattacatga agaccctaca atataatcac acagggaccc 540
agttctttga aattaggaaa atgagaccgc tgagtgggtt aatggaaaca gcaaaagaaa 600
tgacccgaga gtccttgcct atcaaatgcc ttgaagctgt catcctgggc atctacttaa 660
ccaatgggca gccttccatt gagcggttcc ccatcagctt taaaacctac ttctcaggaa 720
actactttca ccacgttgtg ctggggattt actgcaatgg gccgctatgg ctcattgggc 780
atgaacccgc aaggcttaac tgatggacaa gccanttgac tttttcggac tctgaatgac 840

0960204.0070000

n 841

<210> 2164
<211> 796
<212> DNA
<213> Homo sapiens

<400> 2164
gctaagaagg ggagactgag gctgaggctg gggaacatcg ggcagcatga gcggctgcgg 60
gctcttcctg cgcaccacgg ctgcggctcg tgcctgccgg ggtctggtgg tctctaccgc 120
gaaccggcgg ctactgcgca ccagcccgcc tgtacgagct ttcgccaaag agcttttcct 180
aggcaaaatc aagaaggtaa cgcgagccct gggcgaaccc ttgctgtctg gctcccgctt 240
ttcaccctca gctgcaagac tggtgttgaa ctttgtgaga ttccccaaac ctgccagaga 300
gatacaccct gcggccgagg cgtgttaaca ctccggattc ctgagttcca ggaaaacctt 360
cccagagaaa ggtggactcc cgaaaaattg accaggaagg gaaaatccca gatgaaactt 420
tggagaaatt gaagagccta gggctttttg ggctgcaagt cccagaagaa tatggtggcc 480
tgggcttctc caacaccatg tactcacgac taggggagat catcagcatg gatgggtcca 540
tcactgtgac cctggcagcg caccaggcta ttggcctcaa ggggatcatc ttggctggca 600
ctgaggagca gaaagccaaa tacttgccta aactggcgtc cggggagcac attgcagcct 660
tctgcctnac ggagccagcc agtgggagcg atgccagcct taatccggag cagagncncc 720
cttagtggaa gaccagaagc acttacattc ttcaatgggc ttccaaggtc tgggantact 780
taatgggagg acttgg 796

<210> 2165
<211> 743
<212> DNA
<213> Homo sapiens

<400> 2165
attcacagga ggctacgggc tggagaagga cccgcagaga tcaggggact tgtataccca 60
ggcagcagag gcagcgatgg aagccatgaa gggccgactg gccaaccagt actaccaaaa 120
ggctgaagag gcctgggccc agatggagga gtaaccagga aaatcactgc cggctagtcc 180
caagcaaacg ggctaggagg aaagattaaa aaaacaacaa caacaactta tttagtttgg 240
ggaggggaag catttttaag tgtgttgtaa aatcaaattt tatatttcat tttttgactc 300
ttgaaaaatg tctttgctcc ttggcagcta ccagcagaga ctctatagct gtctcttagg 360
gcagtatttt ggggaagtgg ggcttgaaga agcagcctaa tgaaccaaca taccgttttg 420
tgtgtggttt tttttgtttg tttgtttgtt tgttttgaga cagagtcttg ctctgtcacc 480
caggctggag tgcagtgaca tgatcttagc tcactgcaac ctccgcctcc tgggttcaag 540
tgattctcct gcctcagcct cccaagtagc tgggattact ggtgcacacc accacactca 600
gctaattttt gcatttttag tagagatggg gtttcaccat gttggccagg ctggtctcga 660
actcctaacc tcangtgatc cacctgcctn acctnccaag gtgctgggat tacaggtgtg 720
aaccaccatg cctgcccatt ttg 743

<210> 2166
<211> 841
<212> DNA
<213> Homo sapiens

05529465.020800

0030020350

<400> 2166
naattaagag gagagatgtt ggtccttatg gcattcgatc tgaatattgt atcaggaaaa 60
tcatttgtcc catnggagtt ccagaaacac caaaagaaac gcctacacct cagaggaaag 120
gccttcgatc aagtgcactg cggccaaaga gaccagaaac gcccaagcaa actggccctg 180
ttattattga aacctgggta gcagaagaag aactggaatt gtgggagatc agggcatttg 240
ctgagagagt ggagaaagaa aaggcacaag cagttgagca acaggctaag aaacgactgg 300
agcagcagaa gccgacagtg attgcaactt ccactacttc cccaacaagc agtacaacca 360
gcaccatctc tccagcacag aaggttatgg tggcccccat aagtggctca gttacaactg 420
gaaccaaaat ggtactaact actaaagttg gatctccagc tacagtaaca ttccaacaaa 480
acaagagctt tcatcaaacc tttgctacat gggttaagca aggccagtca aattcaggcg 540
ttgttcaagt acagcagaaa gtcctgggta tcattccatc aagtacaggt accagtcagc 600
aaacctttac ttcattccag cccaggacag caacagtcac aattaggccc aatacctcag 660
ctctggagga accacaagca attcacaagt aatcacaggg cctcagattc gccctggtat 720
gaccgtgatt agacaccact tccaacagtc aacactagga aaggcaattt nttcgaacac 780
ctgtgatggt acagccaggt gctcctcaac aaggggatgg acttcaaatc atcaggggggg 840
c 841

<210> 2167
<211> 826
<212> DNA
<213> Homo sapiens

<400> 2167
naaaaaaaca ccatcatgct gtctgctggc agcttttcct ccccntatga gcacctcagc 60
cagccagaga caaagcgcat ggtagagcac tacaccgcct atctcagcga caacacccgc 120
ctcattgcta acccgggcct caaattctct gtcagaaatg aagtaatggc taccagccac 180
gtcacagatg aatggatgac acaaatggaa atgagtagcc tgaacactta cattgtccgc 240
cgttacatag caacacccaa tggcgtcctc agaatttatc ctggttccct catggacaaa 300
gcatttgatc ccactaggag acaatggtat ctccatgcag tagctaatcc agggttgatt 360
tctttgactg gtccttactt agatgttgga ggagctggtt atgttgtgac aatcagtcac 420
acaattcatt catccagtac acagctgtct tctgggcaca ctgtggctgt gatgggcatt 480
gacttcacac tcagatactt ctacaaagtt ctgatggacc tattacctgt ctgtaaccaa 540
gatggtggca acaaaataag gtgcttcata atggaggaca ggggttatct ggtggcgcac 600
ccgactctca tcgaccccaa aggacatgca cctgtggagc agcagcacat cacccacaag 660
gagcccctgg tagcaaatga tatcctcaac caccccaact ttgtaaagaa aaacctgtgc 720
aacaagcttc agtgacagaa cggtccaaag gtttataatt caacaccagc cttgcggggg 780
atttgacgaa ccttngcatg gcagccactg ttcaatacng antaca 826

<210> 2168
<211> 806
<212> DNA
<213> Homo sapiens

<400> 2168
tctgaactag acagggcagt tacccaaatc agtgtagacc tgatngatga ctacccagca 60
tctgacccac ggggggctga gtctgtccct gaggaagcac ctgggttcag caatacgtca 120
ctgattatcc ttcaccagct agaagacaag atgaaagctc actcttttct tatggacttt 180
attcatcaag ttggcttatt tggacgtcta ggcagttttc cagttagagg gacaccgatg 240

gccactcgac tgttgctctg tgagcatgcc gaaaagctgt cagccgccat tgttctcaag 300
aaccaccact cccggctttc tgaccttgtc aacacagcca tattgattgc tttgaacaag 360
agggagtatg aaatcccatc caacctgact cctgcagatg tctttttcag ggaggtatcc 420
caagtagata ccatctgtga gtgcttactg gagcatgagg agcaagtctt gagggatgca 480
cctatggatt ccattgaatg ggctgaagtg gtgatcaatg tgaacaatat tctcaaggat 540
atgctgcagg ctgctagtca ttatcgccaa aatagaaact ctttgtatag aagagaagaa 600
tcactagaaa aagaacctga atatgttcca tggacggcaa caagtggtcc tggtggcatc 660
cgaacggtaa taatacgcca gcatgagatt gtcctgaagg tggcttatcc acaggcagac 720
agcaacctcc gaaacatcgt gaccgancac ttggtagccc tgatcgattg cttnctggaa 780
tggttattgt ttctnactta agtctg 806

<210> 2169
<211> 530
<212> DNA
<213> Homo sapiens

<400> 2169
ccggaccccg gtgttcatct tcgagaggct ctgcagcatc atttatcctg aggagaatga 60
agtcactgag ttctttgtga ccctggagaa ggatccccaa caagaagact tcttacaggg 120
caggatgcct gggaacccgt atagcatcaa tgagccaggc atcgggccgc tgatgaggga 180
tataaagaac aagatttgcc aggactgtga cttagtggcc ctcctggaag atgacagtgg 240
catggagctt ctagtgaaca ataaaatcat tagtttggac cttcctgtgg ctgaagttta 300
caagaaagtc tggtgtacca cgaatgangg anagcccatg aggattgttt atcgtatgcg 360
ggggctgctg ggcgatgcca cagaggagtt cattgagtcc ctggactcta ctacagatga 420
agaagaagat gaagaagaag tgtataaaat ggctggtgtg atggcccant gtgggggcct 480
ggaatgcatg cttaacanac tcgcanggat cagagatttc aagcagggac 530

<210> 2170
<211> 836
<212> DNA
<213> Homo sapiens

<400> 2170
actgaaatgt ttggtcagta cccacttcag gtcaatgggt tcaaagatct gcatgagtgc 60
ctagaagctg caatgattga aggagaaatt gagtctttac attcagagaa ttcaggaaaa 120
tcaggccaag agcattggtt tactgaatta ccacctgtgt taacatttga attgtcaaga 180
tttgaattta atcaggcatt gggaagacca gaaaaaattc acaacaaatt agaatttccc 240
caagttttat atttggacag atacatgcac agaaacagag aaataacaag aattaagagg 300
gaagagatca agagactgaa agattacctc acggtattac aacaaaggct agaaagatat 360
ttaagctatg gttccggtcc caaacgattc cccttggtag atgttcttca gtatgcattg 420
gaatttgcct caagtaaacc tgtttgcact tctcctgttg acgatattga cgctagttcc 480
ccacctagtg gttccatacc atcacagaca ttaccaagca caacagaaca acagggagcc 540
ctatcttcag aactgccaag cacatcacct tcatcagttg ctgccatttc atcgagatca 600
gtaatacaca aaccatttac tcagtcccgg atacctccag atttgcccat gcatccggca 660
ccaaggcaca taacggagga agaactttct gtgctggaaa gttgtttaca tcgctggagg 720
acagaaatag aaaatgacac cagagatttg caggaaagca tatccagaat ccatcgaaca 780
attggaatta atgtctctga caaatctatg atacaagttc cttatcgatt acattg 836

05253403.0920800

<210> 2171
<211> 620
<212> DNA
<213> Homo sapiens

<400> 2171
agttagggcg gcggatggag gtcagcggtg gtgctcgctg cggtttggaa tcacttgcta 60
ggagtcttgt ctctctgcca cccaggacat catggcagct cacctggtaa agcgatgcac 120
gtgcctcctg agagaagctg ctcgtcaggc ccctgccatg gctccagttg gccgactgag 180
acttgcctgg gtagcccata agactctgac ttcctcagcc acctcaccca tttcccacct 240
cccaggttcc ttgatggagc cggtggagaa ggaacgagca tctactccct acatagagaa 300
gcaggtggac cacctcatca agaaggccac aaggccagag gagctcctgg agctacttgg 360
tggcagtcac gacttggaca gcaatcaagc agcaatggta cttatccggc tctctcactt 420
gctgtctgag aagccagaag ataaaggctt gctcatacag gatgcccact ttcatcaact 480
tctctgtctg ctcaacagtc agattgcctc ggtctggcat ggtaccctct cgaagctgct 540
gggaagcctg tatgctctgg gcatccccaa ggcctncaag gagctgcagt cggtggagca 600
ngangtccgc tagcgcatgc 620

<210> 2172
<211> 656
<212> DNA
<213> Homo sapiens

<400> 2172
aactttatca agagcctgga tgactcgcag tgtggcatca cctacaagat ggagaaggtt 60
tactccacct tgaaagataa ggatttggag ctctacctga aactgcaaga gcagaacatc 120
aagcctcagt tctttgcctt ccgctggctg acactgctgc tgtcccagga gttcttgctg 180
cctgacgtca tccgcatctg ggactccctc ttcgccgatg acaaccgctt tgacttcctc 240
ctcctcgtct gctgcgccat gctcatgctg atccgggagc agttgctgga aggggacttc 300
actgtgaata tgcggctgct gcaggactac cccatcacag atgtctgcca gatcctgcag 360
aaagccaagg agctccaaga ctcaaagtag cccggcggca agaggcccac gttcggggga 420
gaagcctccc gaccctgtgc cctggctccc gggacacata gaaacctgta ggaacccagc 480
ctgaggggaa gccacaggat cggcccgaga cccaggccat gcccactggg gacacactgt 540
gccgtgctcc ttctgccgcc acgcccagct ccccacctgc cctgcactct gcctctttgc 600
caggatactg angagggctg gagctcggga agttgncctt cctgggccan ggcccg 656

<210> 2173
<211> 683
<212> DNA
<213> Homo sapiens

<400> 2173
ccggtccatg cagttgtata catagtgttc atgctgggct cctgtgcatt cttctccaaa 60
acgtggattg aggtctnagg ttcctctgcc aaagatgttg caaagcagct gaaggagcag 120
cagatggtga tgagaggcca ccgagagacc tccatggtcc atgaactcaa ccggtacatc 180
cccacagccg cggcctttgg tgggctgtgc atcggggccc tctcggtcct ggctgacttc 240
ctaggcgcca ttgggtctgg aaccgggatc ctgctcgcag tcacaatcat ctaccagtac 300
tttgagatct tcgttaagga gcaaagcgag gttggcagca tgggggccct gctcttctga 360

0050450-0050-0050

gcccgtctcc cggacaggtt gaggaagctg ctccagaagc gcctcggaag gggagctctc 420
atcatggcgc gtgctgctgc ggcatatgga cttttaataa tgtttttgaa tttcgtattc 480
cttcattcca ctgtgtaaag tgctagacat tttccaattt aaaattttgc tttttatcct 540
ggcactggca aaaagaactg tgaaagtgaa attttattca gcccgactgc cagagaagtg 600
ggaatggtat aggattgncc ccaaagtgtc catgtaactt ttggtttaac ctttgcacct 660
tctnatgctg gatgccggtt gna 683

<210> 2174
<211> 725
<212> DNA
<213> Homo sapiens

<400> 2174
aaaaaaaaaa aaaaaaaaaa atttacagag ttgtcctcgg aggtccagga cagcggccag 60
cccggcggcg ggagtcaggg ccacgccacc tgcagggaag aacccgagtc gaagcgggaa 120
gatggctgca gacaggcctg cagatcaggg agcagagaaa catgaaggca caggtcagtc 180
ctctgggatc actgatcaag agaaggagtt atccaccaat gctttccaag ctttcacatc 240
tggaaattat gatgcctgtc tacaacacct tgcctgtcta caagatataa acaaagatga 300
ttataaaata attttgaata cagcagtagc tgagtttttt aaaagtaacc aaacaacaac 360
agataatttg agacaaacac ttaaccagct gaagaatcag gtccactcag ctgttgaaga 420
aatggatgga ttagatgatg ttgaaaacag catgttgtac tataatcaag cagtcattct 480
ttatcatctg cggcagtata cagaagccat atcagttggt gaaaaacttt atcagttcat 540
agagcctttt gaaaaatttg cccaagcagt gtgnttttg cttgtagacc tgtatatatt 600
aacctaccaa gcttgagaaa gctttgcatc ttcttgctgg cctaanaaaa aaatgatttc 660
acaagggtaa ccaattaccc aaaaatggga aaggaatgga gactgggtna ttaaccaacc 720
cnccc 725

<210> 2175
<211> 713
<212> DNA
<213> Homo sapiens

<400> 2175
gntatttcag accaaagtaa atgtccaact ctctgcacac agaaaaaatc ttggaaatgt 60
aatgaatgtg gaaaaanctt tactcagagc tcatccctta cccaacatca gagaactcat 120
actggagaga gaccctacac atgtgaggaa tgtgggaaag cctttagtcg tagttcattc 180
cttgttcaac atcaaagaat tcacactgga gtgaaaccat atggatgtga gcagtgtggg 240
aaaacatttc gatgtcgatc atttcttact cagcatcaaa gaattcacac tggagagaaa 300
ccttataaat gcaatgaatg tgggaattcc ttccgcaatc actcacatct cactgaacac 360
canagaattc acactggaga gaaaccttat aaatgcaata ggtgtgggaa ggcattcaat 420
cagaatacac accttattca tcatcagaga attcacactg gtgagaagcc ttacatatgc 480
agtgaatgtg gctcttcttt tcgaaaacac tcaaatctta cgcaacatca gagaattcac 540
actggggaaa aaccccataa atgtgacnaa tgtgggaaaa ctttccaaac aaaggcaaac 600
ctctctcagc atcagagaat tcatagtgga gagaaccccn ctaatgnaaa agaatgtggc 660
aaagcctttt gcagaaccca tctcttatta ancacccacc gaattcatta ctc 713

<210> 2176
<211> 557

0020050250

<212> DNA
<213> Homo sapiens

<400> 2176
nntagcgggc ggcagagctg gagtgaaggg agctagtggt aaagggagct ggtggagggg 60
tggcggcagg ggtaaggggc aggggacacc ctctagacgg agagcgggct ccgaggtcct 120
ggctggccct cggtgcgccc gcccctgtgt tggtcccaca atccctggca atgagaggcc 180
agggtttatt ggacagagtc agttgtgggg ttcagagggt cagcaatcaa tcaatcctcc 240
gaatccagag atttanaccc agtcgtccgt attaggactg gaggggggtc aataggttca 300
gtgtttgaga tgccaaggga acctgtcttt tgatttgngg ttcaacatac agaggtagca 360
gtcaccatta tgctcaaagn ggtgatcctg attggaggcc ctcaaaaggg aactcgcttn 420
agacctttgt cttttgaggt gcccaaacca ttgattcctg tggcangggt ccctatgatc 480
caacaccata ttgaagcctg tgcccaggtc cctgnaatgc angagattct gctcattggc 540
ttctaccaac ctgatga 557

<210> 2177
<211> 616
<212> DNA
<213> Homo sapiens

<400> 2177
atgcgtgcag gcccggagcc ccaggcgctg gtggggcaga aacgcggcgc cctgcgtctt 60
ctggttccga ggctggtcct caccgtttcc gctccggcgg aagtgaggag gagggtcctt 120
cgacccgtgc tgagctggat ggaccgcgag acgcgcgccc tcgccgacag ccacttccga 180
ggcctggggg tcgatgtccc cggcgtcggc caggctccgg gccgggtagc cttcgtctcg 240
gagccgggcg ccttctccta cgccgacttt gtgcggggct tcttgctgcc caacctgccc 300
tgcgtgtttt ccagcgcctt cacgcagggc tggggcagcc ggcggcgctg ggtgacgccc 360
gcggggaggc ccgacttcga ccacctgcta cggacctacg gagacgtggt tgtaccagtt 420
gcaaactgtg gggtccagga atacaactcg aaccccaaag agcacatgac tctcagagac 480
tacatcacct actggaaaga gtacatacag gcgggctact cctctccaag ggctgnctct 540
accttaaaag actggcactt gtgcaaggga cttttccggt gggaaggacg ttttcaccct 600
tgcctggggn nccttt 616

<210> 2178
<211> 560
<212> DNA
<213> Homo sapiens

<400> 2178
tcatcatgac catgatcgtc cataagaact gggtggacct ggcccgggcc gtcagctact 60
acatccggtt cttcatnacc tacatccctt tctacggcat cctgggagcc ctccttttcc 120
tcaacttcat caggttcctg gagagccact ggtttgtgtg ggtcacacag atgaatcaca 180
tcgtcatgga gattgaccag gaggcctacc gtgactggtt cagtagccag ctgacagcca 240
cctgcaacgt ggagcagtcc ttcttcaacg actggttcag tggacacctt aacttccaga 300
ttgagcacca cctcttcccc accatgcccc ggcacaactt acacaagatc gccccgctgg 360
tgaagtctct atgtgccaag catggcattg aataccagga gaagccgcta ctgagggccc 420
tgctggacat catcaggtcc ctgaagaagt ctgggaagct gtggctggac gcctaccttc 480
acaaatgaag ccacagcccc cgggacactg tggggaaggg gtgcangtgg ngtgatggcc 540

0952469.02300

anaggaatga tgggcttttg 560

<210> 2179
<211> 854
<212> DNA
<213> Homo sapiens

<400> 2179
taaatttggt gaacataatg aatgtacaga tgccctctac cagaaattag actttacagc 60
acatcagaga attcacacag aagataaatt ctacctttct gatgaacatg ggaaatgcag 120
aaaatccttt taccggaaag cacacctcat tcagcatcag aggccccact caggagagaa 180
aacttaccaa tatgaggaat gtgcaaaatc cttttgttca agttcacatc ctattcagca 240
tcctggaact tatgtgggat tcaaacttta tgaatgtaat gaatgtggga aagctttctg 300
tcagaattca aacctcagta aacatctgag aattcacaca aaagagaaac cttgtgataa 360
caatggctgt gggagatctt acaagtcacc cctcatagga caccagaaaa cagatgcaga 420
gatggaactc tgtggtggca gtgaatatgg gaagacatca catctcaaag gacatcagag 480
aattctcatg ggggagaaac cctatgaatg tattgaatgt gggaaaactt tctccaagac 540
atcacatctc agagcacatc agagaattca cacaggtgaa aaaccctatg aatgtgttga 600
atgtgagaaa actttctctc acaagacaca cctcagtgta catcagagag ttcacacagg 660
ggagaaaccc tatgaatgta atgactgtgg gaaatctttt acctatactc accctgagag 720
cacatnaaag aattccacag gtgagaagcc ctatgaatgc agtgactgtg agaaaacttt 780
tgccataatt cagcccttag agcacatnat agaattcaca cnggggagaa accttatgaa 840
tgnaatgaat gtgg 854

<210> 2180
<211> 706
<212> DNA
<213> Homo sapiens

<400> 2180
tattgcgctt tttaaacaga tggattccag aagatatgat gtcaagacca ggaagtggag 60
ctttctcttg gaagagcaca gtaaactaat tgcaaaggtg cgctgcctcc cacaagttca 120
gctggaccct ctgcccacga ctctcaccct ggcgtttgct tctcagctca agaagacatc 180
tctcagtctc acgccagatg tcccagaggc agacctttct gaagtggacc ccaagctcgt 240
gtctaatctg atgccctttc agagagctgg agtcaatttt gccatagcca aaggaggccg 300
cctgctgctc gctgacgaca tgggcctggg gaagaccatc caagccatct gcatcgcagc 360
cttttaccgg aaggagtggc cgctcctggt ggtggtgcca tcctccgtgc gcttcacctg 420
ggagcaggcc ttccttcggt ggctgccatc tctgagccca gattgcatca acgtcgtggt 480
gactgggaag gaccgcctga cagctggcct gatcaacatt gtcagctttg accttcttag 540
caagttggaa aaacagctaa aaaccccttt taaagttgtc atcattgatg aatctcactt 600
cctcaaaaac agtaggactg cccgctgtcg agcagctatg ccggtcctaa aggttgccaa 660
ganggtgatc ctgttgtcgg gcacaccagc catgtnccgg nccgca 706

<210> 2181
<211> 828
<212> DNA
<213> Homo sapiens

0956945 - 072800

0950250 '90 '9 '90 '90

<400> 2181
tgagaaagct gagaatcaat ctcaatctga tttatgatca taaccctaag gtgtttcttg 60
gaaatgtgga aaccttcatt aaacagatag attctgtgga tcatattaac ttgtttttta 120
cagaattgaa agaagaagat gtcacgaaga ccatgtaccc tgcaccagtt accagcagtg 180
tctacctgtc cagggatcct gacgggaata aaatagacct tgtctgcgat gctatgagag 240
cagtcatgga gagcataaat cctcataaat actgcctatc catacttaca tctcatgtaa 300
agaagacaac cccagaactg gaaattgtac tgcaaaaagt acacgagctt caaggaaatg 360
ctccctctga tcctgatgct gtgagtgctg aagaggcctt gaaatatttg ctgcatctgg 420
tagatgttaa tgaattatat gatcattctc ttggcaccta tgactttgat ttggtcctca 480
tggtagctga gaagtcacag aaggatccca aagaatatct tccatttctt aatacactta 540
agaaaatgga aactaattat cagcggttta ctatagacaa atacttgaaa cgatatgaaa 600
aagccattgg ccacctcagc aaatgtggac ctgagtactt cccagaatgc ttaaacttga 660
taaaagataa aaacttgtat aacgaagctc tgaagttata ttcaccaagc tcacaacagt 720
accaggatat cagcattgct tatggggagc acctgatgca ggagcacatg tatgagccac 780
cggggctcat gtttgncccg ttgcggtgcc cacganaaaa gctntttt 828

<210> 2182
<211> 866
<212> DNA
<213> Homo sapiens

<400> 2182
cttcctaggg ttctttctag agtacggcag caagttgtca gattccctag ttgaatttgc 60
tttggacatc agtgtgaagc agaactgata tgccacttga attaataaag gaagtcaatg 120
gggtgcctga agttcagccg ctgagtaaat tacataaagt agatttcgga tccctacagc 180
caggttacaa ttatagcaag aaatatattc agggaaaact ttcacttatc tcttctttaa 240
cttatcgtgg aaataaaaca gctgttttgc agattggact acaaggacac cattgcagtg 300
gctagattta ttgttttttt agcttcttca tctacaagca gagatggtaa accttgcata 360
tttttgaaag catttgaaga cctcaaatca actgtttatg tttatgtcaa atctttaaga 420
gatttttcta cagaatcaat gtctttggtt ccagcaacaa attatatata tacacccctg 480
aatcaactta agggtggtac aattgtcaat gtctatggtg ttgtgaagtt ctttaagccc 540
ccatatctaa gcaaaggaac tgattattgc tcagttgtaa ctattgtgga ccagacaaat 600
gtaaaactaa cttgcctgct ctttagtgga aactatgaag cccttccaat aatttataaa 660
aatggagata ttggtcgctt tcacaggctg aagattcaag tntntaaaaa ggagactcag 720
ggtatcacca gctctggctt tgcatctttg acgttgaggg actttgggag cccctatcat 780
accttgcact tnagccagta ttttacttcc tactgaggcc ncaaatggna gaagccttac 840
gggtttgggc tttactcata tgcacg 866

<210> 2183
<211> 865
<212> DNA
<213> Homo sapiens

<400> 2183
aacaaagatg gtggaggagg agaacatccg cgtggttcgt tgtggcggca gcgagttgaa 60
ctttaggaga gctgtgttct ctgcagattc taagtatatc ttctgtgtct ctggagactt 120
tgttaaagtt tacagcacag ttacagaaga gtgtgtacac atactgcatg gacacagaaa 180
tctggtgact ggaatccagc ttaaccccaa caaccatcta cagctgtatt cttgttccct 240

tgatggcaca attaaactgt gggactatat agatggcatc ttaataaaga ctttcatagt 300
tggatgtaaa cttcatgccc tctttactct tgcccaagct gaggattctg tctttgttat 360
agtgaataaa gaaaaaccaa atatatttca gctggtttca gtgaaactgc caaaatcctc 420
aagccaggaa gtagaagcca aggagctgtc ctttgttttg gattacataa accagtcacc 480
caagtgcatt gcctttggaa acgagggagt atatgttgct gcagtacggg aattttactt 540
gtctgtttat tttttcaaaa agaaaacaac atcaaggttt actttatcat catcaagaaa 600
taagaagcat gctaaaaaca attttacgtg tgtagcatgt cacccaacgg aagactgcat 660
cgcatctggt cacatggatg gcaaaattcg ctttggagga atttttatga tgataagaaa 720
tatacgtaca catgtttaca ttgcaccatg atccggtatg gatttggctt tttcagtgac 780
aggcaccagt ctgctgaatg cggtcgtgaa tctgtcttga nagtggcccg atgcaccaga 840
gaaaatagga gttctcccgc gttag 865

<210> 2184
<211> 878
<212> DNA
<213> Homo sapiens

<400> 2184
atgaaatggg tcttggcaaa actattcaat caattacatt cctctatgaa atccttctga 60
ctggtataag aggacctttc ctgattattg ctccactttc tactattgca aactgggaga 120
gagaatttcg tacgtggact gatattaacg ttgtggttta tcatgggagc ctgattagca 180
gacaaatgat acagcaatac gagatgtact tcagggattc acaggggcgt atcattcgag 240
gagcttacag attccaagcc atcatcacca cttttgaaat gattcttgga ggctgtggag 300
agcttaatgc aattgaatgg cgatgtgtga ttattgatga agcacatagg ttaaaaaata 360
aaaattgtaa actcttagag ggcctgaaac tcatgaatct ggaacacaag gtgcttttga 420
ctggcacccc tctccaaaat acagttgaag aactatttag tcttcttcac tttcttgaac 480
ccttaaggtt tccttctgaa tcaacattta tgcaagaatt tggggatctg aaaacagagg 540
aacaggtaca gaaacttcag gttatcctga aaccaatgat gttgagacga ttaaaagaag 600
atgtggaaaa gaagttggca cctaaagaag aaaccatcat tgaagtagaa cttactaata 660
ttcaaaagaa atactaccgg gctatcttgg aaaagacttt tctttttat ccaaaggagc 720
aggacaaact aatgtcctaa cttgggcaat accatgatgg agctcaggaa atggtggaat 780
catccatatc ttataaaaag ngctgaggag aaaaatcctt ggagaattag agatncttcc 840
aatccactgg ttctggattt catcttcaac caaggatc 878

<210> 2185
<211> 760
<212> DNA
<213> Homo sapiens

<400> 2185
gcgcgcgtga gctgagccgg tgggtgagcg gcggccacgg catcctgtgc tgtgggggct 60
acgaggaaag atctaattat catggacctg caacagtttc ttatgtgcct gtccctgtgc 120
acagcctttg ccttgagcaa acccacagaa aagaaggacc gtgtacatca tgagcctcag 180
ctcagtgaca aggttcacaa tgatgctcag agttttgatt atgaccatga tgccttcttg 240
ggtgctgaag aagcaaagac ctttgatcag ctgacaccag aagagagcaa ggaaaggctt 300
ggaatgattg tagataaaat agacgcggat aaagatgggt ttgtgacgga gggggagctg 360
aaatcctgga ttaagcacgc ccagaagaaa tacatatatg acaatgttga aaaccaatgg 420
caggagtttg atatgaatca agacggctta atctcctggg atgagtacag aaacgtgact 480

0356205 2006-05-05

tatggcactt acctggatga tccagatcct gatgatggat ttaactataa acagatgatg 540
gttagagatg agcggaggtt taaaatggca gacaaggatg gagacctcat tgccaccaag 600
gaggagttca cagctttcct gcaccctgag gagtatgact acatgaaaga tatagtagta 660
caggaaacaa tggaagatnt agattagaat gctgatgggt tcattgatct agaanagtnt 720
attggtgaca tgtacagcca tgatgggaat ctgatgaacc 760

<210> 2186
<211> 809
<212> DNA
<213> Homo sapiens

<400> 2186
ggagagatgg ggtttcacca tgttggctaa gctggtctgg aactcatggc ctcaagttat 60
ctgcccacct cagcctccca aagtgctgag taagccaagt tttctaatag ccacattaga 120
caagtaaaag gaaacaggtt aaattcattt taacatgttt tacttaaccc aatgtatcca 180
aaatagcatt tcaacatgtc atcggttttt tagtttttt ttttttgag atagtgcttc 240
gctttgttgc ccaggctgga gtgcagtggc acaatctcgg ctcactgcaa cctccacctt 300
ccaggttcaa gtgattctcc tgcctcagcc tcccgagtag ctgggattac aggcacccgc 360
caccatgccc actaattttt gtatttttgg ttagagatgg ggtttcgcca tgttggccag 420
gctagtctca aactcctgac ctcaggtgat ccacccacct cggcctccca aagtgctagg 480
attacaggcg tgaggcaccg tgcctggcgt catcggtatt atttaaatga attatgttac 540
gttcttttgt gctgtcttca aaatctgtta tatattttac acttacacca aatctcaatt 600
accatggtac atttttatct gaaatgcttg acctttattt tgatttcata aaattcatag 660
ttggagaagt agattcacat atncaagttg ttccaattat ataataagtt ttccaaaact 720
ggaaatgggt gtccattttt tttttaaagt aaaaaagccn ggctggtatt ttgaccaant 780
tgtggggtgg tttggtttgg tttganaca 809

<210> 2187
<211> 831
<212> DNA
<213> Homo sapiens

<400> 2187
aggaagggcc cgtcccgcct tccccggcgc gccatggagc cccgggcggt tgcagaagcc 60
gtggagacgg gtgaggagga tgtgattatg gaagctctgc ggtcatacaa ccaggagcac 120
tcccagagct tcacgtttga tgatgcccaa caggaggacc ggaagagact ggcgtgctgc 180
tggtctccgt cctggaacag ggcttgccac cctcccaccg tgtcatctgg ctgcagagtg 240
tccgaatcct gtcccgggac cgcaactgcc tggacccgtt caccagccgc cagagcctgc 300
aggcactagc ctgctatgct gacatctctg tctctgaggg gtccgtccca gagtccgcag 360
acatggatgt tgtactggag tccctcaagt gcctgtgcaa cctcgtgctc agcagccctg 420
tggcacagat gctggcagca gaggcccgcc tagtggtgaa gctcacagag cgtgtggggc 480
tgtaccgtga gaggagcttc ccccacgatg tccagttctt tgacttgcgg ctcctcttcc 540
tgctaacggc actccgcacc gatgtgcgcc agcagctgtt tcangagctg aaaggagtgc 600
gcctgctaac tgacacactg gagctgacgc tgggggtgac tnctgaaggg aacccccccac 660
ccacgctcct tccttccaag agactgaacc gggccatgga gatcctcaaa agtgctcttn 720
aacatcaccc tggacttcat caaaggggga agttggacca agnaaaacct tgnccttta 780
accgacaccc tgggggaacc ctttttccg ggacttgggt gaatgnatcc g 831

0020020 = 0020020

<210> 2188
<211> 896
<212> DNA
<213> Homo sapiens

<400> 2188
aaaaaaaaac tgggaagatg gacgcagcta ctctgaccta cgacactctc cggtttgctg 60
agtttgaaga ttttcctgag acctcagagc ccgtttggat actgggtaga aaatacagca 120
ttttcacaga aaaggacgag atcttgtctg atgtggcatc tagactttgg tttacataca 180
ggaaaacttt ccagccattg gggggacagg ccccacctcg gacacaggct ggggctgcat 240
gctgcggtgt ggacagatga tctttgccca agccctggtg tgccggcacc taggccgaga 300
ttggaggtgg acacaaagga agaggcagcc agacagctac ttcagcgtcc tcaacgcatt 360
catcgacagg aaggacagtt actactccat tcaccagata gcgcaaatgg gagttggcga 420
aggcaagtcc ataggccagt ggtacgggcc caacactgtc gcccaggtcc tgaagaagct 480
tgctgtcttc gatacgtgga gctccttggc ggtccacatt gcaatggaca acactgttgt 540
gatggaggaa atcagaaggt tgtgcaggac cagcgttctc tgtgcaggcg ccactgcgtt 600
tcctgcagat tccgaccggc actgcaacgg attccctgcc ggagctgagg tcaccaacag 660
gccgtcgcca tggagacccc tggtacttct cattcccctg cgcctggggc tcacggacat 720
caacgaggcc tacgtggaga cgctgaagca ctgcttcatg atgccccagt ccctgggcgt 780
catcggaggg aaacccaaca gcgcccacta cttatcggct acgttggtga ngagctcatn 840
tacctggacc cccaaaccac gcaaccagcc gtggaancca ctgattggct tgtttc 896

<210> 2189
<211> 895
<212> DNA
<213> Homo sapiens

<400> 2189
cttgtatgca accacttcta aactatagga aaacatttga tgtaattgtg atagatccac 60
catggcagaa caaatcagtt aaaagaagta ataggtacag ttatttgtca cccctgcaaa 120
taaagcaaat acctatccct aaattggctg ctccaaactg tcttcttgtt acttgggtga 180
ccaatagaca gaagcaccta cgttttataa aggaagaact ttatccctct tggtctgtgg 240
aggtagttgc tgagtggcac tgggtaaaaa ggttttaaaa gactacatca agccagatgg 300
ggaatatttg gagttgtttg ctcgaaattt acagccaggt tggactagtt ggggcaatga 360
agttctcaaa tttcagcatg tggattattt tattgctctg gagtctggaa gctgactatg 420
atcttgatta aagtagtggt ttcttcattg tttcctcacc acttttccct taattctaag 480
tcatttttt attttgttac caacccatat tcttagaata taaacaggac ttgttttttt 540
cagtaaggga ccagaagtga ctagccttca tgtaatttta agatgaattt tacttgagtt 600
gcactaacat tctatgttat tctagactat acaaattaag tggtaagcag ttataaagac 660
ggcaagacca tgctattgaa aaagttcaga aaacatacac cgtggaccag aggtcttaat 720
cctatctatg gatgtgtttt gtgtgaccca tacagtgttg taaaaaacac ttagaaccat 780
tattctaaaa aatggggcta tttcacatta aagtccagaa ttctggttct tttttaaaca 840
tcagangctt ttggctacac anaggccttt tttcttttct ggcatcaatc tgcag 895

<210> 2190
<211> 906
<212> DNA
<213> Homo sapiens

WO 2004/050683 PCT/US2003/038000

<400> 2190
tcgcatgaag atgaccaaaa acaaagggct ggatgtttgc aattggactg atggggatga 60
gatgcagtgg ggcccagcca gggcagagga ggagcatggt gtctatgtgt atgacctgat 120
ggctactgtg gtacacatcc tggactcacg cacaggggge agcctggtgg ctcacatcaa 180
agttggagag acctaccacc agcgcaagga gggcgttact caccagcagt ggtatctgtt 240
caatgacttt cttattgaac ctattgataa gcatgaagct gtgcagtttg acatgaattg 300
gaaagtacct gcaatccttt attatgtcaa acggaatctc aattccagat acaacctgaa 360
catcaagaac cctattgagg caagtgtctt gctggctgaa gcctcgctgg cacggaagca 420
gcggaaaaca catactacct ttattccact gatgctgaat gagatgccac agattgggga 480
cctggtgggt ctggatgctg agtttgtcac ccttaatgag gaggaagcag agttacgcag 540
tgatggtacc aagtctacca ttaaaccaag ccagatgtca gtagccagga ttacctgtgt 600
tcggggccag ggacccaatg agggtatccc cttcattgat gactacatct ctacccagga 660
gcaggtggtg gattacttga ctcaatactc gggtataaag cctggtggcc tcgatgccaa 720
aatttccttc aagcacctaa caactntcaa gtctacctac ttaaagcttc gntttctcat 780
tgacattgga agtcaaagtt tggngggtca tggggcctgc aaaaaggact ttccgggtca 840
tcaacctgat ggtgccccaa gggcccaagt nccttgacac tggctacctg gttccattat 900
gccccg 906

<210> 2191
<211> 681
<212> DNA
<213> Homo sapiens

<400> 2191
atacttgtgc ggttccaagt gtggagaaag cggctctggg tctagattga gggatactcc 60
ccctttccac catgggcaag aagggcaaag ttggcaagag ccgacgagac aagttttatc 120
acttggcgaa ggagacgggt taccgttccc gatctgcttt caagctgatc cagctcaatc 180
gccgctttca gttcctgcag aaagcccgag ccttgctgga cctgtgtgct gcgccagggg 240
gatggctgca ggtagctgcc aagtttatgc ctgtatccag ccttattgtg ggagtggacc 300
tggttccaat caagcctctc cccaatgtgg tgactctcca ngaggacatc acaacagaac 360
gttgtangca ggccctgagg aaggagctga agacctggaa ggttgatgtt gtgctcaatg 420
atggggcccc caacgttggg gctagctggg tccatgatgc ttactcacaa gcccatttga 480
cactgatggc tctacgtttg gcttgtgact ttttggcccg tggtggcagc ttcatcacaa 540
aggttttccg ttctcgtgac tatcagcctc tgctatggat ctttcagcag ctggtccgnc 600
gtgtccaggc caccaagccc caagcctctn gcatgaatct gcagagatct ttgtatctgn 660
caaggattcc tggccctgca a 681

<210> 2192
<211> 871
<212> DNA
<213> Homo sapiens

<400> 2192
cagactcgca gggatcagag atttcaagca gggacgccac cttctaacag tgctactgaa 60
attgttcagt tactgcgtga aggtgaaagt caaccggcag caactggtca aactggaaat 120
gaacaccttg aacgtcatgc tggggaccct aaacctggcc cttgtagctg aacaagaaag 180
caaggacagt gggggtgcag ctgtggctga gcaggtgctt agcatcatgg agatcattct 240

0050-0050-0050

agatgagtcc aatgctgagc ccctgagtga ggacaagggc aacctcctcc tgacaggtga 300
caaggatcaa ctggtgatgc tcttggacca gatcaacggc acctttgttc gctccaaccc 360
cagtgtgctc cagggcctgc ttcgcatcat cccgtacctt tcctttggag aggtggagaa 420
aatgcagatc ttggtggagc gattcaaacc atactgcaac tttgataaat atgatgaaga 480
tcacagtggt gatgataaag tcttcctgga ctgcttctgt aaaatagctg ctggcatcaa 540
gaacaacagc aatgggcacc agctgaagga tctgattctc cagaagggga tcacccagaa 600
tgcacttgac tacatgaaaa agcacatccc tagcgccaag aatttggatg ccgacatctg 660
gaaaaagttt ttgtctcgcc cagccttgcc atttatccta aggctgcttc gggcctggcc 720
atccacaccc tggcacccag gttctgattg gaactgattc catnccgaac ctgctaagct 780
ggagcaggtg tccatgataa gctttggacc ttgcagaaaa cctgttggaa ccctggggac 840
acctgnctaa ccagaaattg cccancccag g 871

<210> 2193
<211> 819
<212> DNA
<213> Homo sapiens

<400> 2193
cccgttcctg caccagcccc gcaccctccc cagaaggctg gtcgccctgg tctgagtgga 60
gtaagtgcac tgacgacgga gcccagagcc gaagccggca ctgtgaggag ctcctcccag 120
ggtccagcgc ctgtgctgga aacagcagcc agagccgccc ctgcccctac agcgagattc 180
ccgtcatcct gccagcctcc agcatggagg aggccaccgg ctgtgcaggg ttcaatctca 240
tccacttggt ggccacgggc atctcctgct tcttgggctc tgggctcctg accctagcag 300
tgtacctgtc ttgccagcac tgccagcgtc agtcccagga gtccacactg gtccatcctg 360
ccacccccaa ccatttgcac tacaagggcg gaggcacccc gaagaatgaa aagtacacac 420
ccatggaatt caagaccctg aacaagaata acttgatccc tgatgacaga gccaacttct 480
acccattgca gcagaccaat gtgtacacga ctacttacta cccaagcccc ctgaacaaac 540
acagcttccg gcccgaggcc tcacctggac aacggtgctt ccccaacagc tgataccgcc 600
gtcctgggga cttgggcttc ttgccttcat aaggcacaga gcagatggag atgggacagt 660
ggagccagtt tggtttctnc ctctgcacta gccaagaact tgctgcttgc tgtgggggtc 720
catcggttca agactctgct ggatgacatg gggaagntgg tcagctnatt gcgaagtcag 780
tagcagctta tgttttcaca tgacctaatt ntgctgctg 819

<210> 2194
<211> 786
<212> DNA
<213> Homo sapiens

<400> 2194
aacgggatgg ggagctggac cagcagatta tgagcttaca gaaagcctgg cctacatttt 60
actctttttg gatttcttcc tcatcaagag actgctgcag tgcctgtcat gtgacagcgg 120
catggacata tgccccaggc tttcctgctg gggtccatcc atgagcctgc aggtgccctc 180
atggagcccc agccctgccc tggaagcttg gctgagagct tcctggagga ggagcttcgg 240
ctcaatgctg agctgagcca gctgcagttt tcggagcctg tgggcatcat ctacaatccc 300
gtggagtatg catgggagcc acatcgcaac tacgtgactc gctactgcca gggccccaag 360
gaagtactct tcctgggcat gaaccctgga ccttttggca tggcccagac tggggtgccc 420
tttggggaag taagcatggt ccgggactgg ttgggcattg tggggcctgt gctgacccct 480
ccccaagagc atcctaaacg accagtgctg ggactggagt gcccacagtc agaagtgagt 540

0305204.00004

ggtgcccgat tctggggctt tttccggaac ctctgtggac agcctgaggt cttcttccat 600
cactggtttg tccacaatct atgccctctg cttttcctgg ctcccagcgg gcgcaacctt 660
actcctgctg agctgcctgc caagcagcga gaacagcttc ttgggatctg tgatgcaacc 720
ctctgncggc angtgcaact gcttgggggt gccggctggt ggttgggaag ttgggccaac 780
tggcan 786

<210> 2195
<211> 698
<212> DNA
<213> Homo sapiens

<400> 2195
gataattacc cagcctaacc atttctcagg tgcttgcgag gtgatcagaa ggcaaagatg 60
tcggagcgaa aagtattaaa caaatactac ccgccggact ttgacccatc aaagatcccc 120
aaactcaagc tccccaaaga ccggcagtac gtggtgcggc tgatggcccc cttcaacatg 180
aggtgtaaga cgtgcggaga atacatctac aaggggaaga aattcaatgc tcggaaggag 240
acggtgcaga acgaggtcta cctgggcctg cccatcttcc gcttttacat caagtgcacg 300
cgctgcctgg cagagatcac cttcaagaca gaccctgaaa acacagacta caccatggag 360
catggagccg cgcggaattt ccaggctgag aagctcctgg aggaggagga gaagagggtg 420
cagaaggagc gggaggacga ggagctgaac aaccccatga aggtgctgga gaaccggacc 480
aaggactcca agctggagat ggaggtgctg gagaacctcc aggagctgaa agacctgaac 540
cagcggcagg cgcacgtgga cttcgaggct atgctgaggc agcaccgcct gtcggaggag 600
gaacggcgga ggcagcanca ggaggaggac gagcaggaga ccgcggncct gttggangaa 660
gccagaaagc gaaactgctg gaggacttcc gactcaga 698

<210> 2196
<211> 845
<212> DNA
<213> Homo sapiens

<400> 2196
taatgaaaac tttacatgaa tgcttattta ggttgttcaa agtaaaaagg gctacaggtc 60
acagatcgtc agtgcctgag aaagaacatt gacttactct atatcaattg aggggaaagt 120
gcagtaccgt catcttcaag ccttgtaagc ataaaagaga ataggctgcc catataagtc 180
aaaggaaaat gagcccaggc cttgctatga agcagtgtgt gaatggacaa tgttgaatga 240
atgtctggct cagtgatgga gagccaggtt catctttgaa atctagggct cttcactcat 300
gaagcagact cctattagaa tgttactagg ggcagaagca gtgggattgg taaaagagtg 360
caatgataac accatgagag ccttcacata cagaaccaga cagaacttca aaggttttga 420
tgataacaat gatgatttcc tgacaatggc agaatgtcaa ttcattatca aacatgaact 480
tgaaaatctt agagctaaag atgaaaaaat gatccctggt taccctcagg caaagttgta 540
tccaggaaaa tcattgttga gaagattgct cacgtctggc atcgtgattc aggtgtttcc 600
actgcatgac agtgaagccc tgaagaagct tgaggacacc tggtacactc ggtttgcttt 660
gaagtatcag cccatagaca gtattcgtgg ctactttggg gaaacaatgc tctgtctttg 720
gatttttgg agtatttcac ttttgcatta atccccatgg cttgncattg ggttacctta 780
ctacttggtt gngtggggaa gactatgacc agtacctgat ctttggcctn gtcaaccctc 840
attgg 845

<210> 2197

09/09/2003 10:09 PM

0050050.0002

<211> 913
<212> DNA
<213> Homo sapiens

<400> 2197
ctgtcacgct tgttacttat tgccaaaact gggaagttga aggaagccca agcatgtgtt 60
gaagctaaca gagaccccat agtaaaaatc ctgggctctg attataatac aatgaaagaa 120
aactcaattg cattaaatat tcttggcaaa attaccagag atgatgatcc tgaaagtgaa 180
attaagatga agattgctat gctgcttaag caattggatc tgcacctcct caatcattct 240
ctaaaacata tttcattaga aataagttta agtcccatga cggtgaagaa ggatatagaa 300
ctgctcaaac gtttctcagg aaaaggaaac caaacagtct tggaatctat tgaatatacc 360
tcagattatg aattttcaaa tggatgtcga gccccaccgt ggagacaaat tcgtggggaa 420
atttgttatg tgctggtgaa acctcacgat ggtgagactc tgtgcattac ttgcagtgca 480
ggaggagtat ttttaaatgg tggcaaaaca gatgatgaag gggacgttaa ttatgagaga 540
aaaggttcaa tttataaaaa ccttgtcaca tttttaagag aaaaatcacc aaaatttca 600
gaaaatatgt ctaaattggg aattagcttc agtgaagacc agcaaaagga aaaggatcag 660
cttggcaaag cccccaagaa ggaagaagca gctgccctcc gcaaagacat ttctggttca 720
gacaaaaggt cactggagag gaaccaaatt aatttttgg aggaatcaaa tgaccnaaga 780
gatggggaac ccaaccttaa actgggaaga ccactggtta attaccaaag gccaaagctc 840
agcaaaagaa atccaaggan ggccaacccn ccgggaaaaa cttggaaaaa cccaggaacc 900
ntctggtttc aac 913

<210> 2198
<211> 146
<212> DNA
<213> Homo sapiens

<400> 2198
atcatgccgc tgggactggg gcggcggaaa aaggcgcccc ctctagtgga aaatgaggag 60
gctgagccag gccgtggagg gctgggcgtg ggggagccag ggcctctggg cggaggtggg 120
tcggntgtnc aaagaccgct tcncgg 146

<210> 2199
<211> 808
<212> DNA
<213> Homo sapiens

<400> 2199
acttccggaa tctctcggcg tgtgagcttg gttgtcctac caaagccagc gtttcggctc 60
gcgtgcgccg gcctagtttg ctcgcgccct cacgcgcttt gggtttcccg gtctcatggc 120
cggcctgacc ttatttgtgg gccgcctccc gccctcggcc cgcagtgagc agctggagga 180
actgttcagt caggtggggc cggtgaagca gtgcttcgtg gtgactgaaa aagggagtaa 240
ggcatgtcga ggctttggct atgtcacttt ttcaatgctg gaagatgttc agagggccct 300
caaggagatt accacctttg aaggttgcaa gatcaacgtg actgttgcca agaaaaaact 360
gaggaacaag acaaaggaaa aggggaaaaa tgaaaactca gagtgcccaa agaaggagcc 420
gaaggctaaa aaagccaaag tggcagataa gaaagccaga ttaattattc ggaacctgag 480
ctttaagtgt tcagaagatg acttgaagac agtatttgct caatttggag ctgtcctgga 540
agtaaatatc cctaggaaac cagatgggaa gatgcgcggt tttggttttg ttcagttcaa 600

aaacctccta gaagcaggta aagctctcaa aggcatgaac atgaaagaga taaaaggccg 660
gacagtggct gtggattggg cccgtggcaa aggataaata taaagataca cagtctgttt 720
ctgctatagg tgangaaaag agccatgaat ctaaacatca ggaatcaagt taaaaagaag 780
ggcanaanag gaagaaggat ttggaaga 808

<210> 2200
<211> 827
<212> DNA
<213> Homo sapiens

<400> 2200
tgcaacactg tggtgctgcc ccagtggcac tccttctcca ggacccacaa cgtctgtgaa 60
ctctgtgtca accagacctc cgggggcatg aagccgagct cggtcagcgt gccacagtgc 120
agctttttg aaatggcagc agctctggat tctttctacc tcaaggagca gacctttat 180
catgtggcat cagacagcat agaatgcagc aatttttaa cttcctatag cccottcagc 240
tactacactg catgttgcag gaccataagc aggggtgtgt caggcttcat cgactctgaa 300
caaggtgtct ttgaagcccc tactgttgca ttttcttccc ttgagaagaa atgtgaggtt 360
gatgccccaa gctccgttcc tcacattgag gagaacaggt atctctttcc agaagtggac 420
atgactagca caaacttcac aggcctgagc tgcagaacca acaagactct caacatctac 480
cttttggatt caaatttgtt ttggttatat gcagagagac tgggtgctcc gagctccact 540
caggtgaaag aatttgcggc aattgttgac gtgaaagaag aatctcatta catcttggat 600
ccaaagcaag cactgatgaa gctcacccta gagtctttta ttcaaaactt cagcgttctc 660
tatagtccct tgaaaaggca tctcattgga agtggctctg cccagttccc cgtctcacat 720
ttaatcactg aagtgacaac tgataccttt tgggaagtag tccttcaaaa acagggacgt 780
tctnctgctc tattacgctt ccgtggtgcc ggnttctgnc catccct 827

<210> 2201
<211> 801
<212> DNA
<213> Homo sapiens

<400> 2201
aagattgcat gggaactgga tcagactgta cttggaggaa aagcattcag aagtcctatt 60
caacctgggc tccaaggttc tcaggcagta cctggatgct ctgaagacgc tgagcttgtc 120
cctgagtgca caagtggccc agtacgacat ctattcgatg atggtgggga ctgtcgtggt 180
tttggaggtt ctcaccctgc tcctgctcag cgtcccacag gcactgcgca gaaaggctga 240
gctggaagtc ccactgtcat ctcctgggtt ttctctgctc ttttatttgg tgatcctggt 300
tctttcggcc gttcacgtca ttgtgtgcac ctcagctgaa agttcgtgct acttctgtgg 360
cctctcgtgg ctggcggcag gtggggtgat ggtgctggcc tcggcgctgc tgtgtgtgat 420
tgtgtctgtt ctgaccaacg tgctcgtggg tggaaacacc ccaaggaaga accccatgca 480
tcccagctca aggtggtcag agctagacct tcttattctg ttggggacgg cgggccacgt 540
cttgagcctg ggcgccagca gcttcgtgga ggaggagcac cagacctggt acttccttgt 600
gaacaccctg tgtctagctc tgagccaaga aacctacaga aactactttc tgggagatga 660
cggtgagcct tccgtgtggc ctctgtgtgg aacaagggca tgacggggcc acagcaaccg 720
tggcaaggac nggcctggct tgtgatatcc tggaacgagg acaaaaggcc acggaagccc 780
ctntacctnc gaatgcttaa a 801

<210> 2202

0050045600 - 07-20-2000

<211> 852
<212> DNA
<213> Homo sapiens

<400> 2202
atgaccttct acagtgaggt gaaacaaata gagaagagaa ggttgaaaag agaagtaaca 60
gtgacagcaa agaaaaccgg gaaacaaaat taaatggtcc tggtgaaaac gtcagtgagg 120
atgaggctca gtcaagtaat caacgtaaga gagctaataa gcacaagtgg gtaccactcc 180
acttagatgt tgtaagatca gagagtcaag aaagacctgg atcccggaac agctcaagat 240
gtcaacctga agcaaataaa ccaacacata acaataggag aaatgataca cgaagttgga 300
agcgagatag agaaaaaaga gatgatcaag atgacgtttc cagtgtgaga agtgagggtg 360
gtaatatccg aggttccttt agaggtcgag gaagaggccg aggacgggga agaggacgag 420
gcagaggaaa tcctcgatcg aactttgatt attcatatgg ttatcaagaa catggtgaaa 480
ggactgatca accatttcaa acagaactta ataccagtat gatgtattac tatgatgatg 540
gtacaggtgt acaggtgtat cctgtggaag aagcgttgct taaagagtat attaagcgtc 600
aaattgaata ttacttcagt gtagaaaatt tggaacgaga cttctttctt cggggaaaga 660
tggatgaaca aggtttcttg cctatttccc tgattgctgg tttcagcgtg ttcaggctct 720
cactacaaac cttaatctca tcttaaagca cttgaaggat acacagaata gaaattgtgg 780
atgagaaatt gagaaaagag attgaccnga aaaatgggcc aatttccagg nccttcttnc 840
acgcaatgtg cc 852

<210> 2203
<211> 890
<212> DNA
<213> Homo sapiens

<400> 2203
caggggagct cagtctgcta tcgtacatta ggcctgacgt taaagggctt tcaacgcttc 60
aggatattga aataggagtg cagcatattt tagcagatat gattgctaaa gacaaagaca 120
cgcttgactt cattcggaac ttgtgccaga agagacatgt ttgtatccag tcatctctgg 180
caaaagtatc ctcaaaaaag gtaaatgaga aagatgttga taagtttctg ctctaccagc 240
atttttcctg caacataaga aacattcacc atcatcagat tctggcaatt aaccgtggag 300
aaaatttgaa ggtactgacg gttaaggtca atatttctga tggagtgaag gatgaattct 360
gtaggtggtg catccaaaac aggtggagac cacgtagctt tgcaaggcca gagttaatga 420
agatcttata taattcactg aatgattcct ttaaacgcct tatttatcct cttctctgta 480
gagaattcag agccaaacta acatcagatg cagagaagga atcagtaatg atgtttggac 540
ggaaccttcg tcagctcctt ttaacaagcc ctgttccagg gcgcacctta atgggagtgg 600
atcctggtta taaacatggt tgcaaattag ctataatttc tcctactagt cagatacttc 660
atactgatgt ggtttacttg cattgtggac aaggcttccg agaggcggag aaaataaaga 720
ccttttgctg aattcaactg cagcacagta gtgattggaa gtggaactgc ctgcagggaa 780
acagaactta ctttgctgac ctgataatga agaattattt tgcaccctgg atgtggttac 840
tggatcgtca gtgaagcagg acctcaatct aagtgtcagc cctgaactaa 890

<210> 2204
<211> 827
<212> DNA
<213> Homo sapiens

09629469.027800

0050350 2005-08-25

<400> 2204
aaaaaaaaag gtaacttcag tgcgtttatg cagaaggaga tcttcgaaca gccagaatca 60
gttttcaata ctatgagagg tcgggtgaat tttgaaacca acacagtgct cctgggtggc 120
ttgaaggacc acttgaagga gattcgacga tgccgacggc tcatcgtgat tggctgtgga 180
accagctacc acgctgccgt ggctacgcgg caagttttgg aggaactgac tgagcttcct 240
gtgatggttg aacttgctag tgattttctg gacaggaaca cacctgtgtt cagggatgac 300
gtttgctttt tcatcagcca gtcaggcgag accgcggaca ccctcctggc gctgcgctac 360
tgtaaggacc gcggcgctct caccgtgggc gtcaccaaca ccgtgggcag ctccatctct 420
cgcgagaccg actgcggcgt ccacatcaac gcagggccgg agatcggcgt ggccagcacc 480
aaggcttata ccagtcagtt catctctctg gtgatgtttg gtttgatgat gtctgaagac 540
cgaatttcac tacaaaacag gaggcaagag atcatccgtg gcttgagatc tttacctgag 600
ctgatcaagg aagtgctgtc tctggaggag aagatccacg acttggccct ggagctctac 660
acgcagagat cgctgctggt gatggggcgg gctacaacta tgccacctgc ctggaaggag 720
ccctgaaaat taaagagata cctacatgcc tcagaaggca tnctgctggg gaactgaagc 780
acgggcccct ggcacttgat tgacaagcan atgccccgtc atnatgg 827

<210> 2205
<211> 787
<212> DNA
<213> Homo sapiens

<400> 2205
atggcagtgg agtcattcat ggcaacagcc ccctttgtcc aaattggcag gtttttcctc 60
tcgtcaggcc tcatcgacaa agtcgacaac ttcaagtccc tgagcctatc caagctggag 120
gaccctcatg tggacatcat tcgccgtgga gacttttttct accacagcga aaatcccaag 180
tatccagagg tgggagactt gcgtgtctcc ttttcctatg ctggactgag cggcgatgac 240
cctgacctgg gcccagctca cgtggtcact gtgattgccc ggcagcgggg tgaccagcta 300
gtcccattct ccaccaagtc tggggatacc ttactgctcc tgcaccacgg ggacttctca 360
gcagaggagg tgtttcatag agaactaagg agcaactcca tgaagacctg gggcctgcgg 420
gcagctggct ggatggccat gttcatgggc ctcaacctta tgacacggat cctctacacc 480
ttggtggact ggtttcctgt tttccgagac ctggtcaaca ttggcctgaa agcctttgcc 540
ttctgtgtgg ccacctcgct gaccctgctg accgtggcgg ctggctggct cttctaccga 600
cccctgtggg ccctcctcat tgccggcctg gcccttgtgc ccatccttgt tgctcgggac 660
acgggtgcca nccaaaaaag ttggagtgaa aagaccctgg caccccgccc gacacctgcg 720
ttgaacccct aggatccagg tccttttaa cctctgaccc agcttcaatg ccanagnang 780
gagcccc 787

<210> 2206
<211> 876
<212> DNA
<213> Homo sapiens

<400> 2206
agatgcatgt tgcagtgtcc atcagtagaa gtcagcttct tacctctcat agtgaataca 60
gttgctctgc ctgatgaatt gagctacata tgtacacatg gggaagactg ggatgtagct 120
tacattattc atctttatcc ttctctcact ttgcggaatc ttctcccata ttccctaaga 180
tatttacttg agggaacagc agaaactcat gagctggcag aaggcagtac tgctgatgtt 240
ctgcattcga gaatcagtgg tgaaataatg gaattagtcc tggtgaaata ccagggcaaa 300

aactggaatg gacatttccg catacgtgat acactaccag aattctttcc tgtgtgtttt 360
tcttctgact ccacagaagt gacgacagtc gacctgtcag tccacgtcag gagaattggc 420
agccggatgg tgctgtctgt ctttagtccc tattggttaa tcaacaagac tacccgggtt 480
ctccagtatc gttcagaaga tattcatgtg aaacatccag ctgatttcag ggatattatt 540
ttattttctt tcaagaagaa gaacattttt actaaaaata aggtacaatt aaaaatttca 600
accagtgcct ggtccagtag tttctcattg gatacagtgg gaagttatgg gtgtgtgaag 660
tgtcctgcca acaatatgga gtacctggtt ggtgttagca tcaaaatgag cagtttcaac 720
ctttcacgaa tagttaccct gacttccctt ttgtaccatt ggcaaacaag tcatcattag 780
gaactagaaa gtttggccaa gattggcatt ctggaatggg cttcaatggc caacttaant 840
aaaatgggaa cctattantg ggctttcttt tcanaa 876

<210> 2207
<211> 762
<212> DNA
<213> Homo sapiens

<400> 2207
actcattgtt cgcagctgat gtcactcgca gttgtgagcg gccgcctctc ccggggacaa 60
tgtgggactg agcggcccag ccgccgtgcc gccgccgccg ccgccgcagg acagccccag 120
cgaggccatt tccagcacat agaagagaga ttggaaacca acgtgcagaa ctgccagtcc 180
cctgacacgc tgtgccccac ccactgcagc ccagtgctga atgaaccctg cccagaggtg 240
tctgtagtga gcttctgccc tagtgacttt tggtaggtgg gagtgtgcct caattccccc 300
ctcaacccct gcctcaagcc tttaccaggc agtggcaaga cctgaccaca cccgaggcct 360
ccctgccttc aaggcttccc atggctgctc cagcttcctc cccagctgct cttctgtgct 420
ccatccacca tctggctgct ggacgaaagt gcctctcata tggaagccgg ccaggttgca 480
gcgcggacac actcgcaggt cgctgtggcc ccagcctcgc ctgacagaat gagcggctcg 540
gacgggggac tggaggagga gccagagctc agcatcaccc tcacgctgcg gatgctgatg 600
cacgggaagg aagtgggcag catcatcggg aagaagggcg agactgtaaa gcgaatccgg 660
gagcagtgcc cggatcacca tctncgangg ctcctgcctg aacgcatcac caccatcacc 720
gggtctacag caactgtctt tcatgcagtc ttccatgatt gn 762

<210> 2208
<211> 772
<212> DNA
<213> Homo sapiens

<400> 2208
gaagaagaag aacttctagg tcctaaacta gaagaggaag aagaagagga agtagttgaa 60
aatgatgagg agatagcctt ttcaggcaag gacaagccag cttcagagaa tagtgaggag 120
aagctgatca gtaagtttga caagcttcca gtaaagatcg tacagaagaa tgatccattt 180
gtggtggact gctcagataa gcttgggcgt gtgcaggagt ttgacagtgg cctgctgcac 240
tggcggattg gtgggggga caccactgag catatccaga cccacttcga gagcaagaca 300
gagctgctgc cttcccggcc tcacgcaccc tgcccaccag cccctcggaa gcatgtgaca 360
acagcagagg gtacaccagg gacaacagac caggaggggc ccccacctga tggacctcca 420
gaaaaacgga tcacagccac tatggatgac atgttgtcta ctcggtctag caccttgacc 480
gaggatggag ctaagagttc agaggccatc aaggagagca gcaagtttcc atttggcatt 540
agcccagcac agagccaccg gaacatcaag atcctagagg acgaacccca cagtaaggat 600
gagaccccac tgtgtaccct tctggactgg caggattctc ttgccaagcg ctgcgtctgt 660

US 2005/0196805 A1

gtgtccaata ccattcgaag cctgtcattt gtgccaggca atgacttttg agatgtccaa 720
acccccccagg gcttggtgnt tattctgggg caancttgat cctggttgac cn 772

<210> 2209
<211> 866
<212> DNA
<213> Homo sapiens

<400> 2209
cacgtccaag gaaccgatct tcctgaccca attgctacat ttcagcaact tgaccaggaa 60
tataaaatca attctcgact acttcagaac attctagatg caggtttcca aatgcctacg 120
ccaatccaaa tgcaagccat cccagttatg ctgcatggtc gggaacttct ggcttctgct 180
ccaactggat ctggaaaaac attagctttt agcattccta ttttaatgca gctgaaacaa 240
cccgcaaata aaggcttcag agccctgatt atatcaccaa cacgagaact tgccagccag 300
attcacagag agttaataaa aatttctgag ggaacaggat tcagaataca catgatccac 360
aaagcagcag tggcagccaa gaaatttgga cctaaatcat ctaaaaagtt tgatattctt 420
gtgactactc caaatcgact aatctattta ttaaagcaag atccccccgg aatcgaccta 480
gcaagtgttg agtggcttgt agtagacgaa tcagataaac tgtttgaaga tggcaaaact 540
gggttcagag accagctggc ttccattttc ctggcctgca catcccacaa ggtccgaaga 600
gctatgttca gtgcaacttt tgcatatgat gttgaacagt ggtgcaaact caacctggac 660
aatgtcatca gtgtgtccat tggagcaagg aattctgcag tagaaactgt agaacaagag 720
cttctctttg ttggatctga gaccggaaaa cttctggccg tgagagaact tgttaaaagg 780
gtttcaatcc acctggtctt ggttttggtc agtccattgg aangggttaa agaacttttt 840
catgagctca tntttgaagg gnttaa 866

<210> 2210
<211> 684
<212> DNA
<213> Homo sapiens

<400> 2210
ctccccgagc tgaccaagct ggacatcacc aataacccac ggctgtcctt catccacccc 60
cgcgccttcc accacctgcc ccagatggag accctcatgc tcaacaacaa cgctctcagt 120
gccttgcacc agcagacggt ggagtccctg cccaacctgc aggaggtagg tctccacggc 180
aaccccatcc gctgtgactg tgtcatccgc tgggccaatg ccacgggcac ccgtgtccgc 240
ttcatcgagc cgcaatccac cctgtgtgcg gagcctccgg acctccagcg cctcccggtc 300
cgtgaggtgc ccttccggga gatgacggac cactgtttgc ccctcatctc cccacgaagc 360
ttccccccaa gcctccaggt agccagtgga gagagcatgg tgctgcattg ccgggcactg 420
gccgaacccg aacccgagat ctactgggtc actccagctg ggcttcgact gacacctgcc 480
catgcaggca ggaggtaccg ggtgtacccc gaggggaccc tggagctgcg gagggtgaca 540
gcagaagagg cagggctata cacctgtgtg gcccagaacc tggtgggggc tgacactaag 600
acggttagtg tggttgtggg ccgtgctctc tcagccaggc agggacnaaa ggacaagggc 660
ttgaacttcc ggtgccngan acca 684

<210> 2211
<211> 648
<212> DNA
<213> Homo sapiens

0050-0202-0350-0

<400> 2211
agtgctttca aaagaattgg cgtccgctgt tcgcctctcc tcccgggagt cttctgccta 60
ctcccagaag aggagggaag cacaggtggg tttctttagc tctgcgtcgg atccctgaga 120
acttcgaagc catcctggct gaggctaatc tccgctgtgc ttcctctgca gtatgaagac 180
tttggagact caaccgttag ctccggactg ctgtccttca gaccaggacc cagttccagc 240
ccatccttct ccccacgctt ccccgatgaa taaaaatgcg gactctgaac tgatgccacc 300
gcctcccgaa aggggggatc cgccccggtt gtccccagat cctgtggctg gctcagctgt 360
gtcccaggag ctacgggagg gggacccagt ttctctctcc actcccctgg aaacagagtt 420
tggttcccct agtgagttga gtcctcgaat cgaggagcaa gaactttctg aaaatacaag 480
ccttcctgca gaagaagcaa acgggagcct ttctgaagaa gaagcgaacg ggccagagtt 540
ggggtctgga aaagccatgg aagatacctc tggggaaccc gctgcagang acgagggana 600
caccgcttgn aactacagct tctcccagct gcctcgattt ctcagtgg 648

<210> 2212
<211> 836
<212> DNA
<213> Homo sapiens

<400> 2212
ctttattacg gggccaacgc agtcaccgcc gtccgcagtc acagtccagc cactgaccgc 60
agcagcgccc ttgcgtagca gccgcttgca gcgagaacac tgaattgcca acgagcagga 120
gagtctcaag gcgcaagagg aggccagggc tcgacccaca gagcaccctc agccatcgcg 180
agtttccggg cgccaaagcc aggagaagcc gcccatcccg cagggccggt ctgccagcga 240
gacgagagtt ggcgagggcg gaggagtgcc gggaatcccg ccacaccggc tatagccagg 300
cccccagcgc gggccttgga gagcgcgtga aggcgggcat ccccttgacc cggccgacca 360
tccccgtgcc cctgcgtccc tgcgctccaa cgtccgcgcg gccaccatga tgcaaatctg 420
cgacacctac aaccagaagc actcgctctt taacgccatg aatcgcttca ttggcgccgt 480
gaacaacatg gaccagacgg tgatggtgcc cagcttgctg cgcgacgtgc ccctggctga 540
ccccgggtta gacaacgatg ttggcgtgga ggtaggcggc agtggcggct gcctggagga 600
gcgcacgccc ccagtccccg actcgggaag cgccaatggc agcttttttcg cgccctctcg 660
ggacatgtac agccactacg tgcttctcaa gtccatccgc aacgacatcg agtgggggt 720
cctgcaccag cgctcaccgg ctggagcang aggcagtgct gaatcaaggc atctgtgact 780
ggcattgagg tgcgcgcgca aaaactgaca nagtcatcac tggcgctgaa tgnttc 836

<210> 2213
<211> 835
<212> DNA
<213> Homo sapiens

<400> 2213
gctaatgttt tggccgcttc aagatggcgg tgcaggagtc ggcggctcag ttgtccatga 60
ccctgaaggt ccaggagtac ccgaccctca aggtgcccta cgagacgctg aacaaacgct 120
ttcgcgccgc tcagaagaac attgaccggg agaccagcca cgtcaccatg gtggtggccg 180
agctggagaa gacgttgagc ggctgccccg ccgtggactc cgtggtcagc ctgctggacg 240
gcgtggtgga gaagctcagc gtcctcaaga ggaaggcggt ggaatccatc caggccgagg 300
acgagagcgc caagctgtgc aagcgccgga tcgagcacct caaagagcat agcagcgacc 360
agcccgcggc ggccagcgtg tggaagagga agcgcatgga tcgcatgatg gtggagcacc 420

US 2003/0224000 A1

tgctgcgttg cggctactac aacacggctg tcaagctggc gcgccagagc ggcatcgaga 480
gctgcctgga gttcagcctc agaatccagg agttcattga actcatccgg cagaataaga 540
gactggacgc tgtgagacat gcaagaaagc acttcagcca agcagaaggg agccagctgg 600
acgaggtgcg ccaggccatg ggcatgctgg ccttcccgcc gacacgcaca tctcccgtac 660
aaggaccttc tggaccctgc acggtggcgg atgctgatcc agcagtttcc ggtacgacaa 720
cttaccgact acaccagctt gggaaacaat ttctggggtt tcacccttta cccttgcang 780
cttggcctnt taagcccttt aaggacacca ccagtgcttn caaagggagg accgg 835

<210> 2214
<211> 852
<212> DNA
<213> Homo sapiens

<400> 2214
atttaccaag ggacattgga gctccccaca ccactcattg ctgcccacca gctatacaac 60
tacgtggctg atcacgccag ctcttaccac atgaagccat tgcgaatggc ccggccaggg 120
ggcccagaac acaacgagta tgccctggtg tcggcatggc acagttctgg ctcctacctg 180
gactctgagg gacttcgaca ccaggatgac tttgatgtgt ctctgcttgt ctgtcactgt 240
gctgcaccct ttgaggagca aggagaggct gagcggcacg ttctgcggct acagttcttc 300
gtggtgctca ccagccagcg agagctcttc cccaggctca ctgctgacat gcgccgcttc 360
cggaagccac ccagactgcc ccctgagcca gaggctcctg ggagttcagc tggcagccct 420
ggggaggcct cagggcttat tctagcgcct ggaccggctc ctctgttccc accactggct 480
gcagaggtgg gcatggcacg agcacggctg gctcagctgg tgcggctggc tggagggcac 540
tgccgtcggg acacccttg gaagcgcctc ttcttgctgg agccaccggg gcctgatcga 600
ctgcggctag gggggcgcct ggccctggca gagctggagg aactcctaga agcaagtcca 660
tgccaaatcc attggggaca tcgaccccc agcttggact gnttcctatc catgacggtc 720
tcctggtacc agnagcctga tcaaaagttc ttcttaagcc ggtttccccc anaacttgtc 780
ggccattttc caaaagcccc aaactttggg naacttaagt taccctgggt tggggcttga 840
attcanaaag tt 852

<210> 2215
<211> 508
<212> DNA
<213> Homo sapiens

<400> 2215
agcagcggcg cagggcacca tgggaaacgg acggaagctc cattgagcca ataagttgg 60
ccacgtgggg cggaacggaa acctcgcagg gtcagaccgt agcgacgcgg gaagtccgga 120
cgcagtagct ccctgaagcg gaggcgaagg ggagtttaag ccccagcggc ggcaatggcg 180
gagaggcccg aggacctaaa cctgcccaat gccgtgatca ccaggatcat caaggaggcg 240
ctcccggacg gtgtcaacat ctccaaggag gcccggagcg ccatctcccg cgccgccagc 300
gtcttcgtgc tgtacgccac atcctgtgct aacaactttg caatgaaagg aaagcggaag 360
acgctgaatg ccagtgatgt gctctcagcc atggaagaga tggagttcca gcggttcgtt 420
accccattga aagaagctct ggaagcatat aggcgggagc agaaaggcaa ganggaggcc 480
tnanagcaaa agaagaagga caaagaca 508

<210> 2216
<211> 811

0960396.0970800

<212> DNA
<213> Homo sapiens

<400> 2216
tattgaagat gctcttgttt taaacaaggc ctctttagac agaggctttg ggcgttgcct 60
tgtatataaa aatgctaaat gtacgttgaa acgatacacc aatcagactt ttgataaagt 120
gatggggccc atgttggatg ctgctacaag gaaacctatc tggcgacatg aaatcttaga 180
tgcagatggt atttgttctc caggtgagaa agtagaaaac aaacaagtgc ttgtaaataa 240
gtccatgccc acagtgactc agattccttt ggaaggaagt aatgtaccac agcaaccaca 300
gtacaaagat gtacccataa cctacaaagg agcaacagac tcatatattg aaaaagtgat 360
gatatcttca aatgctgaag atgcttttct gatcaaaatg ctgctgagac agacaaggcg 420
tccagaaatt ggagacaaat tcagcagtcg tcatgggcaa aaaggtgttt gtggcttgat 480
cgtcccccag gaagacatgc cattttgtga ttctggcatc tgtccggaca tcatcatgaa 540
cccacacggc tttccatcac gaatgacggt ggggaagctc attgagctgc tggctggcaa 600
ggccggtgtg ctggacggca gattccacta cggcactgcg tttggaggca gtaaagtgaa 660
ngatgtgtgt gaggacctcg ttcgccatgg gtataactac ttggggaaag actatgttac 720
atncggcatc acaggtgacc cttanaacat catctatttt ggcccctgtc tatcagaact 780
gaacaatggn gctagataaa tgcatgcccg g 811

<210> 2217
<211> 873
<212> DNA
<213> Homo sapiens

<400> 2217
tggatttggt gattctacaa aaaaagacac tgaggttgag accttgaagc atgacactgc 60
tgcagtcgat cgttccgtca agcgtctttt caaagttcgg agtgatcttg attttgctga 120
gcaactgtgg tgcaaaatga gcagtagtgt gatttcatac caagacttgg tgaagtgttt 180
cacattgatc atccagagtc tacaacgtgg tgatatacag ccatggctcc atagtggaag 240
taacagttta ctaagtaagc tcattcatca gtcttatcat ggaaccatgg acacagtttc 300
tctcagtggg actattccag ttcaaatgct tttggaaatt ggtttggaca aactaaagaa 360
agattatatc agtttttca taggtcagga acttgcatct ttgaatcatt tggaatactt 420
cattgctcca tcagtagata tacaagaaca ggtttatcgt gtccaaaaac tccaccatat 480
tctagaaata ttagtcagtt gcatgccttt cattaaatct caacatgaac tcctcttttc 540
tttaacacag atctgcataa agtattacaa acaaaatcct cttgatgagc aacacatttt 600
tcagctgcca gtcagaccaa ctgctgtaaa gaacttatat caaagtgaga agccacagaa 660
atgggagagt ggaaatatat agtggtcaaa agaagattaa gacagtttgg caactgagtg 720
acagctcacc catagaccat ctgaattttc acaaacctga tttttcggaa ttaacactta 780
acggtagcct ggaagaaagg atattcttta ctaacatggg tacctgcanc aagtgcattt 840
caaggtgaat gtgcctgatg aagtcctntn taa 873

<210> 2218
<211> 746
<212> DNA
<213> Homo sapiens

<400> 2218
gtgcggagcg gcgcggcaca gagcctgttg ttgagctcag tatgtcgtgg gaatccgggg 60

09/05/2008 15:50:53 PM

ccgggccagg tctaggttcc caggggatgg atctcgtgtg gagtgcgtgg tacggaaagt 120
gcgttaaagg gaaagggtcg ttgccactct cggcccacgg catcgtggtc gcctggctca 180
gcagggccga gtgggaccag gtgacggttt atctgttctg tgacgaccat aagttgcagc 240
ggtacgcgct taaccgcatc acggtgtgga ggagcaggtc aggcaacgaa ctccctctgg 300
cagtggcttc tactgctgac ctgatacgct gtaagctctt ggatgtaact ggtggcttgg 360
gcactgatga acttagactg ctctatggca tggcattggt caggtttgtg aatcttatct 420
cagagaggaa gacaaagttt gccaaggtcc ccctcaagtg tctggctcaa gaggtaaata 480
ttccggattg gattgttgac cttcgccatg agttgaccca caagaaaatg ccccatataa 540
atgactgccg cagaggctgc tactttgtcc tggattggct ccagaagacc tattggtgcc 600
gccaactgga gaacagcctg agagagacct gggagttgga ggagttcang gaagggatag 660
aggaagagga tcaagaggaa gataagaaca ttgntgntga tgacatcaca gaacagaaac 720
cagagcctta ggatgatggg aaaagt 746

<210> 2219
<211> 768
<212> DNA
<213> Homo sapiens

<400> 2219
agtttcggaa ccccagccag ctcacctctg cgccgctgaa cccgatccga gcctccggca 60
aaggtttttc cctcctcccc cggccgaggg cttctgccgc ccgggcaccc ccgccccgcg 120
gcgccccaca ttcccccagc ccggggccct tggcgcgtgc gctccgtgcg gctgtgctcc 180
gcgggacttt gtttgtttcc tcctcgtccc tctttgttgg gctgaacacc agcctcgtca 240
aagccccccа ctccggaggg agttcggctt ctccagcagg gcggctgcag cgcgctgccc 300
cgaccccgcc tgcggccccт cacgccgcta gtgctcccac cccgccctcc tggcaccccg 360
cctgcgtccg ttcgcccgag gaagccaacc gcgacttcat tgatgcaccc attccagtgg 420
tgtaacgggt gtttctgtgg cctgggactg gttagcacca acaagtcctg ctcgatgcca 480
cccatcagtt tccaagacct tccgctcaac atctatatgg tcatctttgg cacaggcatc 540
tttgtcttca tgctcagcct tatcttctgc tgctatttta tcaagcaaac tgcggaacca 600
ggcacagagt gatcgatacg gatataagga ggtggtgctt aaaggtgatg ccaagaagtt 660
acaattatat gggcagacct gcgcaatctg tctggaagac ttcaagggga aggatgaatt 720
angcgtgctt ccgngccaac acgcctttta accgcaagng tcttggtg 768

<210> 2220
<211> 754
<212> DNA
<213> Homo sapiens

<400> 2220
tgctggccag tacttgttct cccttgcccc aacccтttac cggatatctt gacaaactct 60
ccaattttct aaaatgatat ggagctctga aaggcatgtc cataaggtct gacaacagct 120
tgccaaattt ggttagtcct tggatcagag cctgttgtgg gaggtaggga ggaaatatgt 180
aaagaaaaac aggaagatac ctgcactaat cattcagact tcattgagct ctgcaaactt 240
tgcctgtttg ctattggcta ccttgatttg aaatgctttg tgaaaaaagg cacttttaac 300
atcatagcca cagaaatcaa gtgccagtct atctggaatc catgttgtat tgcagataat 360
gttctcattt atttttgatg tagaatttac attgccatgg gtgttaaata agctttgagt 420
caaaagtcaa gaaagtgact gaatatacag tcaccтttta tgaaatgagt ctctgtgtta 480
ctgggtggca tgactgattg aggtgaagct cacggggcca ggctgaccgt cttgaccgtt 540

US 2005/0255486 A1

ccacttgaga taggttggtc atcgtgcaga aggccccagg acctcagcac acacagcctn 600
ctcttggtct gagtaggcat catgtggggg ccagatctgc ctgctggttc catgggttac 660
atttactgng ctgnatctca gatgttggtg tctggaagtt tattcttaan agactgtacc 720
caactgggct ggattaatgg gaagttgcag ttcg 754

<210> 2221
<211> 854
<212> DNA
<213> Homo sapiens

<400> 2221
cagactggag cacatgctga tttaaatcca ttttaccaaa agtacagcag ccgcactcag 60
catgctattc tatacatgaa tcctcataaa atcaacctgg atctcatttt ggaacttctt 120
gcatacttag ataaaagtcc ccaattcaga aatattgaag gagcagtatt gatcttttta 180
ccaggacttg ctcatattca gcagttgtat gatcttctat caaatgatag aagattttat 240
tctgaacgat ataaagtgat agctctgcat tctattcttt caacccaaga tcaagctgca 300
gcattcacac ttccccctcc aggagtcagg aagattgttt tagcaaccaa tattgcagag 360
acgggtatca ctattcctga tgttgtattt gtaattgata ctggaagaac aaaagaaaat 420
aagtaccatg aaagcagtca gatgagttct ttggtggaga cgtttgtcag taaagccagt 480
gctttgcagc gccagggaag agctgggcgg gtcagagatg gcttctgttt ccgaatgtac 540
acaagagaaa gtattacttt atttttcaga tttgaaggct ttatggatta ttctgttcct 600
gaaatcttac gtgtaccttt ggaggaatta tgccttcata ttatgaaatg taatcttggt 660
tctcctgaag atttcctctc caaagcctta gatcctcctn agctccaagt gatcagcaat 720
gcaatgaatt tgctccgaaa aattggagct tgtgaattaa atgagcctaa actgactncg 780
ttgggccaac accttgcagc tttacctgng aatgtcaaga atggcagagc ttattttggn 840
gccatattgg ctgc 854

<210> 2222
<211> 796
<212> DNA
<213> Homo sapiens

<400> 2222
actgtttctt gtcaagaaaa ggatcttttg gcactggaac aagatgctgt ctttggcctg 60
gaatccctac tggtactttg tagtcaagat gatagtccag gtgctcaggc cactttaaag 120
attgctctaa actgtatggt gaagttggcc aagggcaggc cccatcttag ccagtcagta 180
gttgagacct tgttgactca attgcacagt gctcaagacg ctgcccggat tttgatgtgc 240
cattgcctgg cagccattgc catgcaactg ccggtgctgg gtgatgggat gcttggtgac 300
ctcatggagc tgtacaaggt gattggacga tcagccacag acaagcaaca agaacttctg 360
gtgagtttgg ctactgtgat ttttgttgca agtcagaagg cattgtctgt ggaaagtaag 420
gcagtaatta agcagcagct tgaaagtgtc tccaatggat ggactgtata ccgtattgcc 480
agacaggctt ccagaatggg taatcatgac atggccaaag agctttatca gagtttgctg 540
actcaggttg cctcagaaca tttctacttc tggctaaata gtttgaagga gttttcacat 600
gcagaacagt gtctcactgg gttgcaagag gaaaattata gttcagcact ttcttgcatt 660
gctgaatctt taaaattcta tcacaaaggg attgcttctt aacagcagct agtacaccac 720
tgaatccttt aagctttcag tgtgaatttg taaaactcan gattgaccnt ttacaagcct 780
tctctnaact tatctg 796

US 2002/0150900 A1

<210> 2223
<211> 702
<212> DNA
<213> Homo sapiens

<400> 2223
tttatgaaga gctcgactct gactccgagg acctagaccc caatcctgaa gatctggacc 60
cggtttctga agacccagag cctgatcctg aagacctcaa cactgtcccg gaagacgtgg 120
accccagcta tgaagatctg gagcccgtct cggaggatct ggaccccgac gccgaagctc 180
cgggctcgga accccaagat cccgacccca tgtcttcgag tttcgacctc gatccagatg 240
tgattggccc cgtacccctg attctcgatc ctaacagcga caccctcagc cccggcgatc 300
caaaagtgga ccccatctcc tctggcctca ctgccacccc ccaggtcttg gccaccagcc 360
ccgcggtgct ccccgccccc gccagcccgc cccggccctt ctcctgcccg gattgcgggc 420
gagccttccg ccgcagctcc gggctgagcc agcatcgccg cacgcacagc ggcgagaagc 480
cgtaccgctg ccccgactgc gggaagtcct tcagccacgg tgccaccctg gctcagcacc 540
gtggcatcca cactggggcg cggccgtacc agtgcgcggc tgcggcaagg ccttcggctg 600
gcgctccacg ctgctgaaac atcgcagcag ccacagcggg gagaagccga ccactgcccg 660
gtgtgtggca aggncttcgg gcacggntng ttctggcaca ag 702

<210> 2224
<211> 871
<212> DNA
<213> Homo sapiens

<400> 2224
tgtgttacat ccatattgct gctctcattg cagagtatct gaaaagaaag ggttactgga 60
aagtggaaaa gatttgcaca gcatccctgc tctcggagga tacccacccc tgtgatagca 120
actcattact aacaactccc agtggaggaa gcatgttctc tatgggatgg ccagcttttt 180
tgagcattac accaaacatt aaggaagaag gagcgatgaa agaggattct ggaatgcaag 240
atacaccata caatgagaat atcctggtgg agcagctata catgtgtgtg gagtttctct 300
ggaagtctga gcgatatgaa ctcattgctg atgtcgacaa gcccatcatt gctgtctttg 360
agaaacaacg agacttcaaa aaattgtcag atctctacta cgacattcat cggtcatatc 420
tgaaagtggc agaggtggtg aattcggaga agcggctgtt tggtcgctac tatcgtgtgg 480
cattttatgg gcagggcttt tttgaagaag aagaaggtaa agagtatatt tataaagagc 540
ctaagctgac aggtctgtcc gagatttccc aaagattact caagctctat gcagataaat 600
ttggagcaga caatgtgaag ataatccagg attccaacaa ggtaaacccc aaggatttgg 660
accccaaata tgcctacatn caggtgacct atgtgacgcc gtctttgagg aaaaggaaat 720
cgaagaccgg aagacagatt tcgaaatgca ccacaacatc aaccggtttg gcttcgagac 780
acccttnacg cttgtcgggc caagaagccc cggtgggggt ggccggaaca atgcaagccg 840
gnggaccaat cctgacaacg agtcanctgt t 871

<210> 2225
<211> 706
<212> DNA
<213> Homo sapiens

<400> 2225
aatctgtttg aggatgtagg cactggtgtg aaggaacatg gccctgtatc agaggtggcg 60

0956304.0720001

gtgtctccgg ctccaaggtt tacaggcttg caggctacac acggcagttg tgtcgacccc 120
tccacgctgg ttggcagagc ggcttggcct ttttgaggag ctgtgggctg ctcaggtaaa 180
gagattagca agcatggcac agaaggaacc ccggactatt aagatatcac ttcctggagg 240
ccagaaaatt gatgctgtgg catggaacac aacccctac caactagccc ggcagatcag 300
ttcaacactg gcagatactg cagtggctgc tcaagtgaat ggagaacctt atgatctgga 360
gcggcccttg gagacagatt ctgacctcag atttctgaca ttcgattccc cagaggggaa 420
agcagtgttc tggcactcca gcacccatgt cctgggggca gcagctgaac aattcctagg 480
tgctgttctc tgcagaggtc caagtacaga atatggcttt taccatgatt tcttcctggg 540
aaaggagagg acaatccggg gctcaaagct gcctgttttg gagcggattt gccaggaact 600
tacagctgct gctcgaccct tccggaggct agaggcttca cgggatcagc ttcgccagtt 660
gttcaangct gagtatgccc atcgtgggtt ctncgangtg aaaact 706

<210> 2226
<211> 806
<212> DNA
<213> Homo sapiens

<400> 2226
gacgggccac accctctgag aaccttgtac cctcatctgc tcgtgtggat aagcccccca 60
gtgtgctgcc ctacttcaat cgtcctcctt cggcccttcc cctgatgggt ctgcccccac 120
caccaattcc acccccacca cctctctcct caagctttgg ggtccctcct cctcctcctg 180
gtatccacta ccagcatctc atgcccccac ctcctcgatt acctcctcat cttgctgtac 240
ctccccctgg ggccatccca cctgcccttc acctcaatcc agccttcttc cccccaccaa 300
acgctacagt ggggcctcca ccagatactt acatgaaggc ctctgccccc tataaccacc 360
atggcagccg agattcgggc cctccaccct ctacagtgag tgaagccgaa tttgaagata 420
tcatgaagcg aaacagagca atttccagca gtgccatttc caaagcagta tctggagcca 480
gtgcagggga ttacagtgac gcaattgaga cgttgctcac agccattgcg gttatcaaac 540
agtcccgggt tgccaatgat gatcgttgcc gtgtcctcat ctcctctctt aaggactgtc 600
ttcatggcat tgaagccaag tcctacagtg tgggtgccag tgggagctct tncaggaaaa 660
gacatcgctc ccgggaaagg tcacctagcc ggtcccggga gaacagcagg aggcaccggg 720
atctgcttca taatgaanat cggcatgatg attatttcca agaaanggaa ccgggagcat 780
tgagaaaaca ccggggatag aanaac 806

<210> 2227
<211> 814
<212> DNA
<213> Homo sapiens

<400> 2227
caactactct gaaagtgtct tacttagaga tttacaatga agaaattttg gatcttctat 60
gcccatctcg tgagaaagct caaataaata tacgagagga tcctaaggaa ggcataaaga 120
ttgtgggact cactgagaag actgttttgg ttgccttgga tactgtttcc tgtttggaac 180
agggcaacaa ctctaggact gtggcctcca cggctatgaa ctcccagtcg tcccgatctc 240
atgccatctt tacaatctcc ttagagcaaa gaaagaaaag tgacaagaat agcagctttc 300
gctccaagct gcatcttgta gacctcgctg gatcagaaag acagaagaaa accaaggctg 360
aaggggatcg tctaaaagag ggtattaata ttaaccgagg cctcctatgc ttgggaaatg 420
taatcagtgc tcttggagat gacaaaaagg gtggctttgt gccctacaga gattccaagt 480
tgactcgact gcttcaagat tctctaggag gtaatagcca tactcttatg atagcctgtg 540

US 2005/0255485 A1 Nov. 17, 2005

tgagtcctgc tgactccaat ctagaggaaa cattaaatac ccttcgctat gctgacagag 600
caagaaaaat caagaacaaa cctattggta atattgatcc ccagacagct gaacttaatc 660
atctaaagca acaggtacaa cagctacaag tcttggtgct acaggcccat ggaggtaccc 720
tgnctggatc tataactgng gaaccatcag agaatctaca atccctgatg gagaaagaat 780
cagtcccttg gtanaaggag aatggaaaaa ttaa 814

<210> 2228
<211> 772
<212> DNA
<213> Homo sapiens

<400> 2228
taagaagtct cttgaaataa aagaagaaaa aattgctgct ttagaagctc gattagaaga 60
atccacgaat tataaccagc aattgcgcca agaacttaaa acaaatgcta cactgcaagc 120
agagaagcaa gcgttgaaaa ctcaactgaa gcaacttgag acacagaaca ataatttgca 180
ggctcagatt cttgcacttc agaggcagac agtgtcatta caagaacaga ataccactct 240
tcaaacacag aatgccaagc ttcaggttga aaattccacc cttaattccc aaagtacctc 300
actcatgaac cagaatgccc aactcctaat ccagcagtct tccttagaaa atgaaaatga 360
atctgtaatc aaagagcgag aagacctaaa atctctctat gattctctga tcaaagatca 420
tgaaaagctg gaacttcttc atgaacgtca ggcttcagag tatgaatctc ttatctctaa 480
acatggaact ctgaagtctg cccacaaaaa tcttgaggtg gaacatagag accttgaaga 540
ccgttacaat cagttattaa aacagaaagg acagttggaa gatttggaaa aaatgctcaa 600
agtagaacag gaaaaaatgc tgcttgaaaa taaaaatcat gaaacagtag ctgcagaata 660
caagaaactt tgtggtgaaa atgataggct gaatcatacc tatagtcaac ttttaaaaga 720
gactgaagnt ttacaaactg accattaaaa nttgaaaagn cttctgaata tt 772

<210> 2229
<211> 773
<212> DNA
<213> Homo sapiens

<400> 2229
aaaagaatgg aggagtcgga acccgaacgg aagcgggctc gcaccgacga ggtgcctgcc 60
ggaggaagcc gctccgaggc ggaagatgag gacgacgagg actacgtgcc ctatgtgccg 120
ttacggcagc gccggcagct actgctccag aagctgctgc agcgaagacg cgagggagct 180
gcggaggaag agcagcagga cagcggtagt gaaccccggg gagatgagga cgacatcccg 240
ctaggccctc agtccaacgt cagcctcctg gatcagcacc agcaccttaa agagaaggct 300
gaagcgcgca aagagtctgc caaggagaag cagctgaagg aagaagagaa gatcctggag 360
agtgttgccg agggccgagc attgatgtca gtgaaggaga tggctaaggg cattacgtat 420
gatgacccca tcaaaaccag ctggactcca ccccgttatg ttctgagcat gtctgaagag 480
cgacatgagc gcgtgcggaa gaaataccac atcctggtgg agggagacgg tatcccacca 540
cccatcaaga gcttcaagga aatgaagttt cctgcaacca tcctgagagg cctgaagaag 600
aaaggcattc accacccaac acccattcag atccagggca tccccaccat tctatctggc 660
cgtgacatga taggcatcgc tttcacgggt tcangcaaga cactggtgnt cacgtttgcc 720
ccgtcatcat tgttctggnc tgggaacaag gaagaaagaa gggttacccc ttt 773

<210> 2230
<211> 826

0050250.0003

<212> DNA
<213> Homo sapiens

<400> 2230
aattaataca agtcccaggc ccaatgccta agagaccaga cgtgggcaaa gacaagtttg 60
gatggaaagg tgttatcaca gagccctgtc cagctcctag aattcctcag gccagtgaca 120
ctttttgct gctggccacc catgcctctg atgagaacac ttgccaattt ggccagcaga 180
aagagagtag gccggatgtt ttcatgagcc cacaaattta gaaactctcc tagtagtact 240
ttttctctct ccatttaaga gacaactacg gtcaaaagtt tgagccattc tcttctaccc 300
cttcagtgtc tgacccttc actggctctt atctgtaaac acagggaggc aggtatggat 360
ttttcacagt agacaatggg tcaacagcat gagtttgagg acctgctgtg aagatttctc 420
ctccaaaata catctcatgg gcaggattct tcctgctcca tatctgtttc aattttaaga 480
aagcaccaca tacaagacac attcagaagt cattcctgag cattgctggt gtttgcacac 540
ttgccacctg cattaccaat tctgtaaatt tcaattcctg gtggaaagtg accactttga 600
ccatggattt cccaaagaag agttcctttg cagaccatag gtggaaaagt caatgagcat 660
ctccttcctt gccaaagcat gtcccaacat gtaacaaact ctagggatca aaagggttat 720
attcagcatc tgatgtcana tgtacagntc cttcccttcc atatataaac cccggtgtag 780
aatctgcacg ccctgctctt cggaaaccaa ggaacaagcc actgnt 826

<210> 2231
<211> 804
<212> DNA
<213> Homo sapiens

<400> 2231
cacacttgga ctcttttcaa acattaggtt agtttgtaat gaaagcaaaa aatttgtgaa 60
tagagagcag tagaaacaca tccagcaaca gctcaccttt taacctaaaa ggctcctccg 120
agcagctcca tggccggtct gagagcttca gcagcgaaga cctgatcccc agcagggacc 180
tggccacttt gccccgggaa gccagcacac cgggacgcaa cgccctcggc cgccacgagt 240
acccccttgcc tcggaacggg cctctcccac aggagggtgc ccagaagagg ggcacagccc 300
ctccctacgt cggagtgcgg ccctgctcgg cctcccccag cagtgagatg gtcaccttgg 360
aggagttcct ggaggagagc aaccgcagct cccccaccca tgacactccc agttgccggg 420
atgacctgct gagtgactac ttccgaaagg ccagcgatcc cccagccatc ggaggccaac 480
caggaccacc tgccaagaaa gaaggggcca agatgcccac caactttgtg gcccccaccg 540
tcaaaatggc cgcccccacc tcggagggga ggccgctgaa gcccgggcag tacgtaaagc 600
caaacttcag actgactgag gccgaggccc cacccagcgt ggccccgaga caggcccagc 660
cttcccagag cctgtctctg ggcagacccc ggcaggctcc ggtgccccca gcttcccatg 720
cacctgccaa gcccgcagtg ccttcttgag cccggccttc agccttggcc tnagctgacc 780
ttntncgggc caacgggcca aagg 804

<210> 2232
<211> 743
<212> DNA
<213> Homo sapiens

<400> 2232
ctgctccagt tatgtaaccc atgggcttcc ctttgcacag ctcctcatgt gctcatctcc 60
atgctgatca aaccacccca cctcattcct tgccttctgc aaggggaagt gcctcaggct 120

09525450.090202

ggagtttgtc ctgtctacag actgaatatg cattttgccc agtggctgga gatgtgctgg 180
tggtggaatg tgctggtgat tgtttctgga tggagagcca cagcccccca gtgttctgcc 240
atgactgact cctgaccttg gcaaattgcc tcctctctcc cagcctcctc cataacaggt 300
ggcgatgagt cccatttcct ccctacctca caggaaggca cgcattataa agggcacact 360
tatcagatgt gcccagatgt ggctggaact tttggagaca gatacttggt tcacaaccgc 420
aaaggtgggc tttcaccaga gaagaaaatc tctgggctgc tgagttcagt gggctccttg 480
caggctggtc caggaagtct ggtgttcctc ctgaaggtgg ctgctatgtc cagcaggtga 540
tcaagctgac agtaccacaa gaaccaagaa acagaatctg ttcccaagga atgaatgttc 600
tatctctctg acccaaaagc aagagcaaga gagagctgtc accatcatca ccctgctccc 660
aacacaaaca cagncccccа agtccatatt gctgacaagg gtatctgcct tgtcanggtg 720
aatcctctgg acccccangc cat 743

<210> 2233
<211> 829
<212> DNA
<213> Homo sapiens

<400> 2233
aattccctac cctcgacctg tcgatgcccc gcggccccgc ccgccctctt aagcctggct 60
cagccctcag ggcccgcccg aagtctaccg agcccgagtg gcctaccgag cccgagtggc 120
cccgcagcgt ccaggaggcg cccgctccgc ggtggcgctc ttggaggtgg tgtcggagag 180
ccgccgagcg tgcggtcccg ggatggctct accccggcca agtgaggccg tgcctcagga 240
caaggtgtgc tacccgccgg agagcagccc gcagaacctg gccgcgtact acacgccttt 300
cccgtcctat ggacactaca gaaacagcct ggccaccgtg gaggaagact tccaaccttt 360
ccggcagctg gaggccgcag cgtctgctgc ccccgccatg ccccccttcc ccttccggat 420
ggcgcctccc ttgctgagcc cgggtctggg cctacagagg gagcctctct acgatctgcc 480
ctggtacagc aagctgccac cgtggtaccc aattccccac gtccccaggg aagtgccgcc 540
ttcctgagca gcagccacga gtacgcgggt gccagcagtg aagatctggg ccaccaaatc 600
attggtggcg acaacgagag tggcccgtgt tgtggacctg acactttaat tcaccggccc 660
ctgcggatgc ttctctggta cctgangggc tgaggacctt ccagttatta ccttgctacc 720
cagcaagcag tcagangatg gtcccaaacc cttcaaccaa gaagggaagt cccctgttcg 780
gttcagntca cggaggagga ctgcatttgn tctgtacggg gtccttcca 829

<210> 2234
<211> 853
<212> DNA
<213> Homo sapiens

<400> 2234
gaaaacagtt tactcctcct ttgctaggcc cgatgtcacc actgaaccct ttggtccaga 60
taactgtttg catttcaata tgactccaaa ctgccagtac cgtccccaga gtgtacctcc 120
ccatcacaat aaattggagc agcaccaagt gtatggtgcc aggtcagagc caccagcctc 180
catgggtctt cgttataaca catatgtggc cccaggaaga aacgcatctg gacaccactc 240
caagccatgc agccgggtcg agtatgtgtc ttctttgagc tcctctgtca ggaatacctg 300
ttaccccgaa gacattccac cgtaccctac catccggaga gtgcagtctc tccatgctcc 360
gccgtcttcc atgattcgct ctgttcccat ttcacggaca gaagttcccc cagatgatga 420
gccagcctac tgcccaagac ctctgtacca atataagcca tatcagtcct cccaggcccg 480
ctcagattat catgtcactc agcttcagcc ttactttgag aatggccggg tccactacag 540

0956450 - 0956450

gtatagccca tattccagtt cttctagttc ctattacagt ccagatgggg ccctgtgtga 600
tgtggatgcc tatggcacag tccagttgag acccccttcac cggcttccaa tcgagacttt 660
gctttctaca atcctaggct gcaaggaaag agcttgtaca gttatgctgg tttggcttca 720
cgttcccggg ccaacgtgac tggctatttc tctccaacga ccataatgna atcagcatgc 780
cttcggctgc tgatgtgaag cacacctaca ccttatggga tcttgaggac atggaaaaat 840
cccnatgcag tcc 853

<210> 2235
<211> 853
<212> DNA
<213> Homo sapiens

<400> 2235
agttgcacgc tgagccgcgg acaccatgca gtcggatgat gttatctggg atacactagg 60
aaacaagcaa ttttgttcct tcaaaataag aaccaagact cagagcttct gccgaaatga 120
atatagcctg actggactgt gtaatcggtc atcctgtccc ctggcaaata gtcagtatgc 180
cactattaaa gaagagaaag gacagtgcta cttgtatatg aaggttatag aacgagcggc 240
ttttcctcgg cgtctctggg aacgggtccg gcttagtaaa aactatgaga aagcactgga 300
gcaaatagat gaaaatctga tttactggcc ccgtttcatt cgacacaaat gtaagcagag 360
attcaccaag atcacccaat acctaattcg aattagaaaa cttacactaa agcgacagag 420
gaaacttgtt cctttgagta agaaggtgga gcgtagggag aaaagaagag aggaaaaggc 480
attaatagct gctcagctgg acaatgccat tgagaaggaa ttactggaga gactgaaaca 540
agatacgtat ggcgacatct acaacttccc cattcatgcc ttcgacaaag ccctggaaca 600
acaggaggca gagagtgact ctttagatac tgaggaaaaa gatgatgatg atgatgatga 660
ggaagatgtg gggaaaagag aatttgtcga agatggtgag gtagatgaga gtgacataag 720
tgattttgag gatatggata aactggatgc cacagtgatg aagatcagga tggtaaatcc 780
tccatgagga ggaggaagaa aaaggcctta atgcgaaaca caaggcaaat gccttganag 840
gccctgcaaa aaa 853

<210> 2236
<211> 850
<212> DNA
<213> Homo sapiens

<400> 2236
agccgagccg cgaggagcgc gctccgtggc cccgatggag cggtacaaag ccctggaaca 60
gctgctgaca gagttggatg acttcctcaa gattcttgac caggagaacc tgagcagcac 120
agcactggtg aagaagagct gcctggcgga gctcctccgg ctttacacca aaagcagcag 180
ctctgatgag gagtacattt atatgaacaa agtgaccatc aacaagcaac agaatgcaga 240
gtctcaaggc aaagcgcctg aggagcaggg cctgctaccc aatggggagc ccagccagca 300
ctcctcggcc cctcagaaga gccttccaga cctcccgcca cccaagatga ttccagaacg 360
gaaacagctt gccatcccaa agacggagtc tccagagggc tactatgaag aggctgagcc 420
atatgacaca tccctcaatg aggacggaga ggctgtgagc agctcctacg agtcctacga 480
tgaagaggac ggcagcaagg gcaagtcggc cccttaccag tggccctcgc cggaggccgg 540
catcgagctg atgcgtgacg cccgcatctg cgccttcctg tggcgcaaga agtggctggg 600
acagtgggcc aagcagctct gtgtcatcaa ggacaacagg cttctgtgct acaaatcctt 660
caaggaccac agccctcact ggacgtgaac ctactgggca gcaacgtcat tcacaaggag 720
aagcaagtgc cggaagaagg acacaagctg aagatcacac cgatgaatgc cgatgtgaat 780

0507050.0507800

gtgctgggcc tgcanagcaa ggaccagctt ancatgggct aaggtcatnc aggaagtgag 840
cggctgcttc 850

<210> 2237
<211> 839
<212> DNA
<213> Homo sapiens

<400> 2237
ttgcagtgga cacagctgct gggccatatc agaatcacac tgtggttttt ctgggatcag 60
agaagggaat catcttgaag tttttggcca gaataggaaa tagtggtttt ctaaatgaca 120
gccttttcct ggaggagatg agtgtttaca actctgaaaa atgcagctat gatggagtcg 180
aagacaaaag gatcatgggc atgcagctgg acagagcaag cagctctctg tatgttgcgt 240
tctctacctg tgtgataaag gttccccttg gccggtgtga acgacatggg aagtgtaaaa 300
aaacctgtat tgcctccaga gacccatatt gtggatggat aaaggaaggt ggtgcctgca 360
gccatttatc acccaacagc agactgactt ttgagcagga catagagcgt ggcaatacag 420
atggtctggg ggactgtcac aattcctttg tggcactgaa tgggcattcc agttccctct 480
tgcccagcac aaccacatca gattcgacgg ctcaagaggg gtatgagtct aggggaggaa 540
tgctggactg gaagcatttg cttgactcac ctgacagcac agacccttg ggggcagtgt 600
cttcccataa tcaccaagac aagaagggag tgattcggga aagttacctc aaaggccacg 660
accagctggt tcccgtcacc ctcttggcca ttgcaagtca tcctggcttt cgtcatgggg 720
gcccgtcttc ttgggcatac ccgctactgc gtctgngatc atcggcgcaa agacgtggct 780
gtggtgcaac gcaaggagaa ggagctnacc cactnggccc ggggcttcat gaacacgta 839

<210> 2238
<211> 822
<212> DNA
<213> Homo sapiens

<400> 2238
tataattata tgttaaataa ggcacataac cagtttccaa ggtcatcatg gttgcttaaa 60
gtctttcccc ttctgtactc catggaaata ttctcagtaa accaaaaaca aaaatggaaa 120
aataatcacc aacccccatc ccgacacaca cacacagtcc aaagcaaaag tcagtgtgta 180
ttgaatttaa caagtaatgc agtttgggat gcttttgcta cattttggtg gcattttaac 240
tagttatctg aatatttatt aatcgtactt cctcttgtaa agttaactac ttacttttt 300
gttgttgttt ttttaacatc aggttctgta tctaatagga gatgtaacac tttatttcat 360
ggcaggtttt tattgcagag acttgaagtc ttagtttttt aaactggcac ataaaacact 420
ttttgctgtt atttttattt atgtcaatac tgcagagtat ctttatgcct tattcaagtg 480
gattctgagc ctgtatgtca caatgtaaac actggaggtt cactcaccta cgcactcacc 540
caccacctct gaaagaaaca gaaactgcag agaaagacag catcttagct cattttgttt 600
ttaaatgagg ttttagacgc ttgccacttc ctaagggaaa tcctaaaaca gagcaagtga 660
tgctcccagg tatcactgtg aacttttttc tttcaaagtg tgaattttta cactggcttt 720
ttcatttttt taaagtaatt gaagcttgtg gctttacaac ttaatgnttt ttgctatcca 780
gatacaggtt cattggttaa naacccagtg acacttaata ng 822

<210> 2239
<211> 854
<212> DNA

09529800.0N2000

<213> Homo sapiens

<400> 2239
tgccagaccc aaaaccgcca gggccacctg tggcctcctc gtcctcggcc actagcctgc 60
cgtggcccgt ggtcatcggc atcccagccg gcgctgtctt catcctgggc accctgctcc 120
tgtggctttg ccaggcccag aagaagccgt gcacccccgc gcctgccct cccctgcctg 180
ggcaccgccc gccggggacg gcccgcgacc gcagcggaga caaggacctt ccctcgttgg 240
ccgccctcag cgctggccct ggtgtggggc tgtgtgagga gcatgggtct ccggcagccc 300
cccagcactt actgggccca ggcccagttg ctggccctaa gttgtacccc aaactctaca 360
cagacatcca cacacacaca cacacacact ctcacacaca ctcacacgtg gagggcaagg 420
tccaccagca catccactat cagtgctaga cggcaccgta tctgcagtgg gcacgggggg 480
gccggccaga caggcagact gggaggatgg aggacggagc tgcagacgaa ggcaggggac 540
ccatggcgag gaggaatggc cagcacccca ggcagtctgt gtgtgaggca tagccctgg 600
acacacacac acagacacac acactgcctg gatgcatgta tgcacacaca tgcgcgcaca 660
cgtgctccct gaaggcacac gtacgcacac acgcacatgc acagatatgc cgcctgggca 720
cacagataag ctgccaaatg cacgcacacg cacagagaca tgccagaaca tacaaggaca 780
tgcttgctga acatacacac gcacacccat gcgcanattg cttgctggaa cacacacaca 840
cacggatatg ttgt 854

<210> 2240
<211> 755
<212> DNA
<213> Homo sapiens

<400> 2240
ttcaagagca gcctggccaa catggtgaaa ccctgtctct actaaaaata caaaagttgg 60
cctgttgtgg tggcgcgcac ctgtaatccc agctactcgg gtggctgggg caggagaatc 120
gcttgaaccc aggaggcgga gggtgcagtg agccgggatc acgccactgc acttcagcct 180
gggtgacaga gtgtgactcc atctcaagaa aaacgaggga gattagaaac ctatgatcag 240
gcattggctg aaacaaatgg taaattcttt tggcagcctt gagcttcccc aggcagggac 300
ccaaaggggc ctgggttatc cctgagacag ggccttgagc tgctagaaac tatgctagtg 360
tttgttcaag tctctccgtg tccggggtga gcaaaattgt ttgtgctgaa aatcaatgat 420
ttgcagctct caagattcca gtgggcagtc tgggtgcctg agtttctgct ttttttttt 480
ctttatgtac agggtcttgc tctgtcacct aggctagagt gtaattagtg gccccagtca 540
tggctcactg cagctgcaaa ctggctgcaa gctgttctgg ctcagcctac caggttactg 600
ggcttacagg tggatgccac cgtacccaac agattttatt tttgtaggga tgggggtctc 660
cctgtattgc ccaggctggt ctcaaactcc tggcctncca aggtgtttan attgcaggtg 720
taagccacca cacgtggcca gccttntgca tttct 755

<210> 2241
<211> 814
<212> DNA
<213> Homo sapiens

<400> 2241
ctccgggcat ggacccgata gcctcggctc tgcgcacgcc catctccatc accagctcct 60
atgcggcgcc cttcgccatg atgagccacc atgagatgaa cggctccctc accagtcctg 120
gcgcctacgc cggcctccac aacatcccac cccagatgag cgccgccgcc gctgctgcag 180

0502980.0502980

ccgctgccta tggccgatcg ccaatggttg gttttgaccc tcacccccg atgcgggcca 240
caggcctccc ctcaagcctg gcctccattc ctggaggaaa accagcgtac tcattccatg 300
tgagtgctga tgggcagatg cagcccgtgc ccttccccca cgacgccctg gcaggccccg 360
gcatcccgag gcacgcccgg cagatcaaca cactcagcca cggggaggtg gtgtgtgccg 420
tgaccatcag caaccccacg aggcacgtct acacaggtgg caagggctgc gtgaagatct 480
gggacatcag ccagccaggc agcaagagcc ccatctccca gctggactgc ctgaacaggg 540
acaattacat ccgctcctgc aagctgctcc ctgatgggcg cacgctcatc gtgggcggcg 600
aaggccagca cgctcaccat ctgggacctg gcctnggcca cgccccgcat caaggccgag 660
ctgacgtctc gnttccgctg gtatgccctg gncattagcc ctgacgccaa agtctgttct 720
ctgctgcagc gatgggaaca tgctgctgga cctgacaaca gaccctggca gcagtcaggg 780
caccaatggg cagttgatan ctntccatga tggn 814

<210> 2242
<211> 845
<212> DNA
<213> Homo sapiens

<400> 2242
ttcaacttcg tggagctgcc tgctgctgcc ctgcgcttca tgcccaagcc ggtgttcgtg 60
ccagacgtgg ccctcatcgc caaccgcttc aaccccgaca acctcatgca cgtctttcat 120
gacgacctgc tgccactctt ctacaccctg cggcagtttc ccggcctggc ccacgaggca 180
cggctcttct tcatggaggg ctggggcgag ggtgcacact tcgacctcta caagctgctc 240
agccccaagc agcctctcct gcgggcacag ctgaagaccc tgggccggct gctgtgcttc 300
tcccatgctt ttgtgggcct ctccaagatc actacctggt accagtatgg ctttgtgcag 360
ccccagggcc cgaaggccaa catcctcgtc tcaggcaatg agatccggca gtttgcacgg 420
ttcatgacag aaaagctgaa cgtgagccac acaggagtcc ccctaggcga ggagtacatt 480
ctggtcttta gccgaaccca gaacagactc attctgaatg aggcagagct gctgctggca 540
ctggcccagg agttccagat gaagacagtg acagtgtccc tggaggacca cacctttgct 600
gatgtcgtgc ggctggtcag caatgcctcc atgctggtca gcatgcatgg ggcccaactg 660
gtcaccaccc tnttnctgcc ccgtggggca actgtggtag aactcttcca tatgctgcaa 720
tcccgacact acacttccta taagacgctt ggccatgctg nctggcatgg accttcagta 780
tgtaacctgc ggaacatgat gncngagaca cagtcacaca ccctgacggc ctggataagg 840
ggcat 845

<210> 2243
<211> 843
<212> DNA
<213> Homo sapiens

<400> 2243
tgtcatacat attcgttctc cattgatata tctggagaaa tcaatgctac agcctatagc 60
tgtgaaaaaa ttctacctta tatttgcagg tgaagatttt tctattagat tatctacaaa 120
aacaagcttt cagtaaacta ccaaaaaaaa gtgggggtgg aggaaaaaag gcaaaggcgc 180
cttctgagat caaaaggacc agtgtattaa tttgaggggt tgggttattt taaccttggn 240
gaattgttgt gtgtactcag agtgtatttt ctttgtgtag agcagaatgt acacattata 300
gcagctcgcc attgtgtttg catttttaa gaagtacatc tttaactttg tatacacaag 360
aaatgtcata tttttgagtt ttgtaatgga agaaccaggc acanaaacag acagaaatga 420
tactgtatgt gtgtgtattt atgtctgaag aaagtcccct tgaattctga tatctctttg 480

0502436.0-0702000

aatctaagag atcctgatag cttcatgttt aagagcattg acaggtgggg cacctctgag 540
gggagttcat tgtttctcat gcatcatttg ccatatacta ttaatcaaag tgcttgcttt 600
cagtcctttg aggggacaga taatctgaag gcccanatta gagatttcac tgatattttg 660
ggacatacat aagaaacatc attataatta ataaaaagcc gtaatagcat ataaatgggt 720
cttgacattt taaaagcctg ggtatgatca gttgacactt tgagtccccc ctaaatagct 780
ggactttcct tttatttcga atttggactn atttgnagcg gatactcatc ttcanaagtt 840
tgg 843

<210> 2244
<211> 804
<212> DNA
<213> Homo sapiens

<400> 2244
ttattatgct tctggatccg aatttgatga gatgtttgtg ggtgtgggag ccagccgtat 60
cagaaatctt tttagggaag caaaggcgaa tgctccttgt gttatattta ttgatgaatt 120
agattctgtt ggtgggaaga gaattgaatc tccaatgcat ccatattcaa ggcagaccat 180
aaatcaactt cttgctgaaa tggatggttt taaacccaat gaaggagtta tcataatagg 240
agccacaaac ttcccagagg cattagataa tgccttaata cgtcctggtc gttttgactt 300
gcaagttaca gttccaaggc cagatgtaaa aggtcgaaca gaaattttga aatggtatct 360
caataaaata aagtttgatc aatccgttga tccagaaatt atagctcgag gtactgttgg 420
cttttccgga gcagagttgg agaatcttgt gaaccaggct gcattaaaag cagctgttga 480
tggaaaagaa atggttacca tgaaggagct ggagttttcc aaagacaaaa ttctaatggg 540
gcctgaaaga agaagtgtgg aaattgataa caaaaacaaa accatcacag catatcatga 600
atctggtcat gccattattg catattacac aaaagatgca atgcctatca acaaagctac 660
aatcatgcca cgggggccaa cacttggaca tgtgtccctg gtacctgaga atgacngatg 720
gaatgaaata gaacccactg cttgcacaaa tggatggtag tatgggagga aaatggcana 780
aggagcttat atttggaccg ncat 804

<210> 2245
<211> 880
<212> DNA
<213> Homo sapiens

<400> 2245
atgtcaatgt gtctgtcctt cactcctcca ttgtctgccg ccactgctgc tgctgctgct 60
gctgccgctg ctgctgcacg aatcgccgca gcccccagcc ttgcgcgtcg tcgctacctc 120
ctcggacaga aattttatga ataagcatca gaagccagtg ctaacaggcc agcggttcaa 180
aactcggaaa agggatgaaa aagagaaatt cgaacccaca gtcttcaggg atacacttgt 240
ccaggggctt aatgaggctg gtgatgacct tgaagctgta gccaaatttc tggactctac 300
aggctcaaga ttagattatc gtcgctatgc agacacactc ttcgatatcc tggtggctgg 360
cagtatgctt gcccctggag gaacgcgcat agatgatggt gacaagacca agatgaccaa 420
ccactgtgtg ttttcagcaa atgaagatca tgaaaccatc cgaaactatg ctcaggtctt 480
caataaactc atcaggagat ataagtattt ggagaaggca tttgaagatg aaatgaaaaa 540
gcttctcctc ttccttaaag ccttttccga aacagagcag acaaagttgg cgatgctgtc 600
ggggattctg ctgggcaatg gcaccctgcc cgccaccatc ctcaccagtc tcttcaccga 660
cagcttagtc aaagaaggca ttgcggnctc atttgctgnc aagcttttca aagcatggat 720
ggcagaaaaa gatgcccact ctggtacctc ggctttgaga agagcccact tagaccagaa 780

0050203.0050000

gcttgcttgg aactcttttc caagttnaca ggaccagaaa tgggggatca attttgggtt 840
aaataccttn actggacccc aaggtcntta aaggagcctt 880

<210> 2246
<211> 853
<212> DNA
<213> Homo sapiens

<400> 2246
ttatttgcta attgcacaga cgataacatc tacatgttta atatgactgg gttgaagact 60
tctccagtgg ctattttcaa tggacaccag aactctacct tttatgtaaa atccagcctt 120
agtccagatg accagttttt agtcagtggc tcaagtgatg aagctgccta catatggaag 180
gtctccacac cctggcaacc tcctactgtg ctcctgggtc attctcaaga ggtcacgtct 240
gtgtgctggt gtccatctga cttcacaaag attgctacct gttctgatga caatacacta 300
aaaatctggc gcttgaatag aggcttagag gagaaaccag gaggtgataa actttccacg 360
gtgggttggg cctctcagaa gaaaaaagag tcaagacctg gcctagtaac agtaacgagt 420
agccagagta ctcctgccaa agcccccagg gtaaagtgca atccatccaa ttcttccccg 480
tcatccgcag cttgtgcccc aagctgtgct ggagacctcc ctcttccttc aaatactcct 540
acgttctcta ttaaaacctc tcctgccaag gcccggtctc ccatcaacag aagaggctct 600
gtctcctccg tctctcccaa gccaccttca tctttcaaga tgtcgattag aaactgggtg 660
acccgaacac cttnctcatc accacccatc acttcacctg cttcggagac caagatcatg 720
tcttccgaga aaagccctta ttcctgngag ccagaagtca ttccaagcag aagcttgctc 780
tgagtctaga aatagagtaa gaggaggcta gactcaactg ctgganagtg tgaaacaaaa 840
gtgtgtgaan agt 853

<210> 2247
<211> 750
<212> DNA
<213> Homo sapiens

<400> 2247
aaaaaaaaaa aaaaaaactc agttgcctct ggccagtgca gggctcagcc agggatggct 60
tctagctgac agtgggagga attaattcat ctgaccggaa tattctttc tcttctgggc 120
tgttggtttt tcaagtgcaa caaagattcc atacagctcc aaggaaggag ccaagaaaaa 180
cattctgtgc caaagtgaga tcctggaagt gaaaccccgg aataaagctg aaaagcgggc 240
tccagttggg tgccaggaaa tgcaggactg gaatgtgact tgacttccgg cagcgcgcag 300
gtgctcccgg gtcacctgct ttgaggtcca gcctcctgcc ctgcctcagg tgaccacatg 360
accactgtgg actttgccct gaaaccttct gggaggagaa gaggcctgac cttggcgctg 420
gggtccagtg ggcattgctc tggtccgagg ctgctgctct tgacctctgc tctgcggctg 480
ttttccattg gagtagaggc tcctcctgtc ctgtcctgcc tgtggaggga agcaaacctt 540
cccctggacc agagagagga gaaagcggag acaggtagca acgctgtgga ctggtgatga 600
caggctcttc agctccctgc aagtgaccgg gcctggggaa cagggcatgg cacaggcaca 660
caggaccccc cacccanggc tgccccacca gccccgtgtg ttcaactggt ctcctggaaa 720
tggcttcgng gtaaatccac ttggtnttcg 750

<210> 2248
<211> 730
<212> DNA

0508245.0508400

<213> Homo sapiens

<400> 2248
tatacgctca gaaagtgaaa attggcgcat ctttagagag gaacaaaatg gagaagatga 60
agatggaggt tggcgactag ctggatcaag gagggatgga gagaggtggc gacctcacag 120
tcctgatggc cctcgttctg caggctggcg ggaacacatg gaacgacgtc ggaggtttga 180
gtttgatttt cgagatagag atgatgaacg gggttaccga agggttcgct ctggcagtgg 240
gagcatagat gatgacaggg atagcttgcc cgaatggtgc ttagaggatg ctgaagaaga 300
aatgggtaca tttgactcat ctggagcatt cctttctcta aaaaaagtac agaaagagcc 360
tattccagaa gagcaggaga tggacttccg gcctgtggac gaaggggagg agtgctctga 420
ctctgagggt agccataatg aagaggccaa agaacccgat aagacaaata agaaagaagg 480
agagaaaaca gatagagtag gagttgaagc tagtgaggaa actccccaga cctcatcatc 540
atctgctaga ccaggtactc cttcagacca tcagtctcag gaagcatcac agtttgagag 600
gaaagatgaa ccaaaaactg agcaaacgga aaaagctgaa naggagactc ggatggaaaa 660
tagtctacca gccaaagtgc ccagcanagg ggatgaaatg ggttgcttga tgtccagcan 720
ccccttgtcg 730

<210> 2249
<211> 660
<212> DNA
<213> Homo sapiens

<400> 2249
tttttttaa aggagtcagc tctacaaaga tgttgctttc tttgatgcaa tgcagagagc 60
agagctttgg acttggaatc aggagacccg gactctgtca ttaaatcaac tgtgactctg 120
ggccagttac tttccatttt tgagtcttga tttcctactt ataaaatgag ggagcttatt 180
tggatgatct ttaaggtctc ttttggcact aataactcgg tgtctctttt ttttcacctt 240
caccatttca gttgatccac caaacaaacc tgagagatca ggattggcat ccaagagttg 300
tctcggccaa ctctgatgtc atgcttactc tgtactagac atcgttccaa gcattttacg 360
tgcattaact catttatctt cccaacatct tgttagggag gcactatagt gagcctcatt 420
tgaagatgag gaaacaaagg tacaaagagg ttctagctgg acctctaaag tcacataata 480
agtaagtggt agagctggag ttcacatcca ggcagtaggc tccaaggtct gtgctcttaa 540
ccacattctg ggctgcatct tttatagaca aactatgatc cagagagatt acnagacttg 600
gatcacatac caagagagtg ttaaagccnc attaggattc aattccaggg ncatcaaatt 660

<210> 2250
<211> 843
<212> DNA
<213> Homo sapiens

<400> 2250
ttatgatatt aaccagatca tttctacagc tgtaatgacc tatacgaagc actttgatgc 60
tcatggccgt atcaaggaga ttcaatatga gatattcagg tcgctcatgt actggattac 120
aattcagtat gataacatgg gtcgggtaac caagagagag attaaaatag ggcoctttgc 180
caacaccacc aaatatgctt atgaatatga tgttgatgga cagctccaaa cagtttacct 240
caatgaaaag ataatgtggc ggtacaacta cgatctgaat ggaaacctcc atttactgaa 300
cccaagtaac agtgcgcgtc tgacacccct tcgctatgac ctgcgagaca gaatcactcg 360
actgggtgat gttcaatatc ggttggatga agatggtttc ctacgtcaaa ggggcacgga 420

US 2005/0059030 A1

aatctttgaa tatagctcca aggggcttct aactcgagtt tacagtaaag gcagtggctg 480
gacagtgatc taccgttatg acggcctggg aaggcgtgtt tctagcaaaa ccagtctagg 540
acagcacctg cagtttttt atgctgactt aacttatccc actaggatta ctcatgtcta 600
caaccattcg agttcagaaa ttacctncct gtattatgat ctccaaggac atcttttgc 660
catggaaatc agcagtgggg atgagttcta tattgcatcg gataacacag ggacaccact 720
ggctgtgntc agtancaatg ggcttatgct gaaacagatt cagtcactgc atatggggaa 780
atctatttga ctctaatatt ggctttnact gggaattgga tttcatgggg gcctgnntga 840
acc 843

<210> 2251
<211> 774
<212> DNA
<213> Homo sapiens

<400> 2251
attctgcctc gaaggcatgg aggagtcagg ctctgagggc ctagacgagc tgatttttgc 60
ccggaaagac acattcttta aggatgtgga ctatgtctgc atttctgaca attactggct 120
gggaaagaag aagccctgca tcacctacgg cctcaggggc atttgctact ttttcatcga 180
ggtggagtgc agcaacaaag acctccattc tggggtgtac gggggctcgg tgcatgaggc 240
catgactgat ctcattttgc tgatgggctc tttggtggac aagaggggga acatcctgat 300
ccccggcatt aacgaggccg tggccgccgt cacggaagag gagcacaagc tgtacgacga 360
catcgacttt gacatagagg agtttgccaa ggatgtgggg gcgcagatcc tcctgcacag 420
ccacaagaaa gacatcctca tgcaccgatg gcggtacccg tctctgtccc tccatggcat 480
cgaaggcgcc ttctctgggt ctggggccaa gaccgtgatt cccaggaagg tggtcggcaa 540
gttctccatc aggctcgtgc cgaacatgac tcctgaagtc gtcggcgagc aggtcacaag 600
ctacctaact aagaagtttg ctgaactacg cagccccaat gagttcaagg tgtacatggg 660
ccacggtggg aagccctggg tctncgactt cagtcaccct cattacctgg ctgggagaaa 720
gccatgaaac agnttttggt gntgagccaa cttgaccagg gaaggcggca agta 774

<210> 2252
<211> 819
<212> DNA
<213> Homo sapiens

<400> 2252
catggtcttg caggtggaac aagatgtgcc cttttcagag gttgtgaagt tagctccaaa 60
tcccagacta gctgctaccc caagcccggg agcttctcag gtctacgagg cccttctccc 120
ccagtatgcc aaactcgagc agagaatctt gtctcagacc cgggggcctc cggagtgaac 180
aggcatccct gttgcccctg cctgcccaga tttactgacc ccatttgtcg acatggcccc 240
agacaggagg gatccacttc tctgttctga acagctcttc ctgcccctac tgactccttg 300
gagtgtccag gaccatctta aagccgccct cagcacatct gcatgaagat aggtaggcac 360
tcctgtccct gtgcccgtgt gccccagggc aggaaagcat ctctcttttc ctgtctttta 420
tcccaggagg caggacaaca ctgagactgg gatatgtcca ataaaaacta tgacttttcc 480
ccttgcagag gcagaattaa agctaatcta gggactcaaa tcagcagaat gggggagaca 540
aagcccggtc tcaccccta acctcatcct atctctttct ccaaccctga ctgcccactc 600
ctccacaaac cgtgacccat agccggcccc accccatacc ttgatctacc atccatcctc 660
ttcccaatcc aaaccccaca gtctcttctc tcccacaccc tgccttcttg gttcagctgt 720
ctgangtgcc tcgcaaggcc tctcttactt gccccatgct ccccttttnca tgctgtccca 780

0050250200

ttctctcctt tcaccatctc tnctttcccc tcctcatct 819

<210> 2253
<211> 680
<212> DNA
<213> Homo sapiens

<400> 2253
gactggggga acatttgtac aaaactaacg atgaagttat tcatggcatc ttcaaagctt 60
acattcagag gctgcttcac gccttggctc gacactgcca gctggatcag accatgaggg 120
ggttcctgag gagactgatg actttgggga gtttcgcatg agggtatcag acctggtaaa 180
ggacttgatt ttcttgatag ggtctatgga gtgttttgct cagttatatt ctactctgaa 240
agaaggcaac ccaccctggg aggtgacaga agcggttctc tttatcatgg ctgctatagc 300
aaagagtgtt gatccggaaa acaatccaac acttgtggaa gtcctagaag gagttgtccg 360
cctcccggag accgtacata cggctgtgcg atacatcagc attgaattgg ttggagagat 420
gagtgaagtc gntgatcgaa atcctcagtt ccttgaccct gtgttgggct atttgatgaa 480
aggcctgtgt gaaaagcccc tggcttctgc tgcagccaaa gccattcata acatttgctc 540
tgtctgccga gatcacatgg ctcagcactt taatggactc ctggagattg cccgctccct 600
cgattncttc tgttgctcan aagctgctgt ggcttgctaa aagggacagc acttgtccta 660
acccgantac ctttggataa 680

<210> 2254
<211> 699
<212> DNA
<213> Homo sapiens

<400> 2254
ttttttatg tgtttgttta aagatacata ttaagcttgt agaccatagg gacatacgga 60
gagtccattg ctaatatctc actcagtatt gtgaaattct atctcaccac cgtgaaactc 120
ttcagttttc taattgcttt atcagcaggg ggtataaaag gtcatgaaag caatttccac 180
atgctgtggc tccaggtctc tgggtgtgaa gcagagcaag cctggtttgt cctcctcctg 240
tctccacaca gacggcttct gcaggtttgg taatctacag tacactcctt gcagggaaaa 300
ggtgatgagt catcatggac ttatttgacc acttttatg catgcttaga ggaaaacaga 360
atactgttaa gagattcatc tgctagttat taagtaaaga aatatcacaa taggccgggc 420
gcagtggctc acacctgtaa tcccagcatt ttgggaggcc aaggtgggcg gatcacctga 480
ggtcaggagt tcgagaccag cctagccaac atggtgaaac cccgtctcta ctaaaattat 540
aaaaaattag ccgggtgtag tggtacacgc ctgtagtccc agttacttgg gaggctgagg 600
catgagaatt gcttgaaccc aggaagtgga ngtggaggtg agccgaaatt gtgccactgt 660
acttcagcct gcaacagaat gagacactgt cacacanna 699

<210> 2255
<211> 739
<212> DNA
<213> Homo sapiens

<400> 2255
ctgtggattt cttggctggg gacaggcccc gggcagtgcc tgctgctgtt ttcatggtcc 60
tcctgagctc cctgtgtttg ctgctccccg acgaggacgc attgcccttc ctgactctcg 120

0982702.60250

cctcagcacc cagccaagat gggaaaactg aggctccaag aggggcctgg aagatactgg 180
gactgttcta ttatgctgcc ctctactacc ctctggctgc ctgtgccacg gctggccaca 240
cagctgcaca cctgctcggc agcacgctgt cctgggccca ccttggggtc caggtctggc 300
agagggcaga gtgtccccag gtgcccaaga tctacaagta ctactccctg ctggcctccc 360
tgcctctcct gctgggcctc ggattcctga gcctttggta ccctgtgcag ctggtgagaa 420
gcttcagccg taggacagga gcaggctcca aggggctgca gagcagctac tctgaggaat 480
atctgaggaa cctcctttgc aggaagaagc tgggaagcag ctaccacacc tccaagcatg 540
gcttcctgtc ctgggcccgc gtctgcttga gacactgcat ctacactcca cagccaggat 600
tccatctccc gctgaaactg gtgctttcag ctacactgac agggacggcc atttaccagg 660
tggccctgct gctgctggtg ggcgtggtac ccactattca naangtgaag gcaggggtca 720
ccacggatgt ctnctactg 739

<210> 2256
<211> 785
<212> DNA
<213> Homo sapiens

<400> 2256
agaccccgaa ttcacagcaa gcatggaaag caaaatctgc cccttcacca tcgccatttt 60
cctaaagtac agtaatgatc ccgtcgtcgc ctcactggct caggacatct tcaaggagct 120
gtcccagatt gaagcctgtc agggcccaat gcaaatgagg ctgattccca ctctggtcag 180
cataatgcag gccccagcag acaagattcc tgcagggctt tgtgcgacag ccattgatat 240
cctgacaaca gtagtacgaa atacaaagcc tccccctttcc cagcttctca tctgccaagc 300
tttccctgct gtggcacagt gtacccttca cacagatgac aatgccacca tgcagaatgg 360
cggagagtgc ttgcgggcct atgtgtcagt gaccctggaa caagtagccc agtggcatga 420
tgagcagggc cacaatggac tgtggtatgt gatgcaagtg gtgagccagc tcctggaccc 480
ccgcacctca gagttcactg cggcctttgt gggccgcctt gtttccaccc tcatctccaa 540
ggcagggcgg gaactcgggg agaatctaga ccagattctt cgtgccatcc tcagtaagat 600
gcagcaggca gagacgctca gtgtcatgca gtccctgatc atggtgttcg ctcatctggt 660
gcacactcag ctagaacctc tcttggagtt ctgtgtagcc tnccaggacc tactggcaaa 720
cctgctctan agttgtgatg gctgaatgga caagccgaca gcacctggtc tatggacagn 780
atgaa 785

<210> 2257
<211> 863
<212> DNA
<213> Homo sapiens

<400> 2257
cttccgggag cctggggccc aggactgcag cggcttcgga aggtgggctc tgccagcggg 60
accatgctgc tccgagccgc ttggaggcgg gcggcagtgg cggtgacagc ggctccaggg 120
ccgaagcccg cggcgcccac tcgggggctg cgcctgcgcg ttggagaccg tgctcctcag 180
tctgcggttc ccgcagatac agccgctgcc ccggaggtgg ggccagtgct gcgacctctc 240
tatatggatg tgcaagctac aactcctctg gacccccggg tgcttgatgc catgctccct 300
tacctaatca actactatgg gaacccacac tcccggacac atgcttatgg ctgggagagt 360
gaggcagcca tggaacgtgc tcgtcagcaa gtagcatctc tgattggagc tgatcctcgt 420
gagatcattt ttactagtgg tgctactgaa tccaacaaca tagcaattaa gggggtggcc 480
cgattctaca ggtcacggaa aaagcacttg atcaccaccc agacagaaca caaatgtgtc 540

05652-0056-00US

ttggactcct gccgttcact ggaagctgag ggctttcagg tcacctacct cccagtgcag 600
aagagtggga tcattgacct aaaggaacta gaggctgcta tccagccaga tactagcctg 660
gtgtcagtca tgactgtgaa caatgagatt ggagtgaaca gcctattgca gaaatagggc 720
ggatttgcag ttccagaaag gnatatttcc atactgatgc aacccaagct tgttggaaaa 780
atccacttga tgtcaatgac ctgaaaattg atctcatgag cattaatggt cacaaaatct 840
acggtcccaa ngggttggtg ccn 863

<210> 2258
<211> 781
<212> DNA
<213> Homo sapiens

<400> 2258
tgagcgaagc tcctgcacct catcctccac ccaccagaga gatgggaagt tctgtgactg 60
ctgctactgt gagttcttcg gccacaatgc gccacccgct gccccgacga gtcggaacta 120
taccgagatc cgggagaagc tccgctcgag gctgaccagg cggaaagagg agctgcccat 180
gaaggggggc accctgggcg ggatccctgg ggagcccgcc gtggaccacc gagatgtgga 240
tgagctgctg gaattcatca acagcacgga gcccaaagtc cccaacagcg ccagggccgc 300
caagcgggcc cggcacaagc tgaaaaagaa ggaaaaggag aaggcccagt tggcagcaga 360
agctctaaag caggcaaatc gtgtttctgg aagccgggag ccaaggcctg ccagggagag 420
gctcttggag tggcccgacc gggaactgga tcgggtcaac agcttcctga gcagccgtct 480
gcaggagatc aaaaacactg tcaaagactc catccgtgcc agcttcagtg tgtgtgagct 540
cagcatggac agcaatggct tctctaagga gggggctgct gagcctgagc ctcagagtct 600
acccccctca aacctcagtg gctcctcaga gcagcagcct gacatcaacc ttgacctgtc 660
ccctttgact ttgggcttcc cttcagaacc acacgttaca aagcttccag ggcgaagcca 720
agcccccaac cattggggca ggaaattgaa aanggccccc caanccaacc antgggacca 780
g 781

<210> 2259
<211> 775
<212> DNA
<213> Homo sapiens

<400> 2259
cctactaaaa aaaatgcaga gaagtattcc ggcattttgg aaggtcctgt ggaccgaccc 60
gtactcagca actattcgga cacaccatca ggactagtga acggtcggaa aaatgaaagt 120
gaaccctggc agccttcctt gaattcagaa gctgtttatc ccatgaactg tgttccggat 180
gttatcactg ccagcaaagc tggagtcagt tcagccctcc ctccagcaga tgtctctgcg 240
agtataggaa gctctcctgg ggtagccagc aacctgacag aacctagtta ttcaagtagt 300
acctgtggaa gccacactgt acccagtctt catgcagggc tcccatctca ggaatatgcc 360
ccaggataca acggatcata tttgcattct acttatagta gccagccagc acctgcactt 420
ccttcacctc atccgtctcc tttgcatagc tctgggctac tacagccccc accaccacct 480
cctccgccac cagccttggt cccaggctac aatgggactt ctaacctctc cagttacagc 540
tatccgtctg ctagctatcc tcctcagact gctgtggggt ctgggtacag ccctgggggg 600
gcaccgcctc cgccttcagc gtacctgcct tcaggaattc ctgctcccac ccccctaccc 660
cccaccactg ttcctggcta cacctaccan ggccatggtt tgacacctat tgcaccgtcg 720
gctctgacna acagttcaac aagttctctc aaaanggaaa gctttctaca tggca 775

0356350.0076

<210> 2260
<211> 769
<212> DNA
<213> Homo sapiens

<400> 2260
gtgccccgga tgtgcccagc tggctcctgg ccccacccct cgggcctttg ggctggacca 60
gccacctctg cctgagacct ccggtcgccg caagaagctg gagaggatgt acagcgttga 120
ccgtgtgtct gacgacatcc ctattcgtac ctggttcccc aaggaaaatc ttttcagctt 180
ccagacagca accacaacta tgcaagcggt gttcaggggc tacgcggaga ggaagcgccg 240
gaaacgggag aatgattccg cgtctgtaat ccagaggaac ttccgcaaac acctgcgcat 300
ggtcggcagc cggagggtga aggcccagac gttcgctgag cggcgcgagc ggagcttcag 360
ccggtcctgg agcgacccca cccccatgaa agccgacact tcccacgact cccgagacag 420
cagtgacctg cagagctccc actgcacgct ggacgaggcc ttcgaggacc tggactggga 480
cactgagaag ggcctggagg ctgtggcctg cgacaccgaa ggcttcgtgc caccaaaggt 540
catgctcatt tcctccaagg tgcccaaggc tgagtacatc cccactatca tccgccggga 600
tgacccctcc atcatcccca tcctctacga ccatgagcac gcaaccttcg aggacatcct 660
tgaggagata gagaggaagc tgaacgtcta ccacaaggga gccaagatct ggaaaatgct 720
gattttcttg ccanggangt cctggacacc tctatctnct taagaacaa 769

<210> 2261
<211> 858
<212> DNA
<213> Homo sapiens

<400> 2261
atgccgacgg actgtgtccg gcgatgggca cgggcatttc ttcgtttata gctgtctgtt 60
tgcattctga ttgggaacac tgggatcatt ttcatcatgc cgacagtggt ggtaatggat 120
gtatcccttt ccatgacccg acctgtgtct attgaggggt ccgaggaata ccagcgtaag 180
cacctagcag cccatggttt aacgatgctg tttgagcaca tggccacaaa ttacaagctt 240
gaatttacag cacttgtggt tttttcatca ctttgggagt tgatggtccc cttcacgaga 300
gattataata ccctacagga agcactaagt aatatggatg attatgacaa aacctgcttg 360
gagtctgcat tagttggtgt ttgcaatatc gttcagcaag aatggggtgg tgcaattcct 420
tgccaggttg tcctggtgac agacggctgt cttggcattg gtagagggtc actgcgacat 480
tccctagcca ctcaaaatca acgaagtgag agcaacaggt ttccactacc ttttcctttc 540
ccatctaagt tatatatcat gtgcatggcg aatttggagg agctccagag caccgattcc 600
ttggaatgcc ttgaacgtct catatattta aacaatggtg aagggcagat ttttactatt 660
gatggccccc tgtgcttgaa gaatgtacag tctatgtttg gaaaactgat agattggcat 720
atacgccttt ccatgctggt ctcaagtgtg gncacctaac tgctgatgta caagtctttc 780
ccaggcccag aacctttttgg tgganatgaa gaaattgatc ctatncctta aagcatttac 840
cccagatttg ggaaatan 858

<210> 2262
<211> 833
<212> DNA
<213> Homo sapiens

<400> 2262

0050250 .07/20/2000

aaaaaaaaaa aaaaaaaaaa cataacaagt atgaaaacag gtgagcttga gaaagaaaca 60
gccccttga ggaaagatgc agatagttca atatcagtct tagagatcca tagtcaaaaa 120
gcacaaatag aggaacccga tcctccagaa atggaaactt ctcttgattc ttctgagatg 180
gcaaaagatc tctcttcaaa aacagcttta tcttccaccg agtcgtgtac catgaaaggt 240
gaagagaagt ctcccaaaac taagaaggat aagcgcccac caatcctaga atgtcttgaa 300
aagttagaga agtccaaaaa gacttttctt gataaggacg cacaaagatt gagtccaata 360
ccagaagaag ttccaaagag tactctagag tcagaaaagc ctggctctcc tgaggcagct 420
gaaacttctc caccatctaa tatcattgac cactgtgaga aactagcctc agaaaaagaa 480
gtggtagaat gccagagtac aagtactgtt ggtggccagt ctgtgaaaaa agtagaccta 540
gaaaccctaa aagaggattc tgagttcaca aaggtagaaa tggataatct ggacaatgcc 600
cagacctctg gcatagagga gccttctgag acaaagggtt ctatgcaaaa aagcaaattc 660
aaatataagt tggttcctga agaagaaacc ctgcctcaga aaatacagag ataacctctg 720
aaaggcagaa agagggcatc aaattaacaa tcaggatatc aagtcggaaa aagaacccga 780
ttcttccccc aaagttctag aacccgaaaa ccagcnngaa gaagancgga aaa 833

<210> 2263
<211> 812
<212> DNA
<213> Homo sapiens

<400> 2263
gagcttgtcc agacgaagcc tcgcagggat gggttggagc ctgggccgtg cttcgctcag 60
gcagcgtttg aggcagaccc agcagggtcc tcctggggcc ttcctgcctt tgaactgcgg 120
tggcgggcgg gcgcacggtc tcctgtacgc cctagactag gggccgccat ctccatggcc 180
acggccgtga gccggccctg cgccggcagg tcgcgggaca tactgtggcg cgttttgggc 240
tggaggatag ttgcaagtat tgtttggtca gtgctatttc tacccatctg caccacagta 300
tttataattt tcagcaggat tgatttgttt catcctatac agtggctgtc tgattctttc 360
agtgacctgt atagttccta tgtaatcttt tacttcctgc tgctgtcagt ggtaataata 420
ataataagta ttttcaatgt ggagttctat gcagttgtgc cttctattcc ttgctccaga 480
ctagctctga tagggaagat cattcatcct cagcaactca tgcactcatt tattcatgct 540
gcaatgggaa tggtgatggc ctggtgtgct gcagtgataa cccagggcca gtacagcttt 600
cttgtggtcc ctgcactggt actaacagct ttggtagccc tgctgcgcaa acctgcttaa 660
atgaatatca tctttttttc ctactgactg gagcatttat gggctatagc tatagcctcc 720
tggattttgg taacaacatg aactatcttn catttcccat catacagcaa tacaagtctt 780
gcgtttaaga aanctctgnt cttatagtta ac 812

<210> 2264
<211> 757
<212> DNA
<213> Homo sapiens

<400> 2264
gttgcctaga atgcggtgag cgctgtgcac gggctgctga cctccgagcg cacaggcgca 60
cgcatgctgg ccagaccctc tacatctgca gtgagtgcgg acaaagcttc cgccacagcg 120
gccgtcttga cctacacttg ggcgcacacc ggcagcgatg ccgcacttgc ccctgccgca 180
catgcggccg gcgcttcccg cacctcccgg cgctgctgct acaccggcgc cgccagcatc 240
tgccagagcg gccccgccgc tgcccgctgt gcgcccgcac cttccggcag agcgcgctgc 300
tcttccacca ggcgcgggcg cacccccttgg ggacaacctc tgaccctgct gccccacccc 360

US 2005/0059000 A1

accgctgcgc gcagtgcccg cgagccttcc gaagcggcgc cgggctgcgg agtcacgcgc 420
gcatccacgt gtcccggagc cccacgcgac cccgtgtctc agacgcccac cagtgtggcg 480
tgtgcggcaa gtgctttggc aagagctcta cgctgacgcg acacctgcag acgcactcgg 540
gggagaaacc cttcaagtgc ccggagtgtg gcaagggctt cctggagagc gccacgctgg 600
tgcgccacca gcgcacacac acgggcgaga agccgtacgc atgtggcgac tgtggacgct 660
gcttcagcga gagttcacgc tgctgcgcca tcggcgcagc catcagggcg aagcggncac 720
atgcgtgcgc cactttgcgg gaaagggttt cgggnan 757

<210> 2265
<211> 851
<212> DNA
<213> Homo sapiens

<400> 2265
tacgttgtgc aatgccagtt ttaaatacta atataagtgc actgatctca tatgtggaat 60
cacagaaatt atgcaatttg tacttcatag cttatacatg catatagatt ttgtttttac 120
cagaaccacg ctggtaaaaa cagatgctgc acaaagtgaa cttgcccgtt ttcatcgcac 180
tttacgtgca cgaattctac ctctactctc gacctgggac tcaccgatgc gtgaggaagg 240
actgaaaagc aaaagaacta tggactggcc ttttggcatg atcaggtgtc taatataaag 300
aagtgcatga ataagaaaat atatgatatg agtgatggtt aatactgact gtcaacttga 360
ttggattgaa ggatgcaaag tattgatcct gggtgtgtct gtgagggtgt tgccaaagga 420
gattaacatt tgagtcagtg ggctgggaaa gttcgaccca ctgttaatct agatggacac 480
catctaatca gatgccagtg cagctagaaa tgtaaagcag acagaaaaat gcgaaaagag 540
agactggcct agcctgccag cctacatctt tctcccacgc tggatgcttc ctgccctcga 600
acatcagact ccaagttctt cagtttggga cttggactgg ctctccttgg tcctcagctt 660
gaagactgcc cattgtggga cttgtgatca tgtgctcagg aagtatgtgt ggacttttgn 720
catgggttga atagtgtccc tcgcaaagtt cacgtccaca tggaacccgt gaatgtgacc 780
cgntgtggnt tgaatgcttc tggcaaaact taatccccat gcaccattcc aangaaatag 840
ggtctttagg a 851

<210> 2266
<211> 815
<212> DNA
<213> Homo sapiens

<400> 2266
agtcgctcct aacgctccct ggcccggccg gggccgcgca gttagggcat ctgaggcggg 60
gagaagcggc ggggagacgc cggctgccag catgtcgctg cctccggaga aagcctccga 120
gctgaagcag ctcatccacc agcagctgag caagatggat gtccatggta gaataagaga 180
aatccttgct gagactatac gggaagaatt ggcacctgat caacagcatt tatcaacaga 240
agatttgatc aaagccctta gacgtcgagg aatcattgac gatgtgatga aagaacttaa 300
ttttgttact gacagtgttg agcaagaact cccttcctct ccaaaacaac ctatttgttt 360
tgatagacaa tcgacattaa aaaaaactaa tattgatcca acacggaggt atctttacct 420
tcaggttttg ggtggaaaag ctttcttgga acatctgcaa gaacctgagc ctttacctgg 480
acaagtttgt tcaacgttta ctttatgttt acattatcga aaccaacgtt ttcgttctaa 540
acctgttcca tgtgcctgtg aaccagattt tcatgatggc tttttacttg aagtacacag 600
agaaagcttg ggtgatggaa ctagaatggc tgattcaaca acaatgttat caataagtga 660
tccaattcat atgggctaat caaaacagac atatttggtg agacgacttt agtagcatca 720

US06794503-20040921

tattttctgg aatggcgatc ggntttgggc tcanaaaatg gagtgccagt ctgactgtgg 780
acttatgggt gtaggcncag aatcaaaagt ttctg 815

<210> 2267
<211> 790
<212> DNA
<213> Homo sapiens

<400> 2267
atccgggccc ttccagaagc aacccaggag ccccgagacc tgcagggatg tgtgcaccct 60
gacccctgac gcatagccct gcacctgcag ccagctggcc tcgggcttga aaacatggcg 120
ggtgcgctcc aattcacggt ggtttccaag cgcattctgg aggagaaaac acatgagtgt 180
gtggtcaggg ttctctgccg acagacctac cgtggggaag aaagagaagt tctgaagatg 240
gatcatggcc gtgactgcat gtcaaggaga atctccatga tgacacggag gcctacgtcg 300
agatagagta aatatggtcc aattaaaagg tgacccgaca atcaacccct gaaaaaggcg 360
gtcataaaac ccccaggaga cgaagatgat ggcacgtcgt gaccccaaac ctggggcaaa 420
gagactggtg agagcccaga ccctccagaa gcagcggagg gccccagttg ggccaagggc 480
tcccccgccc gatgaagaag atcccaggct caagtgcaaa aactgtgagg cctttggcca 540
cacggccaga agtaccaggt gccccatgaa gtgctggaag gcagccctgg ttccaccgaa 600
ctttggggaa aaggaaggga aggaaaacct gaaaccatgg aagccccagg ttgaagcgaa 660
ccctggccct tgaacaagga taagggagag aaggaagaga gaccaaggcc acaagacccg 720
canaggaagg ctcttcttca catattttnc gggaaacctt cagagaaccc gttgccnaat 780
caaaaaggat 790

<210> 2268
<211> 694
<212> DNA
<213> Homo sapiens

<400> 2268
tctctttaat gatggaggga agcaggcaga cgcgagtgtc tcggccatac aagatcagcg 60
aatcatcaaa ggtataccgc tgggccgacc actcaagcac ggtgctgcag cggctgaacg 120
agcagcgtct ccgcgggctc ttctgcgacg tcgtcctggt ggccgatgag cagcgtgtgc 180
cagcccatcg caacctgctg gccgtgtgca gcgactactt caactccatg ttcaccatcg 240
gcatgcggga agctttccag aaggaggtgg agctgatcgg cgcctcctac attgggctca 300
aggccgtggt ggacttcctg tacggcgggg agctggtgct ggatggcggc aacattgact 360
acgtcctgga gacggctcac ctgctgcaga tctggacggt ggtagacttc tgctgtgagt 420
acctggagca ggaggtgagc gaggacaact acctgtacct gcaggagctg gcctccatct 480
acagcctcaa gcggcttgat gccttcatcg atggcttcat cctgaaccac ttcggcacgc 540
tgtcctttac gcccgacttc ctgcagaacg tctccatgca gaagctgtgt gtctacctga 600
gcagcancga ggtgcagcgg gagtgtgagc acgaccttct gcangccgcc ctgcantggc 660
tgacgcaaca gcccgagcgc gaggcccacg cccg 694

<210> 2269
<211> 776
<212> DNA
<213> Homo sapiens

0952940.0700

<400> 2269
gtcaccagga caacgggcgt cgccggcgcc gtgtgacttc gggctgtggg ctcgctcgcg 60
gctcttcggc catggttttc tcaaacaatg atgaaggcct tattaacaaa aagttaccca 120
aagaacttct gttaagaata ttttccttct tggatatagt aactttgtgc cgatgtgcac 180
agatttccaa ggcttggaac atcttagccc tggatggaag caactggcaa agaatagatc 240
tttttaactt tcaaacagat gtagagggtc gagtggtgga aaatatctcg aagcgatgcg 300
gtggattcct gaggaagctc agcttgcgag gctgcattgg tgttggggat tcctccttga 360
agacctttgc acagaactgc cgaaacattg aacatttgaa cctcaatgga tgcacaaaaa 420
tcactgacag cacgtgttat agccttagca gattctgttc caagctgaaa catctggatc 480
tgacctcctg tgtgtctatt acaaacagct ccttgaaggg gatcagtgag ggctgccgaa 540
acctggagta cctgaacctc tcttggtgtg atcagatcac gaaggatggc atcgaggcac 600
tggtgcgagg ttgtcgaggc ctgaaagccc tgcccctgag gggctgcaca cagttagaag 660
atgaagctct gaaacacatt cagaattact ggcatgagct tgtgagcctc aacttgcagt 720
cctgctcacg tatcacggat gaangtgtgg tgcanatatg cangggctgg caccgg 776

<210> 2270
<211> 796
<212> DNA
<213> Homo sapiens

<400> 2270
gacttcttcg ggtggtcccc gtccgccctc ctcgtcccta cccagtttct tgcttccctg 60
ccccatctcc gccgctcccc gcagcctccg ccgagcgcca tggctcctag gaagggcagt 120
agtcgggtgg ccaagaccaa ctccttacgg aggcggaagc tcgcctcctt tctgaaagac 180
ttcgaccgtg aagtggaaat acgaatcaag caaattgagt cagacaggca gaacctcctc 240
aaggaggtgg ataacctcta caacatcgag atcctgcggc tccccaaggc tctgcgcgag 300
atgaactggc ttgactactt cgcccttgga ggaaacaaac aggccctgga agaggcggca 360
acagctgacc tggatatcac cgaaataaac aaactaacag cagaagctat tcagacaccc 420
ctgaaatctg ccaaaacacg aaaggtaata caggtagatg aaatgatagt ggaagaggaa 480
gaagaagaag aaaatgaacg taagaatctt caaactgcaa gagtcaaaag gtgtcctcca 540
tccaagaaga gaactcagtc catacaagga aaaggaaaag ggaaaaggtc aagccgtgct 600
aacactgtta ccccagccgt gggccgattg gaggtgtcca tggtcaaacc aactccaggc 660
ctgacaccca ggtttgactc aagggtcttc aagacccctg gcctgcgtac tccagcagca 720
ggagancgga tttacaacat cttaagggaa tggcaagccc ttttgcttga cagcnaaaga 780
gatcnttcct taattg 796

<210> 2271
<211> 826
<212> DNA
<213> Homo sapiens

<400> 2271
attccgctac tgcgcaaaga tggtggagga ggagaacatc cgcgtggttc gttgtggcgg 60
cagcgagttg aactttagga gagctgtgtt ctctgcagat tctaagtata tcttctgtgt 120
ctctggagac tttgttaaag tttacagcac agttacagaa gagtgtgtac acatactgca 180
tggacacaga aatctggtga ctggaatcca gcttaacccc aacaaccatc tacagctgta 240
ttcttgttcc cttgatggca caattaaact gtgggactat atagatggca tcttaataaa 300
gactttcata gttggatgta aacttcatgc cctctttact cttgcccaag ctgaggattc 360

0952369 - 0952369

tgtctttgtt atagtgaata aagaaaaacc agatatattt cagctggttt cagtgaaact 420
gccaaaatcc tcaagccagg aagtagaagc caaggagctg tcctttgttt tggattacat 480
aaaccagtca cccaagtgca ttgcctttgg aaacgaggga gtatatgttg ctgcagtacg 540
ggaattttac ttgtctgttt atttttcaa aaagaaaaca acatcaaggt ttactttatc 600
atcatcaaga aataagaagc atgctaaaaa caattttacg tgtgtagcat gtcacccaac 660
ggaagactgc atcgcatctg ggcacatgga tggcaaaant cgnctttgga ggaaatttta 720
tgatgataga aatatacgta cccatgttta cattggcacc atgatatggg tatggatttg 780
gcttttcant gacaggcaca atcttcttaa tggcggncgn gaactg 826

<210> 2272
<211> 767
<212> DNA
<213> Homo sapiens

<400> 2272
agagctcggc atgggtgact ccaccagcca gtccccccca attaagaggt catgcccaga 60
tgtgcagatc tcatggaacc aagggattga cttgtggtgg catgagctca tgcaagaggc 120
aggggatgag tgtgagcccg agtggtgtga tgccgaggac ccactcttca tcctgtacac 180
cagtggctcc acaggcaaac ccaagggtgt ggttcacaca gttgggggct acatgctcta 240
tgtagccaca accttcaagt atgtgtttga cttccatgca gaggatgtgt tctggtgcac 300
ggcagacatt ggttggatca ctggtcattc ctacgtcacc tatgggccac tggccaatgg 360
tgccaccagt gttttgtttg aggggattcc cacatatccg gacgtgaacc gcctgtggag 420
cattgtggac aaatacaagg tgaccaagtt ctacacagca cccacagcca tccgtctgct 480
catgaagttt ggagatgagc ctgtcaccaa gcatagccgg gcatccttgc aggtgttagg 540
cacagtgggt gaacccatca accctgaggc ctggctatgg taccaccggg tggtaggtgc 600
ccagcgctgc cccatcgtgg acaccttctg gcaaacagag acaggtggcc acatgttgac 660
tccccttcct ggtgccacac ccatgaaacc cggttctgct actttccatt ctttggngta 720
gcttctgcaa tcctgaatga attccgggga anantttgga aggtgaa 767

<210> 2273
<211> 804
<212> DNA
<213> Homo sapiens

<400> 2273
tacgaagcga gcttgggagg agcagcggcc tgcggggcag aggagcatcc cgtctaccag 60
gtcccaagcg gcgtggcccg cgggtcatgg ccaaaggaga aggcgccgag agcggctccg 120
cggcggggct gctacccacc agcatcctcc aaagcactga acgcccggcc caggtgaaga 180
aagaaccgaa aaagaagaaa caacagttgt ctgtttgcaa caagctttgc tatgcacttg 240
ggggagcccc ctaccaggtg acgggctgtg ccctgggttt cttccttcag atctacctat 300
tggatgtggc tcaggtgggc cctttctctg cctccatcat cctgtttgtg ggccgagcct 360
gggatgccat cacagacccc ctggtgggcc tctgcatcag caaatccccc tggacctgcc 420
tgggtcgcct tatgccctgg atcatcttct ccacgccccc ggccgtcatt gcctacttcc 480
tcatctggtt cgtgcccgac ttctcacacg gccagaccta ttggtacctg cttttctatt 540
gcctctttga aacaatggtc acgtgtttcc atgttcccta ctcggctctc accatgttca 600
tcagcaccga gcagactgag cgggattctg caccgctatc ggatgactgt ggaagtgctg 660
ggcacagtgc tgggcacggc gatncaagga caaatcgtgg gccaagcaga cacgccttgg 720
ttncaggacc tcaatagctc tacaggtagc ttnacaaaat ggccaaccat acacatggga 780

0956459 -0972800

ccacttacac aggggaacnc caaa 804

<210> 2274
<211> 755
<212> DNA
<213> Homo sapiens

<400> 2274
attggcgtcc gagcgacttc taggagcctg gggttcggcg ctatggagga gctcgatggc 60
gagccaacag tcactttgat tccaggcgtg aattccaaga agaaccaaat gtattttgac 120
tggggtccag gggagatgct ggtatgtgaa acctccttca acaaaaaaga aaaatcagag 180
atggtgccaa gttgcccctt tatctatatc atccgtaagg atgtagatgt ttactctcaa 240
atcttgagaa aactcttcaa tgaatcccat ggaatctttc tgggcctcca gagaattgac 300
gaagagttga ctggaaaatc cagaaaatct caattggttc gagtgagtaa aaactaccga 360
tcagtcatca gagcatgtat ggaggaaatg caccaggttg caattgctgc taaagatcca 420
gccaatggcc gccagttcag cagccaggtc tccattttgt cagcaatgga gctcatctgg 480
aacctgtgtg agattctttt tattgaagtg gccccagctg gccctctcct cctccatctc 540
cttgactggg tccggctcca tgtgtgcgag gtggacagtt tgtcggcaga tgttctgggc 600
agtgagaatc caagcaaaca tgacagcttc tggaacttgg tgaccatctt ggtgctgcag 660
ggccggctgg atgaagcccg acagatgctc ttcaaggaag cccgatgcca gncccgcctn 720
tgcangcata tgccgaatca tgggggacct gatga 755

<210> 2275
<211> 727
<212> DNA
<213> Homo sapiens

<400> 2275
aagaatgccg actacttctc caactatgtc acagaggact ttaccaccta cattaacagg 60
aagcggaaaa acaattgcca tggcaaccac attgagatgc aggccatggc agagatgtac 120
aaccgtcctg tggaggtgta ccagtacagc acaggtactt ctgcagtgga acccatcaac 180
acattccatg ggatacatca aaacgaggac gaacccattc gtgttagcta ccatcggaat 240
atccactata attcagtggt gaatcctaac aaggccacca ttggtgtggg gctgggcctg 300
ccatcattca aaccagggtt tgcagagcag tctctgatga agaatgccat aaaaacatcg 360
gaggagtcat ggattgaaca gcagatgcta gaagacaaga aacgggccac agactgggag 420
gccacaaatg aagccatcga ggagcaggtg gctcgggaat cctacctgca gtggttgcgg 480
gatcaggaga aacaggctcg ccaggtccga ggccccagcc agccccggaa agccagcgcc 540
acatgcagtt cggccacagc agcagcctcc agtggcctgg aggagtggac tagccggtcc 600
ccgcggcagc ggagttcagc ctcgtcacct gagcaccctg agctgcatgc tgaattgggc 660
atgaagcccc ctttcccagg cactggttta actcttgccn aaccttcttn gnccttgtgc 720
gccaggt 727

<210> 2276
<211> 805
<212> DNA
<213> Homo sapiens

<400> 2276

0356306.0702000

atttttttga aaacaagaac agtgatgaaa tcaacatacc tcgactcatt gtcagtcaac 60
taaaatggct tgacagagtt gtggatggca aggacctcac caccaagatc atgcagctga 120
tcagtattgc tccagagaac ctgcagcatg acatcatcac cagcctacct gagatcctag 180
gggattccca gcacgctgat gtggggaaag aactcagtga cctactgata gagaatactt 240
cactcactgt cccaatcctg gatgtccttt caagcctccg acttgaccca gacttcctat 300
tgaaggttcg ccagttggtg atggataagt tgtcgtctat tagattggag gatttacctg 360
tgataataaa gttcattctt cattccgtaa cagccatgga tacacttgag gtaatttctg 420
agcttcggga gaagttggat ctgcagcatt gtgttttgcc atcacggtta caggcttccc 480
aagtaaagtt gaaaagtaaa ggacgagcaa gttcctcagg aaatcaagaa agcagcggtc 540
agagctgtat tattctcctc tttgatgtaa taaagtcagc tattagatat gagaaaacca 600
tttcagaagc ctggattaag gcaattgaaa acactgcctc agtatctgaa cacaaggtgt 660
ttgacctggt gatgctttc atcatctata gcaccaatac tcagaccaag aagtacattg 720
acagggtgct aagaaataag attcgatcan gctgcattca agacagctgn ttcanaatca 780
ttctctggca ttacttaatt cttaa 805

<210> 2277
<211> 746
<212> DNA
<213> Homo sapiens

<400> 2277
gactaatgac tgtccgaaac atcgcctcca tctgtaatat gggcaccaat gcctctgctc 60
tggaaaaaga cattggtcca gagcagtttc caatcaatga acactatttc ggattggtca 120
attttggaaa cacatgctac tgtaactccg tgcttcaggc attgtacttc tgccgtccat 180
tccgggagaa tgtgttggca tacaaggccc agcaaaagaa gaaggaaaac ttgctgacgt 240
gcctggcgga ccttttccac agcattgcca cacagaagaa gaaggttggc gtcatcccac 300
caaagaagtt catttcaagg ctgagaaaag agaatgatct ctttgataac tacatgcagc 360
aggatgctca tgaattttta aattatttgc taaacactat tgcggacatc cttcaggagg 420
agaagaaaca ggaaaaacaa aatggaaaat taaaaaatgg caacatgaac gaacctgcgg 480
aaaataataa accagaactc acctgggtcc atgagatttt tcagggaacg cttaccaatg 540
aaactcgatg cttgaactgt gaaactgtta gtagcaaaga tgaagatttt cttgaccttt 600
ctgttgatgt ggagcagaat acatccatta cccactgtct aagagacttc agcaacacag 660
aaacactgtg tagtgaacaa aaatattatt gngaaacatg ctgcancaaa caagaagccc 720
agaaaaggat ganggtaaaa aagctg 746

<210> 2278
<211> 817
<212> DNA
<213> Homo sapiens

<400> 2278
atttgaacaa atcactaaga ctcatggaac aattattggc attacttcag ggattgtctt 60
ggtccttctc attatttcta ttttagtaca agtgaaacag cctcgaaaaa aggtcatggc 120
ttgcaaaacc gcttttaata aaaccgggtt ccaagaagtg tttgatcctc ctcattatga 180
actgttttca ctaagggaca aagagatttc tgcagacctg gcagacttgt cggaagaatt 240
ggacaactac cagaagatgc ggcgctcctc caccgcctcc cgctgcatcc acgaccacca 300
ctgtgggtcg caggcctcca gcgtcaaaca aagcaggacc aacctcagtt ccatggaact 360
tcctttccga aatgactttg cacaaccaca gccaatgaaa acatttaata gcaccttcaa 420

0082705-0045250

gaaaagtagt tacactttca aacagggaca tgagtgccct gagcaggccc tggaagaccg 480
agtaatggag gagattccct gtgaaattta tgtcaggggg cgagaagatt ctgcacaagc 540
atccatatcc attgacttct aatcttctgc taatggtgat gtgaattctt agggtgtgta 600
cgtacgcagc cttcagggca ccatactgtt tccagcagcc aacccttttc tcccatcaca 660
actacgaaga ccttgattta ccggtaacct attgnatggg gatggtttta ttctctcagg 720
cagnctatat atggtaaacc catcaaggaa cttactctat tcagnggaaa ccataatcat 780
ctctattgct tgggggcatt tatnggaagc cctggcc 817

<210> 2279
<211> 718
<212> DNA
<213> Homo sapiens

<400> 2279
gttaaactcg tcatttcctc cagctagagg agctcaactg atctgttttc tttcgcccag 60
ccaaaatcac agaatgaagg cggtgaagag cgaacgggag cgagggagcc ggcgaagaca 120
ccgggacggg gacgtggtgc tgccggcggg ggtggtagtg aagcaggagc gtctcagccc 180
agaagtcgca cctcccgccc accgccgtcc ggaccactcc ggtggtagcc cgtctccgcc 240
gaccagcgag ccggcccgct cgggccaccg cgggaaccga gcccgaggag ttagccggtc 300
cccacccaaa aagaaaaaca aggcctcagg gagaagaagc aagtctcctc gcagtaagag 360
aaaccgaagt cctcaccact caacagtcaa agtgaagcag gagcgtgagg atcatccccg 420
gagaggacgg gaggatcggc agcacaggga accatcagaa caggaacaca ggagagctag 480
gaacagtgac cgggacagac accggggcca ttcccaccaa aggagaacgt ctaacgagag 540
gcctgggagt gggcagggtc agggacggga tcgagacact cagaacctgc aggctcagga 600
agaagagcgg gagttttata atgccaggcg acgggagcat cgccagagga atgacgttgg 660
tggtggccgg cagtgagtct cangagtttg gntccttggg ccttggtggg naccaacc 718

<210> 2280
<211> 741
<212> DNA
<213> Homo sapiens

<400> 2280
ccacagcaag aagtccaagg ccgagcagag cccagtctcg tccgatgtgg aggtgtcttc 60
cccgaagcgg cagcggctct cagcaagcgc caactccatc tccaatgggg agtatccttg 120
caatcaatgc gacctcaagt tctccaactt tgagagcttc cagacccacc tgaagctgca 180
cctggagctg ctgctgcgga agcaagcgtg cccccagtgc aaagaggact ttgactccca 240
ggagtccctc ctgcagcacc tgacagtgca ttacatgacc acgtcgaccc actatgtgtg 300
cgagagctgc gacaagcaat tttcctcggt ggatgacctg cagaagcacc tgctggacat 360
gcacaccttt gtgttgtacc actgcaccct gtgtcaggag gtcttcgact ccaaggtgtc 420
catccaggtg cacctggcgg tgaagcacag caatgagaag aagatgtacc gctgcacggc 480
ctgcaactgg gacttccgca aggaggctga cctgcaggtg cacgtcaaac acagccacct 540
gggcaacccg gccaaggctc acaagtgcat cttctgtggg gagaccttca gcaccgaggt 600
ggagctgcag tgccacatac cacacacagc aagaagtata actgtaagtt ctgcacaang 660
gccttcacgc catcatcctg ctggagaagc accttgcggg agaagcactg tgtgttgatg 720
ctgcgancga gaacggnacg g 741

<210> 2281

09529800 "09529800

<210> 799
<211> 799
<212> DNA
<213> Homo sapiens

<400> 2281
gagtgggttt cagactttct ctcaggattt ccgctggctt caggttccgg tcaggcgtcg 60
ggacagagcc tgatccaggc ttcggcggcc ggtggcagct ctcgatcagc tctcgcagtc 120
ggagaggcgg ctaaggaaag gtgccacagc agagacgcga aggagaggcc ctagaacctt 180
ttcaaagaag aatggaagaa accatgaagc ttgctacgat ggaagacaca gtggagtact 240
gcctgttcct gataccagat gagtcaaggg actcagataa acataaagag attcttcaga 300
agtacattga gagaataatc actcggtttg cacctatgct ggtcccctac atctggcaga 360
atcagccttt caatcttaaa tataaacctg ggaaaggagg tgttcctgct catatgtttg 420
gcgtgacaaa gtttggggat aacattgagg atgaatggtt tattgtttat gtaataaagc 480
agatcacaaa ggaatttcca gagttagtag caaggattga agacaatgat ggtgaattct 540
tgntaataga agctgctgac tttctcccta aatggctgga tcctgaaaat agcaccaata 600
gggtattttt ctgccatggg gaattgggta ttatccctgc accaagaaaa tctggagcag 660
aatcttgggn tacccaccac acccccacaa tttcacaagc attgaatata atcacagcac 720
attcagaaaa aatcttgctt cagaatctat accaactgct gtgaatangc gcatcagagg 780
ttcccnngaa aaattcagg 799

<210> 2282
<211> 775
<212> DNA
<213> Homo sapiens

<400> 2282
gcagngactc tgggaaatcc ttcattaatc attcacacct tcagggacat ttaagaactc 60
acaatggaga aagnctccat gaatggaagg aatgtgggan aggctttatt cactccacag 120
accttgctgt gcgtatacaa actcacaggt cacaaaaacc ctacaaatgt aaggaatgtg 180
gaaaaggatt tagatattct gcatacctta atattcacat gggaacccac actggagaca 240
atccctatga gtgtaaggag tgtgggaaag ccttcaccag gtcttgtcaa cttactcagc 300
acagaaaaac tcacactgga gagaaacctt ataaatgtaa ggattgtggg agagccttca 360
ctgtttcctc ttgcttaagt caacatatga aaatccatgt gggtgagaag ccttatgaat 420
gcaaggaatg tgggatagcc ttcactagat cttctcaact tactgaacat ttaaaaactc 480
acactgcaaa ggatcccttt gaatgtaaga tatgtggaaa atcctttana aattcctcat 540
gcctcagtga tcactttcga attcacactg gaataaaacc ctataaatgt aaggattgtg 600
ggaaagcctt cactcagaac tcagacctta ctaagcatgc acgaactcac agtggagaga 660
ggccctatga atgtaangaa tgtggaaagg cctttgccag atcctctngc cttaatgaac 720
atacaaggac tcacacttgg agagaagcct tttgaatgng tcaaatgtgg gaaag 775

<210> 2283
<211> 748
<212> DNA
<213> Homo sapiens

<400> 2283
aaaggaccat ctctttagga tatattttta aattctttga aacacataac caaaatggtt 60
tgattcactg actgactttg aagctgcatc tgccagttac accccaaatg gctttaatcc 120

0962045.02800

cctctcgggt ctggttgcct tttgcagttt gggttgtgga ctcagctcct gtgaggggtc 180
tggttaggag agagccattt ttaaggacag ggagttttat agccctttc tactttcctc 240
ccctcctccc agtccttatc aatcttttt ccttttcct gacccctcc ttctggaggc 300
agttgggagc tatccttgtt tatgcctcac tattggcaga aaagacccca tttaaaaccc 360
agagaacact ggaggggat gctctagttg gttctgtgtc cattttcctc tgtgccaaag 420
acagacagac agaggctgag agaggctgtt cctgaatcaa agcaatagcc agctttcgac 480
acatacctgg ctgtctgagg aggaaggcct cctggaaact gggagctaag ggcgaggccc 540
ttcccttcag aggctcctgg gggattaggg tgtggtgttt gccaagccaa ggggtangga 600
gccgagaaat tggtctgtcg gctcctggtt gcactttggg gaaggagagg aagtttgggg 660
ctccaggtag ctccctgttg tgggactgct ctgtcccctg cccctactgg aganatagca 720
ctgnccagtt cccttnagcc tggcagac 748

<210> 2284
<211> 874
<212> DNA
<213> Homo sapiens

<400> 2284
aaaatcatgg attcagaata aacgtgaaca gattaagaat ttcttgtcaa aacgggtgct 60
gataatgtat tttttcagta agcacccaga ggcctccatt caggctgttt tttcagatgc 120
ccaaatgcat atttgggcat tagaaggtct gtcgcactta gtagcagcat catttacaga 180
ggatagattt ggagttgtcc agacgacact accagctatc cttaatactt tgttgacact 240
gcaagaggca gtcgacaagt actttaagct tcctcatgct tccagtaaac caccccggat 300
ttcaggaagc cttgtggaca cttcatataa aacattaaga tttgcattca gagcatcact 360
gaaaactgcc atctatcgaa taactactac atttggtgaa catctgaatg ctgtgcaagc 420
atctgcagaa catcagaaaa gacttcaaca gttcttggag ttcaaagaat agtcaagtaa 480
tataaactgt gttcattaca ctgctgatac aactacagat gggacagtaa atgttcagca 540
ttcttggatc agaagaaaac ggactaatta gatgcttcct ttgtcgtggt ggttgctttg 600
aaaactatac tttaatggga gaaatcatgg aaagaaattc tcaacagaat aactgaaaac 660
tgccttttct gtaccgattg ctttttgtgt gtgtggtata ataaaatctt tattcaattt 720
tacagaagca ttgatggcag tcgaaatgtc tctagctcat ataacttaat agtaataact 780
aaaaaacttt tagaatttac ttttgaaagg agggaagcca gtctgaaatg agtatagggt 840
gatttcatag tcttcttaan taagagttag cttt 874

<210> 2285
<211> 807
<212> DNA
<213> Homo sapiens

<400> 2285
tgcgtgtcac tgaggtggcc accatgctgg cctgcggcat gtgcagggag ctgaggctgt 60
ttccaggtga tgctgctgtg tggagaaggt tctgagatgc agtgagggaa gaaaggatcc 120
tgctggggat tccattgtaa gcacctataa tcgggaattt tcatgtaaca gctttgacat 180
ttaaacattc tgagtttggt gccagctcag atttgattat attttatttt ggatgggtgt 240
aattcacagc acagttctaa tctcccaaat ctttctgctt tttagaatga agtataaaat 300
acttttctca cctgaatacc aagggttggc cctttagttg gatcattgtc atatgacttg 360
gtagatcctt gtcctcagca cctcacgtga gagaagggag tcagccagcc ggccccctgc 420
ttggtgctcg tgaccagctc gcacccctte tgtccaccct tctctcctct cctccccact 480

0956345.02200

ctccccaccc tcctcactct ccccaccctc ccctcctctc ctcctcactc ttcccaccct 540
ccccatcccc accctcccca tcctcctctt ccctttcccc ttgccttctc ctctctccct 600
tctcttctca ngcagggagg aggccatccc aagccgagat taacaggact tgacataagc 660
cattagtttg tactttgaca agtaattatg aattttggtg cttattttgc aaaggatgct 720
tttaagatca aaataataac cctacctaaa gtctaacttc actgntatgg gtcatactct 780
ttaaccttcc aacagggcan anagaga 807

<210> 2286
<211> 857
<212> DNA
<213> Homo sapiens

<400> 2286
accagctccc aggactgtgt ctggctgatc accgtgccca ttggccatgg cgtccgcctc 60
aacctcagcc tgctgcagac agagccctct ggagatttca tcaccatctg ggatgggcca 120
cagcaaacag caccacggct cggcgtcttc acccggagca tggccaagaa aacagtgcag 180
agttcatcca accaggtcct gctcaagttc caccgtgatg cagccacagg ggggatcttc 240
gccatagctt tctccggtca gtatggaagc ctggcctggt gggaagggcc aggctttcaa 300
gtcaaggctg agcttgactc ccgtctccac catttgcgga tcatgtgacc ttgagtgagt 360
tgtataacct cttggagcct cagtgtcttc agagttatga gaattaaatg tattagccta 420
tgtgagagct ctcagtgcag ggttctgtaa atgcaagttt tcctcctatt ccacactgcc 480
agggcagaga ggcacagaag cccaaacctt ggtgccaagt ccactcattc acatcaactc 540
actggctgga tcatccctat acctgtgccc cagcttatcc cttagcactt tctagcgggt 600
tctccttctc caaagggatc tagggcttct gctgacctct caaggagcac tgtgtttttg 660
tgcacaaatg aagatattgt gattttgagt aggaagagta tgaacaattc agagtaggta 720
tgcctttatt ggcagctggt ttcttctaca agtcccaagt tagggatctg gatatttcct 780
cattttaata tagngggaat tgctaaaaaa acttattgaa nggtctntgg ggacttggcc 840
tatctatgga atgatgc 857

<210> 2287
<211> 782
<212> DNA
<213> Homo sapiens

<400> 2287
gaagaagaac ctgcgagccg acaacgcctt catgctgctc acgcaggcgc gactcttcga 60
tgaaccgcag ctggccagcc tgtgcctgga gaacatcgac aaaaacactg cagacgccat 120
caccgcggag ggcttcaccg acattgacct ggacacgctg gtggctgtcc tggagcgcga 180
cacactgggc atccgtgagg tgcggctgtt caatgccgtt gtccgctggt ccgaggccga 240
gtgtcagcgg cagcagctgc aggtgacgcc agagaacagg cggaaggttc tgggcaaggc 300
cctgggcctc attcgcttcc cgctcatgac catcgaggag ttcgctgcag gtcccgcaca 360
gtcgggcatc ctggtggacc gcgaggtggt cagcctcttc ctgcacttca ccgtcaaccc 420
caagccacga gtggagttca ttgaccggcc ccgctgctgc ctgcgtggga aggagtgcag 480
catcaaccgc ttccagcagg tggagagtcg ctggggctac agcgggacca gtgaccgcat 540
caggttctca gtcaacaagc gcatcttcgt ggtgggattt gggctgtatg gatccatcca 600
cgggcccacc gactaccaag tgaacatcca gattattcac accgatagca acaccgtctt 660
gggccagaac gacacgggct tcagctgcga cggctcancc agcacctttc gcgtcatgtt 720
caaggaaccc ggtggaagtg cttgnccaac gtcaactaca cggncttgtg gccacgcttc 780

0205030.0002

aa 782

<210> 2288
<211> 856
<212> DNA
<213> Homo sapiens

<400> 2288
gaggagaatg tgggagcctt tggcggggac cccaagagag tgaccatctt tggctcgggg 60
gctggggcct cctgtgtcag cctgttgacc ctgtcccact actcagaagg tctcttccag 120
aaggccatca ttcagagcgg caccgccctg tccagctggg cagtgaacta ccagccggcc 180
aagtacactc ggatattggc agacaaggtc ggctgcaaca tgctggacac cacggacatg 240
gtagaatgcc tgcggaacaa gaactacaag gagctcatcc agcagaccat caccccggcc 300
acctaccaca tagccttcgg gccggtgatc gacggcgacg tcatcccaga cgacccccag 360
atcctgatgg agcaaggcga gttcctcaac tacgacatca tgctgggcgt caaccaaggg 420
gaaggcctga agttcgtgga cggcatcgtg gataacgagg acggtgtgac gcccaacgac 480
tttgacttct ccgtgtccaa cttcgtggac aacctttacg gctaccctga agggaaagac 540
actttgcggg agactatcaa gttcatgtac acagactggg ccgataagga aaacccggag 600
acgcggcgga aaaccctggt ggctctcttt actgaccacc agtgggtggc ccccgccgtg 660
gccaccggcg acctgcacgc gcagtacggg tcccccacct acttctatgc cttctatcat 720
cactgccaaa gcgaaatgaa gcccaactgg gcagattcgg cccatggtga tgaggtccct 780
atgtcttcgg gattcccatg atcggtccac cgagctnttt agttgnaact tttccaagaa 840
cgacgtnatg cttaaa 856

<210> 2289
<211> 835
<212> DNA
<213> Homo sapiens

<400> 2289
ccaagtgttc aaggactata tttctaaaat ggacccagcc tctaccctgg gactaagcac 60
tgagtccatc catggctaca gcatcagcca cgtgaaacga gtgttggatg cagagccccc 120
cgagatgcct ccttgccgtc gaggtgtcaa taacatatca gtctccctca aaggtctgaa 180
ggagaaatgc gtcgacagcc tggtgttcga gacgctgatc cccaagccga tgatgcagca 240
ctacataagc ctcctgctga agcaccggcg cctcgtcctc tcgggcccca gcggcacggg 300
caagacctac ctgaccaatc gcttggccga gtacctggtg gagcgctctg gccgtgaggt 360
cacagagggc atcgtcagca ccttcaacat gcaccagcag tcttgcaagg atctgcaact 420
gtatctttcc aacctagcca accagataga ccgggaaaca ggaattgggg atgtgcccct 480
ggtgattcta ttggatgacc tgagtgaagc aggctccatc agtgagttgg tcaatggggc 540
cctcacctgc aagtatcata aatgtcccta tattataggt accaccaatc agcctgtaaa 600
aatgacaccc aaccatggct tgcacttgag cttcangatg ttgaccttct ccaacaacgt 660
ggagccagcc aatggcttcc tggttcgtta cctgaggagg aactggtaga gtcagacagc 720
gacatcaatg ccaacaagga aaactgcttc ggtgctcgac tgggtaccca actggggnat 780
catntcacac cttcttggaa ccagacctta acttctatgg ccttntttt tgcgg 835

<210> 2290
<211> 819
<212> DNA

0802704.5

<213> Homo sapiens

<400> 2290
gaagacgcgc tacctgtctg gatctgggcg tgaaagagaa gggagcctga agggccacac 60
attggcagga gaagagttca tgggccttgg cctcggtaat ttggtgagtg gcggagtgga 120
taaaagacag atggccagct tccaagaatc ggttggtgag accagctcgc agagtgtggt 180
tgtagctgtg gacaggattt ttactgggtc taccagactg gatggaaatg caatagttga 240
ctttgtccgc tggctgtgtg ctgtgtccat ggatgaactg gcttcccccc accatcctcg 300
catgttcagc ttgcagaaga ttgtggagat atcatactac aacatgaatc ggatccgacc 360
acagtggtct cgaatatggc atgtgattgg agatcacttc aataaggttg gctgcaaccc 420
taatgaagat gtggctatct ttgctgttga ctcattaagg caactctcca tgaagtttct 480
tgagaagggt gaattagcca acttccgttt ccagaaagat tttctgaggc cctttgagca 540
tattatgaag aaaaacaggt ctcccaccat ccgggacatg gcgatccgct gcattgccca 600
gatggtgaac tcccaggcgg ccaacatccg ctcaggttgg aagaacatct ttgccgtgtt 660
ccaccagcag cctctgatca tgatgggaac attgtggagc tggcctttca gaccacttgc 720
cacattgtca caactatttt ncacaccatt ttnctgcacc atcgattcct ttcaaggatg 780
cttgtgaaag tgcttatcan agttcgcctg caacgcccg 819

<210> 2291
<211> 733
<212> DNA
<213> Homo sapiens

<400> 2291
gcactcatca gtagaagatg ccacgacagc catggagctc taccggctgg tggaggtgca 60
gtgggaacag caggaggccc gcagcctctg gacctgcccc gaggacagag aacctgacag 120
cagcacagac atggaacagt acatggagga ccagtactgg cccgatgacc tggcccacgg 180
cagcagagga ggagccaggg aggcacagga cagaaggaat tgagaagggg gcggggctcc 240
ctggctgggc ttccggtgtg gccggtagga agtgggggcc aggagagcag cgggcactcc 300
ttcctgggca gggtggggca ggatgcagtg agccagcccc agggctagag gagttggggt 360
catctgttac cttgacaccc tctgcacaca gcatagccct ctctctctcc agggctgttg 420
gttctttctc ctgactcctg tggttttgct aatggcactt tacagactcc atggagatgt 480
caggtggacc atcttctagg gcccagcagg agtagggaat gtgccaacag actgcccagg 540
ttgccgtggc cttccccacc ccccagatct cctgagtcat catgctgtgc taatgaaagg 600
gatcatatca tcctctctgg ggatggtggg tgggggtgtc aatatcctgg agctccttac 660
cccaactnaa tgacttgggg gtaaagntct cttccttttg gtgcctacct cttcctncac 720
tcatttgggt tca 733

<210> 2292
<211> 845
<212> DNA
<213> Homo sapiens

<400> 2292
taaattaaat aattaaatag atgattttta catactgtag agctatagag aaaatatagc 60
tggatgggtg atagtgactt ggggatgggg gtggctactc tggatagggt agtttaaggt 120
gacatctctg tgcagatgta gaatgggcta gtgctttcta agaactgaaa gatcagtgaa 180
gaaggggagc atagtgactg aggagtagtg tggcattaga tggggtctga gagttacaca 240

0502050 : 0702050

ggaacatgtg gagcctgtag gccatggtaa agccttttc tactcttctg gtgatttaaa 300
gccattgtaa agttttgagc ttgggagtag gtagcaaaat aagatttata tttttatggg 360
gttactctgg ctgttgagag gagaaaaaga catgaatctg ggaggccact tgggaagcaa 420
ggccatcagt gaagagaaag agtgggagaa aaaggtttga ggagagaagg tataggactt 480
tcactaacct tggaccatat atttgccagg aagaatgtaa gttctccaac atcttcaaat 540
aaagaagtgg ttatgaggaa tgatcagaat aatggagata tgaaaccatt ccagaatttc 600
acaacaatac caatcacaca ggctctcaac tacaatctga gcaaagaagg gcatttagaa 660
aaagaacctt ggaatgcatt cagccatcat ggcccagtta atgtctccat caatggaatt 720
ccttgcattc tcttctgggc caaaagaata atgattaaat ttaagaatca aacctgctgg 780
accntacaga caaccatttg tcaaaagtac tgtggncctg ncactcaaat gcatggaaga 840
agtct 845

<210> 2293
<211> 860
<212> DNA
<213> Homo sapiens

<400> 2293
aactttacga caggcgggat tgttttgtgg ctgtcagctt tccccgtggt ctgagtttgt 60
ggctgcattt ttatctctgg tggctctgct acggcggcgc agaaatgagg cagaagcgga 120
aaggagatct cagccctgct gagctgatga tgctgactat aggagatgtt attaaacaac 180
tgattgaagc ccacgagcag gggaaagaca tcgatctaaa taaggtgaaa accaagacag 240
ctgccaaata tggcctttct gcccagcccc gcctggtgga tatcattgct gccgtccctc 300
ctcagtatcg caaggtcttg atgcccaagt taaaggcgaa acccatcaga actgctagtg 360
ggattgctgt cgtggctgtg atgtgcaaac cccacagatg tccacacatc agttttacag 420
gaaatatatg tgtatactgc cctggtggac ctgattctga ttttgagtat tccacccagt 480
cttacactgg ctatgagcca acctccatga gagctatccg tgccagatat gacccttcc 540
tacagacaag acaccgaata gaacagttaa aacaacttgg tcatagtgtg gataaagtgg 600
agtttattgt gatgggtgga acgtttatgg cccttccaga agaatacaga gattatttta 660
ttcgaaattt acatgatgcc ttatcaggac atacttccaa caatatttac gagcaagtca 720
agtattctga gagaagcctc acaaagtgta ttggaattac tattgaaacc agaccagatt 780
actgcatgaa cgacctttaa gtgacatgtt gacctatggc tgccaaggct gganaatggg 840
gtnccaaang gttattaaga 860

<210> 2294
<211> 854
<212> DNA
<213> Homo sapiens

<400> 2294
tttgggccga gccaaccgct tcctcagcac agcggctgtg agcctcatga ccccacggcg 60
gcctctgagc acctcggaga aagtgaaggt ccgcacgctg agcgtggagc agaggacccg 120
tgaggacatt gaaggcagcc actggaatga gggcttgctg ctggggcggc cccccgagga 180
gcctgagcag cccctcaccg agaactcgct gctggaagtc ctggatgggg cggtcatgat 240
gtacaacctc agcgtacacc agcagctggg caagatggtg ggtgtctccg atgatgtcaa 300
tgaatacgct atggctctga gggacacaga ggacaagctc cgccggtgcc ccaagaggag 360
gaaggacatc cttgcagagt tgaccaagag ccagagggtt ttctcagaaa agctggacca 420
cctgagccgc cgtcttgcct gggtccatgc cactgtctac tcccaggaga agatgctgga 480

US06350850-20020226

catctactgg ctgctgcgcg tctgcctgcg gaccattgag cacggtgatc acacagggtc 540
tctctttgcc ttcatgcccg agttctacct gagcgtggcc atcaacagct acagtgctct 600
caagaattac tttggtcccg tgcacagcat ggaggagctc ccaggctatg aagagaccct 660
gacccgcctg gctgccattc tcgccaaaca ctttgccgac gcacgcattg tgggcactga 720
catncgagat tactgatgca ngccctggcc agctacgtgt gctacccaca cttccttgng 780
gctgtggaac caattcccga ggaacaacgt attcgccatg gtgaaggaac cttctggngc 840
cctatganca acgg 854

<210> 2295
<211> 786
<212> DNA
<213> Homo sapiens

<400> 2295
taacaaatgg tctctcgccc ggttctgtcc cttattttta gattgttttc ctgcatctta 60
caatttcctt ttttttcaaa gttcctttct ccaggcctgt ttttcagtgc tcaggacacg 120
gttttcatca catacttact gttttttttgg ttgggttttg atacgaaaag ctgctacgtt 180
tggtgaccag agggagggtt tggaatctgt gctttgcagg ggatctcggt gggtaccgtg 240
gcccctcgca gggtggcgag tggggtccgt tcctcgagaa gggggccctt acccacaccg 300
tgcggcttga attctgtcgg agttgaatct gtggaaagga ttgtcccatt agagctgctg 360
cgtcctttcc tctgtcctcc ctgtcaccca aaccccgaag tcacagctgc ttagaagaat 420
gggattttgg ggatacaacc acacacattt ccctctggac tgaaatttta aaaacagacc 480
catttcactg acttctttag ggaaaatagt ttcagtcttg ggttgtcttg tgagcccacg 540
ggcatgggac cctgtctctg ctgggctttt ccggccccgt cccagctcct cctcaggcag 600
aggctgcagc cctcagttct gctgctggat ggaacatttc aacccccctcc gggaaggtgg 660
gcagggtgga gggcccaggg ctaggcctgc catgcaccat gagcaggggt gctacctggg 720
tgtgtgaagt tgggctggct tttcctggan gtgggtgaga angctcttcc ggccaaatca 780
naaagg 786

<210> 2296
<211> 760
<212> DNA
<213> Homo sapiens

<400> 2296
gcggcgcttc ttctgccgtt gcgccttctt cagagcgctg agagccacct tggcggcctc 60
ccggaagacg tcctccacat tctcccgaaa cttggcggaa cattccaggt agagagcagc 120
tcggatctgt tcgcaggcgc tcaggccctg ggtgggggga ggagccagca ttaggtgagg 180
ggcccctgga ggtctcctag caccacctgg tgggtttggg actggctctg aggactctgc 240
agggatggag gccttggttt gggcctgtct gtctcctcca tcctggctgc ccctcacagt 300
gtgtgggtgg aatggagggc cagggcagtg cagcccgcag gttggaagaa gccctgtcca 360
ggcccccacc ctggcctctc tccagctccg ggcagggagg ggctgaatcc tgagacccgg 420
ggttggttcc cccaggtgtg tctcccaggc ctgtgagaag agttggaggc ctcaagacag 480
aaaggacttc cagccacctc tctcccttct ctgaaagtac catttaggca aattaatttg 540
ccctttttatt tatttatttt tgggatggag ttttgctctt gttacccggg ctggagtgca 600
gtggcgcgat cttggttcat cgcgacctct gcacccgggt tcgggcgatt ctcctgcctc 660
ggctcccgag tggctgggat tgcaggcatg cgccaccatg cccggntagt gttgtgtttt 720
tggtggaana atggggttct ctcatgttgg ncaaggctgg 760

0960204.0003

<210> 2297
<211> 803
<212> DNA
<213> Homo sapiens

<400> 2297
gttccaagtt gcatgtgctt gaaatagatt taattcttat tccccacagt ttaggtattt 60
ttcattagta catcaatttg acacactgaa tgcaagacta ttaatcccac tgcttctcgc 120
aggaactcaa caatagtgct acgcacagac tcagagaagc gctcactggc agaaagtggg 180
ctgagctggt ttagtgaatc agaggagaaa gcccctaaaa aactggagta cgacagtggt 240
agcctgaaga tggaacctgg gacttctaag tggcggaggg agcggcctga gagccgtgat 300
gattcatcca agggtggaga actgaaaaag cccatcagcc tgggccaccc tggttccctg 360
aagaagggca agaccccacc tgtggctgta acttccccca tcactcacac agcccagagt 420
gccctcaaag tcgcaggcaa acctgagggc aaagctacgg acaagggtaa gcttgcagtg 480
aagaatactg ggctccaacg ctcctcctct gatgctggtc gggaccgcct gagtgatgct 540
aagaagcccc cctcgggcat tgctcgcccc tccacttcgg gatcctttgg ctacaagaag 600
cctcctcctg ccacaggcac agccactgtc atgcaaactg gtggttcagc cactctcagc 660
aagatccaga agtcctcang catcctgtca agccagtaaa tgggcgcaag actagcttag 720
atgtttccaa cagtgcagag ccnggattcc tggcttctgg aaccccgntc taacatccag 780
taccgnaacc tggccccggc caa 803

<210> 2298
<211> 874
<212> DNA
<213> Homo sapiens

<400> 2298
ccgtatgtgg atgaggaggg gaatctggta aagccgctaa aaccgaacgg gataaagatg 60
gagaagtttg tgtttgatgt gttccggttt gctaagaact ttgctgcctt ggaagtgctg 120
cgggaggagg aattttcccc actgaagaac gcagagccag ccgacaggga cagtccccgc 180
accgctcgcc aggccctgct cacccagcac taccggtggg ctctgcgggc cggggcccgc 240
ttcctggatg cccatggggc ctggctccca gagctgccca gcttgccccc aaatggagac 300
cctccggcca tctgtgagat atcgcccttg gtgtcttact ctggagaggg tttagaagtg 360
tacctgcaag gccgggagtt ccagtccccg ctcatcctgg atgaagacca ggccagggag 420
ccgcagctgc aggagtcctg acccgcccag actgccccca gactcccccg agacctgcca 480
gccccggcat cctggaagtc ccgactcccc ccagacctgc cagccccggc gtcctggagc 540
tgggggctac agcccagcct gagctctggg tgggaaagca gcctgcccca tgcttccagc 600
ctgcagaaca cagaatgaaa catgctggta gactccacga gggcagggcc tctcctgtcg 660
cctctggaca caagtggcga cagcctgctg ggggctctgt ggctccattc ctgctgtggg 720
gtctagtcaa gangcagang gacttgggac ctgggagaat ggggctgaaa ngaagcttcg 780
ggtttggggc cccaagggaa gtgtggtgtc atcttgggga agaacaagga aggcattgtc 840
ccttttggga accccgcctt tggggaatcc cccc 874

<210> 2299
<211> 858
<212> DNA
<213> Homo sapiens

0052040 .0702000

<400> 2299
agaacgtgct gtgtggatgc ggcgaaacgc tgaggcgcgg ccttcgttgt gtggtgggga 60
ctcacaagac cgacgtcaag atgatgcttt caagggccaa acctgctgta ggcagaggcg 120
tacagcacac tgacaaaaga aagaagaaag gtaggaagat tccaaaacta gaggagctac 180
tttcaaaaag agatttcact ggagctatta ccctgttgga gttcaaacgt catgttgggg 240
aagaagaaga ggatactaat ttgtggattg gatattgtgc ctttcacctg ggtgactaca 300
agagagctct ggaggaatac gaaaatgcta cagaagagga aaattgtaat tctgaagtct 360
gggtgaacct agcttgcacc tacttctttc ttgggatgta taaacaagct gaagcagctg 420
gatttaaagc ttcaaaaagc cgactccaaa accgcctcct cttccacttg gctcacaagt 480
ttaatgatga gaaaaaattg atgagctttc atcaaaatct tcaggatgtc acagaagatc 540
aactcagttt ggcctcaatc cactatatgc gatctcacta ccaagaagct atagatatat 600
ataagcgaat actgctagat aacagggaat accttgccct taatggttat gtggccctct 660
gctctacaag ttggattact atgatgtggc tcaagaagtt ttggctggtt accttcanca 720
aattcctgat agtccatcgg acttaatctt aaagcctgga ccattttcgn ctttataatg 780
gcanaaccac tgaggccgaa ctcaaaagct ttgatgggcc aatgcttctt natccctttg 840
aatttgctta aagaactt 858

<210> 2300
<211> 851
<212> DNA
<213> Homo sapiens

<400> 2300
agaaattgaa gcacggatca gattatcatt tgcacaggtg tatcaaggtc agaagaagtc 60
aaaagaagct ttgtcccact atcaagcagc tttggaatat gttgagatca gtaaaggtga 120
aacaagtcgt gagtgtgtac ccatattgag agaattagca ggtgtagagc aagccctggg 180
actccacgat gtatccatca accacttcct ccaggcacat ctcatcatcc tgagtagaag 240
cccctctcaa gtggaggcag cagactcggc acacatcgtc gcccatgctg ctgtcgcttc 300
agggagacac gagcaccatg atgtagctga gcagtatttt caagagagca tggctcatct 360
taaggattct gaagggatgg gaagaaccaa atttctttca attcaagatg aattttgcca 420
ttttctacaa atgactggac aaaaagagag agcaacctcg atcctgagag agtccctgga 480
agccaaagtg gaagcatttg gcgatttcag tcccgaggtg gcagagacat accggctcct 540
gggaggagca gacctggcgc aggggaacca cagtggggcc cgcaagaaac tgaagaagtg 600
tctccagatc cagaccctct tatatggacc cgcaggacaa aaggactctt ggccacccag 660
cangccatgg gcatgctgtc cacgggcccc aaggntgctt cgaaaccaag gcaggcatna 720
aaagcccaag tggccttctg caccagcatt cctttaggac accttgctt gggaaaggcc 780
cggcccggga caaccagcag actganggcc cccaaccttg naaaagccta ggacanttct 840
gggcactggc a 851

<210> 2301
<211> 755
<212> DNA
<213> Homo sapiens

<400> 2301
tatgcttgct tctctaggga agaatcccac tgatgcatac cttgatgcca tgatgaatga 60
ggccccaggg ccgattggtc ttttttgaca gggtgctgat tggtgcattt acaatccctg 120

09512009.090200

agctagacac tgagtgctga ttggtgtatt tataaacctt gagctagaca cagagtgctg 180
attggtgtgt ttacaaacca ttagctagac acaagagtgc tgattggtgt atttacagtc 240
ccttagctag acataaatgt tctccaagtc cccatcagat tagctaaata cagagcacta 300
aatgttgtat ttacaaacct tgagctagac acagagtgct gattggtgta tttacaaacc 360
ttagctagac acagagtgct gattggagta tttacaaccc cttagctaga gataaatgtt 420
ctccaagtcc tcactagact caggagccca actggcttca cctagtggat cctgcaccag 480
ggccgcaggc ggagctgcct gccagtcgtg caccgtgagc ccacactcct cagcctttgg 540
gcggtcaatg ggactgggcg ccgcggagca gggggcggcg cttgtcgggg aggctcaagc 600
cgcgcangag cccatggcga angggaggct caagcatggt gggctgcaga tcccgcgccc 660
tggcccatgg ggaggcagct gangcccaca agaatttgag cgcaatgctg gtgggctggc 720
actgntgggg gaaccgggac accttcgnac tgtgg 755

<210> 2302
<211> 807
<212> DNA
<213> Homo sapiens

<400> 2302
attttagcca gagctcagcc catatagtac atcagaaaac acaagctgga gataaatttg 60
gtgaacataa tgaatgtaca gatgccctct accagaaatt agactttaca gcacatcaga 120
gaattcacac agaagataaa ttctaccttt ctgatgaaca tgggaaatgc agaaaatcct 180
tttaccggaa agcacacctc attcagcatc agaggcccca ctcaggagag aaaacttacc 240
aatatgagga atgtgcaaaa tccttttgct caagttcaca tcctattcag catcctggaa 300
cttatgtggg attcaaactt tatgaatgta atgaatgtgg gaaagctttc tgtcagaatt 360
caaacctcag taaacatctg agaattcaca caaaagagaa accttgtgat aacaatggct 420
gtgggagatc ttacaagtca cccctcatag gacaccagaa aacagatgca gagatggaac 480
tctgtggtgg cagtgaatat gggaagacat cacatctcaa aggacatcag agaattctca 540
tgggggagaa accctatgaa tgtattgaat gtgggaaaac tttctccaag acatcacatc 600
tcagagcaca tcagagaatt cacacaggtg aaaaacccta tgaatgtgtt gaatgtgaga 660
aaactttctc tcacaagaca cacctcagtg tcatcagaga gttcacacag gggagaaccc 720
tatgaatgta atgctgtggg aaatctttta cctatactca gcctganagc acatnaagaa 780
ttcacccngt gaaaagccta tgaatgc 807

<210> 2303
<211> 802
<212> DNA
<213> Homo sapiens

<400> 2303
tgatgtatca cgaagctaca gcttgccatg tgactggaga tttagtagaa cttctgtcaa 60
tatttctttc ggttttgaag tctacacgcc cttatcttca gagaaaagat gtgaaacaag 120
cattaatcca gtggcaggag cgaattgaat ttgcccataa actgttaact cttcttaatt 180
cctatagtcc tccagaactt agaaatgcct gtatagatgt cctcaaggaa cttgtacttt 240
tgagtcccca tgattttctt catactctgg ttccctttct acaacacaac cattgtactt 300
accatcacag taatatacca atgtctcttg gaccttattt cccttgtcga gaaaatatca 360
agctaatagg agggaaaagc aatattcggc ctccgcgccc tgaactcaat atgtgcctct 420
tgcccacaat ggtggaaacc agtaagggca aagatgacgt ttatgatcgt atgctgctag 480
actacttctt ttcttatcat cagttcatcc atctattatg ccgagttgca atcaactgtg 540

0526346.0078800

aaaaatttac tgaaacatta gttaagctga gtgtcctagt tgcctatgaa ggtttgccac 600
ttcatcttgc actgttcccc aaactttgga ctgagctatg ccagactcag tctgctatgt 660
caaaaaactg catcaagctt ttgtgtgaag atcctggttt cgcagaatat attaaatgna 720
tcctaatgga tgaaagactt ttttaaacaa caccntggct acacgttcat ggacncattt 780
ccttcttaaa ggtcaaggcc aa 802

<210> 2304
<211> 584
<212> DNA
<213> Homo sapiens

<400> 2304
ttttttcaaa atccgaaatc atttgcgagc cgcaatcgtc gtctgcctgt gtgggggggc 60
ccagggcctg ccttgcacgt tgcagcctct ctggccattg cagagctgct ggcctcctgc 120
ccaggtggag ggtcctgggg acggcagagg ataaagcccc ctcctcacat ccctctattg 180
cggatccaca gtggccttac tcttaacttg gatgagagca aaaacctggg agaatgatgt 240
gcttctgtag tcggtgacaa aggaagaggc attgctactt tatttggtgc acttttggtt 300
tctaggaagg tctttgggtc attttaactt ctcggcaact cccagactct cagagtgtgg 360
ggctggggcc tggcggctgg gctggtgcag ggagtgtgct ggttagtctc cagaccctca 420
cagcagccac gccccccaggc ccaccgtgca tggtgtgggc gggacagccg gaagcttccg 480
gggtggcctc cacctcctgg ctggggcact tttgctccca gagcctttgg tgccaggttt 540
gtgggatggg ggttagcgtc tatgngngga aggccaccan tcta 584

<210> 2305
<211> 803
<212> DNA
<213> Homo sapiens

<400> 2305
attgctccaa gatggcggcg gcggcggcag cgggagcgca gctcagctgg gctggaactg 60
ccctcctgga actcccccag cctacaacct aggaggtgca gggactgagg ctcaggccaa 120
atcgcaactc agacccagtg aacccaaggc ctgaagagaa tttggattca tttaccttgt 180
tttgtgggga ctggagagac aagtaaactc tcagagtaac tgtcccctct gactaccatt 240
tctaaggatg ccccggaggc ccagctagcc ccagacttcg gccccatgcg gctcacccgc 300
tgccaggctg ccctggcggc cgccatcacc ctcaaccttc tggtcctctt ctatgtctcg 360
tggctgcagc accagcctag gaattcccgg gcccgggggc cccgtcgtgc ctctgctgcc 420
ggcccccgtg tcaccgtcct ggtgcgggag ttcgaggcat ttgacaacgc ggtgcccgag 480
ctggtagact ccttcctgca gcaagaccca gcccagcccg tggtggtggc agccgacacg 540
ctcccctacc cgcccctggc cctgccccgc atccccaacg tgcgtctggc gctgctccag 600
cccgccctgg accggccagc cgcagcctcg cgcccggaga cctacgtggc caccgagttt 660
gtggcctagt acctgatggg gcgcgggctg aggcacctgc ctgctggagc gcatggtgga 720
ngcgctncgc gcangaagcg cacgtctggt ggcccgcccc ggttgccacg ggcaaccctt 780
gcaagtgcct ggcccttgaa cgt 803

<210> 2306
<211> 822
<212> DNA
<213> Homo sapiens

03503503.100800

<400> 2306
tttagtaaat cacacaaaaa tccagcagaa attgtgaaaa tcctgaaaga caatttggcc 60
attttggaaa agcaagacaa aaagacagac aaggcttcag aagaagtgtc taaatcactg 120
caagcaatga aagaaattct gtgtggtaca aacgagaaag aacccccaac agaagcagtg 180
gctcagctag cacaagaact ctacagcagt ggcctgctgg tgacactgat agctgacctg 240
cagctgatag actttgaggg aaaaaaagat gtgacccaga tatttaacaa catcttgaga 300
agacagatag gcactcggag tcctactgtg gagtatatta gtgctcatcc tcatatcctg 360
tttatgctcc tcaaaggata tgaagcccca cagattgcct tacgttgtgg gattatgctg 420
agagaatgta ttcgacatga accacttgtc aaaatcatcc tcttttctaa tcaattcaga 480
gatttcttta agtacgtgga gttgtcaaca tttgatattg cttcagatgc ctttgctact 540
ttcaaggatt tactaaccag acataaagtg ttggtagcag acttcttaga acaaaattac 600
gacactattt ttgaagacta tgagaaattg cttcagtctg agaattatgt tactaagaga 660
cagtctttaa agctgctagg ggagctgatc ctggaccgtc acaactttgc catcatgaca 720
aagtatatca gcaagccgga gaacctgaac tcatgatgaa cctncttcgg gataaagtcc 780
caacatccag tttgagcctt ctggttttaa gngttgngcc ag 822

<210> 2307
<211> 868
<212> DNA
<213> Homo sapiens

<400> 2307
aaaaccgagg cccgagccgc gggagtcgag cgaaggcagc gccgaggccg cggtttcccc 60
ctgggcctcc ccagcagcag ccatgggcat caaattttta gaagttatca aaccattctg 120
tgcagttcca ccagaaattc agaaaccgga aaggaaaatc cagtttagag agaaggttct 180
gtggactgct ataacgctct tcattttctt agtgtgttgt cagatcccac tgtttggaat 240
catgtcatca gattctgcag atcctttcta ctggatgaga gttattctgg cttccaatag 300
aggaacttta atggaattgg gtatctcccc aattgtaaca tctggtttga ttatgcagtt 360
gttagctgga gccaaaatca ttgaagttgg agatacaccg aaagatagag ctttattcaa 420
tggagcccag aaactgtttg gtatgatcat taccattggg caagccattg tgtatgtcat 480
tacggggatg tatggggacc ctgcagaaat gggtgctgga atctgtctcc tgatcatcat 540
tcagttgttt gttgctggtt tgattgtgct gctgttagat gagctgctac agaagggtta 600
cggcttgggg tctgggattt ccctctttat tgccaccaac atctgtgaga ccattgtctg 660
gaaggccttt agtcccacta ccattaacac tggcagaggt actgagtttg angggtgcag 720
tcatagctct ggtccatttg gtggccacca ggacggacaa agtccgagct ttacnggang 780
ctttttatcg gcagaaactt acccaatctt atgaacctca ttgctacagt ttttgggttg 840
ctggtggtat atatttccaa ggatttcc 868

<210> 2308
<211> 844
<212> DNA
<213> Homo sapiens

<400> 2308
tctaaaatgg atcgccagag tgttctccat gtactgggca tattgaaaaa ctccaaattt 60
ctcaaagtct gcctgcctgc ttatgtggta gggatgatca ctgaacccat ccctgacatc 120
cgaaaccagt atccagagca cataagcaac atcatctccc tcctccagga ccttgtaagt 180

0356250 .02/2008

gtcttccctg ccagttctgt gcaggaaact tccatgctgg tttccctcct gccaacctct 240
cttaatgctc tgagagcctc tggtgttgac atagaagagg aaacggagaa gaacctggaa 300
aaggtacaga ctatcattga acatctgcag gaaaagaggc gagagggcac tttgagagtg 360
gatacctaca ctctagtgca gcctgaggca gaagaccatg ttgagagcta ccgaaccatg 420
cccatttacc ctacctacaa tgaagtgcac ttggatgaga ggcccttcct tcgccccaat 480
atcatttctg gaaaatacga cagcactgct atctatctgg atacccactt ccggctcctg 540
cgagaagatt tcgtcagacc tttacgggaa ggtattttgg aacttctcca aagctttgaa 600
gaccagggcc tgaggaagag aaagtttgat gacatccgaa tctactttga caccaggatt 660
atcaccccca tgtgttcatc atcaggcata gtctacaagg tgcagtttga cacaaaacca 720
ctgaagtttg gtcgctggca gaattccnaa cgattgctct atgggtcttt gggatgcatg 780
tccaaggaca actttgagac atttcttttt gncaccgtat ctaacangga accaggaaga 840
tctt 844

<210> 2309
<211> 721
<212> DNA
<213> Homo sapiens

<400> 2309
gagagaaaat ggcggcggag ccgaacaaga ccgaaatcca gactcttttt aagaggcttc 60
gcgcagttcc aaccaacaag gcctgtttcg actgcggcgc caagaatccg agttgggcca 120
gcatcatgta cggtgttttc ttgtgcattg actgttccgg ggtgcaccgc tccctgggcg 180
tccatctgag cttcatcagg tccacagagt tggattccaa ctggaactgg ttccagctga 240
ggtgtatgca ggtcggcggg aatgccaatg cgacggcttt ttttcgccaa catggatgca 300
cagccaatga tgccaacacc aaatatagta gccgagctgc ccagatgtac cgggagaaga 360
tccggcagct ggggagtgcg gccctggcta ggcatggcac tgatctttgg atagacaaca 420
tgagtagtgc cgttcctaat cactccccag agaagaagga ctctgatttc ttcacagaac 480
acactcaacc ccctgcctgg gatgcgccag ccactgagcc ttcagggacc cagcagccag 540
ccccgtctac agagagcagt ggcctggcac agccggagca tggccccaac acagacctgc 600
ttggcaccta cccaaagcct nactggaact gaaaagcttc atcattggca agaagaacca 660
cagcagctaa aaaagggctg ggtgccaaga aaggcctang ggcccagaag gtgaacancc 720
n 721

<210> 2310
<211> 755
<212> DNA
<213> Homo sapiens

<400> 2310
aaacattacc caggagcaaa atatgatcgt gacaggtggc ttagcctggt ggaatgattt 60
tatggtcctt gcgtgttata acataaatga ccgtcaagaa gagcttagag tatacttgcg 120
aacatcaaat ctggacaatg cctttgctca tgtcaccaaa gcacaagcag aaacattact 180
gcttagtgtc ttccaggaca tggtaatagt atttagagca gactgttcaa tatgccttta 240
cagtattgaa agaaaatctg atggtccaaa tactactgct ggtattcaag ttcttcagga 300
ggtttccatg tcacgctaca ttcctcaccc tttcctggtg gtatctgtca ctctgacatc 360
agtgagtaca gagaatggaa tcaccttgaa aatgccacag caggctcgtg gtgcagagag 420
cattatgtta aacctggcag gacagctcat catgatgcag agggacaggt caggcccaca 480
gatccgggag aaggacagta accctaataa ccaaaggaaa cttctgccat tctgtcctcc 540

09552360.0N2800

tgttgtacta gcccagtctg ttgaaaatgt ctggacaacg tgtcgagcaa ataaacagaa 600
acgtcacctt ctggaggccc tctggctgag ctgtggtggt gcagggatga aagtttggct 660
ccctctcttc ctagggatca ccgnaagccc cattccttct tgtcccacgg atcatgctgn 720
ctttncacat caacatttac ccgctagctg gtctg 755

<210> 2311
<211> 746
<212> DNA
<213> Homo sapiens

<400> 2311
attataaatc tagagactcc aggattttaa cgttctgctg gactgagctg gttgcctcat 60
gttattatgc aggcaactca ctttatccca atttcttgat acttttcctt ctggaggtcc 120
tatttctcta acatcttcca gaaaagtctt aaagctgcct taacctttt tccagtccac 180
ctcttaaatt ttttcctcct cttcctctat actaacatga gtgtggatcc agcttgtccc 240
caaagcttgc cttgctttga agcatccgac tgtaaagaat cttcacctat gcctgtgatt 300
tgtgggcctg aagaaaacta tccatccttg caaatgtctt ctgctgagat gcctcacacg 360
gagactgtct ctcctcttcc ctcctccatg gatctgctta ttcaggacag ccctgattct 420
tccaccagtc ccaaaggcaa acaacccact tctgcagaga atagtgtcgc aaaaaaggaa 480
gacaaggtcc cagtcaagaa acagaagacc agaactgtgt tctcttccac ccagctgtgt 540
gtactcaatg atagatttca gagacagaaa tacctcagcc tccagcagat gcaagaactc 600
tccaacatcc tgaacctcag ctacaaacag gtgaagacct ggttccagaa ccagagaatg 660
aaatctaaga ggtggcagaa aaacaactgg ccgaagaata ncaatggtgt gacgcaaaan 720
gcctnagcac ctacctaccc cagcct 746

<210> 2312
<211> 818
<212> DNA
<213> Homo sapiens

<400> 2312
atcgccgtcg cccgtgcccc tcccagaccg caccggccgc atggagcccc cggagggcgc 60
cggcaccgga gagatcgtta aggaggctga ggtgccgcag gctgcgctgg gcgtctcagc 120
ccaggggaca ggggacaatg gccacacgcc tgtggaggag gaggtcgggg gcatcccagt 180
accagcaccg gggctcctgc aggtcacgga gaggaggcag cctctgagca gcgtctcctc 240
tctggaggtc cacttcgacc tcctggacct cactgagctc accgacatgt cggaccagga 300
gctggccgag gtctttgctg actcggacga cgagaacctc aacaccgagt ccccagcagg 360
tctgcacccg ctgccccggg ccggctacct gcgctccccc tcctggacga ggacaagggc 420
tgagcagagc cacgagaagc agcccctagg cgaccccgag cggcaggcca cagtcctgga 480
cacgtttctc actgtggaga ggccccagga ggactagacc atctccacct gccccagctc 540
ctgcagggat ggggtccgaa cacgatggca gatctgggca gtgctgaccc agcagacaca 600
cttacccgcc acgangcttc agccgtcact tctgacacac accctggggg caagctctct 660
gccagccccg agaccggnct tgtctgcttg ggcacgggtc ttcgtctcac tttggagacc 720
aanccggctt ttcctggggg gacaacacgg ggcccccggg attgccttnt gggaaccccc 780
aanacaaagc acaagcccca atgggcctta cgtccaag 818

<210> 2313
<211> 767

0050250-0050800

<212> DNA
<213> Homo sapiens

<400> 2313
gtcgcgacgg gggttcaggg aatatttact gggcctctcc gctccctctg ctcttggagg 60
tgccatgagg tcagttagct acgtgcagcg cgtggcgctg gagttcagcg ggagcctctt 120
cccgcacgca atctgcctcg gagacgttga taacgatacg ttaaatgaac tggtggtggg 180
agacaccagc gggaaggtgt ctgtgtataa aaatgatgac agtcggccat ggctcacctg 240
ttcctgccag ggaatgctga cttgcgctgg ggttggagac gtgtgtaata aaggaaagaa 300
cctgttggtg gcagtgagtg ctgaaggctg gtttcatttg tttgacctga cacctgccaa 360
ggtgttggat gcttctgggc accacgagac actaatcgga gaggagcagc gtccagtctt 420
caagcagcac atccctgcca acaccaaggt catgctgatc agcgacatcg atggagatgg 480
gtgtcgtgag ctggtggtgg gctacacaga ccgtgtggtg cgagctttcc gctgggagga 540
gctaggtgag ggtcctgaac atctgacagg gcagctggtg tccctcaaga aatggatgct 600
ggagggtcag gtggacagcc tctcaatgac tctggggcca ctgggtcttn ctgaactgat 660
ggtgtctcac caggttgtgc gtatgcaatt ctactgngta cctggaaaaa ggacactggg 720
tcccttctgc ctntgaaggg cccacggatg gtantaggga gacccca 767

<210> 2314
<211> 768
<212> DNA
<213> Homo sapiens

<400> 2314
ttttctacct aacaattact gagcattcaa ctctgtgctg cgtgtgtgct aacccttcac 60
acacaccacc tcactaatcc tcacagtcct tgaaggtggg gactagtgtc acacgtggcc 120
attgggaaca tcacacagat caaaggctgg gctcaaggtc acattgccta aacacacatt 180
catgtgacgt gagaacctta actcttgccc tcccagtgac acttccttct ctgggtttcc 240
attccgcctt gcagagagca ttctgactta ctgtagcctt ctgtgtgtgt gtctcccctc 300
tctactgtga gcccctcgag agcagggccc atgccttccc catccctgtc ccagaagcta 360
actggaaaca gtggagacat gcagcagatt gttgactgaa gaaggtgctg cgtccatggt 420
catccctcat atcctttata aatttcttac acatttcatt cctttgtggg aattgcatct 480
tgaagctttg tttatagcca tctgcgtggg tcccttaggc tatgtggctg actttaatgc 540
tacagatatt tttccgtttc tggcatgtag cagtgctggg cttagcattg cagagattat 600
aaaagagaag acatggcccc tgcccttcaa ttgcagagat gagaccatat ggaacacaat 660
tagccattaa agacaataca tttcagtatt tgcatggagt atttgattat atagcacatg 720
caaattcttt ggaatgacat acaaggncct gcaaganctg attctang 768

<210> 2315
<211> 775
<212> DNA
<213> Homo sapiens

<400> 2315
caaaataaaa ggaaaaccac tgtgtaaaac agtaggcgga tctttcagag actccaaatc 60
attgacaatt cagaaggatc ttgtcgctgc atttgacaac ggagaccaga aggtgttctt 120
cgatctgtgg gaggagcaca tttcaagttc catccgagat ggggactcct ttgcccagaa 180
gctggaattc tatctccaca tccattttgc catctatctt ttgaagtact ctgtggggag 240

0950250 a 0750800

accggacaaa gaggagctgg atgaaaagat ttcctacttc aaaacctacc tggagaccaa 300
aggggcagcc ttgagccaga ccacagagtt tcttcctttc tatgcccttc cttttgttcc 360
caaccctatg gtgcacccct catttaaaga actcttccag gattcctgga ctccagagtt 420
aaagttgaag ttggaaaagt ttctagcttt aatatctaaa gccagcaaca cgccaaagct 480
tttaacaata tataaggaga atggacaaag taacaaagaa atcttgcagc agctccacca 540
gcagctggtt gaagctgaac gtaggtcagt gacatacctc aaacggtaca ataagatcca 600
ggccgactac cacaatctca ttggagtcac agcagaactg gtggattctc tagaggccac 660
agtcagcggc aagatgatca cccctgagta ccttcagagc gtctgtgtcc gnctgttcag 720
taaccagatg ccgcagaacc tggcgcatag tgnggcttta cgaagnctgg gacgg 775

<210> 2316
<211> 738
<212> DNA
<213> Homo sapiens

<400> 2316
atctctgcaa ggacaaaagt cagaaatggc ttccctgggg actgagagcc catagttctc 60
ttcccactgc tgcttctacc cttttgtttt gcttggctct ctaaaattgt ctcagctcca 120
gctcttctca cagacagttt tatcatctta tcatttttgg cacaaaacaa actatgtttt 180
attcagttta ccaagaagat ggagtcttct gatgtaaaca aaagactgga aaaactctca 240
gccttggatt ataagatttt ctattatgaa atacccggcc caataaacaa gacaacagag 300
cgacatctag ctatcaactg tgttcatgat agagttgttt gctggtggcc actggtcaac 360
gatgatgctt ggccttgggc ccccatttct tctgagaagg acagagccaa tctactcctc 420
ctgagttatg ctcaaggaag actagaggtt ctgagttctg tccgcacaga atgggaccca 480
ctggatgttc gctttggcac caaacagcct tatcaggtgt tcacagtgga gcactccgta 540
agtgtagaca aagagcccat ggctgacagc tgcatctatg aatgcattcg gaataaaatc 600
cagtgtgtgt cagtcaccag aataccacta aagtcaaagg ccatcaactg ctgcaggaat 660
gttactgaag acaaactgat tctgggctgt gaaaatcttc ctnattcttt atgaactcac 720
cgnaaagggc tctnttac 738

<210> 2317
<211> 841
<212> DNA
<213> Homo sapiens

<400> 2317
tcattttacc tctcttggtc atcagaaaat aatgaaaaga ggcaagaaat cgtatgaagg 60
taagaatttt gagaacatct ttactctgag ctcatcgctt aatgaaaacc agagaaatct 120
ccctggagag aaacaatata gatgtactga atgtggcaaa tgcttcaaac ggaactcttc 180
tcttgttttg catcaccgaa ctcacaccgg agagaagcct tatacttgta atgagtgtgg 240
aaagtccttc tccaagaact acaacctgat tgtgcatcaa agaatccaca caggagagaa 300
gccctatgaa tgcagtaaat gtgggaaagc tttcagtgat ggctcagctc tgacacagca 360
ccagagaatt cacacaggcg agaaacctta tgaatgccta gagtgtggaa aaaccttcaa 420
ccgaaattca tccttaattt tgcaccaaag aactcataca ggggaaaaac catatagatg 480
taacgaatgt gggaaaccct tcactgacat ctcccacctt acagtgcatc tcagaatcca 540
caccggtgag aagccctatg agtgtagcaa atgtggaaag gctttccggg acggctcgta 600
cctcacccag catgagagga ctcacactgg agaaaagccc tttgagtgtg cagagtgcgg 660
gaaatccttc aacagaaact ctcacctcat tgngcatcaa aagatccatt ctggggagaa 720

0050294350

ccctatgaat gtaaaggaat gtggcaagga ctttcatcgg agaggtgccg taccttcatc 780
aggccttcan anggattcaa tacttgggcg aanaaagccc ctatgggctt gcaaacccaa 840
g 841

<210> 2318
<211> 707
<212> DNA
<213> Homo sapiens

<400> 2318
aaactaaaac tgctgcaact ctatgagtct gtcagtcaat taaattccct tgattttcat 60
ttagacacac cattctctga taatgacttg gctctgttac taaggcttga tgaaaaagaa 120
ctgcttaagc tccaggcatt actagagaaa tataagcaag agaacaccag gacaaatgtt 180
cgattttctg atgataaaga tggtgtgttg cctgtaaaaa cattcttgga atatttagaa 240
tatgaaaagg atgtgctcaa cataaagaaa ataagtgaag aggaatatgt ggctttaggt 300
agtttctttt tttggaagtg tttgcatgga gaaagctcca ctgaggatat gtgtcacact 360
ttggagtcgg ctggtcttag ccctcagctg ttgttgtctc tgctcctgag tgtttggctt 420
tcaaaggaaa aggatatttt ggataaacca cagtcaatct actgtcttca taccatgctg 480
tccctcctga gcaagatgaa agtggccatc gatgagacct gggattctca gtctgtgtcc 540
ccatggtggc agcagatgcg cacagcctgt attcagtctg agaacaatgg agccgctctg 600
ttgtctgcgc atgttgggca ttctgntgct gcacagatat caaacaacat gacagagaaa 660
aaattttncc aaacagtttt gggtgctgat tcaaaagccc tnactga 707

<210> 2319
<211> 773
<212> DNA
<213> Homo sapiens

<400> 2319
gttgctgaat ctgttgcctg ctgctggtga actccaggag tctggcctgg ccttgtgtcc 60
tgaggtccaa gatcttcttg aaggttgtga actgcctgac ctcccctcta gccttctgct 120
cccagaggac atggctcttc gtaacctgcc cccgctccga gctgcccaca gacgctttaa 180
ctttgacacg gatcggcccc tgctcagcac cttagaggag tcagtggtgc gcatctgctg 240
catccgcagc tttggtcatt tcatcgcccg cctgcaaggc agcatcctgc agttcaaccc 300
agaggttggc atcttcgtca gcattgccca gtctgagcag gagagcctgc tgcagcaggc 360
ccaggcacag ttccgaatgg cacaggagga agctcgtcgg aacaggctca tgagagacat 420
ggctcagcta cgacttcagc tcgaagtgtc tcagctggag ggcagcctgc agcagcccaa 480
ggcccagtca gccatgtctc cctacctcgt ccctgacacc caggccctct gccaccatct 540
ccctgtcatc cgccaactgg ccaccagtgg ccgcttcatt gncatcatcc caaggacaat 600
gatcgatggc ctggatttgc tgaagaagga acacccaggg gcccgggatg ggattcggta 660
cctggaggca gaagtttaaa aaaggaaaca ggtacattcg ctgccagaaa gaagtgggaa 720
agagctttta nccggcatta actgaanang caggatgcaa atcctggact ctt 773

<210> 2320
<211> 717
<212> DNA
<213> Homo sapiens

0960294B9 - 072800

<400> 2320
agctgcagtt ccacgatgtg cgggatgctg ccgccgagtt cctggagaag aacctttcc 60
cctccaactg cctgggcatg atgctgctct cggacgccca ccagtgccgc cggctgtatg 120
agttctcctg gcgcatgtgc ctggtgcact ttgagacggt gaggcagagc gaggacttca 180
acagcctgtc caaggacaca ctgctggacc tcatctcgag tgatgagctg gagaccgagg 240
acgagcgggt ggtcttcgag accatcctcc agtgggtgaa gcacgacctg gagccacgga 300
aggtccactt gcccgagctc ctccgcagcg tgcgtctggc cttgctgccg tccgactgcc 360
tgcaggaggc catctccagc gaggccctcc tcatggcaga cgagcgcacc aagcttatca 420
tggatgaggc cctgcgctgc aagaccagga tcctgcagaa tgatggcgtg gtcaccagcc 480
cctgtgcccg gccacgcaag gcgggccaca cgctactcat cctgggggc cagaccttca 540
tgtgtgacaa gatctaccag gtggaccaca aggccaagga gatcatcccc aaggccgacc 600
tgcccagccc ccggaaggag ttcagcgcct tagcgatcgg ctgcaaggtc tatgtgacgg 660
ggggcagggg cttcganaac ggggtcttcc aaggatgnnc tgggtgtacc gacaccg 717

<210> 2321
<211> 740
<212> DNA
<213> Homo sapiens

<400> 2321
attgaggaac atggcgttgc tggtgcgagt ccttaggaac cagactagca tttctcagtg 60
ggttccagta tgcagccgat tgatacctgt gtctcctacc caaggacagg gggacagggc 120
tctgtctcgc acttcccagt ggccccagat gagccagtcc caagcatgtg gtggatcaga 180
acagattcct ggaatagaca tacagctgaa taggaagtat cacaccacac gtaagctttc 240
tactaccaaa gattccccac agcctgttga ggagaaggtt ggtgctttca caaagataat 300
agaagccatg ggattcacgg gacctttgaa atacagtaaa tggaagatta agattgcggc 360
cctgcgcatg tatactagct gtgtggagaa aactgacttc gaggaattct ttctaaggtg 420
tcagatgcct gatacattca attcatggtt tcttataacc ctactccacg tctggatgtg 480
tctagtccga atgaagcagg aaggccggag tgggaagtac atgtgtcgta tcatagttca 540
ttttatgtgg gaggatgttc agcagcgcgg cagagtcatg ggggggatcc tttcagatga 600
tcatgggctg gccgctgcct ctggagaacc ttcttcaacc ggaaatgtta agaccctcga 660
catcttgaat tgtggtagag tatgtgagga aacagatccg tacctggact ncatgaacgg 720
gggaggatct gnttntgacc 740

<210> 2322
<211> 824
<212> DNA
<213> Homo sapiens

<400> 2322
aagagctttt ctctggtgaa gatgccgtcc ctgcagcccg tggtgatgtg cgtcatgaag 60
cacctgccca aggttccgga gaaaaaactg aagctggtta tggctgacaa ggagctgtat 120
cgagcctgcg ccgtggaggt gaagcggcag atctggcaag acaaccaggc cttcttcggg 180
gacgaggttt ccccactcct gaagcagtac atcctggaga aggagagcgc tctcttcagt 240
acagagctct ctgtcctgca caacttttc agtccttccc ccaagaccag gcgccagggc 300
gaggtggtgc agcggctgac gcggatggtg gggaagaacg tgaagctgta cgacatggtg 360
ctgcagtttc tgcgcacgct cttcctgcgc acgcggaatg tgcactactg cacgctgcgg 420
gctgagctgc tcatgtccct gcacgacctg gacgtgggtg aaatctgcac cgtggacccg 480

0052804.0072800

tgccacaagt tcacctggtg cctggacgcc tgcatccgag agcggttcgt ggacagcaag 540
agggcgcggg agctgcaggg gtttctcgat ggcgtcaaga agggccagga gcaggtgctg 600
ggggacctgt ccatgatcct gtgtgacccc ttcgccatca acacgctggc actgagcaca 660
gtcaggcacc tgcaggaact ggtcggccag gagacactgc ccagggacag ccccgacctt 720
ctgctgctgc ttccggcttg ctggcgctgg gccagggagc ctgggacatg atcgacaagc 780
caggtctttc aaggagccca agaatggang tangagctta atna 824

<210> 2323
<211> 787
<212> DNA
<213> Homo sapiens

<400> 2323
gcttcatggg aaagggcctg ctgtaccacg gaaattgtga ccgcttcaga ggcaaggctt 60
gccacttggg tctgggtgga atcagaacgt gcaggtctcc caggatgtac actcactgcg 120
ccctttctgc tgcttggtgt tcttctggag gagcgtgagt tctcagcgga gcgcttctcg 180
gcacttctga tgtgcctccc atggagggag ccgggccctt gctgctcagg aggtgcagac 240
tgccccgtgc tctgggcctt gcagctctgt cgctagacgg ttgttagagg ggcagctcta 300
ggctggggct tgcgctgggc cgtggtggga ggcacagtgt ttacaggctc tggtggcaga 360
gcagttggca cacctgtggg tgaatctgcc tgatcccctg gcatttggtc agagtacctc 420
agagcacccc actgctcagg ggctccttct ggctgcagta agctccctgg atggtcacag 480
tgccgcccca tccccaggct gtgtgctcaa agcggacaaa actcaggcca gagccacagc 540
tgggagacct gcactgtccc tgcgaaatac taagaacacc tagggtgtgc tcactgtggg 600
ggccagtttc tcctcggaac atgacaatga agctctttta gagaaaagac ctttgtagat 660
tcaacaatta tgataggatt tttacagaca cctattttgg gctcaatttt cattattacc 720
attaaatgca ttggatagaa ngggactggt cttnacacat catattatag gaagacntat 780
tccagtg 787

<210> 2324
<211> 661
<212> DNA
<213> Homo sapiens

<400> 2324
ttatatttaa gcatggagat gatttacgtc aagatcaact tattcttcaa atcatttcac 60
tcatggacaa gctgttacgg aaagaaaatc tggacttgaa attgacacct tataaggtgt 120
tagccaccag tacaaaacat ggcttcatgc agtttatcca gtcagttcct gtggctgaag 180
ttcttgatac agagggaagc attcagaact tttttagaaa atatgcacca agtgagaatg 240
ggccaaatgg gattagtgct gaggtcatgg acacttacgt taaaagctgt gctggatatt 300
gcgtgatcac ctatatactt ggagttggag acaggcacct ggataacctt ttgctaacaa 360
aaacaggtaa caattaatga ctaccagtag acatacattg tatatgtcca tggtttttac 420
ccctgaatct atgtactaac aagataagtt gcggcctggc gcggtggctc acgcccgtaa 480
tcccagcact ttgggaggcc aagacgggtg gatcacctga ggttgggagt tcgagaccag 540
cctgaccaac atggagaaac cccgtctcta ctaaacacac aaaatttgcc gggcgtggtg 600
gtacatgcct gtaatcccaa ctactnagga ngctgangca ggagaatcgc ttgacccggg 660
a 661

<210> 2325

09/845,950

<210> 863
<211> DNA
<213> Homo sapiens

<400> 2325
attgtgcaac ctctggcaga aactggacta caactctcca aacgaacttt cagtactgta 60
ctaccacaga ttgatactac tggacagttg tttgtacaga ctcggaaagg tcaggaagtt 120
cttattaagg tgaagcattt catgaaacaa cacattcttc cagctgaaaa ggaggtaact 180
gagttctatg ttcaaaatga aaattcagtg gacaagtggg gaaaaccttt agtgattgat 240
aaactcaagg aaatggccaa agtcgagggt ctctggaact tgtttttgcc agctgtcagc 300
ggactcagcc acgtggacta tgccttgatt gctgaagaaa caggaaaatg ctttttgct 360
ccagatgtct ttaactgcca agcaccagac acagggaata tggaggttct gcacctgtat 420
ggaagtgagg aacagaagaa acagtggctt gagcctcttc ttcaagggaa cattacctct 480
tgcttctgta tgacagaacc tgatgtagct tcaagtgatg ccacgaatat tgaatgcagc 540
atccaacgag atgaagatag ctatgtaatt aacggcaaaa aatggtggag cagtggagct 600
gggaatccca agtgcaaagt tgcaattgtt ttgggaagaa ctcaaaatac ttctctctcc 660
agacacaaac agcacagcat gattcttggt cccatgaaca cacctggagt aaaaataata 720
aggcctttgt cagtttttgg ctacacagat aattttcatg gaggacattt tgagatccat 780
tttaatcaag tgcgagttnc tggcacaaat ctaatactag gtggaaggta ggggatttgn 840
aaatttccaa nggccgcctt gga 863

<210> 2326
<211> 747
<212> DNA
<213> Homo sapiens

<400> 2326
aagcaaaaag ttctttatag agttggaagc aagacatcag aataatatct tcatagatga 60
cataagtgac attgtggaaa aacacacagc atccacattt gacccatatg tgaaatactg 120
cacaaatgaa gtctaccaac aacgaacact acaaaaattg ttagctacca atccatcctt 180
taaggaagta ttgtcaagga ttgagtccca tgaagactgt aggaacttac ccatgatctc 240
ttttctcatt ctccccatgc agagggtgac ccgccttccc ctgctgatgg atactatctg 300
tcaaaaaaca cctaaggact ctccgaagta tgaagtctgc aaaagagcct tgaaggaagt 360
tagcaagttg gttcgactat gcaatgaggg cgcccggaag atggaaagga ctgagatgat 420
gtacacaatt aactcccagc tggaatttaa aattaagcct tttcctttag tctcctcttc 480
ccggtggttg gtaaaaagag gtgaattgac agcctatgtt gaagacactg tgcttttctc 540
aagaaggaca tccaaacagc aagtctactt ctttctcttt aacgatgtgc tcattatcac 600
caagaagaag agtgaagaaa gttacaacgt caatgattat tccttaagag atcagctatt 660
ggtggaatct tgtgacaatg aagagcttaa ttcttctnca nggaagaaca gcttcacaat 720
gctctattca agacagaact ntggcag 747

<210> 2327
<211> 781
<212> DNA
<213> Homo sapiens

<400> 2327
aaaacgagtt cagggctcct gggcggccgc cttttccagt tccaggtgtg cagaggtgtc 60

09529650.030200

ctctccccac gcgcggcgtg ctgcacttgg tcgctggctc cgagatcgcg cggggccgcc 120
ggaagcccaa gacggtaccg ggggccgcag ccgcagccgg cgccgccctc cgccctcccc 180
aacagcaggc cgagtcccgt agcatccggt agggaaatgg tcgtgctttc ggtccccgcc 240
gaagtcaccg tgatcctgtt agatatcgaa ggtaccacaa ccccgattgc tttcgtgaag 300
gacattttat ttccttacat cgaagaaaat gttaaagagt atctgcagac acattgggaa 360
gaagaggagt gccagcagga tgtcagtctt ttgaggaaac aggctgaaga ggacgcccac 420
ctggatgggg ctgttcctat ccctgcagca tctgggaatg gagtggatga tctgcaacag 480
atgatccagg ccgtggtaga taatgtgtgc tggcagatgt ccctggatcg aaagaccact 540
gcactcaaac agctgcaggg ccacatgtgg agggcggcat tcacagctgg gcgcatgaaa 600
gcagagttct ttgcagatgt agttccagca gtcaggaagt ggagagaggc cggaatgaag 660
gtgtacatct attcctcaag gagtgtggan gcacagaaac tggtattcgg gcattctacg 720
ganggagata ttctttgagc ttggtgatgg cactttgata ctaagaatgg acacaaaagt 780
n 781

<210> 2328
<211> 850
<212> DNA
<213> Homo sapiens

<400> 2328
caaaaatgaa aagccaggta aagtttccaa gggctgtaag aagcctgcaa aacaaaatgg 60
gaagaaagca acctccaaag tgccctctgc tcctcagttt gttcactcca atgatcatgc 120
caatcgagag gctgaaataa agaagagggt tgaggagatg agggagaagc agcaagctgc 180
ccaggagcaa gaaagacaaa aacgcaggtc tatcaagagc tactgtgagg atatcctaag 240
acgccaggag gagtttcagt gtaaggaaga agttttgcag gaattaaata tgtttcctca 300
gctggatgac gaggccacta tgaaggctta ttacaaggag tccgtgaggt ggtagaatac 360
tctgatgtga ttctggaagt cctggatgcc agagacccat taggctgctg ctgctgcttc 420
caaatggggg aggctatcct atgggcagaa ggcaacaaga agctggtcct ggtcttgaaa 480
aagattgacc tggaccccaa ggaggttgtg aagtggctgg attaccttcg gaatgagttg 540
ccaactgtgg ctttcaaggc caggacccag catcaggtca gctttggagc tgaaaacctc 600
atgagggttc tggggaacta ttgctgcctt ggtgaaatgc gcacccacat ccatatggac 660
attgtaggcc ttccaatatt gggaaaagca gcctgattaa aagcctgaag cacagccatg 720
catgcagtgt gggagccatt cctggggtca cgaaattcat gcaggangtc tacctggaca 780
agttcatccg gcttctggat gcttccagcc attggttcca gggnccaact tcaaaaggtn 840
gggcaccctt 850

<210> 2329
<211> 849
<212> DNA
<213> Homo sapiens

<400> 2329
ctgacgatta gaacacagaa gtttaaagca atgttgtgga tgtgtgaaga gtttcccctc 60
tctctggtgg agcaggtcat tcccatcatt gacctaatgg ctcgaacgag tgctcatttt 120
gcaagactga gagatttcat caaattggaa ttcccacctg gatttcctgt caaaatagaa 180
attcccttgt ttcatgtctt aaatgcacgg attacatttg gaaatgttaa tggctgtagc 240
actgccgaag aatctgtatc tcaaaatgtg gaagggaccc aggctgattc agcttcccac 300
atcacaaact ttgaggttga tcaatctgtg tttgaaattc ccgaatctta ctatgttcaa 360

0356245.07200

gacaatggca gaaatgtgca tttgcaagat gaagattacg agataatgca gtttgccatc 420
cagcaaagtc tgctggagtc cagcaggagc caggaacttt caggaccagc ttcgaatgga 480
gggatcagcc agacaaacac ctatgacgcc cagtatgaga gggccatcca ggagagcctc 540
ctcaccagca cagaaggcct gtgccccagc gccctgagcg agacaagccg ttttgataat 600
gacttgcagc tagccatgga gctctctgcc aaagagctag aggaatggga gctccggctc 660
caggaggaag aggctgagct ccagcaagtc ttacagctgc actcactgac aaatagacct 720
ttcagcctgt gagcctctgc acaaagcaga ngctgtgggc tgcacagatg ctgtgtcaac 780
cagggcccta aggctaangg cctggacctt gcgtgcatgc agcangcaac aactggccct 840
tctttatgc 849

<210> 2330
<211> 908
<212> DNA
<213> Homo sapiens

<400> 2330
attttcttgc cctattgagg aagatctaat gaagctcatc atcaaatatg gcatgactgt 60
agtgcaacat tgtgtgagct gtcttggagc tgttgtaaat aaagtgacac aaaattttaa 120
atttgtgtgg gcttgtttca atagatacta tggtgccatt tcaaaattaa aaagtcaaca 180
ccaagaggac ccaaataaca cttcacttct aacaaacaaa ccagcacttc ttagatccct 240
tttcaccgtt ggagcactat gtcggcattt tgattttgat ctggaagatt ttaaaggcaa 300
cagcaaggtt aacataaaag ataaagtact tgaactattg atgtatttta caaaacactc 360
agatgaagaa gtacaaacaa acgctatcat tggtctagga tttgccttta ttcagcatcc 420
aagtctaatg ttcgagcaag aagtgaagaa tctatataat aatattttat ctgataagaa 480
ctcctcagtc aatttaaaaa tacaagtgtt aaaaaaacct ccagacctac ctacaagaag 540
aagatacacg tatgcagcag gcagatagag actggaagaa agttgcaaaa caggaagact 600
taaaagaagt gggtgatgtt tcctcaggga tgagtagttc catcatgcag ctttatctca 660
aacaggtgct tgaggcattt tttcacaccc agtcaagtgt cgccactttg ccctaaatgt 720
cattgcattg actctaaatc aaggncttat tcatccagtt caatgtgtgc catatttaat 780
tgctatgggc acagacccag aacctgctat gcngaacaag gctgatcagc aacttgnggg 840
aaatggccaa aaatatgctg ggattcattc atatgaaacc atggctggta ttgaanagtc 900
ttaccagg 908

<210> 2331
<211> 805
<212> DNA
<213> Homo sapiens

<400> 2331
aaaaaaaaaa aaaaaaaaat ataatccaca cctactactc aataccttag aaaatcttcg 60
cttccctaat aatgttgaac cagttacaaa tcgttttatt acacagtggc ttaatgatgt 120
tgactgtttc ttggggcttc atgacagaaa gatgtgtgtt ctcggactct gtgctcttat 180
tgatatggaa cagatacccc aagttttaaa tcaggtttct ggacagattt tgccggcttt 240
tatcctttta tttaacggat tgaaaagagc atatgcctgc catgcagaac atgagaatga 300
cagtgatgat gatgatgaag ctgaagatga tgatgaaacc gaggaactgg ggagtgatga 360
agatgatatt gatgaagatg ggcaagaata tttggagatt ctggctaagc aggctggtga 420
agatggagat gatgaagatt gggaagaaga tgatgctgaa gagactgctc tggaaggcta 480
ttccacaatc attgatgatg aagataaccc tgttgatgag tatcagatat ttaaagctat 540

0050504590

ctttcaaact attcaaaatc gtaatcctgt gtggtatcag gcactgactc acggtcttaa 600
tgaagaacaa agaaaacagt tacaggacat agcaactctg gctgatcaaa gaagagcagc 660
ccatgaatcc aaaatgattg agaagcatgg aggatacaaa ttcagtgctc cagttgtgcc 720
aagttctttc aattttggan gcccacacca gggatgaatt gagtatctct ttctttcctg 780
ctgggggcct ggantgnaaa acttg 805

<210> 2332
<211> 761
<212> DNA
<213> Homo sapiens

<400> 2332
acgtatttta gaaacttgaa aaagaaactg acccagaaca agctcatctt gaagggggag 60
ttgataacct tactacattt gtgtgagtct cgggaccatg tggaactggc taaaaatgtc 120
atttacaggt accatgcaga gaacaaaaat ttcactttgg gggagtataa atttggaccg 180
ctttttgtga ggttgtgtta cgagttggat ctcgaggaat ctgcagtgga gctcatgaaa 240
gaccagcatt tacgaggttt cttctcagac tccacatcat tcaatatttt gatggatatg 300
ttatttatca aaggcaaata taaaagtgct ttgcaagtat tgatagagat gaaaaaccta 360
gatgtgaagt tcaccaaaga tacctatgtt cttgcttttg caatttgcta caaactgaat 420
agccctgagt ctttcaaaat ctgtactaca ttaagagaag aagctctact caaaggagaa 480
attctctcca ggagagcatc ctgtttcgct gtggcattag ctctgaatca gaatgagatg 540
gcaaaagctg tgtccatttt ttctcaaatc atgaatccag aaagcatagc ctgcattaat 600
ttaaatatta taatccatat ccagtcaaat atgttggaaa acctgataaa gactctaaaa 660
aatgctgcan aaggaaatta tcaaaatttg ngaaaagaca tgtgttctcg gangaagtgc 720
tggccaaagt gagggaaaaa gtgaaggatg tgcctgcctt t 761

<210> 2333
<211> 843
<212> DNA
<213> Homo sapiens

<400> 2333
ttataagatg ctactgagcc ttcctgaaaa ggtcgtgtcc ccacctgaac ctgagaagga 60
ggaggcggcc aaggaagaag ccaccaagga ggaagaagcc atcaaagagg aggtggtcaa 120
ggagcccaag gatgaggcac agaatgaggg cccggctaca gagtcagagg ccccgctgaa 180
ggaggatggg cttttgccca aaccactctc ttctgggga gaggaagaag aaaaaccccg 240
gggcgaggct tctgaggacc tgtgtgagat ggccctggac ccagaactgt tgcttctgag 300
ggatgatgga gaggaggagt ttgcaggagc aaagctggag gattcggagg tccggtccgt 360
tgcctcaaac cagtcagaga tggagttctc ttcacttcag gacatgccca aggagctgga 420
tccctctgct gtgctccccc tagactgtct gcttgctttt gtgttctttg atgccaactg 480
gtgtggctac ttgcaccggc gagacttaga gaggatcctc cttacccttg ggatccggct 540
cagtgcagag caggccaagc agctggtcag cagggtggtg acccagaaca tctgccagta 600
ccggagcctt cagtacagcc gccaggaggg cctggatggt ggccttcccg aggaggtgct 660
cttcggaaac ctggacctgc tgcccctnct gggaaaagca cgaanccagg tgctgccccc 720
acagaacaca aagccctggt gtcccacaat ggcagcctga ntaacgtggg gagcctgctt 780
cacgcgcgga cacaggacac ggccggtnta ctaagacaga tcncctgga ctgaacttga 840
gga 843

0082760 6/15/2005

<210> 2334
<211> 784
<212> DNA
<213> Homo sapiens

<400> 2334
gtcaggcccc ccagtcttag gtggaaacag caactccaac tcctctggcg gggctgggac 60
cgttggtagg ggactggtca gtgatggaac gtcccctggg gaaagatgga ctcaccgttt 120
tgagaggctg agactcagtc ggggaggggg cgccttgaag gatggagcag ggatggtgca 180
gagggaagag ctgctgagtt tcatgggggc tgaggaggca gcccctgacc cagccggagt 240
gggccgggga ggaggggtgg ctgggcctcc ttcaggggga ggagggcagc ctcagtggca 300
gaagtgtcgc ctgctgcttc gaagtgaagg agaaggagga ggaggaagtc gcctggagtt 360
ctttgtacca cccaaggcct ctcggccccg actcagcatc ccctgctctt ctatcacaga 420
cgtccggaca accacagccc tggagatgcc tgaccgggag aacacgtttg tggttaaggt 480
ggaaggtcca tccgagtata tcatggagac agtggatgcc cagcatgtga aggcctgggt 540
gtctgacatc caagaatgcc tgagcccagg accctgccct gctaccagtc cccgccccat 600
gaccctccct ctggcccctg ggacctcatt ccttacaagg gagaacacag acagcctgga 660
gctgtcctgc ctgaatcact cggagagtct acccanccag gacctgctgc ttggacccan 720
cgagaagcaa tgacccgcct gtccaagggg gcatatgggg ggccttttta aaaccgnccc 780
ttgg 784

<210> 2335
<211> 843
<212> DNA
<213> Homo sapiens

<400> 2335
agaagtgttt gcatcatgga agcagcagtg cctgaaccgt ggcaagcaag acatcagcga 60
gaggctcatc agtgcctcat tatttctccg ttttctgtgt ccagccatta tgtctcccag 120
tcttttcaac cttatgcagg agtatcctga tgaccgcaca tctcggactc taactcttat 180
tgccaaggtc attcagaacc tggccaactt tgccaagttt ggtaacaaag aggaatacat 240
ggcattcatg aatgattttt tagaacatga atggggtgga atgaagcgct ttcttttgga 300
gatctctaat ccagacacca tctcaaacac cccaggcttt gatggttaca ttgatctggg 360
ccgagagctt tcagttttgc attccttact gtgggaagta gtttcccaac ttgataaggg 420
tgaaaattcc ttcctacagg cgaccgtggc aaaattgggg cctctccctc gtgttcttgc 480
tgatattacc aagtcattga ctaatcctac gccaatacaa cagcaactga gacgcttcac 540
tgaacataac tccagtccaa atgtcagtgg aagcctctcc tctgggctgc agaaaatatt 600
tgaagacccc actgacagtg atttgcataa actaaaatct ccaagccagg acaacacaga 660
cagctacttc agagggaaaa cattattgct ggtcagcaag cctnctctca gagcatgact 720
tattctgaaa aggatgaaag gggaaagtag ccttnctaat gggcngacgt cttccttatg 780
gaccttcagg acactcatgc tggtcaagtg gagcatgcat ctggcatgcc tgatgngcct 840
atc 843

<210> 2336
<211> 755
<212> DNA
<213> Homo sapiens

09820760.070800

<400> 2336
attttatttg taggagaggc tcctgagcgc taggtccgca ctgtggtgac tgaacccaga 60
agtcggggag cagttgtcct ccgctgcaca gaggctactc tggagctctg tgacggcgcc 120
cagcgtgacc cactcctggg ccaggatacg gaccgtcgtg cccatatctc ctggctggtc 180
gccctatcct cccgactctg cttaaaacca cgtggttcga tggctgccgc ggctacgctg 240
aggctctccg ctcagggcac agtgactttt gaagatgtgg ctgtgaactt tacctgggag 300
gaatggaatc tccttagtga ggctcagaga tgcctgtacc gtgatgtgac gctggagaac 360
ctggcactta tatcctccct ggtctatgca acaaggtcca gccagatgaa gcctgtagcc 420
aggtagaact gtggtaatat cacctcctga ctttgatccg ttttatctct aagcatttca 480
caacctggta gcaaatcctg ggttaatctt acaagggtgt ttacattggt tgacagaaat 540
gggaatacct ccatataacc tgtcatggac ttggtatcct ggcttcagag attctccagg 600
gtcctcggat caaaggactg aaaaaaatgg cacttaagag tcccaggaca ccacaagcta 660
gagaacctgt agatggcgtc aggaccaatg anggaatgga acacccttca cttcctgngt 720
gggttcctaa gtgcttctgc accaggantg cctga 755

<210> 2337
<211> 828
<212> DNA
<213> Homo sapiens

<400> 2337
atccatgtta agttcagcat cctgcatttt gttcatgaat cacattttaa aaggagaaaa 60
gctcctaagt ttttttaaac agtgatttca aagagaagat aggcctttca taattgctaa 120
ttatacatat aggattaata gtcataaatt atagtaaata aaacttgtac ctattccttt 180
tataaatatg aattggctag gcacagtggc tcacagctgt ggtcccggca ctttgggagg 240
ctgaggcggg cagatcgcaa ggtcaggtgt ttgagactag cctggccaac atggcaaaac 300
cctgtgtcta ctaaaaatac aaaaattagc caggcgtggt ggcaggcacc tgtaattcca 360
gctactcagg aagctggggc acgagaatca cttgaaccct ggtggcagag tttgcagtga 420
gctgagattg ttccactgca ttcctgggca ctgcctgggt gacagaatga gactctgcct 480
caaaaaaaaa aaaagttatt aaaaatagat atttaagatt ccaaaatgta gttgatccag 540
tttgtttccc tgtagcaagt agtgggattt gggtttcatg acatataatt aaaatgttaa 600
tcacataact ataatgccaa caattttctt tatacatttt tgnttaatta tgttgacata 660
tactttgtgt tgnaccttat ttcatgttac taaattttac ataaagatgc tggnctattt 720
ttatttaatc atatactggt atgggttgaa tatagttggt cctaccaaaa ctcatggtga 780
aattagattc cccatgggct angntgggag gcanaaccta atggaagg 828

<210> 2338
<211> 594
<212> DNA
<213> Homo sapiens

<400> 2338
ataaagatgc ttcagactgc aaagaatttg ttgaaagagg agaaattggt gcatagctat 60
ccgtatgact ggaggaccaa gaaacctgtg gttattcgtg ccagcaagca gtggtttata 120
aacatcacgg atattaagac tgcagccaag gaattgttaa aaaaggtgaa atttattcct 180
ggatcagcac tgaatggcat ggttgaaatg atggacaggc ggccatattg gtgtatatca 240
aggcaaagag tttggggtgt tccaattcct gtgttncatc ataagaccaa ggatgaatac 300
ttgatcaaca gccaaaccac tgagcatatt gttaaactag tggaacaacn cggcagtgat 360

0095945 0072800

atctggtgga ctcttccccc tgaacaactt nttccaaaag aagtcttatc tgaggttggt 420
ggccctgatg ccttggaata tgtgccaggt cangatattt tggacatctg gtttgatagc 480
ggaacttcat ggtcttatgt tcttccaggt cctgaccaaa gagcagatnt gtacttggaa 540
ggaaaagacc agctcggggg ttgntttcag tcatccttat taacnagtgt ggca 594

<210> 2339
<211> 736
<212> DNA
<213> Homo sapiens

<400> 2339
aagtcattct gtgcaattcc tcagagctct gtgggagaag acccaggcag ggggtgctca 60
cagctttgaa actgccatga tggagtccac gtttccacag cagaaggatc tggaccaggt 120
acagctccat ctggaagaag tgaggttctt tgacgtgttt ggcttcagtg aaacagcagg 180
agcatggcaa tgcttcatgt gcaacaatcc tgagaaagca actgttgtaa atcaagatgg 240
ccagcctctc atagaaggaa aacttaaaga gaagcaagtc agatggaagt tcatcaaaag 300
gtggaaaaca cgctatttta cactggctgg aaatcaactt ctgtttcaaa aaggaaagtc 360
taaagatgac cctgacgact gcccaataga actcagcaaa gtacagagtg tgaaggctgt 420
ggccaagaaa cgcagggacc gctctctccc ccgggctttc gaaatcttca cagacaataa 480
aacctatgtc tttaaggcca aggatgagaa gaatgcagaa gaatggctcc agtgcatcaa 540
cgtggcagtt gcccaagcca aagaaaggga aagtagagaa gtaaccacat atctgtaggg 600
atttataagt cagccatgac aattatacac cacaggcatt gtattatcat tgccaatgtc 660
aagaaaaaga gctaaattta ccaagccatg ttggttttta ctaaatacca atggaattgg 720
tgnncctttaa naanaa 736

<210> 2340
<211> 840
<212> DNA
<213> Homo sapiens

<400> 2340
ttaaagcttc cagaaccttc agcctcattg ccaaatcctc catcaaagct cctctgcagc 60
tggtatgttt atctcctaga tccagagaat ggagaagcca atcataaacc acacctgact 120
gcaaattgca gcgttccttc agcccaggcc agatcccaga tgagttaaac tctgctccaa 180
gacagggaaa taaacatgtg caccagcttg tcagtgaggt catttcttca gccagcaaag 240
taacggatgc cttgagaatg taaaatggac atattgtgga tgttacaaac tttccttctc 300
ccttgcattg ttttcttggc cttcaaggta gctaaaatgc tcataatttt ttatgtcatt 360
ccctgtataa aggtggtggt ggctccaaag acattgtcct tagaaaagga cagaaaattg 420
aaagtacagc agtgtttgtt tgggcctatg ttcagcatgt tgtcaaaaaa aaatgcatgt 480
tttactctct tggagaatag cactgggcag aagtctgttg ctgtaagatc taaggactgc 540
tctaggccag acccatgcgt ctttcattcc ggtagttaat ctctgacagt agctctagag 600
gacctagaga ggcacagttg tcttgctgaa actaagaggg taggttctca gcgtgcttct 660
tatttttctt catccaaaaa tgaagcagat ttttttctnc caaatatcta tcttccttag 720
taacttagag atcattcatg gaattgatct aaacctattc ttggaagctt taaccttggg 780
atcctttgg agtaatatgg ttcataactt taatcttctc tgntnccgga ttctggnttc 840

<210> 2341
<211> 720

0083270.5044.5050

<212> DNA
<213> Homo sapiens

<400> 2341
gttagtctcc gctgctagtt cttggctctg ggaggcccag gtggctctgc agcagcctct 60
gccaccctgt gacctgcgag tattgggaca tccctagctg acgccaggac acccgggaag 120
ccgaggaatg gtgagtggac tgcgcctggc ttcccgaagt ggagaagagg gctggttgaa 180
acctgctgtg gcgcgactcg ggcctccacg ccatcggctc cggaacctgc ggaccgagtc 240
gccgtggcgt agccggggct cagtcctctt ctgttcaggg ccgggccggg cggggcgggc 300
agcggaaccc ctgcatcctg tctgtacctg cgggcgccac ttccgccggc cggatccctg 360
tcgggaaccc ctcgcctccc ctatccagga ctcggtggct tttgaggatg tggctgtgaa 420
ctttacccag gaggaatggg ctttgctaga ttcttctcag aagaatctct acagagaagt 480
gatgcaggaa acctgtagga acctggcttc tgtaggaagc caatggaaag accagaatat 540
tgaagatcac ttcgaaaaac ctgggaaaga tataagaaat catatcgtac agagactgtg 600
tgaaagtaaa gaagatggtc agtatggaga anttgtcagc caaattcaaa tcttgatctg 660
aacgagaaca tttctactgg attaaaacca tgtgaatgcn natttgggga aaagtctttg 720

<210> 2342
<211> 724
<212> DNA
<213> Homo sapiens

<400> 2342
cttactgctg gacttgttct ttaagtacac ctggaataac tttttgcact tccaagtgga 60
actatgcata gccgctattc tctcccacgc tgcccgtgag gagaggacag aagccagcgg 120
atccgagagc agggtggagc ctccgcatga gaacgggaac cggagcctgg agactcccca 180
gccggccgcc agcctccctg acaacacaat ggtgacccac ctgttccaga agtgctgcct 240
ggtgcagagg atcctggagg cctgggaagc caacgaccac acgcaggcag cgggtggcat 300
gagacgtggg aacatgggcc acctcacacg gatcgccaac gcggtggtgc agaacctgga 360
gcggggccct gtgcagacgc acatcagcga ggtcatccga gggctccctg cggactgccg 420
tggccgctgg gagagcttcg tggaggagac gctgacggag acgaaccgca ggaacactgt 480
ggacctggcc ttctctgact accagatcca gcagatgaca gccaacttcg tggatcagtt 540
tggcttcaat gatgaggagt ttgccgacca ggacgacaac atcaatgcct cgtttgacag 600
gatcgcagag atcaacttca acatcgacgc tgacgaggac agtcccagcg cagctctgtt 660
tgaggcctgc tgcagtgacc cgnatncagc cctttgatga tgatgangac caggacatct 720
ggga 724

<210> 2343
<211> 667
<212> DNA
<213> Homo sapiens

<400> 2343
ttaattcaat aaagtataat atgggtaaag tcatagagaa ataattataa aagtgtattt 60
atttctacct gtttgtctaa ctattcatac atcccctatc tagcatttgt atatatgcac 120
aagaacatga agtagtgttt acttcatatt aatgattggt tttcccggat gatggggttt 180
agactcatat tgtctttcgc cattttggta cttttcttca ctgcttaaat gctttataat 240
gtacttttt tctttctgcc aaaacaattt agtgagggtg tttttttaaa caaagatgtt 300

Docket No. 2005-0168

ttcctcatat tattaaagag gatttttctc agagaaatat taaaaagtaa attagttgat 360
atttaaatga ctaccttagt tgatgtgctt tccaccaaaa gcctgaacca taagatgtgt 420
gtacggtgta gcaggcataa caactgcatc ccgtctccca gcactaggat agcaagtccc 480
cgtcgcccca ccaagcaatt caatgggtga gtccaaggca ttttgcatat ttccagtttc 540
agttgttggg ggctgggtgt cagggcagta aaaataatat gnctgctctc ttttcagcca 600
catggcttga agaaacaatt ctcagatccg aaggtgctct ttcctgaaaa attangcatg 660
aanagaa 667

<210> 2344
<211> 779
<212> DNA
<213> Homo sapiens

<400> 2344
agaaagacaa aaggctgaaa tggctttgct tatgatggat gaggacgagg acagtaagaa 60
acacttcaat tacaacaaga ttgtggagca ccagaatctg agcaaaaaga agaaaaagca 120
gctcatgaaa aagaaggaat taatagagga tgactttgag gtaaatgtta acgatgcacg 180
gtttcaggca atgtacactt cccacttgtt caatttggac ccctcagatc ccaatttcaa 240
gaaaacaaaa gctatggaaa aaatccttga ggagaaggcc cggcaaagag aacgaaaaga 300
acaagaactt actcaggcaa taaagaaaaa agagagtgag attgaaaagg aatcacaaag 360
gaagtccatt gatcctgctt tgccaatgtt gattaaatct ataaaaacca aaacagagca 420
gtttcaagca agaaaaaagc aaaaagtcaa ataactggat gttacttatt tttgaactga 480
atacatcttt tcctaaaatg tacaaaaata gtaggaggga atatttattg ggaacaaagc 540
tatctttcaa gaacatgaat aaaatctttt tctggacata gtaaaatttt tctccataaa 600
taattgtctt aattgtggat gactgacaaa tttttattgn atattcctac agatcagtca 660
taattaaatt acctgcatta tanggtttat aaaatttta tattttacaa tggtcagttc 720
taactagtgg aaagtactct agctttttaa aangctggtt acaattctgn gtaaaaatt 779

<210> 2345
<211> 850
<212> DNA
<213> Homo sapiens

<400> 2345
ttttcaagag cttgggatgt tcttcttgac catatacagt cagcagcact cagcaaaaac 60
aatgaagtat ctctggctgc tctgaaaagc ttccaggaaa ttttacagat tgtgtccct 120
gtcagagact cagataagcc tgagacacca cctgtagtta atgtacctgt gcctgttctt 180
atagggccca tatcaggcat gagcaggcca tttgtaagaa cagattccat tggagaaaaa 240
ctagggagat atagtagctc tgagccaccc attgttactg atgagcttga agatttgaat 300
ctatggtggg ctgcgtggaa tacctggtat agaattggat ctgaaagtac taagcctcct 360
attacttttg ataaactaac ttttattcct agccagcctt ttcttacagc tttaattcag 420
atatttccag ctctctacca acacataaaa actggtttca atatggatga cttgcaaaag 480
ttgggagtca tattgcacag tgctatttca gtcccaataa gttcagatgc atccccttt 540
attcttccat cttataccga agcagttttg acaagtttac aggaagctgt acttacagct 600
ttagatgttc tccaaaaggc catttgtgta ggaccagaaa acatgcagat aatgtatcca 660
gctatatttg accagttgtt ggcatttgta gagttttcct gtaaaccttc acagtatgga 720
cagntggaaa caaagcacgt tgcaaatgcc aaatataatc aggcggaatg ggtagccttg 780
aattatgtgc cgnttgctga aaggctttan aagtagttgg ggattatcca aaaacaggtg 840

09352480 - 07-NOV-00

tncaaacatg 850

<210> 2346
<211> 859
<212> DNA
<213> Homo sapiens

<400> 2346
actctaggcc tttcggttcg cgcgagcggg caggaaagcg tgcgtgcggc taagagagtg 60
ggcgctctcg cggccgctga cgatggaaga actggagcaa ggcctgttga tgcagccatg 120
ggcgtggcta cagcttgcag agaactccct cttggccaag gtttttatca ccaagcaggg 180
ctatgccttg ttggtttcag atcttcaaca ggtgtggcat gaacaggtgg acactagtgt 240
ggtcagccag cgagccaagg agctgaacaa gcggctcact gctcctcctg cagctttcct 300
ctgtcatttg gataatctcc ttcgcccatt gttgaaggac gctgctcacc ctagcgaagc 360
taccttctcc tgtgattgtg tggcagatgc actgattcta cgggtgcgaa gtgagctctc 420
tggcctcccc ttctattgga atttccactg catgctagct agtccttccc tggtctccca 480
acatttgatt cgtcctctga tgggcatgag tctggcatta cagtgccagg tgagggagct 540
agcaacgtta cttcatatga aagacctaga gatccaagac taccaggaga gtggggctac 600
gctgattcga gatcgattga agacagaacc atttgaagaa aattccttct tggaacaatt 660
tatgatagag aaactgccag aggcatgcag cattggtgat ggaaaagccc tttgtcatga 720
atctgcagga tctgnatatg gcagtcacca cacaagangt ccaagtggga cagaagcatc 780
aaggcgcttg agatcctcat accttaaaac aagtgctttc cttgcaagga atcnatagcc 840
caatgggtaa accagccnn 859

<210> 2347
<211> 832
<212> DNA
<213> Homo sapiens

<400> 2347
agacacaagg agaggcttgg agagagcaga cgccttctgg attcaagaag acgaggccca 60
ttcccctcag gctcacctgt tactcggcct cccagaaaga tggataggag aaatgactac 120
ggatataggg tgcctctatt tcagggccct ctgcctcccc cggggagcct ggggcttccc 180
ttccctccag atatacagac tgagaccaca gaagaggaca gtgtcctgct gatgcatacc 240
ctgttggcgg caaccaagga ctccctggcc atggacccac cagttgtcaa ccggcctaag 300
aaaagcaaga ccaagaaggc ccctataaag actattacta aggctgcacc tgctgccccc 360
ccagtcccag ctgccaatga gattgccacc aacaagccca aaataacttg gcaggcttta 420
aacctgccag tcattaccca gatcagccag gctttaccta ccactgaggt aaccaatact 480
caggcttctt cagtcactgc tcagcctaag aaagccaaca agatgaagag agttactgcc 540
aaggcagccc aaggctccca atccccaact ggccatgagg gtggcactat acagctgaag 600
tcacccttgc aggtcctaaa gctaccagtc atctcacaga atattcacgc tccaattgcc 660
aatgagtcag ccagttccca agccttgata acctctatca agcctaagaa agcttccaag 720
gctaagaagg ctgcaaataa ggccatacta gtgccaccga ngtctcgctg gctgcaactg 780
gcacccatac agnttccacc caaggccaaa ttaccaatga gacaagcngt at 832

<210> 2348
<211> 890
<212> DNA

0960250 0960250

<213> Homo sapiens

<400> 2348
atggactttt ctcattggcc tcatgtgctg cccttggagc caggggggctg catagacttt 60
cagacagaga acagctcccg gcactgtctt gtgacctaca ggcctgataa aaatcacacc 120
accatacgaa gtgtgctgat ggaaatgtcc taccgactgg atgacactgg aaatccaatc 180
tgctcctgcc agcctgtaca tacatttttt ggaggaccta cttgcaaact attgaccaaa 240
aatgccattt tccaaagccc agagaatgat ggcaacatcc tggtgtgtac tggggatgaa 300
gcagcaaatt ctgccctgct gtgggatgct gccagtggct cgttgctcca ggacctacgg 360
accgatcagc ctgtgttgga catctgccca tttgaggtga accgtaacag ctacttggct 420
accttaacag agaagatggt ccacatctat aagtgggagt gactgtggtc tcgaaacctt 480
gaaggcatgc tgctggttag atgttgtttg ctagcgccta gcagccccaa gcaagatccc 540
tgtttattgt ctgcagtcta gaacattggg aatcatggtt tgtttgcatt agtatgattc 600
taggacccta ggtcactgag acactacaga ttgtgtatct ggtatgtcca ctaaaagagt 660
aattgatggg tactttatct acattatcca tttcttgggt ttaaaagcct tcattaacca 720
ttattggatg ttggaaattc ttaatttctt aatttctggg ngactttctg ggccttaaaa 780
aagtggcctc tcatcatcta ngatgtaatg ggcattaagc attttctggg gaatatgaca 840
tcccatctga gttggcctgn cncttaagta tccttgaagg gctaaccctc 890

<210> 2349
<211> 745
<212> DNA
<213> Homo sapiens

<400> 2349
ggggtgatca tggacgcttg acaacctgcg ggcaggcgcc gggaggccga gccagcgact 60
aagaggaccg agaggtggcg tggacagatt tcaaggccag agaatggcag gggaacagaa 120
accctcaagt aatctcctgg agcagtttat tttactagcc aaaggtacca gtggctcagc 180
cctcactgct ctcataagcc aggtcttaga ggctcccgga gtgtatgtct ttggagaact 240
tctggagctg gccaacgtgc aggagcttgc ggaaggagct aatgctgctt atttgcagtt 300
gttgaacctg tttgcctatg ggacataccc agattacata gccaacaagg agagcctgcc 360
agaactgagc acagctcagc agaacaagct gaagcatctt accatcgtga gcttggcatc 420
aagaatgaag tgtatcccct actccgtgtt gctgaaagac ctggagatgc ggaatctccg 480
ggaactagaa gaccttatca ttgaggctgt ctacactgac atcatccagg gcaagctgga 540
ccagcgaaac cagctgctgg aagtggattt ctgcattggc cgtgacatcc gaaagaagga 600
tatcaataat attgtcaaga ccctgcatga atggtgtgat ggcttgtgaa gcagttctac 660
tgggcatcga ncaacaagtt cttgagagcc aaccagtaca aaagagaacc cncaacccga 720
acttcaacaa ccaggtanaa aaccc 745

<210> 2350
<211> 891
<212> DNA
<213> Homo sapiens

<400> 2350
attacgcgct cttaaggttt ctccgtggtg ttttggaagg tcccggcacg gctaccgtcg 60
ccccacgcta ggaaattttt ttttatttc aacctttgtt acatagcact gaggctacaa 120
gatcatagtt catttaaagc ccccatccct gcaaggtggt gctttctacc aatatgaatc 180

09629469.070800

ttttcaacct ggaccgtttt cgctttgaga aaaggaataa gattgaggaa gcgcccgaag 240
caacccctca accttcccag cctggccctt cttcaccaat ttctcttagt gctgaagagg 300
agaatgctga aggggaagtt agcagggcaa acactcctga ttcagatata actgaaaaaa 360
cagaagattc tagtgttcca gaaactccag ataatgaaag aaaagcaagt atatcatatt 420
tcaaaaatca aagaggaata cagtatattg atttgtcttc tgatagtgaa gatgtcgttt 480
ccccaaattg ctccaataca gttcaagaga aaacattcaa caaagataca gtgattatag 540
tttctgagcc atctgaagat gaagagtccc aaggccttcc taccatggca cgtagaaatg 600
atgatatttc agaactggaa gacctttcgg aattggaaga ccttaaagat gctaaacttc 660
agactttgaa ggaacttttt ccacaaagaa gtgacaatga tttacttaag ttgattgaat 720
caacaagcac tatggatgga gcaattgctg ctgccttgct gatgtttggt gatgcangtg 780
gtgggcccag gaaaagaaaa ttatcttctt cttcagagcc ntatgaggaa gatgaattta 840
aangatgatc aatctattaa aaaggaccag actggatcat gganaggaat c 891

<210> 2351
<211> 664
<212> DNA
<213> Homo sapiens

<400> 2351
acgatgcctg agatcagagt cacgcccttg ggggccggcc aggacgtggg ccgaagctgc 60
atcctggtct ccattgcggg caagaatgtc atgctggact gtggaatgca catgggcttc 120
aatgacgacg tgagtccctt gggcaggagg cccagaggct gggagagccg gccatccaca 180
gctggaccct gggcctcaga gccgggacag tggggtggtg ggcagcagtg gttgtgcttg 240
gatggctgca ccctgtgggg agcagggatg ggtgggcctg gccgaggtga gcccctgcat 300
ggtggggtcc ccctgtgctg gcgctgagcc ccagccccgg ggtcctgtag gctggactcc 360
gtgagaccct gggctcagct tccagctcac atctgtcagt gaggttgggg gtaacctcgg 420
cccctccgga tgctgtgagc agccaggggt cctggtgcca cctgcgggat gggagtgccc 480
agcctgagtc tgcacataga acccccccttc ctgggggccc ctccctgggg catgggtggc 540
cccagatgct gcctggagac cactgtgcaa cctgaaaccc cnacatnctt ctagcgacgc 600
ttccctgact tctctacatc acccanaacg gccgctaaca gacttctgga ctgtgtgatc 660
atta 664

<210> 2352
<211> 800
<212> DNA
<213> Homo sapiens

<400> 2352
aaagggaccg aaacccttca gggaagtcat tgcagggccc ttgcttagaa acaatgggca 60
gtctctggag agcagcagcc tggaggggtc tcacgtgggc gtctatttct ccgcacattg 120
gtgtccgccc tgccgaagcc tcacccgggt cctggtggaa tcctaccgga agatcaagga 180
ggcaggccag aacttcgaga tcatcttcgt tagtgcagac aggtcggagg agtccttcaa 240
acagtacttc agtgagatgc cctggctcgc cgtcccctac acggatgagg cccggcggtc 300
gcgcctcaac cggctgtacg gaatccaagg catccccacg ctcatcatgc tggacccgca 360
gggcgaggtg atcacgcggc aggggcgggt ggaggtgctg aacgacgagg actgccggga 420
gttcccctgg caccccaagc ccgtgctgga gctctccgac tccaacgccg cgcagcttaa 480
cgagggcccc tgcctcgtcc tttttgtaga ttctgaggat gacggagagt ccgaggcggc 540
caagcagctg attcagccga tagctgagaa aatcattgcc aagtacaaag ccaaagagga 600

0962945.0962800

ggaggcaccc cttctgttct tcgtagcccg gggaggatga catgactgac tccctgcgag 660
attacaccaa cctgcctgag gctgcccctt tgctcaccat cctggacatg tcancccggg 720
ccaaatacct tgatggacgt ggaaggagat cacccccggc attcgtggga ggccttttgn 780
ggaaatgact ttncttaacc 800

<210> 2353
<211> 751
<212> DNA
<213> Homo sapiens

<400> 2353
caaaccaatt gtccaaatag cagtgataga aaattctgaa tcactggact gtcagttatt 60
ggctgtcaca catgcaggtg ttaggttata ttttagcact tgtccattca gacagccatt 120
agcacggcct aatacactga cgctggttca tgtccgctta cctcctggat tctcagcatc 180
ttcaaccgtg gaaaagcctt caaaagtaca tagagctctt tatagtaaag gtattctatt 240
gatggcagcc tcagaaaatg aggataatga tattttatgg tgtgtcaacc atgatacttt 300
tcctttccaa aagccaatga tggaaaccca gatggcagct ggtgttgatg gtcattcctg 360
ggctctttct gcgatagatg aattgaaagt agataaaata attacacctt taaacaagga 420
tcatattcca ataactgatt caccagttgt tgtacagcag cacatgttac ctccgaagaa 480
atttgttctc ctctcagcac aggggagcct tatgtttcat aaacttagac ctgtagatca 540
actgaggcat ctacttgtga gtaatgtggg aggagatgga gaagagattg aaagattctt 600
taaattacat caggaagacc aggcttgtgc aacttgcctt attcttgctt gctccactgc 660
tgcctgtgat agagaagtat ctgcctgggc tactcgggct ttctttangt atggtggtga 720
agcacagatg agatttncaa ccactcttnc g 751

<210> 2354
<211> 784
<212> DNA
<213> Homo sapiens

<400> 2354
atttgggagc ggccccgaga cgcgcctggc gcggatccta aatcccgaca gctttataga 60
gcccaggcct ggcaggctcc cagaacttga agccaccaga ccccacatgg aaccaaaggc 120
ctcctgtcca gctgctgcac ccttgatgga gagaaaattc catgttcttg tgggtgtcac 180
ggggagtgtc gcagccctga agttgcctct tctggtgtca aagcttttgg acattcctgg 240
gctggaagta tcagtggtca caactgagag agccaaacat ttctacagcc cccaggacat 300
tcctgtcacc ctctacagcg acgctgatga atgggagatg tggaagagcc gctctgaccc 360
agttctgcac attgacctgc ggaggtgggc agacctcctg ctggtggctc ctcttgatgc 420
caacactctg gggaaggtgg ccagtggcat ctgtgacaac ttgcttacct gcgtcatgcg 480
ggcctgggac cgcagcaagc ccctgctctt ctgcccggcc atgaacaccg ccatgtggga 540
gcacccgatc acagcgcagc aggtagacca gctcaaggcc tttggctatg tcgagatccc 600
ctgtgtggcc aagaagctgg tgtgcggaga tgaaggtctc ggggccatgg ctgaagtggg 660
gaccatcgtg gacaaagtga aagaagtcct cttncagcac agtggctttc agcagagttg 720
acctgggatt tctgtcatgg gtgtccctct gtactcanaa tgggttcang cccaagtcgg 780
tgaa 784

<210> 2355
<211> 777

09609460 .09209800

<212> DNA
<213> Homo sapiens

<400> 2355
aaaacaaaat aaggatttcc agaatgcatt taagatacac aatgccatca cagtacacat 60
gaacaaggcc agtcctccat ttcctcttat ctccaacgca caagatcttg ctcaagaggt 120
acaaactgtt ttgaagccag ttcatcataa ggaaggacaa gaactaactg ctttgctgaa 180
tactccacat attcaggcac ttttactggc ccacgataag gttgctgagc aggaaatgca 240
gctagagccc attacagatg agagagttta tgaaagtatt ggccagtatg gaggagaaac 300
tgtaaaaata gttcgtatag aaaaggctcg tgatattccg ttgggtgcta cagttcgtaa 360
tgaaatggac tctgtcatca ttagccggat agtaaaaggg ggtgctgcag agaaaagtgg 420
tctgttgcat gaaggagatg aagttctaga gattaatggc attgaaattc gggggaaaga 480
tgtcaatgag gtttttgact tgttgtctga tatgcatggt actttgactt ttgtcctgat 540
tcccagtcaa cagatcaagc cgcctcctgc caaggaaaca gtaatccatg taaaagctca 600
ttttgactat gacccctcag atgaccctta tgttccatgt cnagagttag gtctgtcttt 660
tcaaaaaggt gatatacttc atgtgatcag tcaagaagat ccaactggtg gcaggcctac 720
agggaaaggg accaagataa tcaacctcta cccgggcttg ntccanggna aagcttt 777

<210> 2356
<211> 812
<212> DNA
<213> Homo sapiens

<400> 2356
ttatttacct ttttactttt taaaaaattc ttgtgaagtt actttgtgag ttttccagga 60
tgtgtgtaaa ctacacacat cagccaccta ggtagttttg agttgctttg aagttcagct 120
gttgttgact tcaaaggcag cagcttatga aagttggaga aatagaacat tttccagtcc 180
ctattcaggg gttggtgacc tccgtggccc ccagcctcgt ggctttgggc tttggaaggc 240
tggtgtctgg tctcactgat ggctacaggc tggactcacc cccaccatct ctgtcctcac 300
caaccctgtc cccagccccc tggctcatcc ccagtatcct ctacaaacct gctcctactc 360
gggtccaggg caggaggctg agcactgtgg gccatcctgg gagcctcagg ctgcacaggt 420
tgctgacctt ggactgtaag ggctgggtac gaaggcagaa ggtggggatt ctcaggcaat 480
gcagcaggcc tgcgagagac tctggggagg agcaacaggg ctctctaaat tgccacctgc 540
aagtggctgc gtcctcctac catggggcac ccaggaccca gctcaggctt gcacctgggt 600
tcttccttgt tgaacctgtg gcaaagcaag gaggagactt ggtctactcc ctcctgggca 660
gcctctgctg actgccctat aggtgctggg cactgtgtct gggacacaag agactgtgaa 720
angcctcctc ttccacaagt ggaaaactgc cagcagcatg angaaggccg ggttcatgcc 780
agggtccctt ggcaaggccc tgaagggncc aa 812

<210> 2357
<211> 873
<212> DNA
<213> Homo sapiens

<400> 2357
aatcaatagt tgcccagtga aatcactgtc ttcgttgcct gtagctgatt tttaaaagca 60
ttggtgctga tgagaccgtc caaggacaag gaggtcggag gctgatcagc ttctctctct 120
cagatttcca agccatgggg ttgaagaaag ggatgttttt caacccagac ccttatctga 180

09529469.030200

agatttccat tcagcctggg aaacacagca tcttccccgc cctccctcac catggacagg 240
agaggagatc caagatcata ggcaacaccg tgaaccccat ctggcaggcc gagcaattca 300
gttttgtgtc cttgcccact gacgtgctgg aaattgaggt gaaggacaag tttgccaaga 360
gccgccccat catcaagcgc ttcttgggaa agctgtcgat gcccgttcaa agactcctgg 420
agagacacgc catagggtaa acctgtgact gagatcttac tatcactagg ttcccaccaa 480
caggtcgtgc ccaaaggtgg cctgtaggct gcaatagtat agtctcacag agagtcaaaa 540
tggtatcatt atatttcctt tgtttttcct actaattatg ttgcctgagc caacataagt 600
gtttgttata ttaaacaaac ccatcccttt tcacttgatg tgtaacactg gttacttacc 660
caagagagta aaaaatccta ttaaaaatat taaacagtat taaaagaagc cctcaatggg 720
gcatttttct gtacaggtag aaactaaagg ttggtttact atgaagaata ttatttcatt 780
catatgccat ctggggatgt aaagatttaa tcatatgnga catttncata acaggatgga 840
atactgggta actactgnag aagttcttac tta 873

<210> 2358
<211> 695
<212> DNA
<213> Homo sapiens

<400> 2358
gctaaagagc gcgggtcctc ggccgtggag ggtcaagtgg cttcttctga gcgctgaggg 60
aggggagcgt gcgtagggga tggtgccagc gctgcgttat ttggttggtg cctgcggacg 120
ggcccgcggg cttttcgccg gtggctcccc tggggcgtgc gggttcgcgt ctgggaggcc 180
aagaccgctg tgtggaggta gccgcagcgc cagcaccagc tcatttgata tagtcatcgt 240
tggtggcgga attgtggggc ttgcctctgc cagagcactc atcctgcgac atccatcact 300
ttctattggt gttctggaaa aggagaaaga tttagctgtt caccagactg gacataacag 360
tggtgtcata catagtggaa tttattataa acctgagtct ctgaaagcca aattatgtgt 420
acaaggtgca gccctcctct atgagtactg tcagcaaaag gggatttcct acaagcagtg 480
tggcaagctt atagtagctg ttgaacaaga agaaattccc agacttcagg ccctatatga 540
gaaaggcctc cagaatggtg tcccgggcct gaggctgatc cagcaggagg atataaaaaa 600
gaaggagcca tattgtangg gtctaatggc tattgattgt cacatactgg cattgtggac 660
tatcggcagg tggctttgnc atttgcccan gattt 695

<210> 2359
<211> 868
<212> DNA
<213> Homo sapiens

<400> 2359
agctgtgttt tattgcacac ctaaatcctg attataggct tttcatttct ccgcaaagcc 60
tttattttgg cagttaagcc aaatgtgttt tccagaaagt tagttatttt ctcctctttc 120
tttcctttct ttcctccctt tttcccgtct gaccccaaac gttattgtcc aaacatgact 180
ggacagcagc ttttgtttct tgaccctgta atatgacagt ctgctaatat tgacagaagg 240
tgcagttttt gggttatagt cgtgattttc gctaatcaat catattagca ggaaaaaaaa 300
tgacttgttt ctgttgtact tgagtcttaa gaaaaagtgc ccatagttta gtgacaattt 360
ccaaaggctt tagtaccacc tgtatttcaa aatgggggac ccaaactccc ggaagaaaca 420
agctctgaac agactacgtg ctcagcttag aaagaaaaaa gaatctctag ctgaccagtt 480
tgacttcaag atgtatattg cctttgtatt caaggagaag aagaaaaagt cagcactttt 540
tgaagtgtct gaggttatac cagtcatgac aaataattat gaagaaaata tcctgaaagg 600

09823469 - 070800

tgtgcgagat tccagctatt ccttggaaag ttccctagag cttttacaga aggatgtggt 660
acagctccat gctcctcgat atcagtctat gagaagggat gtaattggct gtactcagga 720
gatggatttc attctttggc ctcggaatga tattggaaaa aatcgctggg ctnctggttt 780
ctaggggggа aagaatctga tgagccttta aggccggtca agcccaaatt ggagtttcat 840
catgggggac tttnaaaaac cagttntg 868

<210> 2360
<211> 759
<212> DNA
<213> Homo sapiens

<400> 2360
cttagcctat gctggctaca tcccttatcc gaaggaggaa ctccctttaa ggagcagccc 60
cagccctgct aacagcactg ctggtaccat tgacagcgac agctgggacg cgggtttctc 120
agacatcgcg tcctcagtgc ccttgccagt ctctgaccgc tgctttagcc acctgcagcc 180
tactctcttg cagcgagcca agcccagtaa cttcctgctg gacagaaaga aaacggacaa 240
gctgaagaag aagaagaaga ggaagcgcag ggacagtgat gcgcctggga aagaggggta 300
cagggggggc ttgctgaagc tggaagccgc tgacccctac gtggagaccc ccacgagtcc 360
caccttgcag gatatccccc aggctcccag cgacccctgc tcgggctggg actccgatac 420
tccctcgagt ggatcttgtg ccactgtgtc acctgatcag gtcaaagaaa taaaaactga 480
aggcaaacgg actatcgtcc ggcagggaaa gcaggtggtg ttccgagatg aggacagcac 540
tggcaatgat gaggacatca tggtggactc agatgacgat tcctgggacc tcgtgacctg 600
cttctgcatg aagccatttg ccggccggcc catgatcgag tgtaatgagt gccacacctg 660
gattacctgt cctgtgcgaa aatccggaaa tccaatggtn canaatgttt gctgncaaaa 720
gtgccgggac ttcaagtttg acatccgccg ttcaaccgt 759

<210> 2361
<211> 792
<212> DNA
<213> Homo sapiens

<400> 2361
cacatttttg cccaaatgtt aaacttaaag ctcagacata tgaactccag gaaagtaatg 60
ttcaattgaa attgaccatt gtgaatacag tgggatttgg tgaccaaata aataaagaag 120
agagctacca accaatagtt gactacatag atgctcagtt tgaggcctat ctccaagaag 180
aactgaagat taagcgttct ctctttacct accatgattc tcgcatccat gtgtgtctct 240
acttcatttc accgacaggc cactctctga agacacttga tctcttaacc atgaagaacc 300
ttgacagcaa ggtaaacatt ataccagtga ttgccaaagc agatacggtt tctaaaactg 360
aattacagaa gtttaagatc aagctcatga gtgaattggt cagcaatggc gtccagatat 420
accagttccc aacggatgat gacactattg ctaaggtcaa cgctgcaatg aatggacagt 480
tgccgtttgc tgttgtggga agtatggatg aggtaaaagt cggaaacaag atggtcaaag 540
ctcgccagta cccttggggt gttgtacaag tggaaaatga aaaccactgt gactttgtaa 600
agctgcggga aatgctcatt tgtacaaata tggaggacct gcgagagcag acccatacca 660
ggcactatga gctttacagg cgctgcaaac tggaggaaat gggctttaca gatgtgggcc 720
cagaaaacaa gccagtcagt gntcaagaga nctatgaagc ccaaaggaca tgagttncat 780
gggggaaccg tc 792

<210> 2362

09509450.030200

<211> 916
<212> DNA
<213> Homo sapiens

<400> 2362
aattttcctc aagaggtgaa agatcttctc tcctgcaatc ataccgtatt ggatccagat 60
ctgcgaatga cattttgcaa agctttgatc ttgctgagaa ataagaatct catcaatcca 120
tcaagcctgc tagaactctt ctttgaactt tttcgttgcc atgataaact tctgcgaaag 180
actttataca cacatattgt gacggatatc aagaatataa atgcaaaaca caagaacaat 240
aaagtgaatg tagtattgca aaatttcatg tacaccatgt taagagatag caatgcaacc 300
gcagccaaga tgtctttaga tgtaatgatt gaactctaca gaaggaacat ctggaatgat 360
gcaaaaactg tcaatgttat cacaactgca tgtttctcta aggtcaccaa gatattagtt 420
gccgctttga cattctttct tgggaaagat gaagatgaaa aacaggacag tgactccgaa 480
tctgaggatg atggaccaac agcaagagac ctgctagtac aatatgctac agggaagaaa 540
agttccaaaa acaagaaaaa gttggaaaag gcaatgaaag tgctcaagaa acaaanaaag 600
aagaaaaaac cagaggtgtt taacttttca gccattcact tgattcatga tccccaagat 660
tttgcggaaa aactactaaa gcagcttgag tgctgtaagg agaggtttga agtgaagatg 720
atgctcatga accttatctn cagattggtg ggaatcatga gcttttcctc ttcaattcta 780
tccctttgc aangttctgc agcccaccaa gagaagtacc aagatcctct ggttgctgac 840
aagcatttat cactagtccc cagagatatt catcatgntt atgactgngg caacaatttg 900
tncgccagac ttggaa 916

<210> 2363
<211> 778
<212> DNA
<213> Homo sapiens

<400> 2363
tcagccttga cctcagttgg accaacatct ctaaaaagca actgacatgg ctcgtcaata 60
ggctgccagg actgaaagac ctcctcctag caggctgctc ctggtctgca gtctctgccc 120
tcagcacctc cagctgcccc cttctcagga cccttgatct tcggtgggca gtaggaatca 180
aggaccctca aattcgggac ttgcttactc caccggctga taaaccaggt caggacaatc 240
gcagcaagct ccggaacatg accgacttcc ggctggcagg ccttgacatc acagatgcca 300
cgcttcgcct cataattcgc cacatgcccc tcctgtctcg actcgacctc agtcactgca 360
gccaccttac agatcagtcc tccaatctac tcactgctgt cgggtcttcc actcgctact 420
ctctcacaga gctcaatatg gcaggttgca ataaattgac agaccagacc ctgatctacc 480
tacggcgcat tgccaacgtc accttgatcg accttcgagg atgcaagcag atcactcgaa 540
aagcctgcga gcacttcatc tcagacttgt ccatcaacag cctctactgc ctgtctgacg 600
agaagctgat acagaagatc agctaagaca cacccagccc agattcaaca ggaaaccgat 660
cttcccctga ctccccaccg aggagagcct ctcctcgacc ctgcacgggc tctgaggcca 720
gcgtcacact tcctctctgc tctnctgncc cttgagccct ttctctacan gtggggca 778

<210> 2364
<211> 737
<212> DNA
<213> Homo sapiens

<400> 2364

0950250 "0220800

catcacagca gccagcgctg tgtctggtat cattgctgac ctcgacacca ccatcatgtt 60
cgccactgct ggcacgctca atcgtgaggg tactgaaact ttcgctgacc accgggaggg 120
catcctgaag actgcgaagg tgctggtgga ggacaccaag gtcctggtgc aaaacgcagc 180
tgggagccag gagaagttgg cgcaggctgc ccagtcctcc gtggcgacca tcacccgcct 240
cgctgatgtg gtcaagctgg gtgcagccag cctgggagct gaggaccctg agacccaggt 300
ggtactaatc aacgcagtga aagatgtagc caaagccctg ggagacctca tcagtgcaac 360
gaaggctgca gctggcaaag ttggagatga ccctgctgtg tggcagctaa agaactctgc 420
caaggtgatg gtgaccaatg tgacatcatt gcttaagaca gtaaaagccg tggaagatga 480
ggccaccaaa ggcactcggg ccctggaggc aaccacagaa cacatacggc aggagctggc 540
ggttttctgt tccccagagc cacctgccaa gacctctacc ccagaagact tcatccgaat 600
gaccaagggt atcaccatgg caacccgcca angccgttgc tgctggcaat tnctgtcgcc 660
aggaagatgt cattggcaca gccaatctga gcccgccgtg ctattgcaga tatgctttgg 720
gctttgcnag ggaanca 737

<210> 2365
<211> 774
<212> DNA
<213> Homo sapiens

<400> 2365
acctgtcgcc atccccggct ccctgcccag agcaccatcg ctacactcgc catcctctgc 60
gtccacctcg ccgctcggtt cgctgtccca gcccctccca gggccggtgg gctcctcagc 120
catgacgcct ccccagcagc cgccaccccct gcgttcagag ccgggcacac tgggctctgc 180
agcctcatcc tacagccccc taggtttgaa cggtgtcccc gggagcatct gggactttgt 240
ttccggcagc ttctccccca gcccctcccc cgtcctgagt gccggccccc catcctcttc 300
gagtgcaagt ccaaacggag ctgagctggc ccgggtcagg cggcagctgg acgaggccaa 360
gaggaagatc cggcagtggg aggagtcctg gcagcaggtg aagcaggtct gcgatgcctg 420
gcagcgagag gcgcaggagg ccaaggagcg tgcccgtgtg gccgatagcg accggcagct 480
ggcgctgcag aagaaggagg aggtggaggc acaggtgaag cagctgcagg aggagctgga 540
gggcctgggc gtagcctcca cactgccggg gctgcggggc tgtggggaca tcggcaccat 600
tcccctgccg aagctgcact cgctgcagag tcagctgcgc ctggacctgg aggcggtgga 660
cggcgtgatc ttccagcttc gcgccaagca ntgtgtggcc tgccgggagc gggcccacgg 720
tgcttgtctg ggggccctgt caagcaccac atnctttttgg gaaccntgtg ccgg 774

<210> 2366
<211> 768
<212> DNA
<213> Homo sapiens

<400> 2366
aaaaagcctg tttggtggtc tcttcacacg gacgcgcatg aaatttggtg ccatgactcg 60
gatcgggggga cctcccttgg gagatcaatc ccctgtcttc ctgttctttg ctccgtgaga 120
aagatccacc tacaacctca ggtcctcaga ccgaccagcc caaggaacat ctcaccaatt 180
ttaaatcagc tccaggagaa tgggtgactt gaactggcaa ggagcaacct gctctctcca 240
cgggcctctg gaaccccggc aagagaagat cccttgatca ccatggacac tcaagttggc 300
aagaagagct ccttagagaa gtcgtgggag ggcaagcaag ctgatgtgga gccaggacga 360
tttgatgtgg gagcacctgc agtggagcac agccagggag agccatctcc ccaggcctga 420
cttgctccca taggagactt tagccctagg ggaactgtcc atcctgatct ctgcagggtg 480

09603469.070200

gtcttgtcca tcagacaggg ctgattcgac ctgagcaccc cttggtctgc tggcctttct 540
ggggtcccag cctggccaga cctgcttgca gggcagtctt gggtgccctg gaggccacgc 600
catagcttct gtgctggcag atagtatctg actggtggag agctccagca aggctgcccc 660
taggccacac accagcccat ncacccctc ccacactgga gcttcctang cccaggaaac 720
ttctacgtgt ctttgctggc acaagtctgc acangtaggg tttgcctt 768

<210> 2367
<211> 871
<212> DNA
<213> Homo sapiens

<400> 2367
tcatggaata cgcgagtggg ggtgaagtat ttgattactt agttgcccat ggaagaatga 60
aagagaaaga ggcccgtgca aaatttaggc agattgtatc tgctgtacag tattgtcatc 120
aaaagtacat tgttcaccgt gatcttaagg ctgaaaacct tctccttgat ggtgatatga 180
atattaaaat tgctgacttt ggttttagta atgaatttac agttgggaac aaattggaca 240
cattttgtgg aagcccaccc tatgctgctc ccgagctttt ccaaggaaag aagtatgatg 300
gtcctgaagt ggatgtgtgg agtctgggcg tcattctcta tacattagtc agtggctcct 360
tgcctttcga tggccagaat ttaaaggaac tgcgagagcg agttttacga gggaagtacc 420
gtattccctt ctatatgtcc acagactgtg aaaatcttct gaagaaatta ttagtcctga 480
atccaataaa gagaggcagc ttggaacaaa taatgaaaga tcgatggatg aatgttggtc 540
atgaagagga agaactaaag ccatatactg agcctgatcc ggatttcaat gacacaaaaa 600
gaatagacat tatggtcacc atgggctttg cacgagatga ataaaatgat gccttaataa 660
atcagaagta tgatgaagtt atggctactt atattcttct aggtagaaaa cccctgaatt 720
tgaaggtggt gaatcgttat ccagtggaaa cttgtgtcag angtccgggc catagtgact 780
taaacaacag cacttttaa tcccctgctc acctgaaggt ccanagaagt atcttcanca 840
aatcagaagc caccggcgtt tcaatggatc a 871

<210> 2368
<211> 803
<212> DNA
<213> Homo sapiens

<400> 2368
tttgacaaca acagttttga acaattctgt atcaattact gcaatgagaa actgcagcag 60
ctatttattc agctggttct gaagcaagaa caagaggaat accagcggga agggatcccc 120
tggaaacata ttgactactt caacaatcag atcattgttg acctcgtgga gcaacagcac 180
aaagggatca ttgcaatcct tgatgatgct tgcatgaatg tcggcaaagt caccgatgaa 240
atgtttcttg aagcacttaa cagtaaattg ggcaaacacg cccatttttc cagccgaaag 300
ctctgtgcct cagacaaaat tctggagttt gatcgagatt ttcgaattcg acattatgca 360
ggcgatgtag tctattctgt cattggtttt attgacaaaa ataaagatac tttatttcaa 420
gatttcaagc gccttatgta taacagttca aatcctgtgc tcaagaatat gtggcctgaa 480
ggcaaactga gcattacaga ggtgaccaag cgacctctga ctgctgctac cttgtttaag 540
aattctatga ttgctctagt agacaacctt gcatcaaagg aaccatatta cgttcgttgc 600
atcaaaccca atgacaagaa atctccacag atatttgatg atgaacgctg ccggcaccaa 660
gtagaatatc ttggactact ggaaaatgtg agagtgcgtc gggcaggatt tgccttccgc 720
cagacatacc agaagtttct tcacaggtat aagatgatct ctgaattcac ctgggnccac 780
catgaccttc cttnanacaa aga 803

US20050009000A1

<210> 2369
<211> 821
<212> DNA
<213> Homo sapiens

<400> 2369
ggtccacgga ggtctatgag actcaggctg gtgccttaat aaatgtggag ctagctctga 60
ggagaggcct acaaatgaaa tgtgtcttct gtcacaagac gggtgccact agtggatgcc 120
acagatttcg atgcaccaac atttatcact tcacttgcgc cattaaagca caatgcatgt 180
tttttaagga caaaactatg ctttgcccca tgcacaaacc aaagggaatt catgagcaag 240
aattaagtta ctttgcagtc ttcaggaggg tctatgttca gcgtgatgag gtgcgacaga 300
ttgctagcat cgtgcaacga ggagaacggg accatacctt tcgcgtgggt agcctcatct 360
tccacacaat tggtcagctg cttccacagc agatgcaagc attccattct cctaaagcac 420
tcttccctgt gggctatgaa gccagccggc tgtactggag cactcgctat gccaataggc 480
gctgccgcta cctgtgctcc attgaggaga aggatgggcg cccagtgttt gtcgtcagga 540
ttgtggaaca aggccatgaa gacctggttc taagtgacat ctcacctaaa ggtgtctggg 600
ataagatttt ggagcctgtg gcatgtgtga gaaaaaagtc tgaaatgctc cagcttttcc 660
cagcgtattt aaaaggagag gatctgtttg gcctgaccgt ctctgcaatg ggcacgcata 720
gcggaatcac ttcctggggt tgangcatgt gaaaattata ccttccgatc cggccgaaat 780
cctttcatgg aacttnctnt tgccgttaac cccacaggtt g 821

<210> 2370
<211> 861
<212> DNA
<213> Homo sapiens

<400> 2370
aacagcctca ccctgcagcc cccagcacct cagcccgtct ttctttctca cggggttcca 60
cttcatcagt ctgtgaatcc tcctgtgttg cccttgagtc agccagtcgg acctgtcaat 120
aagtctgttg gaactagtgt cctccccata aatcagactg ttcgccctgg ggttttaccc 180
ctcacccagc ctgtgggacc cataaacaga cctgttgggc ctggtgttct tcctgtgagc 240
ccctctgtca cccctggggt cctgcaggct gtctcgccag gggtgctttc tgtgagtcgg 300
gcggtcccgt ctggagtcct tcctgcaggc cagatgactc ctgcaggcca gatgactcct 360
gcaggggtta tcctgggcaa acagcaactt ctggggttct tcctactggc cagatggtcc 420
agtcaggagt tctccctgtg ggccagacag ctccgtcacg ggttcttccc ccaggccaga 480
cagccccatt gagggttatc tctgcaggcc aggtggtccc atctgggctt ctttctccca 540
accagacagt ctcctcctca gctgttgtgc ctgtaaacca gggtgtgaat tctggtgttc 600
tgcagcttag tcagcctgtt gtgtcnggag ttcttctgtg ggccagccag tgaggcctgg 660
ggtcttgcaa ctcaaccaga ctgtgggcac caacattctg ctgtgaatca gccagtgaga 720
cctggtgctt cgcagaacac caccttcctg acatcagctc tattcttcag acagcttatc 780
cctacaggga aacaagtgaa tgggattcca acctacacgc ttggccccgt gtctgncact 840
tntgccggtt ccccctggaa g 861

<210> 2371
<211> 859
<212> DNA
<213> Homo sapiens

0356245.0702800

0950250-030200

<400> 2371
ctgtggtgtt tttcccccgc tcctctggct gccttcctga tggatctctg tggtcccagg 60
caggaatggc ctgcttgggg acccagcgag ctcccaaggc ctttcctgct gcttcctcta 120
tccctgtgtt ttgcttggct ctctaaattg actcagctcc aggacatcag gaccccaggt 180
tctctggtct tgggactctg agacttgcac caggaatcct gcccaggctc tcaggccttt 240
ggactcagac tgagctactt cactggcttt cctggttctc cagcttgaag atggcagatc 300
gtgggacttc tcagcctcca taattgagtg agccaattcc ctggccaaaa ggtgtgtttt 360
gctgacttca agcatccctg ctacaaaatg gcctacttcc atgaactgtc cagccgagtg 420
agctttcagg aggcacgcct ggcttgtgag agtgagggag gagtcctcct cagccttgag 480
aatgaagcag aacagaagtt aatagagagc atgttgcaaa acctgacaaa acccgggaca 540
gggatttctg atggtgattt ctggataggg ctttggagga atggagatgg gcaaacatct 600
ggtgcctgcc cagatctcta ccagtggtct gatggaagca attcccagta ccgaaactgg 660
tacacagatg aaccttcctg cggaagtgaa aagtgtgttg tgatgtatca ccaaccaact 720
gccaatcctg gccttggggg tccctacctt taccagtggg aatgatgaca ggngtaacat 780
gaacacaatt atatttgcaa gtatgaacca nagantaatc caacaagccc tgtagaaaac 840
cttatcttac aaatcaacc 859

<210> 2372
<211> 865
<212> DNA
<213> Homo sapiens

<400> 2372
ttccagaaag tggcagcctc tgatcgtaca ggactttcgg attatgggag gcgggatcca 60
gagggaaacc tggataagca gctgagcttt aagtgcaatg tttcaaatac attttcgagt 120
ctggcactaa agaatactat tgtggaggct tctattcagc ttcctccttc ccttttctca 180
ccaaagcaaa aaagagaact cagaccaact gatgactctc tttacaagct tcaactcatt 240
gcattccgca atggaaagct ttttccagcc actggaaatt caacaaattt ggctgatggt 300
ggaaaacgac gtactgtggt tacccctgtg attctcacca aaatagatgg tgtgaatgta 360
gatacccacc acatccctgt taatgtgaca ctgcgtcgaa ttgcacatgg agcagatgct 420
gttgcagccc ggtgggattt cgatttgctg aacggacaag gaggctggaa gtcagatggg 480
tgccatatac tctattcaga tgaaaatatc actacgattc agtgctactc ccttagtaac 540
tatgcagttt taatggattt gacgggatct gaactataca cccaggcggc cagcctcctg 600
catcctgtgg tttatactac cgctatcatt ctcctcttat gtctcttagc cgtcattgtc 660
agttacatat accatcacag tttgattaga atcagcctca agagctggca catgcttgtg 720
aacttgngct ttcatatttt cctaacctgt gtgggctttg tgggangaat aacccagact 780
aggaatgcca gcatctgcca agcagttggg ataattcttc actattccac ccttggcaca 840
gtactatggg taggantgac agctc 865

<210> 2373
<211> 859
<212> DNA
<213> Homo sapiens

<400> 2373
atttctaacg agctcccagg tggcgcgggc tgcccgggag cggaccgcaa gtccgcggga 60
ctcctggggt cttggctcca ggccaatcag ccgtcaggac tcttgataaa tcgccctgct 120

cggctaatga gcagaattgc cgggacatgc gcgttccggc cgaaggggg taatttccga 180
actccgggaa ttcgttgtgt gaagtaggcc actcctaggg acgcgcgggg agcccggtcc 240
tcgcgccatg tcgcggcgca agcaggccaa gccccagcac ctcaactccg aggagccgcg 300
gcctgcgcgc cgggagtgtg cggaggtggc cccgcaggtg gcgggggagc cggcttcaga 360
acttgatgat gatgttccaa aagcaaactg cctctccact gaaagcactg acactccgaa 420
ggcccctgtc atcactcttc cctcagaggc aagggaacaa atggccaccc ttggagagag 480
gacgttcaac tgttgctacc caggttgcca cttcaaaact gtccatggca tgaaagactt 540
ggaccgccat ctcagaatcc acacgggaga caaaccgcac aagtgtgagt tctgtgacaa 600
gtgcttcagc cggaaggaca acctgaccat gcacatgcgg tgccacacca gtgtgaagcc 660
acacaagtgt cacctgtgtg actacgctgc cgtggacagc agtagcctca agaagcacct 720
gcggatccac tctgatgagc cggccgtaca aatgccagct tttgccctat gccanccgca 780
attcagcagc ttaccgtcca cctggatctc acacngggga taccccttc agtgctggtt 840
tttaacgcca agttaaaat 859

<210> 2374
<211> 785
<212> DNA
<213> Homo sapiens

<400> 2374
tactctaaat gaagaaagtc tttatcagaa aattcgtatt ttggagaaac cttttgaata 60
tattgaatgc cagaaagcct tccaaaagga cactgttttt gttaatcaca tggaagaaaa 120
gccctataag tggaatggat ctgaaatagc ctttctccag atgtcggacc tcactgtaca 180
tcagacatct catatggaaa tgaagcccta tgaatgcagt gaatgtggga aatccttctg 240
taaaaagtca aaatttatta tacatcagag gactcacaca ggagagaaac cttacgaatg 300
taatcagtgt gggaaatcct tctgccagaa gggaaccctt actgtgcatc agagaacaca 360
cacaggggag aagccctatg aatgtaatga atgtgggaag aacttttacc agaagttaca 420
cctcattcag catcagagaa ctcactcagg agagaagccc tatgaatgta gttattgtgg 480
aaaatccttt tgccagaaga cacacctcac acaacatcag agaacacatt caggagagag 540
accttatgtt tgtcatgact gtgggaaaac cttctcgcag aagtcagcac ttaatgacca 600
tcagaaaatt cacacaggtg tgaaactcta caagtgtagt gaatgtggga aatgcttctg 660
ccgcaagtct actctcacga cccacctgag gacccacaca ggagagaaac cgtatgaatg 720
taatgagtgt ggaaaattct tctcttgggt gcatatctta ctggnccatt atagnanctc 780
attca 785

<210> 2375
<211> 852
<212> DNA
<213> Homo sapiens

<400> 2375
gtcggttgac tccaccaggt agttgtggat tctatgatgg cctccttatc cttctgttgc 60
agctcctcac tgagcagggg aaggctagcc taatcaggga tatgtccagt tcagaaatgt 120
ggaccgtttt gtggcaccgc ttctccatgg tcctgaggct ccccgaggag gcatctgcac 180
aggaagggga gctttcgcta tccagtccac caagccctga gccagactgg acactgattt 240
ctccccaggg catggcagcc ctgctgagcc tggccatggc caccttacc caggagcccc 300
agttatgcct gagctgcctg tcccagcatg gaagtatcct catgtccatc ctgaagcatc 360
tgctttgccc cagcttcctg aatcaactgc gccaggcctc ctttgcttcc cctttgcgct 420

0962346.0720800

ggacatggat gctgacctcc ttatagatgt cttggccgac ctcagggact cagaagttgc 480
agcccatctg ctgcaggtct gctgctacca tcttccgttg atgcaagtgg agctgcccat 540
cagccttctc acacgcctgg ccctcatgga tcccacctct ctcaaccagt ttgtgaacac 600
agtgtctgcc tcccctagaa ccatcgtctc gtttctctca gttgccctcc tgagtgacca 660
gccactgttg acctccgacc ttctctctct gctggcccat actgccaggg tcctgtctcc 720
cagcacttgc ctttatccaa gagcttctgg ctggctctga tgaatcctat cggccctgcg 780
caagcttctg ggncaccana gaatctgtgc ggcacacact tataggttct gggaacttgt 840
tcaaaaaaag at 852

<210> 2376
<211> 829
<212> DNA
<213> Homo sapiens

<400> 2376
gttcaagaga aaagggatgt attaccaaag attctgcctg ctgaagacag ggcgctcagg 60
gaaagggggc ccccccagcc actgccagct gtgcagccca gtggcccgat taacatggag 120
gagaccaggc ccgaaggaag ctatttcagc aagtactcgg aggcagctga gctgagaagc 180
acagcctccc tcctggccac tcaagaatct gacgtgatgg ttgggccttt caagctgagg 240
cccaggaaac agcggacttt gtccatgatt gaggaagaga tccgagcagc tcaggaaagg 300
gaagaggagc tgaagaggca gagataagtc ttgcagagta cgcagagccc caggacaaag 360
aatgccccat cactgccctc cagaacatgc tacaaaactg ctccagggaa aatagagaaa 420
gtcaaacctc ctccatcccc caccactgaa ggccccagct tgcagcctga cttagccccc 480
gaagaggctg ccggaaccca gcggcccaag aatctgatgc agaccctcat ggaagactat 540
gagacacaca aatctaaaag gcgcgagaga atggatgata gtagtgtcct cgaggccaca 600
cgggttaatc gaagaaagag cgcactggct ttgcgctggg aagcagggat ctatgccaac 660
caggaggaag aagacaacga ataaacttcc ttnaacccag gaagcgtctt tggtgcttgg 720
gagaccaaga aaccaagaaa ttaacaactg aaagcatttt aatggactat ttantaaagn 780
gcaaccaaac ttcagcaatt ccttatgtag acccagaact tgcaattnt 829

<210> 2377
<211> 723
<212> DNA
<213> Homo sapiens

<400> 2377
tcagagatgt aactgtcttt cataatataa gtgatgtttg ccaggaatat tatcctaaat 60
ttgttagaca tatttctgac atatctgtga tgatagtttg aaaattagta tgtattattt 120
gttgcctttt atgccattgt gtccttttct tgatgttttc aaagctggct gaatcctaca 180
caatatgtta cactcctaat ctgcattttt taaatgcata ggccgtttaa cttagcacag 240
actattggcc tctgcttgaa gaatagtata cctataaact ggaagcatta tcatcactta 300
ctcattataa cccatcctgt ctgttctgta cagtatagtt ggacccagat ttttacccta 360
tgaatttggt tagcacaaat gggggaaagt atgaaatgcc aaggaaaatt gaaattcatg 420
taggagatga gtagaggaat gttcaggagt tcaagcagaa caagaggaac ccaactatac 480
cgtttctgat ctaaatggta tggtggggaa aaaccatcag atcaacagaa aggacataat 540
ttttaaataa aagtaacttc cttatattga gcaaatttaa ttttatgaaa aatgcattac 600
aaagtctttg tttcactcat ttctctgtgc gactattgaa gtgtttgtta aactggatca 660
cgtccaagaa gttaatgtta ggccaggcca nggggctnac gcttatgntc ccagcacttt 720

US 2003/0224400

tag 723

<210> 2378
<211> 854
<212> DNA
<213> Homo sapiens

<400> 2378
agagctcttt tattacgcac agaaagctgt tcttcatcct acagggcccc tgtactgccc 60
agaggagaag gagatgaaac cagcttgtat aaaagccctt actcgtatat ttaaaatatc 120
tgatcaagat aatgatggta ctctcaatga tgctgaactc aacttctttc agaggatttg 180
tttcaacact ccattagctc ctcaagctct ggaggatgtc aagaatgtgg tcagaaaaca 240
tataagtgat ggtgtggctg acagtgggtt gaccctgaaa ggttttctct ttttacacac 300
acttttatc cagagaggga gacacgaaac tacttggact gtgcttcgac gatttggtta 360
tgatgatgac ctggatttga cacctgaata tttgttcccc ctgctgaaaa tacctcctga 420
ttgcactact gaattaaatc atcatgcata tttatttctc caaagcacct ttgacaagca 480
tgatttggat agagactgtg ctttgtcacc tgatgagctt aaagatttat ttaaagtttt 540
cccttacata ccttgggggc cagatgtgaa taacacagtt tgtaccaatg aaagaggctg 600
gataacctac cagggattcc tttcccagtg gacgctcacg acttatttag atgtacagcg 660
gtgcctggaa tatttgggct atctaggcta ttcaatattg actgagcaag agtctcaagc 720
ttcagctgtt cagtgacaag agataaaaag atagacctgc agaaaaacaa actcaaagaa 780
tgtgtcagat gtaatgnaaa tggagtgaaa actgtgggaa aagggagtct tcagctcttc 840
tggaagaact aatg 854

<210> 2379
<211> 856
<212> DNA
<213> Homo sapiens

<400> 2379
caacaataca ctggaccaag aagggcatat catcttgcac tctatgcatc gttacctgcc 60
gaggcttcat ttggtgcctg cagaaaaggc tgtggaggtg atacaattaa atggccctgg 120
tgtccacact tttaccttcc cacagactga attctttgca gtaacagctt atcagaacat 180
tcagattact cagctgaaaa tagattacaa tccatttgcc aaaggctttc gggatgatgg 240
gctgaataat aatccccaga gagatggaaa acaaaagaac agctctgacc aagaagggaa 300
taatatttcc agttcttctg gtcatcgggt ccgtcttaca gaaggtcagg ggtcagagat 360
acaaccaggt gatttggatc ctttgtcaag gggtcatgaa acatcaggca agggtttgga 420
gaagacttcc cttaatataa aacgagactt tcttggtttc atggatactg attcagcact 480
tagtgaagtt cctcaattga agcaagagat ttctgaatgt cttattgcca gcagttttga 540
agatgactcc cgtgtagcct caccgttaga ccagaacgga agcttcaatg ttgttattaa 600
agaggaacct ctagatgatt atgactacga acttggtgag tgcccagaag gggtcactgt 660
gaaacaggaa gagacagatg aagagacnga tgtatactca aatagtgatg atgatcctat 720
actagagaaa cagctaaaga ggcacaataa agttgcaacc canagctgcc atctatcttc 780
taaatggctt tcaagccagc ccatcaggtg ttgctnaagc ttaaatggtc aaaattagac 840
cctgggaaag aagccn 856

<210> 2380
<211> 830

0962946.0020

<212> DNA
<213> Homo sapiens

<400> 2380
acaatgaaaa acaaccagaa cacttgggtc tggatcaata tataataaaa cgctttgatg 60
gaaagaaaat ttcccaggaa cgagaaaaat ttgctgatga aggcagtata ttttacaccc 120
ttggagaatg tgggctcata tccttttcag actacatttt cctcacaact gttctttcca 180
ctcctcagag aaattttgaa attgccttca agatgtttga tttgaatgga gatggagaag 240
tagatatgga agaatttgaa caggttcaga gcatcattcg ctcccaaacc agtatgggta 300
tgcgccacag agatcgtcca actactggca acaccctcaa gtctggcttg tgttcagccc 360
tcacaaccta ctttttgga gctgatctga agggaaagct gacaatcaaa aacttcctcg 420
aatttcagcg taaactgcag catgatgttc tgaagcttga gtttgaacgc catgaccctg 480
tggatgggag aattactgag aggcagtttg gtggcatgct acttgcctac agtggggtgc 540
agtccaagaa gctgaccgcc atgcagaggc agctcaagaa gcacttcaaa gaaggaaagg 600
gtctgacatt tcaggaggtg gagaacttct ttactttcct aaagaacatt aatgatgtgg 660
acactgcatt gagtttttac catatggctg gagcatctct tgataaagga aagggcacca 720
tcttcatggg gagaagatga gtcttgaaat atcaagacaa ttgcagaang ctgtgccctg 780
agagaatgga agaactggga aagagaaaag gaagtcnnaa gcttaagtga 830

<210> 2381
<211> 840
<212> DNA
<213> Homo sapiens

<400> 2381
aaggtgatca agttcatcct catcatctgc tacaccgtct actacgtgca caacatcaag 60
ttcgacgtgg actgcaccgt ggacattgag agcctgacgg gctaccgcac ctaccgctgt 120
gcccaccccc tggccacact cttcaagatc ctggcgtcct tctacatcag cctagtcatc 180
ttctacggcc tcatctgcat gtatacactg tggtggatgc tacggcgctc cctcaagaag 240
tactcgtttg agtcgatccg tgaggagagc agctacagcg acatccccga cgtcaagaac 300
gacttcgcct tcatgctgca cctcattgac caatacgacc cgctctactc caagcgcttc 360
gccgtcttcc tgtcggaggt gagtgagaac aagctgcggc agctgaacct caacaacgag 420
tggacgctgg acaagctccg gcagcggctc accaagaacg cgcaggacaa gctggagctg 480
cacctgttca tgctcagtgg catccctgac actgtgtttg acctggtgga gctggaggtc 540
ctcaagctgg agctgatccc cgacgtgacc atcccgccca gcattgccca gctcacgggc 600
ctcaaggagc tgtggctcta ccacacagcg gccaagattg aagcgcccgc gctggccttc 660
ctgcgcgaga acctgcgggc gctgcacatc aagttcaccg acatcaagga gatcccgctt 720
gtggatctat agcctgaaga cactgganga gctgacctga cgggcaacct gagcgcggag 780
aacaaccgct acatcggcat cgacggcttg cgggagctta aacgccttaa ngngctgcgg 840

<210> 2382
<211> 848
<212> DNA
<213> Homo sapiens

<400> 2382
ctgtaccatc gatacctgat gaatgaagag caagctgtca gcaaagtgga cggcatcctg 60
tctaactgtg gcatagaaaa ggagtcagac ctgtgtgtgc tgaacctcat acgatacaca 120

0962945.0720800

gccaccacta agtgctctcc gagtgtggat cccgagaggg tgctgtggag tctgagggac 180
caccccctcc tccccgaggc tgaggcgtgt gtgcggcaac acctccccga cctctacgct 240
gccgggggtg tcaacatctg ggccctggtg gcggctgtgg tgctcctctc cagcagtgtg 300
aatgacatcc agcgactgct cttctgcctc cggagaccca gctccacggt gaccatgcca 360
gatgtcaccg agaccctgta ctgcatagcc gtgcttctct acgccatgag ggagaagggg 420
attaacatca gcaataggat tcactacaac attttctatt gcctatatct tcaggagaat 480
tcctgcactc aggccacaaa agttaaagag gagccatctg tctggccagg caagaaaacc 540
atccaactta cacatgaaca acagctgatt ctgaatcaca agatggaacc tctccaggtg 600
gtgaaaatta tggcctttgc cggcactggg aagacctcaa cgctggtcaa gtatgcagag 660
aagtggtctc anagcangtt tctgtatgtg acattcaaca agagcatcgc aaagcangcc 720
cgaacgcgtc ttcccagcaa cgtcatctgc aaaacctttc actccatggg ctacgggcac 780
atanggcgga agtaccagtc aaaggaanaa gttgaatctc ttcaagntaa caccctttat 840
gggcaact 848

<210> 2383
<211> 820
<212> DNA
<213> Homo sapiens

<400> 2383
atttttggaa gcatgttgcg aggctccgct tcttctacaa gtatggagaa ggcaaaaggc 60
aaggagtgga cctccacaga gaagtcgagg gaagaggatc agcaggcttc taatcaacca 120
aattcaattg ctttgccagg aacatcagca aagagaacca aagaaaaaat gtctgtcaaa 180
ggcagtaaag tgctctgccc taagaaaaag gcagagcaca ctgacaaccc cagacctcag 240
aagaagatac caatccctcc attaccttct aaactgccac ctgttaatct gattcaccgg 300
gacattctgc gggcctggtg ccaacaattg aagctgagct ccaaaggcca gaaattggat 360
gcatataagc gcctgtgtgc ctttgcctac ccaaatcaaa aggattttcc tagcacagca 420
aaagaggcca aaatccggaa atcattgcaa aaaaattaaa ggtggaaaag ggggaaacgt 480
ccctgcaaag ttctgagaca catcctcctg aagtggctct tcctcctgtg ggggagccgc 540
ctgccctgga aaattccact gctctccttg agggagttaa tacagttgtg gtgacaactt 600
ctgccccaga ggctttgctg gcctcctggg cgagaatttc agccagggcg aggacaccag 660
aagcagtgga atcttcacaa gaggcctctg gtgtcaagtg gtgtgtggtc catgggaaaa 720
gtcttccttg cagacacaga tgggttgggt tcacctgcag tttcatgctg gtcaagcctg 780
ggttccagaa aagccagnaa ngggaaatga ntgccctctt 820

<210> 2384
<211> 881
<212> DNA
<213> Homo sapiens

<400> 2384
caaatgagaa agattcaaat tgtttgttat tttctgtatt ttcagtcaaa aaatcagtta 60
tatagtgatt ttaaagcaga ttaatggaaa aaaattcatg taacaattac ctgaaaattt 120
ataacctatt cctaatcaaa cccaattata tcagaatacc tttctgaatt tgagattttt 180
gctctacatt ttataatgaa taaggctatt ttttgaaggt atttcatttt gaattctgtc 240
attaacctca aaagctttct actgctttgc ggtgaaggca aaatattcga taactcaact 300
taggccccac tgttccccaa cttcatggag gccagaagac tttactttgt tccataatga 360
aatataaaca cagaacaaag ttgtaaaagt agcatggata tgttgaaact ttggacaagc 420

0962016-0702800

ttcttgtcct ttggaatatg ggatttatat tcatctcctc aatatcccat gtatgcacag 480
aaacttcagt tctatttcta tagacacagg aacctagtga ctattgaacg taattgtaat 540
aaaatgctgc tcattgagcc aaagagaaga aatgatttat taacatgggg acaccaagaa 600
aaacaaagta tgcttttatt ccctttgtca agctcagttt tagggttttt tctttttttt 660
atagtgacaa tccatagata tagacattcc taaaagaaaa ataaataatt cagtagatat 720
atgtcactgg tacctgaata tggaatggaa tttgatggtt tttatttgg tgagacaggt 780
cttgctctgt cacccagact ggaatgcaat ggcatgatca caccttactg ggancctgg 840
cctttaagct cgggatcctc ctggctnaac ttgcaggagc n 881

<210> 2385
<211> 832
<212> DNA
<213> Homo sapiens

<400> 2385
gtcaggcgcg aatcccagcg gccggcgggc ggcggggata cttctacata gacataatca 60
agttttgact atttggaaac caagcatcat taaaattctc tcaaactcct aattgcgaag 120
aatcgataac atttcaagaa gtgataacat ttctctgaac aagaaaagaa gtgattgacc 180
acgttttaaa agtactctgg cactggtgct gtgttttctt cccctcccta aatttgaaga 240
actatggaga aatggtactt gatgacagta gtggttttaa taggactaac agtacgatgg 300
acagtgtctc ttaattctta ttcaggtgct ggtaaaccgc ctatgtttgg tgattatgaa 360
gctcagagac actggcaaga aataactttt aatttaccgg tcaaacaatg gtattttaac 420
agcagtgata acaatttaca gtattgggga ttggattacc cacctcttac agcttatcat 480
agtctcctat gtgcatatgt ggcaaagttt ataaatccag actggattgc tctccataca 540
tcacgtggat atgagagtca ggcacataag ctcttcatgc gtacaacagt tttaattgct 600
gatctgctga tttacatacc tgcagtggtt ttgtactgnt gttgcttaaa agaaatctca 660
actaagaaaa agattgctaa tgcattatgc atcttgctgt atccaggcct tattcttata 720
gactatggac attttcaata taattctgng agtcttggct ttgcttttgn ggggtggtct 780
tggaatatct tgnggactgg ggaacttcta agggcactgg gcattttgct ta 832

<210> 2386
<211> 780
<212> DNA
<213> Homo sapiens

<400> 2386
ttactagaca ttgatccatt aattttaata catttgttgg accttaagga ccggagcagt 60
atagaaaatt tgtggggctt acagcctcgc ccacctgctt cacttctgca gcccacagca 120
tcatattctc gaaaagataa agaccaaagg aagcaacagg caatgtggcg agtgccctct 180
gatttaaaga tgctaaaaag actcaaaact caaatggccg aagttcgatg tatgaaaact 240
gatgtaaaga atacactttc agaaataaaa agcagcagtg ctgcttctgg agacatgcag 300
acaagccttt tttctgctga ccaggcagct ctggctgcat gtggaactga aaactctggc 360
agattgcagg atttgggaat ggaactcctg gcaaagtcat cagttgccaa ttgttacata 420
cgaaactcca caaataagaa gagtaattcg cccaagccag ctcgatccag tgtagcaggt 480
agtctatcac ttcgaagagc agtggaccct ggagaaaata gtcgttcaaa gggagactgt 540
cagactctgt ctgaaggctc cccaggaagc tctcagtctg ggagcaggca cagttctccc 600
cgagccttga tacatggcag tatcggtgat attctgccaa aaactgaaga ccggcagtgt 660
aaagctttgg attcagatgc tggtgtggnt gcagttttca gtggcttgcc tgcggttgag 720

0052850-0072000

aaaaggagga aaatggcacc ttgggggcta atgctaaagg agncatctgg aangactgca 780

<210> 2387
<211> 801
<212> DNA
<213> Homo sapiens

<400> 2387
aaggagctac cagcagaata gtgcccacac taaccattgc attgtgaaga tgctgcaccg 60
gctggcccat gacctcaaaa tggaagccct acttttcag ctgtcagtct tctgcctctt 120
caatcgtctg cttagtgacc ctgctgctgg agcctacaaa gagctagtga ctttgccaa 180
atacatcctg ggcaaatttt ttgcactggc tgcagtcaac caaaaagcct ttgtggagct 240
gttgttctgg aagaacacag ctgtggttcg agagatgact gagggctatg gctccctgga 300
tgacaggtct tccagtcgca gagcacctac atggagcccc gaagaagagg ctcatcttcg 360
ggagctgtac ctcgccaata aggacgtgga agggcaggat gtggtggaag ccatcttggc 420
ccacctgaat actgttcctc gaacacgcaa gcagatcatc caccatctgg tacagatggg 480
actggctgac agtgtcaagg acttccaaag gaaaggaacc catattgtac tgtggacggg 540
ggatcaggag ttggagctgc agcggctttt tgaggaattc cgggactcag atgatgtcct 600
gggtcatatc atgaagaata tcacagccaa acgctcacgg gcccgaatag tggataaact 660
cttggctctg gggctggtgg ctgancggcg ggagctgtac aagaaacggc agaaaaagtt 720
gcatcctcat cttgccaatg gancggagtc cctgaaagat tttgncagga agattggaag 780
aagaggaaan ctgctgagga a 801

<210> 2388
<211> 601
<212> DNA
<213> Homo sapiens

<400> 2388
cttgctacag ccaaatggca tctcactttt taaagacgtt tgcaattatt agttgattca 60
cagtacagaa caaggtataa aggaaaaaac cctgctaggt agtgttacac ctgctaattg 120
gatgactttg ccaagtcacc taaactctgg atctcagtca ccttttgtcc tacattcctc 180
tacccttcta cttgaaaatt tgaaatatgc tgtctattca cttcatagtc attaaggaaa 240
tgttcttaat tgtttttttg tttttgtttt tttttgagat ggagtcttgc tctgtcgcca 300
gactggagtg cagtggcgca atctcggctc actgcaacct ccacctcctg gattcaagcg 360
attctcctgc ctcagcctcc caagtagctg ggattacagg cgcatgccac catgcccagc 420
taatttttt gtatttttag tagagatggg gtttcaccgt gctggccagg atggtctcga 480
tctcctgacc tcgtgatccg cccacctcgg cctcccaagg tgctgggact acaggcatga 540
gccaccgtgc ccggcctctt anttgntntt taaaaattat gtacatttta agtattttgc 600
a 601

<210> 2389
<211> 736
<212> DNA
<213> Homo sapiens

<400> 2389
aaaaaaaaaa gaaaaaaaaa aaactcttgt gtagcctgag gcggcggtag catggagggg 60

0956203.0702000

gagagtacgt cggcggtgct ctcgggcttt gtgctcggcg cactcgcttt ccagcacctc 120
aacacggact cggacacgga aggttttctt cttggggaag taaaaggtga agccaagaac 180
agcattactg attcccaaat ggatgatgtt gaagttgttt atacaattga cattcagaaa 240
tatattccat gctatcagct ttttagcttt tataattctt caggcgaagt aaatgagcaa 300
gcactgaaga aaatattatc aaatgtcaaa aagaatgtgg taggttgata caaattccgt 360
cgtcattcag atcagatcat gacgtttaga gagaggctgn ttcacaaaaa cttgcaggag 420
catttttcaa accaagacct tgtttttctg ctattaacac caagtataat aacagaaagc 480
tgctctactc atcgactgga acattcctta tataaacctc aaaaaggact ttttcacagg 540
gtacctttag tggttgccaa tctgggcatg tctgaacaac tgggttataa aactgtatca 600
ggttcctgta tgtccactgg ttttagccga gcagtacaaa cacacagctc taaatttttt 660
gaagaagatg gatccttaaa ggaggtncat angataaatg aaatgnatgc ttcattacca 720
ggaggaatta aagagt 736

<210> 2390
<211> 717
<212> DNA
<213> Homo sapiens

<400> 2390
agaggactat gaggcgggcg ccaactgctt gggccgcagg gcgggaggca gcgcgggagt 60
ggggcgttga ggggccggcc tagcttgggg ctctggcctt gcgtcttccg accgaatcac 120
cgctcctgag cccggtgcgg ggctgccgct atcgcctggc cgtgggtgcc ggagcggccg 180
ggttgcgact cagcgttctt gggtgggcgc gggcggcgtc tccgcggcgg gcatcccccg 240
aggccgccct cgggccatga tcgactccgt gaagctgcgc cgcgacagcg cggcggactt 300
cttctcccac tacgagtacc tgtgcgcgct gcagaactcc gtgccgctgc ccgccgtgcg 360
cgcctgtctc cgggagggcg tgctggattt caacgccgac cgcctccgcg gggtggactg 420
ggcgcctctg ctgagcaccc tcaagatcaa taaagacctg cccttggtct ccatcaagag 480
cttcttccag ccctggctgg gggacacagg ttctgacatg aataaatttt gcagaagtcg 540
tgttcctgcg ataagataca aagatgtgac cttcagttgt gtaaaagctc ttaaaggctg 600
gttaaagtat atcaagtgtg ctaaagaacc tggactaaat ggactaattc tganagagaa 660
ggatttaact attctancna agggaattga ataaatcggc ttttttttggt gcacctg 717

<210> 2391
<211> 687
<212> DNA
<213> Homo sapiens

<400> 2391
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagaattg actcgcgccc tcgtccgccg 60
ccataggcca gtgccggggt ttaagggcca ggaaaggaag cattcaggga atttaggtgt 120
agccagaaga aaatcaggtc ctggctcccc agaagcaaga gagttcaaat gaaggaagga 180
ggaggttcct ggatgtggat gtcatcattt ctgggaacac tcttaaatgg agactcagat 240
ttcttagcca aaatttaggg aggatccaga agaaaccaaa gacgaagcat cccagttctt 300
gggtatttcc tgaaacagaa gaaaatgaca aaggcccagg aatcagtgac cctggaggat 360
gtggctgtgg acttcacctg ggaggagtgg cagttcctga gccctgctca gaaggacctg 420
tnccgggatg tgatgttgga gaactacagc aaccttgtgt cagtggggta tcaagccggc 480
aaacctgatg ccctcaccaa gttggaacaa ggagaaccac tatggacact anaagatgaa 540
atccacagtc cagcccaccc agaaattgag aaagctgatg atcatctgca gcanccccttg 600

0050239450 - 07-12-2006

caaaaccaaa aaatactgaa gaggacggga caacgctntg aacacggaag aactttgaaa 660
tcatatttag gtttaaccca ccngagc 687

<210> 2392
<211> 826
<212> DNA
<213> Homo sapiens

<400> 2392
ttggagtctt ttaactgtgt ctctcaattc caggcatgtg cacaggtccg tggcatgaat 60
tatttcagcc aaattgaagt ctggagatgt gcctgaaaat tagattagga cagatgttat 120
gcttattcca tatactttct acattatagc ctttcttttg tttactaaaa aggcatagtc 180
actcgcaaat ctagtattga atacattcaa aatccattga agataaccaa ataagctttt 240
aaattgtagg acattcttac tatatcccac ttactatact aaaactagtt ttagaactcc 300
ttcactttta caattaaatt gagattccat gtaccactag tcatatatga ctgtgtacat 360
ttgtatgtat acacatgtaa agtcactaaa catgcacaca cacacacaca aatgcacaca 420
ctcatacata cttaatagga acactaagaa aaagcctgca gatgtctttt ctttaaaaac 480
aaagatgtct ttagaaacta catgtattta tagctccaaa aaattaaaag ttcattccta 540
gtgaaagcaa aacatgaaag gtagtttatt aaagactcaa agctaatttt tagttattta 600
cattttagtt actacctcat ttgtctcctg gaagtctttc ttttctaaat gctacattct 660
gcagacatat tcagcccatg cttttctagc tcagttattc ctacgcaaaa agttaattta 720
atatcctaca acatggatga aaatttcaaa aaccatgctt ggaagaagcc agtccttaaa 780
ggacccctaa tttatggatt ncccattttc caaggtttnc ngaatt 826

<210> 2393
<211> 801
<212> DNA
<213> Homo sapiens

<400> 2393
acttgccgaa gcatgaacga agccatccct agtggcaagg agacttccat cgagctggat 60
gtgcaccacc ctcctacagt gaccctgtcc attgagccac agacggtgca ggagggtgag 120
cgtgttgtct ttacctgcca ggccacagcc aaccccgaga tcttgggcta caggtgggcc 180
aaaggggtt tcttgattga agacgcccac gagagtcgct atgagacaaa tgtggattat 240
tccttttca cggagcctgt gtcttgtgag gttcacaaca aagtgggaag caccaatgtc 300
agcactttag taaatgtcca ctttgctccc cggattgtag ttgaccccaa acccacaacc 360
acagacattg gctctgatgt gacccttacc tgtgtctggg ttgggaatcc ccccctcact 420
ctcacctgga ccaaaaagga ctcaaatatg gggcccaggc ctcctggctc cccacccgag 480
gctgctctct ctgcccaggt cctgagtaac agcaaccagc tgctgctgaa gtcggtgact 540
cangcagacg ctggcaccta cacctgccgg gccatcgtgc ctcgaatcgg agtggctgag 600
cgggaggtgc cgctctatgt gaacgggccc cccatcatct ccagtgaggc agtgcagtat 660
gctgtgaggg gtgacggtgg caaggtggag tgtttcattg ggagcacacc acccccagac 720
cgnatancat ggcctggaag gagaacttct tggaagtggg gaccctggaa cgctnttcag 780
tggagaggac caacttaggc a 801

<210> 2394
<211> 858
<212> DNA

0050-2700-0950-4950-0

<213> Homo sapiens

<400> 2394
gaaaccatgg tcaggtggtc tcttacctgt taaaatcagg agctgacaaa gaaaagttgg 60
cgacatggtg gcacccgtgc tggagacttc tcacgtgttt tgctgcccaa accgggtgcg 120
gggagtcctg aactggagct ctgggcccag aggacttctg gcctttggca cgtcctgctc 180
cgtggtgctc tatgaccccc tgaaaagggt tgttgttacc aacttgaatg gtcacaccgc 240
ccgagtcaat tgcatacagt ggatttgtaa acaggatggc tcccccttcta ctgaattagt 300
ttctggagga tctgataatc aagtgattca ctgggaaata gaggataatc agcttttaaa 360
agcagtgcat cttcaaggcc atgaaggacc tgtttatgcg gtgcatgctg tttaccagag 420
gaggacatca gatcctgcat tatgtacact gatcgtttct gcagctgcag attctgctgt 480
tcgactctgg tctaaaaagg gtccagaagt accaatatta gcatgtggca atgatgattg 540
cagaattcac atatttgctc aacaaaatga tcagtttcag aaagtgcttt ctctctgtgg 600
acatgaggat tggattagag gagtggaatg ggcagccttt ggtagagatc ttttcctaca 660
agctgttcac aagattgcct gataagaata tggaagctgt atataaagtc aacatcttta 720
gaaactcagg atgacgatac ctaagactga aagaaaatac ttttaccata gaaaatgaaa 780
gtggtaaaat acatttgctg gtactctgga nacagtgcta acccggtcat gaaactgggt 840
aaatgcantt nactgcaa 858

<210> 2395
<211> 788
<212> DNA
<213> Homo sapiens

<400> 2395
gtgaagtcgc gcggcttcca cccacgcagt gttctaagtg aaggccagaa actcgctcgc 60
catgtcggct gcagaggcgg ggggtgtttt ccacagagcc aggggcagga ccctggccgc 120
gtttcccgca gaaaaggaaa gcgaatggaa aggcccattc tacttcatcc tgggcgcaga 180
cccacagttt gggctgatca aggcctggtc cactggggac tgtgacaatg gcggtgacga 240
atgggaacag gagatccgtc taactgagca agccgtccag gccatcaaca agctgaaccc 300
caaacccaaa ttcttcgttc tgtgcggcga cctcatccac gccatgccag ggaagccgtg 360
gcggacggag cagacggagg acctgaagcg agtgcttagg gcagtggaca gggccatccc 420
actggtcctt gtcagcggca accatgacat tggcaacacc cccacggccg agaccgtcga 480
ggagttctgc cggacttggg gatatgacta cttcagcttc tgggtcgggg gcgtcctgtt 540
cctggtcctc aactcccagt tctacgagaa cccctccaaa tgccccagcc tgaagcaggc 600
tcaggaccag tggctggacg agcagctgag catcgcnagg cagcggnact gcagcatgcc 660
atcgtcttcc agcacatccg ctgtcctgga gagcatcgac gaggacgacg actactactt 720
caaccttcag caagtncact cggaaagaag ttggcangac aaagttcatt ccacgcnagg 780
tgttaaga 788

<210> 2396
<211> 786
<212> DNA
<213> Homo sapiens

<400> 2396
aggatgagtg tactaagctt ctggttggca atattgttat cacctgatat aacaatcgta 60
cctatcgtat tgatgatgtg gattggaata agactccaaa ggatagcttc acgatgtctg 120

0960503.0072000

atgggaaaga gatcacattc ttggaatact acagcaaaaa ttatgggatc acagttaagg 180
aagaggacca gccattgctg attcacaggc ccagtgagag acaggataat catgggatgc 240
tgctaaaagg ggaaatcctg ctgctgcctg agctttcttt tatgaccgga atcccagaga 300
agatgaagaa ggacttcaga gccatgaagg atttggctca gcaaatcaat ctgagcccca 360
agcaacacca tagtgctttg gaatgcttgc tgcaaagaat tgcaaagaac gaggcagcca 420
ccaatgaact gatgcgttgg gggctccgtc tgcaaaagga tgtacataag attgaaggac 480
gtgttctgcc aatggaaaga attaacttaa aaaatacttc gtttatcaca tctcaggaac 540
taaactgggt taaggaagta accagagacc cttccatctt gactatcccc atgcatttct 600
gggcactttt ttacccaaag agagcaatgg accaggctcg agaactggtc aacatgttgg 660
agaagatagc cggccccatt ggcatgcgta tgagcccacc cggcctgggt tgaactaaag 720
gatgacccga attgagactt atgtcagaac cattcaatcc acgttaggag ctnangggaa 780
aatccn 786

<210> 2397
<211> 838
<212> DNA
<213> Homo sapiens

<400> 2397
ttatgttaca aaatttacaa gaacggttag aaaggaaaaa gagaatagaa gaaattatga 60
agcggacaag aaagacagat gtgaatgcct caaaggtcac agaaacatcc agccatgaca 120
tatatgaaga ggctgaggct gacaacgaag aaagcgacaa ggactcattg aatgaaatgt 180
ttccatcagc cattctaaat ggcacaggct cacctaccaa atttaaaatg ccgttcaaca 240
atgccaagaa aatgacacac aagctggtat ttctagaaga tggtaccagc caggtccgta 300
aagagccaaa aacatatttt aatggcgatt tgaaaaactt cagacaaaaa agcatgaaag 360
acacttcaat acaggaagta gtttcaagac catcttccaa aagaatgacc agtcacacaa 420
cgaaaaccag aaaggcggat gaaaccaaca ccaccagcag atcctctgca caaacaaaat 480
ctgaaggatt ccatgacatc ttgccaaagt cctcagacac ctttagacaa taagagaaga 540
agcaaacctg tttctcctca tttggatatg taaaccttac tcagcctggg agatgaatac 600
atcttccact ctggataact caactcctgg gcccatcagt cctcaaattt ttctgcttct 660
gacttgaacc tggtaaagga agtgcaccga aaaattgaaa gaactgtcaa aaggcccttt 720
gatgtatatc tcagatggta aagtcatctt attctcttgg nctaancaag agttctaagt 780
taagagtggg ttttggtttc tttggaaaat catcttggct ctcaatcttg ggtgnccc 838

<210> 2398
<211> 762
<212> DNA
<213> Homo sapiens

<400> 2398
tgggctacca gtgggctccc atcctagcca acttcctgca catcatggca gtcatcctgg 60
gcatctttgg caccgtgcag taccgctccc ggtacctcat cctgtatgca gcctggctgg 120
tgctctgggt tggctggaat gcatttatca tctgcttcta cttggaggtt ggacagctgt 180
cccaggaccg ggacttcatc atgaccttca acacatccct gcaccgctcc tggtggatgg 240
agaatgggcc aggctgcctg gtgacacctg ttctgaactc ccgcctggct ctggaggacc 300
accatgtcat ctctgtcact ggctgcctgc ttgactaccc ctacattgaa gccctcagca 360
gcgccctgca gatcttcctg gcactgttcg gcttcgtgtt cgcctgctac gtgagcaaag 420
tgttcctgga ggaggaggac agctttgact tcatcggcgg ctttgactcc tacggatacc 480

0050-0050-0050

aggcgcccca gaagacgtcg catttacagc tgcagcctct gtacacgtcg gggtagcctc 540
tgccccgcgc ccaccccggc gcctcgccct gggctgaccg cagctgccgc gagctcgggc 600
caaggcgcan gcgtgtcccc ctggtggccc gcgctctact gaacctgtgc ccaaccccgc 660
gtctgcatct ggagatgcgg acttggacgt ggacttggac ttggacttgg atttgaactt 720
ggctctttgc aacccggact tcggaggaat gggccggncn gn 762

<210> 2399
<211> 803
<212> DNA
<213> Homo sapiens

<400> 2399
aaaaacccgg ctttgctgct tttaactctt cttccttctg tgcctctcta agtgggtcag 60
tatcctaagg aagccttctt atttatcttc ctgcaaacaa gggttacctg aaaagaaaaa 120
aaaagtcaac attgtcaagc tgtttgttta ctctttcttt gaaaacatca ccttctgaaa 180
tttgtctttt agctctctca gattcttccc caaatgaggc agggtgcaga cagcacagtc 240
agctctgcag agtttggagg ggctcactgc cactgggtac tcagaacctc tgtggactgg 300
atgtcagctc tttcctttgg cagcgtgttt ccttttccga gtatgtgctg ttaaactaga 360
ttggccggtt cgctttccat ttcctgacac ttgacatgga atgcctttga ccattggtgc 420
tctgacagag aagtcatgga gtcattgcca tttcctggtt gccctttgg aatgtgatcc 480
tgttagtaga ggttttctag cttctactaa gatatttctt tccctaacca tcatacactt 540
ggcatgtttc attcccatct cctttcccct caccttaaag gagactaccc ctttgcccca 600
tattgtcaac ctaattttct ctcgtactct ctctagtgaa tgatgtgcta ccaagtatat 660
gccangctgt gagaggatta tactgagtag tagaaagaac taatttgaaa taaaaattat 720
ttggataatt aagaaagcng attanatgcc catggtcaac aaggaagttg actgnatggc 780
tgctaagtta gattcaaaac atc 803

<210> 2400
<211> 884
<212> DNA
<213> Homo sapiens

<400> 2400
tcaagatgca cttagtaagc cccatggaac tgtgaaagcc atatgtatcc ctgaaggagc 60
aaaatactta aaaaggaaag acattgaatc cattagaaac tttgcagctg accattttaa 120
tcaggaaatc ttacctgtat tccttaacgc caatagaaac tggaattctc cagttgctaa 180
tttcataatg gagtcacaaa gactggaatt aatcagacta atggagaccc aagaggaaga 240
tgtggtccta ctaactgctg gagagcacaa taaagcatgc tctttgttag gaaaattacg 300
actggaatgt gctgaccttc tagaaacaag aggagtggtg ctccgtgacc ccactctgtt 360
ctctttcctt tgggtggtag atttcccact cttcctgccc aaggaggaaa atcccagaga 420
gctggaatcg gcccaccacc catttactgc tccccacccc agtgacatac atctcctgta 480
cactgagccc aaaaaggagg atgtgaaaat gctctcccat ctgctccagg ctttagatta 540
tggggcaccc cctcatggag gaattgcctt agggttagac agactgatat gccttgtcac 600
tggatctcca agcatcagag atgtcatagc cttcccaaag tccttccggg gacatgacct 660
catgagcaat accccagatt ctgtcccttc tgaggaactg aagccctatc atatccgagt 720
ctncaagcca acagacttca aaagcagaaa gagctcattg aatcatgcat accatgccga 780
aaggttgagc ttttaggttt ggcctctttg gnttcccaag gttaagncag atctagagtc 840
tgcccaggct acatcaagct ttaaaggaag gaatcnggca catt 884

0050204950 - 07-12-2010

<210> 2401
<211> 742
<212> DNA
<213> Homo sapiens

<400> 2401
ttgcttgcct ttgcctttga ggctctgtgg ctgtggggct gagtggcatc atggcggctc 60
agaaagatct ctgggacgcc attgtgattg gggcggggat ccagggctgc ttcactgcat 120
accacctggc caaacacagg aagaggatcc tcctgctgga gcagttcttt ctaccacact 180
cccgaggaag ctcccatgga caaagccgga taatccgaaa ggcgtacctg gaagactttt 240
acacccggat gatgcatgag tgctatcaga tatgggccca gctggagcac gaggctggaa 300
cccaattgca caggcagact ggattactgc tgctgggaat gaaagagaat caagaattaa 360
agacaatcca ggccaatctg tcgaggcaga gggtagaaca ccagtgtctt tcatctgagg 420
aactgaagca acgtttccca aatattcggt tgcccagggg agaagtgggg ctcttggaca 480
attccggagg agttatctat gcatataagg ccctcagagc cctgcaggat gcaattcgac 540
agctaggagg catagtgcgt gacggagaga aggtggtgga gataaaccca gggctactgg 600
tcacggtgaa aaccaccttc aggagctacc aagctaagag cttggtcatc acagcangtc 660
cttggaccaa ccagcttctn cgtcccctgg gcattgagat gcctnttcag acccttgcgg 720
atcaacgtgt gttactggcc aa 742

<210> 2402
<211> 898
<212> DNA
<213> Homo sapiens

<400> 2402
acaatgtgct agaacaaatc acaagctttg cgtcaggaac atcctatcat ctccctttgg 60
ctcaccacat tcagctcatc tttgatctca tggagccagc actgaacatc aacggactaa 120
ttgacttcgc aatacagtta ctaaatgaac tgagtgttgt ggaagctgaa ctgctcctaa 180
aatcctccag cctggcagga agttatacaa caggactgtg tgtctgcatc gtggctgttc 240
tcaggcgcta tcacagttgt ctaatcttga atcctgatca gacagcccag gtgtttgaag 300
ggttgtgtgg tgtggtcaag catgtcgtaa acccctcaga atgttcttcc cctgaaagat 360
gcattttagc ctacctctat gatctctatg tgtcatgtag ccacctcaga agtaaatttg 420
gagacctctt cagtgcctgt tcaaaagtaa agcaaaccat atataataac gtgatgcctg 480
caaattcgaa cttgcgatgg gatccagact tcatgatgga ttttattgag aatccctcag 540
cccgcagcat caactactca atgctgggca agatcctcag tgacaatgcg gccaatcgct 600
acagctttgt ctgcaataca ctcatgaatg tatgtatggg ccatcaggat gctggcagga 660
ttaacgacat agccaatttc tcctctgagc ttacggcttg ctgcactggt cttagttcag 720
aatggctggg ggttctgaag gctctttggt ggtcttcaaa tcacgtgtgg gggttttaaa 780
ggatggactt tgcactggaa aatgtgaagt ggancctttc atttccatgg attcatttac 840
tactttcact ggtaattctg gatagcccga cagtggtttt ttccctggga ggacntnc 898

<210> 2403
<211> 829
<212> DNA
<213> Homo sapiens

0505245.0-07/02/2008

<400> 2403
aaaaaaaaaa aaaaaaaatt ttctgctcct tttgtgcctt cttttagatt gttttcttta 60
tattttcctc agctagtttg aaagttagtt gttacatttc tattcttttg gtgtttacct 120
tcagtttttt aattggagta taatttacct tcagtaaaat tcatattttt tggagtatag 180
ttctgagttt tgataaacag ataacagtca tgtaaccacc aaccaccacc atcgtcatgt 240
tatagaacaa ttccatcacc ccaaaaattt tcttttgccc cttgtagtca acctctttcc 300
acatttctgg cctttggcaa ccactgaact gttttctgtt tgtatagtgt tgcatttttc 360
cagaatgtca tataaatgga attattcctt tacttaccat actgaatttg acattcatgc 420
atattattcc ttgtgtccat aatttatttt tattattaaa tagtattcca ttgtatggat 480
attatcacag tttgtttatc cgttgaccaa atgaaggaca tgtgggtggg ttttttttt 540
gagacagagt ctcagtctgt cactcaggct ggagtgcagt agtgcaaaca cggctcactg 600
cagcctcaac ctcctgggct caagtgatcc tcctacctct gcctcctggg tagctaggac 660
tacatgcatg tgccaccaca ctcagttttt taatttttg taacagatag agagatagag 720
atattgccca ggctggtttt gaactcctgg cctcaagtga ccctcccacc tnagtttncc 780
caagtgcttg ggattacang gggtgtgcca ccacacctgg gcccattcc 829

<210> 2404
<211> 665
<212> DNA
<213> Homo sapiens

<400> 2404
gggaggagaa gtctcagcta gaacgagcgg ccctaggttt tcggaaggga ggatcaggga 60
tgtttgcgag cggctggaac cagacggtgc cgatagagga agcgggctcc atggctgccc 120
tcctgctgct gcccctgctg ctgttgctac cgctgctgct gctgaagcta cacctctggc 180
cgcagttgcg ctggcttccg gcggacttgg cctttgcggt gcgagctctg tgctgcaaaa 240
gggctcttcg agctcgcgcc ctggccgcgg ctgccgccga cccggaaggt cccgaggggg 300
gctgcagcct ggcctggcgc ctcgcggaac tggcccagca gcgcgccgcg cacacctttc 360
tcattcacgg ctcgcggcgc tttagctact cagaggcgga gcgcgagagt aacagggctg 420
cacgcgcctt cctacgtgcg ctaggctggg actggggacc cgacggcggc gacagcggcg 480
aggggagcgc tggagaaggc gagcgggcag cgccgggagc cggagatgca gcggccggaa 540
gcggcgcgga gtttgccgga ggggacggtg ccgccagaag ttggaggagc cgncgccctc 600
tgncacctgg agcaactgtg gcgctgcttc tncccgctgg cccaaaattt ctgtggctct 660
ggttc 665

<210> 2405
<211> 788
<212> DNA
<213> Homo sapiens

<400> 2405
tgacaatata gaagattcta cagcaagatt agatacacaa cactctgaag acatgaatgc 60
caccagatct gaagagcagt tccatgttat aaaccacgca gagcaaactc ttcgtaaaat 120
ggagaactac ttgaaagaga aacaactatg tgatgtgcta ctgattgcag gacacctccg 180
catcccagcc cataggttgg ttctcagcgc agtgtctgat tattttgctg caatgtttac 240
taatgatgtg cttgaagcca aacaagaaga ggtcaggatg gaaggagtag atccaaatgc 300
actaaattcc ttggtgcagt atgcttacac aggagtcctg caattgaaag aagataccat 360
tgaaagtttg ctggctgcag cttgtcttct gcagctgact caggtcattg atgtttgctc 420

09/21/2006 15:03:09 Page 1019 of 1320

caattttctc ataaagcagc tccatccttc aaactgctta gggattcgat catttggaga 480
tgcccaaggc tgtacagaac ttctgaacgt ggcacacaaa tacactatgg aacacttcat 540
tgaggtaata aaaaaccaag aattcctcct gcttccagct aatgaaattt caaaacttct 600
gtgcagtgat gacattaatg tgcctgatga agagaccatt tttcatgctc taatgcantg 660
ggtggggcat gatgtgcaga ataggcaagg agaactgggg atgctgcttt cttacatcan 720
actggccatt acttccacca cagntactgg gcagatcttg gaaacccagt tnccatggtt 780
tacctggg 788

<210> 2406
<211> 823
<212> DNA
<213> Homo sapiens

<400> 2406
tgctcaggca gttcttcaag ctgtgacagc tgtccagaca gcaaatactc ctcttagtgg 60
caccacagtt agcgagagtg cagtgactcc agcccagagt ccagtactta gaataattat 120
tgacaacatg tactaccctg taacacttga tgttcttcac caaatatttt ctaagtttgg 180
tgctgtattg aagataatca catttacaaa aaataaccag tttcaagctt tgctccagta 240
tggtgatcca gtaaatgctc aacaagcaaa actagcccta gatggtcaga atatttataa 300
tgcctgctgt accctaagga ttgatttttc caaacttgtg aatttgaatg taaaatacaa 360
caatgataaa agtagggatt atactcgacc tgatcttcca tctggggatg gacaacctgc 420
attggaccca gctattgctg cagcatttgc caaggagaca tccctcttag ctgttccagg 480
agctctgagt cctttggcca ttccaaatgc tgctgcagca gctgctgcag ctgctgctgg 540
ccgagtgggt atgcctggag tctcagctgg tggcaataca gtcctgttgg ttagcaattt 600
aaatgaagag atggttacgc cccaaagtct gtttaccctc ttcggtgttt atggagatgt 660
gcagcgtgtg aagattttat acaataagaa agacagcgct ctaatacaga tggcttgatg 720
gaaaccaatc acacttggca tgaatcatct taatggacag aaaatggttt gggaaaaata 780
tttcggggta ctctggctaa acatnanact gtccagntac ctt 823

<210> 2407
<211> 814
<212> DNA
<213> Homo sapiens

<400> 2407
taatcatcta aagcaacagg tacaacagct acaagtcttg ttgctacagg cccatggagg 60
taccctgcct ggatctataa ctgtggaacc atcagagaat ctacaatccc tgatggagaa 120
gaatcagtcc ctggtagagg agaatgaaaa attaagtcgt ggtctgagcg aggcagctgg 180
tcagacagcc cagatgttgg agaggatcat ttggacagag caagcgaatg aaaaaatgaa 240
cgccaagcta gaagagctca ggcagcatgc ggcctgcaaa ctggatcttc aaaagctagt 300
ggagactttg gaagaccagg aattgaaaga aaatgtagag ataatttgta acctgcagca 360
attgattacc cagttatcgg atgaaactgt tgcttgcatg gctgcagcca ttgatactgc 420
ggtggagcaa gaagcccaag tagaaaccag tccagagacg agcaggtctt ctgacgcttt 480
taccactcag catgctctcc gtcaagcgca gatgtctaag gagctggttg agttgaataa 540
agcgcttgca ctgaaagagg ccctggctag gaagatgact cagaatgaca gccaactgca 600
gcctattcag taccaatacc aggataacat anaagagcta gaattagaag tcatcaatct 660
gcaaaaggaa aaggaagaat tggtcttgac ttcagacagc aaagaaggtg ccaaccaacc 720
aagttgagtg agcccgccgn aacgtntcag aactgaggca atgctgtctg aaaaaactga 780

0062045 0062980

tgacagccaa ctttgaacta agatcncgac gctg 814

<210> 2408
<211> 831
<212> DNA
<213> Homo sapiens

<400> 2408
agatggttct gaactttgat accaaggatc ccctcatcct gtcctgcgtc cttactaatg 60
tctctgcact ctttccattt gtcacctaca gaccagagtt cctgccccag gtcttctcta 120
agctattttc atctgtcact tttgaaactg ttgaagaaag taaggccccc agaacccggg 180
cagtgaggaa tgtgaggagg catgcttgtt cctccatcat caagatgtgt cgtgactacc 240
cccagcttgt gctgcccaat tttgacatgc tttataacca tgtgaagcaa ctcctctcca 300
atgagctact cctgacacaa atggagaagt gtgccctcat ggaagccctg gttctcatta 360
gcaaccaatt taagaactac gagcgtcaga aggtgttcct agaggagctg atggcaccag 420
tggccagcat ctggctttct caagacatgc acagagtgct gtcagatgtt gatgctttca 480
ttgcgtatgt gggtacagat cagaagagct gtgacccagg cctggaggat ccgtgtggct 540
taaaccgtgc acgaatgagc ttttgtgtat acagcattct gggtgtggtg aaacgaactt 600
gctggcccac tgacctagaa gaggccaaag ctgggggatt tgtggtgggt tatacatcca 660
gtggaaatcc aatcttccgt aacccctgca cagagcagat tctgaaactt cttgacaatt 720
tgcttgcgct tataagaacc cacaatcatt atatgcacca gaaatgctag cccaaatggc 780
agancctttc accaaggctn ttggatatgc ttgacgccgg naaaaactgc t 831

<210> 2409
<211> 648
<212> DNA
<213> Homo sapiens

<400> 2409
acatgccatg gtggctatgt gtataccaca gggcgtgatg gagcctacta ccagctgttt 60
gtacgagacg gccagctcca gccagtccta aggcagaagt cctgtcgaag catgaactgg 120
ctagctgggc tccgtatagt gcccgatggg agcatggtta tcctgggttt ccatgccaat 180
gagtttgtgg tgtggaaccc tcggtcacac gagaagctgc acatcgtcaa ctgtggtgga 240
gggcaccgtt cgtgggcatt ctctgatact gaggcggcca tggcctttgc ttacctcaag 300
gatggggatg tcatgctgta cagggctctg ggtggctgca cccggccaca cgtgattctc 360
cgggagggtc tgcatggtcg tgagatcact tgtgtaaagc gtgtgggcac cattaccctg 420
gggcctgaat atggagtgcc cagcttcatg cagcctgatg acctggagcc tggcagtgag 480
gggcccgact tgactgacat tgtgatcaca tgtagtgagg acactactgt ctgtgtccta 540
gcactcccta caaccacagg ctcagcccac gcactcacag ctgtttgtaa ccatatctcc 600
tcggtacgtg ctgnggctgt gtggggcatt ggnaccccan gtggccct 648

<210> 2410
<211> 752
<212> DNA
<213> Homo sapiens

<400> 2410
ctagtctatc tccgcttcct caacctctcc tacaacccca tcagcaccat tgagggctcc 60

0062305-0021300

atgttgcatg agctgctccg gctgcaggag atccagctgg tgggcgggca gctggccgtg 120
gtggagccct atgccttccg cggcctcaac tacctgcgcg tgctcaatgt ctctggcaac 180
cagctgacca cactggagga attagtcttc cactcggtgg gcaacctgga gacactcatc 240
ctggactcca acccgctggc ctgcgactgt cggctcctgt gggtgttccg gcgccgctgg 300
cggctcaact tcaaccggca gcagcccacg tgcgccacgc ccgagtttgt ccagggcaag 360
gagttcaagg acttccctga tgtgctactg cccaactact tcacctgccg ccgcgcccgc 420
atccgggacc gcaaggccca gcaggtgttt gtggacgagg gccacacggt gcagtttgtg 480
tgccgggccg atggcgaccc gccgcccgcc atcctctggc tctcaccccg aaagcacctg 540
gtctcagcca agagcaatgg gcggctcaca gtcttccctg atggcacgct tggaggtgcg 600
ctacgcccag gtacaggaca acggcacgta cctgtgcatc gcggccaacg cgggcggcaa 660
cgactccatg cccgnccacc tgcatgtgcg caagntactt cgcccgactg gccccattaa 720
gcccaacaag aanccttcgc ttttcatctt cc 752

<210> 2411
<211> 773
<212> DNA
<213> Homo sapiens

<400> 2411
ggcgccgggg gacacgttgg ctgcgtttc ggcgggcctc ccgggtacaa aaatggctgt 60
ggctagcgat ttctacctgc gctactacgt agggcacaag ggcaagtttg ggcacgagtt 120
tctggagttc gaatttcggc cggacggaaa gcttagatat gccaacaaca gcaattacaa 180
aaatgatgtg atgatcagaa aagaggctta tgtgcacaag agtgtaatgg aagaactgaa 240
gagaattatt gatgacagtg aaattacaaa agaagatgat gctttgtggc ctccccctga 300
tagggttggc cgacaggagc ttgaaattgt aattggagat gagcacatat cttttaccac 360
atcaaaaata ggttctctta ttgatgtaaa tcagtcaaag gatcctgaag gccttcgagt 420
attttactat ttggtacaag acttgaaatg tttagttttc agtcttattg gattacactt 480
caagattaaa ccaatttaaa ttgtatgttt tcaggctgtt tgtatattta attaagggat 540
gggaggggtt atttgtcatt tacagtattg gggtttttat gaatgtgaag caaacaaaaa 600
aaatttgtat gtaaactgaa aataagaaaa tacattagca agcttaatgg ttatccttac 660
ttgagtccac atgggttgga cagtccccac acacattaaa ttctggaaat gaaagccacc 720
ttttggtaaa aatttgctct aataaaacat accnaatcct ggnttgcnaa ata 773

<210> 2412
<211> 831
<212> DNA
<213> Homo sapiens

<400> 2412
tgttcaaaga cgtacattca actcaagagt ccagctctac agcagctata tttggaaata 60
cacatatttt atggccagta tataaatgat ttttaataaa attctaccaa atatctggct 120
gggtagctgc cctcgtcagg tggaacatgt aaccatcaaa ctgaagcatg aattggggat 180
tacagctgta atgaatttcc agactgaatg ggatattgta cagaattcct caggctgtaa 240
ccgctaccca gagcccatga ctccagacac tatgattaaa ctatatagga agaaggcttg 300
gcctacatct ggatgccaac accagatatg agcaccgaag gccgagtaca gatgctgccc 360
caggcggtgt gcctgctgca tgcgctgctg gagaagggac acatcgtgta cgtgcactgc 420
aacgctgggg tgggccgctc caccgcggct gtctgcggct ggctccagta tgtgatgggc 480
tggaatctga ggaaggtgca gtatttcctc atggccaaga ggccggctgt ctacattgac 540

0052045 - 0052045

gaagaggcct tggcccgggc acaagaagat tttttccaga aatttgggaa ggttcgttct 600
tctgtgtgta gcctgtaact ggtcagcctg cttctgcccc ctnctgattt ccctaaggag 660
cctgggatga tgtggtcaaa tgacctagaa acaaggattc tacctgaact gaaaggactg 720
tgtgaccttc cccaaccaac cactttcacc tgggatgact ttcgaatatg ctttggtttg 780
gggctggatt ttttgaaatc ttttccagna aactgggggt taacccccntg n 831

<210> 2413
<211> 818
<212> DNA
<213> Homo sapiens

<400> 2413
tggggtgtcg ctccgggctg gtggcggggc cactgccccg cttgggggaa gccgagcgat 60
ggtttgtggg cgccagttgt ctggcgccgg gagtgagacc ctaaaacaaa gaagaacaca 120
aatcatgtcc cgaggacttc caaagcagaa accgatagaa ggtgttaaac aagttatagt 180
tgtggcttct ggaaagggtg gagtcggaaa atctactaca gcagtgaatc ttgcacttgc 240
actagcagcg aacgattcgt ccaaggccat tggtttgcta gatgtggatg tgtatggacc 300
ttcagttcca aagatgatga atctgaaagg aaatccggaa ttatcacaga gcaacctaat 360
gaggcctctc ttgaattatg gtattgcttg tatgtctatg ggctttctgg ttgaagaaag 420
tgaaccagta gtttggagag gccttatggt aatgtcggcc attgagaaat tgttgaggca 480
ggtagattgg ggtcaactgg actacttagt tgtagacatg ccaccaggaa ctggagatgt 540
gcagttatca gtctcacaga atattcctat aacaggtgct gtgattgtct ccacgcccca 600
ngacatcgca ttgatggatg cacacaaggg tgctgagatg tttcgcanag tccacgtgcc 660
cgtccttggc cttgnccaaa acatgaatgt tttccagtgg tccaaaatgt aaacacaaaa 720
ctcatatttt tggtgctgat ggtcaaggaa actagccana cccttggtct tgaanttcta 780
ggagacattc cttacacctt aatataaggg aagcttna 818

<210> 2414
<211> 841
<212> DNA
<213> Homo sapiens

<400> 2414
tgaaaaaaga tggtgaagaa tgtactaacg aaggcaaagg aatagctgca cgaattcttg 60
ggccatccaa accacctcct tcaacatata atccacataa acctgttcct tatccgatac 120
ctccatgccg accacatgca actattgcac caagtgctta taacaatgca ggtctggtac 180
cattagcgaa tgtcatagct ccacctccac ctccatatac tcctaatcct gtaggaacag 240
agaatgaaga cctttcgaat ccgtcaaaac ctatacagaa tcaaacattt tccaccccag 300
caagtcaact cttttctcct catggttcta atccttcaac acctgctgca actcctgttc 360
ctactgcatc cccagtcaag gcaattaatc atccatcagc atcagcagct gccaccgttt 420
ctggaatgaa cctgctgaat actgtccttc ctgtgttccc agggcaggtc tcctcagccg 480
ttcacacacc tcagccatca ataccaaacc caacagttat cagaacccct tcattgccca 540
ctgcacctgt tacatccatc cacagtacaa ccaccactcc tgttccttcc atttttctg 600
gcctagtgtc actgccaggt ccttctgcca ctcctaccgc agccactcct accccaggac 660
ctacaccacg gtccactctt ggttccagtg aagcatttgc ttctacttct gcacctttca 720
ctagcctccc ttttccacca gctcttctgc tgcttctacc agcaacccaa attctgcttc 780
attggcatca gtttttgcan ggcttccttt gnccttacac caacatccaa nggctatcca 840
a 841

US 2005/0260686 A1

<210> 2415
<211> 780
<212> DNA
<213> Homo sapiens

<400> 2415
cgtatcaacg ggcatgatgt tgtcctggca acgttttcta caccttataa cagcatccct 60
gggtctgcag tctgtgccta tgacatgctt gacattgcca gtgtttttac tgggagattc 120
aaggaacaga agtctcctga ttccacctgg acaccagttc ctgatgaacg agttcctaag 180
cccaggccag gttgctgtgc tggctcatcc tccttagaaa gatatgcaac ctccaatgag 240
ttccctgatg ataccctgaa cttcatcaag acgcacccgc tcatggatga ggcagtgccc 300
tccatcttca acaggccatg gttcctgaga acaatggtca gataccgcct taccaaaatt 360
gcagtggaca cagctgctgg gccatatcag aatcacactg tggtttttct gggatcagag 420
aagggaatca tcttgaagtt tttggccaga ataggaaata gtggttttct aaatgacagc 480
cttttcctgg aggagatgag tgtttacaac tctgaaaaat gcagctatga tggagtcgaa 540
gacaaaagga tcatgggcat gcagctggac agagcaagca gctctctgta tgttgcgttc 600
tctacctgtg tgataaaggt tccccttggc cggtgtgaac gacatnggaa gtgtaaaaaa 660
acctgtattg ccttcagaga cccatattgn ggatggataa aggaaagtgg tgcctgcagc 720
catttatacc cacagcagac tgacttttga gcnggacatt aagcgtggca ataccnatgg 780

<210> 2416
<211> 638
<212> DNA
<213> Homo sapiens

<400> 2416
tggtgagatg tttctggaag aaaaaatccc ctcgatttct gatttaaagc tagcaattcg 60
aagagctact ctgaaaagat catttactcc tgtatttttg ggaagcgcct tgaagaacaa 120
aggagttcag cctcttttag atgctgtttt agaatacctc ccaaatccat ctgaagtcca 180
gaactatgct attctcaata aagaggatga ctcaaaagag aaaaccaaaa tcctaatgaa 240
ctccagtaga gacaattccc acccatttgt aggcctggct tttaaactgg agtttttgtc 300
taggtccttt ttccgtctca ctagacagaa ggaccacaga aggcccatcc agaggaccac 360
gttatatttg attgtcatgt ctccttatga tctcctaggc tgtaatagtt tcttagactt 420
tccttgtttc tcacgagatt gatatttttg agaagtattg gtcagctctt ttgtagagtg 480
tccctcaatt tgggtttatt atttgatgct tttcacatga ttagattgga gtcatgtgtt 540
tttaggagga ctgccatcga ggtgaagtgt tattcttgtc acatcatatc caaggtacag 600
acttgcagca tgatttatca ttgnttttgn tnttttttg 638

<210> 2417
<211> 669
<212> DNA
<213> Homo sapiens

<400> 2417
gtgtggagtt tacggagccg gtgggcggta ggcggtgcta cgggtagctg ggtgctgtcc 60
aaaggcgaca gggcgtcgtt aggggagcga gtcgtgaccg gttgggccac actcaacgtg 120
ggacgaagct tcgcctactg tttgactacg tgcgtgcagc ctcccctcga tgtcggccct 180

EP 2 502 630 A2 20120926

cgaaaagagc atgcacctcg gccgccttcc ctctcgccca cctctacccg gcagcggggg 240
cagtcagagc ggagccaaga tgcgaatggg ccctggaaga aagcgggact tttcccctgt 300
tccttggagt cagtattttg agtccatgga agatgtagaa gtagagaatg aaactggcaa 360
ggatactttt cgagtctaca agagtggttc agagggtcca gtcctgctcc ttctgcatgg 420
aggaggtcat tctgcccttt cttgggctgt gttcacggca gcgattatta gtagagttca 480
gtgtaggatt gtagctttgg atctgcgaag tcatggtgaa acaaaggtca agaatcctga 540
agatctgtct gcagaaacaa tggcaaaaga cgttggcaat gtggttgaag ccatgtatgg 600
ggaccttctn ctccaattat gctgattgga catagcatgg gtggtgctat tgagnccaca 660
cagcntcat 669

<210> 2418
<211> 734
<212> DNA
<213> Homo sapiens

<400> 2418
cagcttcgag acagagtgat agatggaact ccttgtggcc aggacacaaa tgatatctgt 60
gtccagggcc tttgccggca agctgaaatt cctcagagtg aaaactgtac ccctcctcag 120
caaagtggat gatatccatg ctatctgtag ccttctaaaa gactttcttc gaaacctcaa 180
agaacctctt ctgacctttc gccttaacag agcctttatg gaagcagcag aaatcacaga 240
tgaagacaac agcatagctg ccatgtacca agctgttggt gaactgcccc aggccaacag 300
ggacacatta gctttcctca tgattcactt gcagagagtg gctcagagtc cacatactaa 360
aatggatgtt gccaatctgg ctaaagtctt tggccctaca atagtggccc atgctgtgcc 420
caatccagac ccagtgacaa tgttacagga catcaagcgt caacccaagg tggttgagcg 480
cctgctttcc ttgcctctgg agtattggag tcagttcatg atggtggagc aagagaacat 540
tgacccccta catgtcattg aaaactcaaa tgcctttca acaccacaga caccagatat 600
taaagtgagt ttactgggac ctgtgaccac tcctgaacat cagcttctta agactccttc 660
atctagntcc ctgtcacaaa aaagtccgnt ncaccttacc aagaacactc ctagatttgg 720
gagcaaaagc aagt 734

<210> 2419
<211> 774
<212> DNA
<213> Homo sapiens

<400> 2419
tcaacatggt agcgcccggc cgagtgctca tctgcactgt caaggatgag ggctccttcc 60
acctcaagga cacagccaag gctctgctga ggagcctggg cagccaggct ggccctgccc 120
tgggctggag ggacacatgg gccttcgtgg gacgaaaagg aggtcctgtc ttcggggaga 180
aacattctaa atcacctgcc ctctcttcct gggggggaccc agtcctgctg aagacagatg 240
tgccattgag ctcagcagaa gaggcagagt gccactgggc agacacagag ctgaaccgtc 300
gccgccggcg cttctgcagc aaagttgagg gctatggaag tgtatgcagc tgcaaggacc 360
ccacacccat cgagttcagc cctgacccac tcccagacaa caaggtcctc aatgtgcctg 420
tggctgtcat tgcagggaac cgacccaatt acctgtacag gatgctgcgc tctctgcttt 480
cagcccaggg ggtgtctcct cagatgataa cagttttcat tgacggctac tatgaggaac 540
ccatggatgt ggtggcactg tttggtctga ggggcatcca gcatactccc atcagcatca 600
agaatgcccg cgtgtctcac actacaaggc cagcctnctg ccactttcaa cctgtttccg 660
gaggccaagt ttgctgtggt tctggaagag gacctggaca ttgctgggga ttttttcagt 720

US 2003/0232333 A1 Dec 18 2003

ttcctgagcc aatccatnca cctactggan gangatgaca gctgtactgg atct 774

<210> 2420
<211> 738
<212> DNA
<213> Homo sapiens

<400> 2420
acagaaggcg gggccagcgc cgctgccggg tgctggaggc gccattggag ccggcttggc 60
tggcgagccc ggctgaggag cctcttgggt cgcacttacc gccgcgtccg ctcccggtcc 120
ctggcccctc agcggcatgg cgtgcggggc gacgctgaag cggcccatgg agttcgaggc 180
ggcgctgctg agccccggct ccccgaagcg gcggcgctgc gcccctctgc ccggccccac 240
tccgggcctc aggcccccgg acgccgagcc gacgtcgccg tttcagacgc agaccccacc 300
gcagagtctg cagcagcccg ccccgccccgg cagcgagcgg cgccttccaa ctccggagca 360
aatttttcag aacataaaac aagaatatag tcgntatcag aggnggagac atttagaagt 420
tgttcttaat cagagtgaan cttgtgcttc ggaaagtcaa cctcactcct cagcactcac 480
agcacctagc tctccaggtt cctcatggat gaagaaggac cagcccacat ttaccctccg 540
acaagttggc ataatatgtg agcgcctctt aaaagactat gaagataaaa ttngggagga 600
gtatgancaa atctnaatac caaactagca gaacaatatg aatcttttg tgaaaatcac 660
acatgatcag attatgcgac ggtatgggac aagggcaaca anctatgtgt catgaanctt 720
tgncacatat ctgggtat 738

<210> 2421
<211> 805
<212> DNA
<213> Homo sapiens

<400> 2421
ttacccgatc ccactctcca gacccgccgc tgcctatgag gaggccctgc agctggtgaa 60
ggaggggaga gtgccttgcc ggaccctcag gacggagctg ctgggctgct acagtgacca 120
ggactttctg gccaagctgc actgtgtgcg gcaggccttc gaggggcttc tggaagacaa 180
gagtaaccag cttttcttcg ggaaagtggg ccgacagatg gtgacaggcc tgatgaccaa 240
ggctgagaag agccccaaag gcttcctgga gagctacgag gagatgctga gctatgccct 300
gcggcccgag acctgggcca caacacggct ggagctggag ggccgagggg tggtatgcat 360
gagcttcttc gacatcgtgc tggacttcat cctcatggac gccttcgagg acctggagaa 420
ccctccggcc tcggtgctcg ccgtcctgcg gaaccgctgg ctgtcagaca gcttcaagga 480
gacggccttg gccactgctt gctggtcggt cctgaaagcc aagaggaggc tgctgatggt 540
gcctgatggc ttcatctccc atttctactc cgtatcggag catgtgagcc ctgtcctagc 600
cttcggcttc cttggaccca agcctcactt gctgaagtct gtgctttctt caagcaccag 660
attgtgcagt acctgangga catgttcgac ctggacaatg tgcgcttaca cgtcacttgc 720
cgcgctggca gacgacatcc ttgcactgtc ccggngccgc aacgagatat tgctggggta 780
cctgggggtg ccccgnggnc agcaa 805

<210> 2422
<211> 856
<212> DNA
<213> Homo sapiens

0305205-050800

<400> 2422
atttagatta ttttggatac attttgaaaa gggatagcat aaatatttta agtaaaaaga 60
cctttatttt aaataatagt ggatatttta atgctggaaa ttagcattat agttgatatg 120
ccagaaatta tatctttggt tgtgatttaa acttatgcta taaactaaat taatgatgta 180
aatacatagt tttaaacatt cttttaggga catgtaactt ttaagtatca cttcaataat 240
acgtattatt ataggaacaa agatttggga ataattgatt acaggtgagg aagtactgga 300
attccagttc aaggagatac catttcattt aggactaaaa ggacaagata caagttcaca 360
tgatgggaaa aatcagaaaa cctctcgcag acaaagggta tataatggat atgaggcatc 420
aaaaagcatg gtatagtcag tgatggggaa tagtccagaa aggctgaaac acagcatgtg 480
atgcgagtca aggtagttga tgcccaactg tgaagggccg ttctaatcta gcatggaggt 540
agacagtgtt tccttaatat ggctgcatat cagaattacc taggtcagga cgaggcatgg 600
agatgctact ttaataggcc ctgccgcaga tcttccaaac cagaatctta atcctggagt 660
ctaggaatct ttatttttca cacactcatc caagtggtct gataaaatca gtccagcact 720
tttagaaccc actgataaca gacttattcc tggagacgca tttgaggagg aattggaaga 780
attttctaat ggaaaaggaa aaaagggtca catggaacca gaatnttgca angggancct 840
ggggcccagg gaattt 856

<210> 2423
<211> 608
<212> DNA
<213> Homo sapiens

<400> 2423
aaaacaattg gtatatgaaa tatacacatc ctgtgcccca atatggtgca ttatgaaaaa 60
caaaatcatt ttctaaaatg catttttga gcattgctct atagaaggga agggtgatga 120
gagaacagaa ctggcccctg tacaggtgtc attaatctgg ttgtatatgg gttataatat 180
gtaatacaaa aagctcatta agtatgggac tacatggaga gggaagacag tttcatttat 240
agctactggg gctaccagga cccttgctga ctgcagcctg gttgtgatta gttcaggtta 300
ctaggtgttc tgatggagtg ggacagtcca agtccagtaa ctgacattac gttttatgcg 360
tgtgcagttt ggtataacgt ggagtcagtg ctctaacgac acactatact tctatatgct 420
tttttctgtg aattttcctt ggtacatgag agaaataagt actctcatca acttatgata 480
aattggacta ttaggaataa aacaatctca gagcagctcc taaacaagag aatnaaaatg 540
ggccatncca gcacttataa ggggagcaca tcttgtaatg aaagtctgtg cctattggna 600
atgattcc 608

<210> 2424
<211> 822
<212> DNA
<213> Homo sapiens

<400> 2424
taagaaactg aaagaattga accaacgcat tgggaagaca gagtgcagaa ataagcatga 60
aggaatagct gataaacttt tggcaaaaat agcaaaactt caaagacgta ttaaaacagt 120
attattattt caaaggaatt gtttgaaacc aaacatgtta tccagtaatg gagcctctaa 180
ggttgcaaat tcagaggcta tgattttgga taagaatctt gagtcagtta atagtccaat 240
tgaaaagtct tctgtgaatt atgagccttc taacccttcc gaaaaaggaa gtaaaaaaat 300
taatttgtca tcagatcaaa ataagtctgt ttctgaaagt aacaatgatg atgttatgtt 360
gatttctgtg gaaagtccta atttgacaac tccaactaca tcaaatccaa cagataccag 420

US 2005/0048500

aaaaattaca tcaggaaatt ctagcaattc tcccaatgct gaagttatgg ctgtacagaa 480
gaaacttgat tctataattg atttgacaaa agaaggccta tccaactgca atacagaaag 540
tccagtatcc cccctggagt cacattcgaa agctgcttca aactcaaagg aaacaacccc 600
attggcacaa aatgcagtcc aggttcctga gtcctttgag cacctgccac ctcttccaga 660
accaccagca ccactacctg gaattagtag accaaaaccc cgagacacac tttctttccc 720
agaaacctgg agcttcaaaa gtggaaaccg ggttttcaga accaaatggg cattggccct 780
gacnttggna attttaaccc caaaatcnaa tccccaaagt gg 822

<210> 2425
<211> 859
<212> DNA
<213> Homo sapiens

<400> 2425
tttacccaga ctcctcctgg aatgctggcc ttggacaaca tgctgtactt ggctaaagtc 60
caccaggaca cctacatccg gattgtcttg gagaacagta gccgggaaga caaacatgaa 120
tgccccttg gccgcagtgc cattgagctc accaaaatgc tctgtgaaat cctgcaggtt 180
ggggaactac caaatgaagg acgcaatgac taccacccga tgttctttac ccatgaccga 240
gcctttgaag agctctttgg aatctgcatc cagctgttga acaagacctg gaaggagatg 300
agggcaacag cagaggactt caacaaggtt atgcaagtcg tccgagagca aatcactcga 360
gctttgccct ccaaacccaa ctctttggat cagttcaaga gcaaattgcg tagcctgagt 420
tactctgaga ttctacgact gcgccagtct gagaggatga gtcaggatga cttccagtcc 480
ccgccaattg tggagctgag ggagaagatc cagcccgaga tccttgagct gatcaagcag 540
cagcgcctga accggctctg tgagggcagc agcttccgaa agattgggaa ccgccgaagg 600
caagaacggt tctggtactg ccggttggca ctgaaccaca aggtccttca ctatggtgac 660
ttggataaca acccacaagg ggaggtgaca tttgaatccc tgcaggagaa aattcctgtt 720
gcagacatta aggccattgt cactgggaaa gattgtcccc acatgaaaga gaaaagtgct 780
cttgaaacag aaccaaggag gtggttggga atttgggcct ttttccatnc tgnatgaacc 840
cttgatgaga accttnaac 859

<210> 2426
<211> 812
<212> DNA
<213> Homo sapiens

<400> 2426
atatatcgac gaagaatgga aaaagatgtc ccaatgctgc cccaaagcca gagaagaaag 60
atggggtgtc cttctgtgct gaacatgtcc gtaggaatgc cctggcactt catgctcaaa 120
tgaagaagac caacccaggg cctgtgggtg aaacactcct gtgccagctg agctcatatg 180
ctaagacaga gctggggtct cagactccag aaagtagtcg cagtgaagcc agccgaatac 240
tagatgaaga cagctggagt gatggggagc aggaacccat tactgtggat cagacatgga 300
gaggtgaccc tgacagtgaa gctgatagca tagacagtga tcaagaagat cccctaaaac 360
atgctggtgt ctacacggca gaagaagtgg ccctgattat gcgtgaaaag ctaattcgtt 420
tgcagtcgtt gtatattgat cagtttaaac gacttcagca tctgctcaag gagaanaagc 480
gccgatactt acataatcgc aaagtggaac atgaagctct aggcagtagt ctcctgactg 540
gcccagaggg acttttggcc aaagaacgag agaacttaaa gcgattaaaa tgtctgcgac 600
gataccgnca gcgctatgga gtggaagcct tactgcatag gcagttgaag gaacggagaa 660
tgctggccac agatggtgct tgcccaacag gcccatacca ctcgttccag tcagaggtgc 720

0005720880

ttggcctttg tggatgatgt tcgttgntcc atcagtctct tncaatgacc agacactggc 780
cttacccata atttgtcang gataccaaat ca 812

<210> 2427
<211> 884
<212> DNA
<213> Homo sapiens

<400> 2427
tcatttcatg ttatgttttc atttcccctc tgtctgagag attgctctga tgtctttcct 60
tccataagtc ctacggagat cgagcttacc tcatttttct cccaggccta ggagctcaat 120
taccaggatc actttcttcc ccagggtgta ctacagacct ccacatgttg gacagtagga 180
ttcagcagag aatgagtccc acatcctctt ttcatccata agccactctt cccaactact 240
cttccgcctt ccattgtccc tatgtctact ttactgctca atctggattt tggggaacct 300
cctcccaaaa aggcattaga aggaaatgcc aagcaccgaa attttgtcaa gaagcggagg 360
ctcttagaac ggagaggctt tctgagtaaa aagaaccaac cccctagcaa ggcgcctaag 420
ttgcactctg aaccttcaaa gaaaggggag actcctacgg tcgatggcac ttggaagacc 480
ccttccttcc caaaaaagaa gacagctgct tccagcaatg ggtcaggaca gcccctggac 540
aagaaagctg cagtgtcttg gttgacccct gcccccttcaa aaaaggctga ttctgttgct 600
gctaaagtag atttgctggg ggagttccag agtgcccttc caaagatcaa tagccaccca 660
acccgctctc agaagaagag ctcccagaag aaatcctcta aaaagaacca tcctcagaag 720
aatgccccac agaactccac ccaagctcat tcagagaata aatgctccgg agcatcccaa 780
aanttncacg gaagatggtg gcaatgactg tgaaatggtg gcacaggacc aangggcatg 840
ttagttcctt ggctcgatga acattgcaac tacaacggag atgg 884

<210> 2428
<211> 706
<212> DNA
<213> Homo sapiens

<400> 2428
taaatgcagc tagattcaaa tgggctgata accaaatttt aacacatcag caatttgcat 60
tcagaaattt aaaaaatact gggccagaca taaccctcag gttactttac ctctgagggt 120
gcaacctctt ctcctcaaaa tgtactggtt ctgcctgtct ggagggccat ggagaagagg 180
ctgggagtca agccaaatcc tgcttcctgg attttatcag gatattattg gcagacatct 240
gcgaagtggt tgagaagcct gtacctgttt tatacttgct tttgcttcag cgttctgtgg 300
ttgtcaacag atgccagtga gagcaggtgc cagcagggga agacacaatt tggagttggc 360
ctgagatctg ggggagaaaa tcacctctgg cttcttgaag gaaccccctc tctccagtca 420
tgttgggctg cctgctgcca ggactctgcc tgccatgtct tttggtggct agaagggatg 480
tgcattcagg cagactgcag caggccccag agctgccggg cttttaggac acactcctcc 540
aattccatgc tggtgttttt aaaaaaattc caaactgcag atgatttggg ctttctacct 600
gaagatgatg taccacatct tctggggcta ggttggaact gggcatcttg gangcagagc 660
ccacccagag ctgcactcag acctgctgna tcttncagtg ccagca 706

<210> 2429
<211> 826
<212> DNA
<213> Homo sapiens

0050450.0042000

<400> 2429
atatgatgca tcctgaacct ggaaaattct accagattaa tccagaagag tatgaacatc 60
caaatccctg gaaagagagt ttccagcagt cgtataaagg tgcacatgta aagccaggat 120
ttgctgaaca tttctacagt aaccctgcaa gatataaagg aagagaaaat atgttgtatt 180
atgatactat tgaagatgcc cttggtgggg tacaagaggc tcattttgat ggacttatct 240
ttgttcattc tggaatatat actgatgaat ggatatatat tgaatctcca atcaccatga 300
ttggtgcagc acctgggaaa gtggcagaca aagttataat tgaaaacact agagattcaa 360
ccttcgtttt tatggaaggc tctgaagatg cttatgttgg atatatgaca ataaggttta 420
accctgatga caaatctgca caacaccaca atgcacacca ctgcttagag attacagtaa 480
attgtagccc tattattgat cactgtatca tccgaagtac atgtacagtt ggttctgcag 540
tatgtgttag tggtcaagga gcatgtccca ccatcaagca ctgtaacatc agtgactgtg 600
aaaatgttgg actatatata acagatcatg cacagggaat atatgaggat aatgaaattt 660
ccaataatgc gttagctggg atttgggtta aaaatcatgg aaacccaatt attagacgga 720
atcatattca tcatggacgt gatgntggtg nggtcacatt tgatcatggc atggggtact 780
tttgaaagtt gcaattttcc cccgaaattn ggatagcagg cttttg 826

<210> 2430
<211> 704
<212> DNA
<213> Homo sapiens

<400> 2430
agccagaccg gcggccacaa gacccctctc tctaaaacac cagacccact gctgggctgc 60
aaaaggaagc gcagaggtgg tggccatgtg aggccatcca cgcccaagaa aatgcaggag 120
gtggtgaaag acggtagcca ggatgccgac cacagccagg ggagagctga gcccggccat 180
gagaggcgag acctgcccat ccagggcaaa gccagtgagg ccctgggagg ggagggcacc 240
gccaggggcc ctggcgacac tcgcatgtca cagggccagg gtaagacaga cgaggcaagg 300
cgcctagacg agaaagagag ctctgaagac aaaagcagct ccctggacag tgacgaggac 360
ctggacacag ccatcaagga cttgttaagg tccaagcgaa agctcaagaa gaggtgcagg 420
gagcccaggg ctgcgtgcag gaagaaggtc aggttcagca cagcccagac gcacttcttg 480
gagcagctgg gcgggctccg gagagactgg aaagacaggg gcccgccagt gctgaagagc 540
tgcctctcca agtccaagag agacagtggc gagggtcctg ggaagaaacc ccccagtgtc 600
tttggcagca cggcagagag gatgaggcan gagggtgccg cgagccagga cgcggcctgg 660
cctttcgggt gaggagaccc gcttcgctnt gcttcgaang gaat 704

<210> 2431
<211> 882
<212> DNA
<213> Homo sapiens

<400> 2431
attatgctgg tctccatggc ggggcctcgg agccaagacg aggttgagta gactcgtttt 60
gaattttctc ccctctgctc cggcggactt cccatgtcgc cttgtggggc tatcggcggc 120
ggcaggactg ggggagtcag aggtctggca gcgctgtctg cgcagaccta ccggacgcta 180
cctcccaacc cccctgtctt cctcctgcct cctcctcctc ccgtcacctc ctgacccgcc 240
ggagctccga gcaactgccg gcctccgcct ccagccgcag ccggtcactg gcggcgcctt 300
ccgcgccaag cttgggggcc ttttcggggt cccacatggc acggcttccg acccccggcc 360

0961203450-040208

cgggacgggg ctcgcaggcc ccagaggggc aggctggaga aggaggaggt taggtgtctt 420
caggagggtt gctgagccca aggacgcgcc atcgccgcgg agaaggagcc ggacccctg 480
ggcggagcgc ccaatgtgtg gtccctcacg ccgtcccgca ccttgctttt tagggttctt 540
tttccgcttt ctgagccctt ttatacctta cgtttagaag gggaaaatca tcctcccaca 600
ccttctcccc gacttttgc ctttttgtc ttgaagttac ccaaaggcct gtgtattggt 660
ctcaatggtc ccaagaatta ctctaatata gttggttttc tganggaaga tggatggaga 720
taactatctg atcccaatgt cacttttaa ggcattcgct tcaagagaac aagcagttta 780
agaatcaggc agaactggat tgcaaaaant taatgggcan acccggtatg tgtgcaggtg 840
aagacaaagc tttccttttt tacttggttt aaagatgtct ac 882

<210> 2432
<211> 744
<212> DNA
<213> Homo sapiens

<400> 2432
taatagaatt taaaacattt cacaaaagtc aacacataaa taatatcaac caaaataaag 60
tggtagacag aagagaaaat atactaattt attgttcaaa gaggaaaata agtctcaaag 120
gttaaggcta ttatataaat ttatttttaa aaagacataa acctacattt tcagaagaag 180
aagttccatg tttccttaga ttatgtattt agcatccatt aatcacaggg ccaaactaac 240
aacaaaagtt gtttagcttt cccttacaat ccagctttta tgggtgtgca aacatcacat 300
tacagtccct ccaaccacaa accccaacat atagtatttc acttcctgcc caatagtggg 360
tgtccccaca cctttcaacc actgtagcaa caaagctctg gcctaggctt ttcacttgct 420
tctttactgc ctgactgact ttggtgtttc ctcatgtggc ctggtgtggc atggcacgcc 480
ctcttgggag atgaaagtaa tcttccatag gcaattgttt ctgtgtcacc attgctgatt 540
aaaacaaatc ctaagtacaa atgtcagaac agaaacatgc aaagcaagaa aacattacat 600
catgaaagtt tctttttttt tctttnttct ttttttttt ttttgagaca gagttttgct 660
ctttttgctc aggctggagt acagtgggcg cgatcttggt tcaccgnaac cttcgncttc 720
tgggttcaag cgtttctnct gcct 744

<210> 2433
<211> 852
<212> DNA
<213> Homo sapiens

<400> 2433
gtcgcgagag gttgttcgcg ccttgagagt taagcgaagt gtggtggctt ccaaggaata 60
caaacataaa ggccttcgac cgttgcaaat agactaaagt gaaaacaaat ctgaatgaag 120
atgaagttat ttcagaccat ttgcaggcag ctcaggagtt caaagttttc tgtggaatca 180
gctgcccttg tggctttctc tacttcctct tactcatgtg gccggaagaa aaaagtgaac 240
ccatatgaag aagtggacca agaaaaatac tctaatttag ttcagtctgt cttgtcatcc 300
agaggcgtcg cccagacccc gggatcggtg gaggaagatg ctttgctctg tggacccgtg 360
agcaagcata agctgccaaa ccaaggtgag gacagacgag tgccacaaaa ctggtttcct 420
atcttcaatc cagagagaag tgataaacca aatgcaagtg atccttcagt tcctttgaaa 480
atccccttgc aaaggaatgt gataccaagt gtgacccgag tccttcagca gaccatgaca 540
aaacaacagg ttttcttgtt ggagaggtgg aaacagcgga tgattctgga actgggagaa 600
gatggcttta aagaatacac ttcaaacgtc tttttacaag ggaaacggtt ccacgaagcc 660
ttggaaagca tactttcacc ccaggaaacc ttaaaagaga gagatgaaaa tctcctcaag 720

US 2005/0260609 A1

tctggttaca ttgaagtgtc cagcatattc tgaaagatgt cagtggagtg ccactcttga 780
aagtgctgtc aacatgaaac cttaactata tagnctgctt ggactgtgtg gctganatca 840
ggcaagctnt gg 852

<210> 2434
<211> 785
<212> DNA
<213> Homo sapiens

<400> 2434
tcttgtcaat gatggcggtc acagcaggtg ccgacttctg ctatgccatc gaggttttca 60
agcctatggc tgatgctgct gtgaagattg tggagaaaaa tggctttagt gataagatta 120
aggttatcaa caagcattcc accgaggtga ctgtaggtcc agagggtgac atgccatgcc 180
gtgccaacat cctggtcaca gagttgtttg acacagagct gatcggggag ggggcgctgc 240
cctcctatga gcacgcacac aggcatctcg tggaggaaaa ttgtgaggcc gtgccccaca 300
gagccaccgt ctatgcacag ctggtggagt ccgggaggat gtggtcgtgg aacaagctat 360
ttcccatcca cgtgcagacc agcctcggag agcaggtcat cgtccctccc gttgacgtgg 420
agagctgccc tggcgcaccc tctgtctgtg acattcagct gaaccaggtg tcaccagccg 480
actttacagt cctcagcgat gtgctgccca tgttcagcat agacttcagc aagcaagtca 540
gtagctcagc agcctgccat agcaggcggt ttgaacctct gacatctggc cgagctcagg 600
tggttctctc gtggtgggac attgaaatgg accctgaggg gaagatcaag tgcaccatgg 660
ccccccttctg ggcacactca gacccagagg agatgcaatg gcgggaccac tggatgcaat 720
gtgtgtactt cctggcacaa gaagaacctg tggtgcangg ctcaacgctn tatctggnac 780
ccacc 785

<210> 2435
<211> 779
<212> DNA
<213> Homo sapiens

<400> 2435
agacacatcg aaaggaatcg cagatgtccc cgagtggttc aaaggcagtc ggctcaacta 60
tgcagaaaac ctcctgcggc acaaagagaa tgacagagtt gcccctttaca ttgcaaggga 120
aggcaaagag gaaattgtga aggtgacttt tgaagagctg aggcaagaag tggctttgtt 180
tgcagcagca atgaggaaaa tgggtgtgaa gaaaggagat cgggttgttg gttatttacc 240
caacagtgag cacgctgtcg aggcgatgct ggctgcggca agcattggtg ccatctggag 300
ctccacgtcc ccggacttcg gtgagaatgg tgtgctggac cggttttctc aaattcagcc 360
aaagctcatc ttctctgtgg aggctgttgt ctataatggc aaagagcaca accacatgga 420
aaagctgcag caggtggtta gaggcctacc agacttgaag aaagtggtgg tgattcctta 480
tgtgtcctcc agagagaaca tagacctttc aaagattcca aacagtgtgt ttctggatga 540
ctttcttgcc accggcacca gtgagcaggc cccgcagctg gagttcgagc agctgccttc 600
agccacccac tgttcatcat gttctcatcg ggcaccacgg gcgcacccaa gtgcatggtg 660
cattccgctg ggggcaccct catncacatc tgaaggagca cctgctgcac ggnaacatga 720
ccagcagtga catnctctgg gctcaccacg gccggctgga tgatgtggaa cttggatgg 779

<210> 2436
<211> 748
<212> DNA

0035050.0002

<213> Homo sapiens

<400> 2436
attgaggaac atggcgttgc tggtgcgagt ccttacggag ttttgctctt gttgcgcaag 60
ctggagtgca atggcgtgat cttggctcac tgcaacctct gcctcccggg ttcaagcgat 120
tctcctgcct cagcctcctg agtagctggg attacagagg aaccagacta gcatttctca 180
gtgggttcca gtatgcagcc gattgatacc tgtgtctcct acccaaggac agggggacag 240
ggctctgtct cgcacttccc agtggcccca gatgagccag tcccaagcat gtggtggatc 300
agaacagatt cctggaatag acatacagct gaataggaag tatcacacca cacgtaagct 360
ttctactacc aaagattccc cacagcctgt tgaggagaag gttggtgctt tcacaaagat 420
aatagaagcc atgggattca cgggaccttt gaaatacagt aaatggggtg tcagatgcct 480
gatacattca attcatggtt tcttataacc ctactccacg tctggatgtg tctagtccga 540
atgaagcagg aaggccggag tgggaagtac atgtgtcgta tcatagttca ttttatgtgg 600
gaggatgttc agcagcgcgg cagagtcatg ggggttaatc cctatatcct gaagaagaac 660
atgatcctca tgacaaatca tttctatgca gcgatcttgg gatatgatga ngggatcctt 720
tcanatgatc atgggctggc cgntgcct 748

<210> 2437
<211> 737
<212> DNA
<213> Homo sapiens

<400> 2437
acatgcgccc tgacagccca acaatggcgg cgcccgcgga gtcgctgagg aggcggaaga 60
ctgggtactc ggatccggag cctgagtcgc cgcccgcgcc ggggcgtggc cccgcaggct 120
ctccggccca tcttcacacg ggcaccttct ggctgacccg gatcgtgctc ctgaaggccc 180
tagccttcgt gtacttcgtg gcattcctgg tggctttcca tcagaacaag cagctcatcg 240
gtgacagggg gctgcttccc tgcagagtgt tcctgaagga cttccagcag tacttccagg 300
acaggacaag ctgggaagtc ttcagctaca tgcccaccat cctctggctg atggactggt 360
cagacatgaa ctccaacctg gacttgctgg ctcttctcgg actgggcatc tcgtctttcg 420
tactgatcac gggttgcgcc aacatgcttc tcatggctgc cctgtggggc ctctacatgt 480
ccctggttaa tgtgggccat gtctggtact ctttcggatg ggagtcccag cttctggaga 540
cgggattcct ggggatcttc ctgtgccctc tgtggacgct gtcaaggctg cccagcatac 600
ccccacattc cggattgtcc tgtggggctt ncggtggctg atcttcagga tcatgcttgg 660
agcangcctg atcaagatcc ggggggaccg gtgctggcna aaccttacct ggattggact 720
ttcactatga aaancca 737

<210> 2438
<211> 808
<212> DNA
<213> Homo sapiens

<400> 2438
ttgttgtttg ttgaagcatt tcctattagg gatccaaacc ttcatgctat tggaatggat 60
agtgaaatcc agaaacagtt tgaagagctc tatagccttt tagaagatcc ttacccgatg 120
gtccgttcca cagggatcct tggtgtttgt aaaataactt ctaagtactg ggaaatgatg 180
cccccgacca ttcttattga cctcctgaag aaggtgactg gggaactggc atttgacacg 240
agctcagctg atgttcgttg ttctgtcttt aagtgtctgc caatgatttt ggacaacaaa 300

US20050250000

ctgagccacc cattgttaga gcagctcctt ccagctctca gatacagtct ccacgacaat 360
tcggagaaag tgagggtagc ttttgtggac atgctgttga agatcaaagc tgtgagggct 420
gctaagtttt ggaaaatatg tcccatggag cacattctgg ttcgtctgga aactgattct 480
cgacctgtgt ctcggcgcct ggtgagcctc atctttaatt ctttcctgcc tgtgaatcag 540
ccggaggagg tctggtgcga gcgctgtgtc accctggtgc agatgaacca cgccgctgcc 600
aggaggttct atcagtacgc ccacgaacac accggctgca ccaacatagc aaagctgatt 660
cacgttattc gtcattgctt aaatgcctgt atccagaggg cagtgagaga ccttcagagg 720
accaggagga agaagaccga aagggagaag gagaatggng actggtcttg gacaaaacac 780
tgncagtaaa cgatgttnca tgccttgg 808

<210> 2439
<211> 705
<212> DNA
<213> Homo sapiens

<400> 2439
ttgttatgtc tgccagatgg tcagtattct gacagtgtgg gacaaaggaa aaacggcagc 60
ctgggcaacc ccgcctctat aagaactaaa aaattagcca ggcatggcgg tgcatgcccc 120
tgtagtccta gcttctcagg aggctgaggc aggaggctct cttgagcccg ggaggacaag 180
gctgcagtga gccatgacca tgccactgca ctcagcctgg gcaacagagt gagaccctgt 240
ctcaagaaag aaaaacgaga aagggagagt ccctccactg taaggagatc gggttcatta 300
cattttgggg tgttggagaa aaatactgag tcagcacctg tgtgggattg gtgggagcag 360
atttggtgtt ttccaccccc tcacaggatt ctgaggtaac tcatttctgt tggccttggc 420
cttgtatggg gaggatttcc ctccagcctt gtatggggag gatttccctt gtatggggag 480
gattttccct ccagcttgtg ggaaaggaat caaggaccag agacaggcag gggagaagat 540
cactgaggga tttacggcag cagcctctgc acggcttccc acgaccttcc cagctgcttg 600
ctggacgctg ctggagaaac agcacatncc aagatcatca tggccccagc atnctcttga 660
acttantaac agttggcctg acagatgaac cggatatcat ccctg 705

<210> 2440
<211> 728
<212> DNA
<213> Homo sapiens

<400> 2440
tcaaaataaa attcctgaat ttgtacaagc cacaggaagc tagattgaga tcattatatg 60
acaactggaa ggccaaggct atgggttacc tcaaattgag gaattttggc acctactcac 120
aggctccatg agcagatgaa gtagacagct ttactcagta tctcagacca agaacttcat 180
ctccatctcc aactagctga aacatcttcc ctcctcaacc tggaaaattc tctgacttag 240
aaatttaaac aaaaccctcc cctttcattg aatctccatt gtctggagtt tgcttgtttt 300
aatctagcct gttcctccac tatgggctcc ctttcaaact atgccctgct tcaactaacc 360
cttactgctt ttttgacaat tctagtacaa cctcagcacc tgcttgctcc agttttccgg 420
acactatcta tcttgactaa tcagtctaat tgctggttat gtgaacatct agataatgca 480
gaacaacccg aactagtttt tgttcctgcc agtgcaagca cctggtggac ctattctgga 540
caatggatgt atgaaagggt gtggtatcca caagcagaag tacagaatca ctctacttcc 600
tcctatcgta aagtgacttg gcactgggaa gcctncatgg aagctcaagg nctatccttt 660
gctcaagtaa nggtattgga gggaaatttt tctctttgcg tagaaaataa aaatggcagt 720
ggaccctt 728

0050250450 - 0050250450

<210> 2441
<211> 772
<212> DNA
<213> Homo sapiens

<400> 2441
gctagcgaat aaccttaaac aggagggtca taatcttggg ctgctccatg gggatatgga 60
tcagagtgag agaaacaagg tcatttcaga ctttaagaaa aaggacatcc cagtcctggt 120
ggccacagat gttgcagccc gtggtctgga cattccttca attaagactg tcattaacta 180
tgatgtggca cgagacattg atacccacac gcataggatt ggccgcacag gaagagcggg 240
tgagaaaggt gtggcctata ccctactcac tcccaaggac agcaattttg ctggtgacct 300
ggtccggaac ttggaaggag ccaatcaaca cgtttctaag gaactcctag atctggcaat 360
gcagaatgcc tggtttcgga aatctcgatt caaaggaggg aaaggaaaaa agctgaacat 420
tggtggagga ggcctaggct acagggagcg gcctggcctg ggctctgaga acatggatcg 480
aggaaataac aatgtaatga gcaattatga ggcctacaag ccttccacag gagctatggg 540
agatcgacta acggcaatga aagcagcttt ccagtcacag tacaagagtc actttgttgc 600
agccagttta agtaatcaga agctggaagt tctgctgctg gggcaaagtg ggtggactag 660
tgcagggagc ttgaattctg gtccaactac tcancacaac agggccataa cagtcctgac 720
agncccgtca ccaatgccgc canggcatcc aagctttggc aatctggcac at 772

<210> 2442
<211> 730
<212> DNA
<213> Homo sapiens

<400> 2442
ggcagagacg agaagagagg aggggaggcc tcctccgccg ccgccatctt ggaccgggcc 60
cggtcagctt ccgcggagcc atcggcagac gccgcggcct cccttgagcc ccgacccccg 120
tcgtcagaac aaccccgggc ccactccccc aaccccactt ccgcttcgcg ccgctatcgc 180
gatagcgccc gggccccggg cgcgagaaaa aggcggcggg cgctcgcctc ccccgcctgt 240
cgcgatacgc tcctcagcgg cggcgccagc tcctgtgcgt ccgtctccaa gagagtatga 300
agagagtgcg tctgtagggc agggaagatg gcggacaagc gcaaactcca aggtgagatt 360
gatcgctgcc tcaagaaggt gtctgagggc gtggagcagt ttgaagatat ttggcagaag 420
ctccacaatg cagccaacgc gaaccagaaa gaaaagtatg aggctgacct aaagaaggag 480
attaagaagc tacaacggct gagggaccaa atcaagacat gggtagcgtc caacgagatc 540
aaggacaaga ggcagcttat agacaaccgc aagctcattg agacgcaaat ggaacggttc 600
aaagttgtgg aacgagagac caaaaccaaa gcttacagca aaagagggcc tgggcctgcc 660
cagaaggtag atcctgccag aaggagaagg aagangttgg ncantggctc acgaatacca 720
ttgacacgct 730

<210> 2443
<211> 727
<212> DNA
<213> Homo sapiens

<400> 2443
tggtgatttg catctcgtga cccgtattgt ggctggttaa gccagggatc ctgtggtaga 60

US 2005/0260645 A1

gtgaccccag ggatgcttgc tgaaggatat gaacaagaca cagaattcgg caacacagct 120
catctagggg actgccatgg tgtacgatgg gaagtccagt ctggagagtc caaccagatg 180
gtccacatga atgtcctcat cacctgtgtc tttgctgctt ttgttttggg ggcattcatt 240
gcaggtgtgg cagtatactg ctatcgagac atgtttgttc ggaaaaacag aaagatccat 300
aaagatgcag agtccgccca gtcatgcaca gactccagtg gaagttttgc caaactgaat 360
ggtctctttg acagccctgt caaggaatac caacagaata ttgattctcc taaactgtat 420
agtaacctgc taaccagtcg gaaagagcta ccacccaatg gagatactaa atccatggta 480
atggaccatc gagggcaacc tccagagttg gctgctcttc ccactcctga gtctacaccc 540
gtgcttcacc agaagaccct gcaggccatg aagagccact cagaaaaggc ccatggccat 600
ggagcttcaa ggaaagaaac ccctcaattt tttccgtcta gtccgncacc tnattcccca 660
ttaagtcatg ggcatatccc agtgccattg gtcttncaaa tgctacccat gactacaaca 720
cgtcttt 727

<210> 2444
<211> 828
<212> DNA
<213> Homo sapiens

<400> 2444
cagtacacaa atgcatgagt atgtttatac agtgttagac tgatgtgaat ttgcatttgt 60
tacattacat tgccagcgca tatcatttag caagttggca ttaacattta tgctttaatt 120
aaatgcctgt atacctatgt gtgcagcagt aaaaaattag tgagaaaaag caacttttg 180
tcactcttag gaaatatttt gtcttattag tgttcttggc acatgtatat tactaaagta 240
gataattcca atgagaaata ctaccagatt attgttataa aattaattta caatgtccct 300
gatattgagc taactcttaa aaaaaccaaa caaaactcgt atctgagtgt aactttgcca 360
atattttaaa agccaaaata ttctctggac aacaaatttg tattgctcag ggacagttta 420
ccttgcctgg taaaccttcc caaacagaaa tatagctata ctatctttgg ttttgttttt 480
ttgttttttt tgnttgtttg tattagatgg aatttcactc ttgtcgccca ggctggagtg 540
tagtggcgca gtctcagctc actgcaacct ccacctcccg ggttcaagtg attctcctgt 600
ctcagctccc tgagtaactg gaattacagg tgcacgccac cacgcccggc taatttttgt 660
gtttttagca gagacagggt ttcaccacgt tggccagggt ggtcttggac tcctgacctc 720
aggtcatcct nctgcctcgg cctnccaaag tgctgagact acaggtgtga gccccggctc 780
agccactanc tttgggtttt taaacatgga tatattcctc aagatgaa 828

<210> 2445
<211> 373
<212> DNA
<213> Homo sapiens

<400> 2445
ccttttctc taaggcagga aaggaaagac attaaaccat taattaagtc aatcctcttg 60
gagactcaaa agactatgaa gtgatcactc tatataaaat ataaatacag tgtgggttca 120
aatggccatt ttttgtgtgt ccctctctct catcttatgc ttcccttcct ttttttattt 180
ttatttttg gagacggagt cttgctgtgt cgcccaggtt ggagtgcagt ggcgtgatct 240
tagctcactg caagctctgc cttccaggtt cacgccattc ttctgcctca gccccctgag 300
tagctgggac tacaggcgcc cgccaccacg cccggctaat ttttttttt ttttttggan 360
ttttangaaa ngc 373

0050250-0050800

<210> 2446
<211> 869
<212> DNA
<213> Homo sapiens

<400> 2446
ctcttctctt gtctctgacg gcttgtagtt atggggcagg agccgcggac gctgccgccc 60
tcccccaact ggtactgcgc ccgctgcagc gatgccgtgc ccgggggcct ctttggcttc 120
gccgcgcgga cctccgtctt ccttgtccgc gtgggcccgg gcgcaggcga gagtccaggg 180
acacccccgt ttcgagtcat aggagagttg gtgggacaca ccgaaagggt ctctggcttc 240
acattttctc atcaccctgg tcagtacaac ctctgtgcca ccagctccga cgatgggact 300
gtgaaaatat gggatgtaga gacaaaaaca gttgtgacag aacatgcact ccatcagcat 360
acgatatcaa cactacattg gtctcctcga gtaaaggact taatagtatc tggggatgaa 420
aaaggagtag ttttctgtta ctggtttaac agaaatgaca gccagcacct ctttatagaa 480
cccaggacaa ttttctgtct tacttgttca cctcatcatg aagatttagt agccattggc 540
tacaaggatg gcatagtggt gataattgac atcagtaaga aaggagaggt tattcatagg 600
cttcgaggcc atgatgatga aatccactcc atagcctggt gtcccctgcc tggtgaagat 660
tggttatcta taaaccaaga ggaaacttca gaagaagctg aaattaccaa cgggaatgct 720
gtancacaag cttcagtaac aaaaaggttg ctacttaacc actggaagca aagatcaaac 780
cattcgaatc ttggagctgg tctaaaaggc ccaggggtgg atgaattttg gaaattggcc 840
ctttttgaa anaanaanaa ggaggggt 869

<210> 2447
<211> 774
<212> DNA
<213> Homo sapiens

<400> 2447
aagggttggc tgcgcgtgcg gcgggagtag aggcgccttg cgcaccagga agtgactgtt 60
tccccaccgc agcaaaccag gccatccgct ggccttttag tttgccgcct caggtttgta 120
agaggattta ttggttacga aggaaggtgg atttcagtgt gttctttgga tggcaggcct 180
taagagaaga gtcccactgc acagcctcag atacttcatc tccatggtgg gtctcttctc 240
caaaccagga ctgcttccct ggtatgccag aaatccacca ggatggtcac agctctttct 300
gggcacagta tgtaagggag atttcacccg tgtgatagcc acgaaatgtc agaaaggaca 360
aaaaagtcag aagaaaccaa gccatcttgg accactagat ggttcctggc aggaaaggct 420
ggctgatgtt gtgacaccac tctggaggtt gagctatgaa gaacagctca aggtgaaatt 480
tgcagctcag aagaaaattt tacaaagact agagtcttac atccaaatgc tcaatggagt 540
cagtgtgaca acggctgtac ccaaatctga gaggctctct tgtcttctnc atcctattat 600
accctctcct gtcatcaatg gttaccgaaa taagtccacc ttctctgtga accgaggtcc 660
anatggcaat ccaaagactg tggggttcta cctgggaact tggagagatg ggaaccttgc 720
tgngngcagt ctaatcatct gaaaaacatc cttgagaaac acagtcaant gggc 774

<210> 2448
<211> 696
<212> DNA
<213> Homo sapiens

<400> 2448

0505245.0702800

ctattttggt gacagaagaa gaacttagta gatgcattga ggatgtgttt aaggtgtacg 60
tggttgggaa tgaaccttta acagttttga tggattccct gcttccagtc ctgggagtgc 120
tttttcttct ctactgtttt actaagcaga gtgtgtctca cataaggtca ctttgccaag 180
aaatcttatt atggattctg gggaagctgg aaaggaagaa ggcaattgcc agcctgaaag 240
gatttgcagg gttggacaaa gctgtgccct ctctccattc tctgtgtcag tttagagttg 300
ccactcaagg tggcattatg attaccatca aagaggccat tagtgatgaa gatgaagatg 360
aagccctgta ccagaaggta tcctctgagc agggccgggt ggagcatctc ggggacttgc 420
tgtcccactg ccaggaatgc ggtttggcag gagacttctt catcttctgt ttgaaagagt 480
tgactcatgt ggcctcggaa aatgaaacag agttaaaaac tgagcccttc tccagcaaga 540
gcctcttgga attagagcaa catcagactc ttcttgtgga aggccaagag cggaagctgc 600
ttgtcctgca gctgatggct gtctgtgcga gagaatgtct gagcagatat tcacaaacgt 660
cactcangtg gtggactttg tancancaac attgca 696

<210> 2449
<211> 675
<212> DNA
<213> Homo sapiens

<400> 2449
catcaagacc atcagggcga tatctttggc ggcctggtcc tcctgaaggt gaaggcaaag 60
gtgcgacagt gcctgcagga gcggcggaca gtgcccattt tgtttgcctc taccgttcgg 120
cgccaccccg acaagacggc cctgatcttc gagggcacag atacccactg gaccttccgc 180
cagctggatg agtactcaag cagtgtagcc aacttcctgc aggcccgggg cctggcctcg 240
ggcgatgtgg ctgccatctt catggagaac cgcaatgagt tcgtgggcct atggctgggc 300
atggccaagc tcggtgtgga ggcagccctc atcaacacca acctgcggcg ggatgctctg 360
ctccactgcc tcaccacctc gcgcgcacgg gcccttgtct ttggcagcga aatggcctca 420
gccatctgtg aggtccatgc cagcctggac ccctcgctca gcctcttctg ctctggctcc 480
tgggagcccg gtgcggtgcc tccaagcaca gaacacctgg accctctgct gaaagatgct 540
cccaagcacc ttcccagttg ccctgacaag ggcttcacag ataaactgtt ctacatctac 600
acattcngca ccacagggct tgccaaaggc cgncatcgtg gtgcacagca ngtattaccg 660
catggcttgc cctgg 675

<210> 2450
<211> 899
<212> DNA
<213> Homo sapiens

<400> 2450
tacttggata tgaaaaatac tcgtacggcc tctgaaccat cagctcaact aagctatgcc 60
agcactggac gagagtttgc agccttttt gccaagaaga aacctcaaag gccaaaaaat 120
tctcttttca agttcgaatc gtcctcccat gccatcagta tgagcgccta tctgcgagaa 180
cagagaaggg agctctatag tcggagtgga gaactgcaag ggggtcctga tgacaactta 240
attgaaggtg gaggaacaaa atttgtctgc aaacctggag ccagaaacat taccgtcata 300
ttccacccat tactaagatt tattcaggag attgagcatg ctctgggtct tggcccagcc 360
aaacagtgtc ctcttcgaga gtttctcacc gtgtacatca aaaacatctt tctcaatcaa 420
gtcttggctg agatcaacaa ggagattgaa ggagtcacta aaacatctga ccctttgaag 480
attctggcca acgcagacac catgaaggtg ctgggagtgc agcggcctct cctacagagc 540
acaatcattg tggagaagac agttcaagac ctcctgaacc tgatgcatga cttgagtgca 600

0552045 - 072800

tattcagatc aattcctcaa catggtgtgc gtgaagctcc aggagtacaa ggacacctgc 660
actgcagctt acaggggtat tgtccagtca gaagaaaaac ttggcatcag tgcatnctgg 720
gcaaaagatg atgatatcag cagactcttg aaatctctac caaactggat gaatatggct 780
caacccaaca gcttgaggnc caaaagagag gaggaagaag attcataagg gcagcttttg 840
gcaaggagtc tgaagtctta ttgggaacct gggggataaa ttaatccctc ccaaganat 899

<210> 2451
<211> 889
<212> DNA
<213> Homo sapiens

<400> 2451
aacacgataa aggggacatg ccgggagttg cagtaccctc aggaaggtag cgtcttgatc 60
tgcgtggcgt ggttctgtgc cttgggaaga gatgaatggg aagcggccag cggagcccgg 120
cccagcccgg gtgggaaaaa agggaaagaa ggaggtgatg gcggagtttt cggacgctgt 180
tacggaagaa accttgaaaa agcaggtggc tgaggcctgg agccgcagga cgccgttcag 240
tcacgaagtc attgtcatgg acatggaccc ttttcttcac tgtgtgatcc caaacttcat 300
ccaaagccaa gacttcttag aagggcttca gaaggaactg atgaacttgg acttccatga 360
gaagtataat gatttatata agttccagca gtctgatgat ttgaagaaga gaagagagcc 420
tcacgtctcc actttaagga aaattctgtt tgaagatttc cggtcctggc tttctgatat 480
ttctaaaatt gacctggaat caaccattga catgtcctgt gctaaatatg aattcactga 540
tgccctgctg tgccatgatg atgagctgga agggcgccgg attgccttca tcctgtacct 600
ggttccttcc tgggacagga gcatgggtgg taccctggac ctgtacagca tagatgaaca 660
ctttcagccc gaagcagatt gtcaagtctc ttatcccttc gtggaacaaa ctggttttct 720
ttgaagtatc tnctgngtcc tttcaccagg tgtctgaagt gctgctgaag aaaagtcacg 780
tttgctataa gtggctggtt catggnccat tattgcttcg gcttcccact cttttgaacc 840
cccatccttg gagccttaca tccacaagat catanatttg gatgatgga 889

<210> 2452
<211> 740
<212> DNA
<213> Homo sapiens

<400> 2452
ctgaccgccg gggggtgccc ccgggacgta gcgccgcgga gaggaagcgg caaaggggac 60
catgcggcgc ctgactcgtc ggctggttct gccagtcttc ggggtgctct ggatcacggt 120
gctgctgttc ttctgggtaa ccaagaggaa gttggaggtg ccgacgggac ctgaagtgca 180
gacccctaag gtttggtcct tgtttttcaa ggtggctggg atgagccctt gggcgcctca 240
ggtgcctgta tcacccactc ctccctacca aagagggcat cttcctacag gaggacacct 300
tgctgtatgt catttcccat gtctcttgca agaagctcag ttccatttgc agactcaggt 360
ctttcttcaa gtcagatgca cactgctggt gtattgcacg gaccttccac ccactagcat 420
catcatcacc ttccacaacg aggcccgctc cacgctgctc aggaccatcc gcagtgtatt 480
aaaccgcacc cctacgcatc tgatccggga aatcatatta gtggatgact tcagcaatga 540
ccctgatgac tgtaaacagc tcatcaaatt gcccaaggtg aaatgcttgc gcaataatga 600
acggcaaggt ctggtccggt cccggattcg gggcgctgac atcgnccagg gcaccactct 660
gactttcctc gacagccact gtgangtgaa cagggactgg ctccagcctc tgttgcacan 720
ggtcaaagag gactacacgc 740

0056204.0007000

<210> 2453
<211> 819
<212> DNA
<213> Homo sapiens

<400> 2453
ttttagaatg gcacatcata tctcattgat gccaacatgg ttttgtccat ggttctgact 60
ttctgtgaag gcaccagctt gcaatatgcc atcccatttc accttgcatg tgagacagca 120
aacaaaatcc acaaatggtg tgaactaata tgctggctgc taccttgcat aaattaatga 180
tttgatcaca cgggttcttc gtggggttac atctgtgaat agcctgtttt ccacatgtaa 240
atttgtgcct tacaccttga gttgtgtaca cttgtaaact ctttatgatc aactgttccc 300
ccttttgaaa taagtgcaga tatttattta accctccctt ccccaccctc tgccccactt 360
ccagccctct gaaagattgg agtcaagcag atggaagaat gcagtggtga tagttgtcat 420
gcgacagcct gagaacgctg ggcagcacca caccctccaa ttcacactgc cttctagttg 480
tgccaactgg aaccaccctt tggctgtgct gcgaagcatg gaccccagtg ttgttgtggg 540
tgtgtcaaat ccccttcat cctcaagagc tccctgcttc ccttagatta tttcaatacg 600
gtgatatcct tatttgctag cagaaaaggg actaacgtcc cattcctctt ttctgctgcg 660
tccactggct agagagcaag cggtgcgcgg ttgggcagac acctgggagg agtcttcaag 720
ccatgtgcac agnacacacg tgcagtgcac acaaagaaat gacatggaaa tagatgcagg 780
caggctggtc cctgctgnga ttnacgagta acttcaagt 819

<210> 2454
<211> 795
<212> DNA
<213> Homo sapiens

<400> 2454
tcttacctat caaaaagaaa catttgtttg agaattccag gcttctgcag cctccaaaag 60
gtgttcttct ctatgggcct ccaggctgtg gtaaaacgtt gattgccaag gccacagcca 120
aagaagcagg ctgtcgattt attaaccttc agccttcgac actgaccgat aagtggtatg 180
gagaatctca gaaattggct gctgctgtct tctcccttgc cataaagcta caaccatcca 240
tcatctttat agatgaaata gactcctttc tacgaaaccg ttcaagttct gaccatgaag 300
ctacagccat gatgaaagct cagtttatga gtctctggga tggattggat actgatcaca 360
gctgccaggt catagtaatg ggagctacca atcgtcctca ggaccttgac tcggctataa 420
tgagaagaat gcctacnaga tttcatatca accagcctgc tttaaaacag agagaagcaa 480
tcctgaaact catcttgaaa aatgaaaatg tggataggca tgtagacctg ctagaagttg 540
cccaggaaac tgatgggttt tcaggaagtg acctaaaaga gatgtgtcga gatgctgccc 600
ttctctgtgt tagagaatat gntaattcta catcagaaga aagccatgac naagatgaaa 660
ttcggcctgg tcaacagcag gacctgcatc gggcaattga aaagatgaag aaatcaaagg 720
gtgcagcatt tcagaatggt ttaacccatg gtttgggtta naattaagag taaagaacat 780
tttgtncagg ntcaa 795

<210> 2455
<211> 794
<212> DNA
<213> Homo sapiens

<400> 2455

0502345.0002

aagttaaaac agctgagctt ctgaatgcct gcaagaagct gcccctttgaa attaagaact 60
tcgtgaagaa aacagaggct cttcggttgc agtatcgcta cttagacttg cgtagtttcc 120
aaatgcagta taacctgcga ctgaggtccc agatggtcat gaaaatgcgg gaatatctct 180
gtaatctgca tgggtttgtg gatatagaaa cccccacatt gtttaagagg accccagggg 240
gtgccaaaga gtttttagta ccatccaggg aacctggaaa gttttattct ctccctcaga 300
gtcctcaaca gtttaagcaa cttctgatgg ttggcggttt agacagatat tttcaggttg 360
cccgatgtta tcgagatgaa ggttcaagac cagacagaca gcctgagttt actcagattg 420
acatagagat gtcatttgta gaccagactg ggatccagag tttaattgag ggtttgctcc 480
agtattcctg gcccaatgac aaagatcctg tggttgttcc ttttcctact atgacttttg 540
ctgaggtgct ggccacctat ggaactgata aacctgacac tcgctttgga atgaagatta 600
tagatatcan tgatgtgttt agaaacacag agattggatt tcttcaagat gcacttagta 660
agccccatgg aactgtgaaa gccatatgta tccctgaagg accnaatact taaaaaggaa 720
agacattgna tccattaaaa cttttgcagc tgccatttta atcaggaaat cttacctgga 780
ttccttacgn ccat 794

<210> 2456
<211> 739
<212> DNA
<213> Homo sapiens

<400> 2456
agcagaatag ccaggcagga cagagaaact ccaccagcag tattgagccc aggcttctgt 60
gggagagagt ggagaagctg gtgcccagac ctggcagtgg cagctcctca gggtccagca 120
actcaggatc ccagcccggg tctcaccctg ggtctcagag tggctccggg gaacgcttca 180
gagtgagatc atcatccaag tctgaaggct ctccatctca gcgcctggaa aatgcagtga 240
aaaaacctga agataaaaag gaagttttca gacccctcaa gcctgctgat ctgaccgcac 300
tggccaaaga gcttcgagca gtggaagatg tacggccacc tcacaaagta acggactact 360
cctcatccag tgaggagtcg gggacgacgg atgaggagga cgacgatgtg gagcangaag 420
gggctgacga gtccacctca ggaccagagg acaccagaag cagcgtcatc tctgaatttg 480
agcaatggtg aaacggaatc tgtgaaaacc atgattgtcc atgatgatgt anaaagtgag 540
ccggccatga ccccatccaa ggaaggcact ctaatcgtcc gccagactca gtccgctagt 600
ancacactcc anaaacacna atcttcctcc tcctttaccc ttttatagaa cccagattac 660
taccgatttc tccatctanc ggaacaacng ttgactctgt ggtggggatt ttcctgtgat 720
ngggatnaaa cccnaaacc 739

<210> 2457
<211> 748
<212> DNA
<213> Homo sapiens

<400> 2457
ggaagataat gtttgcttgc ccagcaatgg caaattatat acaaaggtaa tcaactgggt 60
gcagcgtagc atctgggana atggagacag tctggaanag ctgatggaag angttcaaac 120
cttgtactac tcagctgatc acaagctgct tgatgggaac ctactanatg gacaggctga 180
ggtgtttggc agtgatgatg accacattca gtttgtgcag aaaaagccac cacgtgagaa 240
tggccataag cagataagta gcagttcaac tggatgtctc tcttctccaa atgctacagt 300
acaaagccct aagcatgagt ggaaaatcgt tgcttcagaa aagacttcaa ataacactta 360
cttgtgcctg gctgtgctgg atggtatatt ctgtgtcatt tttcttcatg ggagaaacag 420

0507050 2007000

cccacagagc tcaccaacaa gtnctccaaa actaagtnag antttaagct ttgagatgca 480
acaagatgag ctaatcgaaa agcccatgtc tcctatgcag tacgcacgat ctggtctggg 540
aacagcagan atgaatggca aactcatagc tgcaggtggc tataacagan aagaatgtct 600
tcnaacagtc caatgctata atccacatac agatcactgg tcctttcttg ctcccntgaa 660
aaacaccaag aacccgattt cnaatggctg ttctcatngg gccanctcta tgtggtaggt 720
ggatcaaatg ggccctccaa tnacctga 748

<210> 2458
<211> 875
<212> DNA
<213> Homo sapiens

<400> 2458
agtcacctct tctcaaccct ttacctgggc agatcatttg aaagcacagg aagaagctca 60
aggtcttgtc cagcattgta gggcaacaga agttactttg cctaaaagta tacagagcct 120
tatctattgg ctccaccctg ctttgtcttg gctaccactg ttccctcgta ttggagctga 180
tagaaaaatg gctggaaaga caagtccttg gtcaaatgat gcaaccctgc agcatgtttt 240
aatgagtgac tggtctgtga gctttacttc tctatataat ttgctgaaga caaaactttg 300
cccctatttc tacgtttgta cctatcagtt tactgtcctg ttccgagcag caggattagc 360
tggaagtgac ttaatcacag ctctcatatc tccaacaact cgaggtttaa gagaagctat 420
gagaaatgaa ggtattgaat tttctctgcc tttaataaaa gaaagtggcc ataagaagga 480
gacagcatct ggaacaagct tgggatatgg ggaggagcaa gccatcagtg atgaggatga 540
agaagaaagt ttttcctggc tggaagagat gggtgtgcaa gataaaatta aaaagccaga 600
catactttct atcaagctgc gtaaagagaa acatgaagta caaatggatc acagacctga 660
atctgttgtt gttggtaaaa agaatcaaca cctttacatt gctcaatttt ttgattaact 720
ctaagaattt aattgctacc tcaggtccac aggcaggact cctccaacct cttgtccctg 780
ttgctttccg aaggtgccnc aatgccaatt gcttaanggc ccgaattttt aatttnaaaa 840
nccaaactcc tttctggaat acnaaaacca tttta 875

<210> 2459
<211> 667
<212> DNA
<213> Homo sapiens

<400> 2459
gagacctgag gctctggcct gcagctcgcg ccgccatgga cgctgccgag gtcgaattcc 60
tcgccgagaa ggagctggtt accattatcc ccaacttcag tctggacaag atctacctca 120
tcgggggga cctggggcct tttaaccctg gtttacccgt ggaagtgccc ctgtggctgg 180
cgattaacct gaaacaaaga cagaaatgtc gcctgctccc tccagagtgg atggatgtag 240
aaaagttgga gaagatgagg gatcatgaac gaaaggaaga aactttacc ccaatgccca 300
gcccttacta catggaactt acgaagctcc tgttaaatca tgcttcagac aacatcccga 360
aggcagacga aatccggacc ctggtcaagg atatgtggga cactcgtata gccaaactcc 420
gagtgtctgc tgacagcttt gtgagacagc aggaggcaca tgccaagctg gataacttga 480
ccttgatgga gatcaacacc agcgggactt tcctcacaca agcgctcaac cacatgtnca 540
aactccgcac gaacctccag cctctggaga gtactcagtc tcaggacttc tananaaagg 600
cctggtgcan gcggcttgct gggggatgtg agcgctcang acgtgatnaa gtactcgtgg 660
ttctgga 667

0062045 0072800

0022070-050402

<210> 2460
<211> 949
<212> DNA
<213> Homo sapiens

<400> 2460
tctctacccg ggaatgtctc ggcgaaagca gcggaaaccc caacagttaa tctcggactg 60
cgaaggtccc agcgcgtctg agaacggtga tgctagcgag gaggatcacc cccaagtctg 120
tgccaagtgc tgcgcacaat tcactgaccc aactgaattc ctcgcccacc agaacgcatg 180
ttctactgac cctcctgtaa tggtgataat tgggggccag gagaacccca acaactcttc 240
ggcctcctct gaaccccggc ctgagggtca caataatcct caggtcatgg acacagagca 300
tagcaacccc ccagattctg ggtcctccgt gcccacggat cccacctggg gcccagagag 360
gagaggagag gagtcttcag ggcatttcct ggtcgctgcc acagaaccag tatgtggcat 420
tcctgtcaaa tggcctgccc atgaagccct ggaattccag ctccacctcc actaccactc 480
caagcctggc cccaccagtg ctgtttggcc taggaactgt ggctgggaag gtgcctccaa 540
caatgggatc canggaagcc aaggagaaga cagcccccct cctatttcag cctcctgcac 600
ccaaggcagt gcctgagaag cccatcatan acaagaanta ncaaactgta cattccttct 660
tcctcccccc gctccagaag gtgccggtac tgaanatgct ccantaattg gtgaaccaac 720
cctaaggaat tagggaaaaa tgaaggaagg gcataggaaa attttcccan ttaatccccc 780
gatggtccca ttaaggtaaa gtttggctng tcattttcca aaactctcca cttctcatcn 840
tgataactct caaatttggg aaacaactga attcttgcca aaaagttccc ccagaaaant 900
tttgggaaaa ttttaanttc ntttctttaa ggaaccnttt tnggtcccc 949

<210> 2461
<211> 614
<212> DNA
<213> Homo sapiens

<400> 2461
gtagtgacgg ggattgttgt gttgcagaaa tccggcaatc gacctgagga cttgcgagcc 60
gctcagctcc cgggacgttt ggagctgctg ctaaataatt tctgctcagc catgtcgccg 120
gctccagatg cagccccggc tcctgcgtcg atctccctgt ttgacctcag cgcggatgct 180
ccggtctttc agggcctgag cctggtgagc cacgcgcctg gggaggctct ggcccgggct 240
ccgcgtactt cctgttcagg ctcaggggan aaanaaagcc cagaaagaaa gctactccag 300
ggtcctatgg atatttcaga aaagttattt tgttcaactt gtgaccagac cttccanaac 360
caccaagaac agagggaaca ttataagctt gactggcatc ggtttaacct aaagcaacgt 420
ctcaaggaca agcctctcct gtctgccctg gactttgaaa agcagagctc cacaggagat 480
ctttccagca tctcgggatc agaagactca gactcagcca gtgagganga cttgcagaca 540
ctggatcggg aganggctac atttganaaa ttganccgac ccccaggctt ttaccctcat 600
cnagttcttt tcca 614

<210> 2462
<211> 818
<212> DNA
<213> Homo sapiens

<400> 2462
gcatacatga caaaatgtgg ccacagcttt tgctacaagt gtattcatca gagtttggag 60

gacaataata gatgtcccaa gtgtaactat gttgtggaca atattaacca tctgtatcct 120
aatttcttgg tgaatgaact cattcttaaa cagaagcaaa gatttgagga aaagaggttc 180
aaattggacc actcagtgag tagcaccaat ggccacaggt ggcagatatt tcaagattgg 240
ttgggaactg accaagataa ccttgatttg gccaatgtca atcttatgtt ggagttacta 300
gtgcagaaga agaaacaact ggaagcagaa tcacatgcag cccaactaca gattcttatg 360
gaattcctca aggttgcaag aagaaataag agagaggaaa tgagtggctt atactctcct 420
gtcagtgagg atagcacagt gcctcaattt gaagctcctt ctccatcaca cagtagtatt 480
attgattcca cagaatacag ccaacctcca ggtttcagtg gcagttctca gacaaagaaa 540
cagccttggt ataatagcac gttngcatca agacgaaaac gacttactgc tcattttgaa 600
gacttggagc agtgttactt ttctacaagg gatgtctcgt atctcagatg acagtcgaac 660
tgcaagccan ttgggatgaa tttcaggaat gcttgtccaa gtttactcca atataattcc 720
agttacgacc tttaaccccc attgtcatat gcctantgat ctctataatg gttcccantt 780
ntaatcctct aattattgaa atttggaanc ccnggggg 818

<210> 2463
<211> 821
<212> DNA
<213> Homo sapiens

<400> 2463
ctattctgta aatgttcaat gaactagaga atgattcttg ggtagttaat attgtcaatg 60
ttgatgaact cttttccttc gctgaaagca gctactttgt tggaggtttc aattctgcgt 120
ggcaatttgc agcatttcta gtggtactgc tccacatttt acagctttat gaagaaggtg 180
tttacttttt ttgaaattac cttgagacat ttcaaactgt gcagaagata tatgcacaaa 240
agcaaatgtc ttgcagtttg ctatagccac ttatcatcat ctggctcttg aatagcttta 300
attcagctgt tgaatctcac ttgaatttga gcaaaacctt catctttata tgtatctgga 360
caaattactt caattgcttg acagtaatga ccaatcaatt tatttaaaat agtatcattt 420
agtaggacag tgtttttctc tggtttgagc aacgaattca accagtcctc tgggttgatc 480
atcatcatca tcatcatttg gttatcagtt cctgagttat ttttaccagg ggagttttat 540
acctttagac agctattttg aattatctca gggaatgtca tatatctctg cctctttaga 600
gtcagtcact ggcactttgt ctgtttggtg acatcatgtt tccctgactg ttcttcatct 660
ttggtagtta tacattgata tatgtgcatt gaatatgtta ggtatttata aacagtcttt 720
gcaatctggc tttgtctgtg aatgtccctg ttatantaag tctgtccaaa aattgttaag 780
ccatactgtc tttttttgg gtctttaaa aaccncccc c 821

<210> 2464
<211> 795
<212> DNA
<213> Homo sapiens

<400> 2464
aaacagacat ggccggcgaa ggagatcagc aggacgctgc gcacaacatg ggcaaccacc 60
tgccgctcct gcctgcagag agtgaggaag aagatgaaat ggaagttgaa gaccaggata 120
gtaaagaagc caaaaaacca aacatcataa attttgacac cagtctgccg acatcacata 180
catacctagg tgctgatatg gaagaatttc atggcaggac tttgcacgat gacgacagct 240
gtcaggtgat tccagttctt ccacaagtga tgatgatcct gattcccgga cagacattac 300
ctcttcagct ttttcaccct caagaagtca gtatggtgcg gaatttaatt cagaaagata 360
gaacctttgc tgttcttgca tacagcaatg tacaggaaag ggaagcacag tttggaacaa 420

0050204590

cagcagagat atatgcctat cgagaagaac aggattttgg aattgagata gtgaaagtga 480
aagcaattgg aagacaaagg ttcaaagtcc ttgagctaag aacacagtca gatggaatcc 540
agcaagctaa agtgcaaatt cttcccgaat gtgtgttgcc ttcaaccatg tctgcagttc 600
aattagaatc cctcaataag tgccagatat ttccttcaaa acctgtctca agaagaagac 660
caatgttcat ataaatggtg gcagaaatac cagaaganaa agttcattgg tgcaaatcta 720
acttcgtggn ctcgctggct gttttcctta tatgatgctg anaactttaa ntgggacaga 780
aatccagaaa acnct 795

<210> 2465
<211> 737
<212> DNA
<213> Homo sapiens

<400> 2465
agccgccgcc tcgccgcttc ccctcgtcgg agcggccgct cgtccgcccg gcttgaggcc 60
cgcgggganc gcggcgcaat tcgtcggccc gcgggggggc ggcctcccgg catcttcgcg 120
gcgaccaagg actaccagga aggggancgg ctgggatggc gcgtccgcgg ccccgcgagt 180
acaaagcggg cgacctggtc ttcgccaaga tgaagggcta cccgcactgg ccggcccgga 240
ttgatgaact cccagagggc gctgtgaagc ctccagcaaa caagtatcct atcttctttt 300
ttggcaccca tgaaactgca tttctaggtc ccaaagacct ttttccatat aaggagtaca 360
aagacaagtt tggaaagtca aacaaacgga aaggatttaa cgaaggattg tgggaaatag 420
aaaataaccc aggagtaaag tttactggct accaggcaat tcagcaacag agctcttcag 480
aaactgaggg agaangtgga aatactgcag atgcaagcag tgaggaagaa ggtgatagag 540
tanaagaaga tggaaaaggc aaaagaaaga atgaaaaagc aggctcaaaa cggaaaaatc 600
atatacttca aagaaatcct ctaaacagtc ccggaaatct ccaggaagat gaagatgaca 660
agactgccna gaaanaagaa aacnaaagca gctctgaagg tgganatgcc gggcaacgac 720
acnagaaaac acacttc 737

<210> 2466
<211> 692
<212> DNA
<213> Homo sapiens

<400> 2466
gaagcgcgcc gcgcacctca tggttccggg gacagttagg gcggcggatg gagggtttgg 60
aatcacttgc taggagtctt gtctctctgc cacccaggac atcatggcag ctcacctggt 120
aaagcgatgc acgtgcctcc tgagagaagc tgctcgtcag gcccctgcca tggctccagt 180
tggccgactg agacttgcct gggtagccca taagactctg acttcctcag ccacctcacc 240
catttcccac ctcccaggtt ccttgatgga gccggtggag aaggaacgag catctactcc 300
ctacatagag aagcaggtgg accacctcat caagaaggcc acaaggccag aggagctcct 360
ggagctactt ggtggcagtc acgacttgga cagcaatcaa gcagcaatgg tacttatccg 420
gctctctcac ttgctgtctg agaagccaga agataaaggc ttgctcatac aggatgccca 480
ctttcatcaa cttctctgtc tgctcaacag tcagattgcc tcggtctggc atggtaccct 540
ctcgaagctg ctgggaacct gtatgctctg ggcatcccca aggcctccaa ggactgcant 600
cngtggaaca ggaagtccgc tggcncatgc ngaactcaat tacaagcacc tggccttcct 660
ggcaaaatcc tgttgccacc ctctcacang aa 692

<210> 2467

US 2005/0048500 A1

0050050.00200

<211> 716
<212> DNA
<213> Homo sapiens

<400> 2467
aaagtgggct ccaggcgtcg cgatggagga gagcgggtac gagtcggtgc tctgtgtcaa 60
gcctgacgtc cacgtctacc gcatccctcc gcgggctacc aaccgtggct acagggctgc 120
ggagtggcag ctggaccagc catcatggag tggccggctg aggatcactg caaagggaca 180
gatggcctac atcaagctgg aggacaggac gtcaggggag ctctttgctc aggccccggt 240
ggatcagttt cctggcacag ctgtggagag tgtgacggat tccagcaggt acttcgtgat 300
ccgcatcgaa gatggaaatg ggcgacgggc gtttattgga attggcttcg gggaccgagg 360
tgatgccttt gacttcaatg ttgcattgca ggaccatttc aagtgggtga aacagcagtg 420
tgaatttgca aaacaagccc agaacccaga ccaaggccct aaactggacc tgggcttcaa 480
ggagggccag accatcaagc tcaacatcgc aaacatgaan aagaaggaag gagcagctgg 540
gaatccccga gtccggcctg ccagcacagg aaggctganc ctgcttcccc tcccccaggg 600
gggaaaacct ccaccctgat ccctcccct ggggaacaat tggctgtggg gggatccctc 660
ctccaaccan catttgctcc canttcagga agtnctcctg tacctgggcc aaangn 716

<210> 2468
<211> 742
<212> DNA
<213> Homo sapiens

<400> 2468
aaaaaaaaaa aaagcatccg ctgggtgtan ccgtggggat ggcaggttcg gggaggctgg 60
tcctacggcc ctggattcgg gagctgattc tggggtcaga gacaccctcc agtccacgag 120
ccgggcagct gcttgaggta ctacaggacg ccgaggccgc ggtcgcgggc ccatcccacg 180
cccctgatac gtccgacgtc ggggccacgc tgcttgtgtc tgacgggacc cacagtgtcc 240
gatgcctggt gacgcgggag gccctggaca cctcggactg ggaggagaag gagttcggct 300
tccgcgggac agagggccgg ctgctgctgc tgcaggactg cggggttcat gtccaggtcg 360
ctgagggcgg cgcgcccgca nagttctatc tccaggtgga ccgcttcagc ctgctgccca 420
cggagcagcc ccggctacgg gtgcctggtt gcaaccaaga cttanatgtt cagaaaaagc 480
tctatgactg ccttgaggag caccttttcag agtccacctc gtccaatgca ggcctatcac 540
tgtcccagct tctggatgaa atgcgggagg accanganca tcaggggggca ctcgtgtgcc 600
tggctgaaac tgcctgacac tggaaggncc ttgcacagca ccccctgtca cccactgggc 660
tgcctcacga tgcaaggcca cgggaaaanc tgtgttacac ttgtcccanc tcaattgctg 720
ttgnancccc ccccccccaa tn 742

<210> 2469
<211> 570
<212> DNA
<213> Homo sapiens

<400> 2469
aaaatagggt cactgggccg cttggcggtg tcgttgcggt accaggtccg cgtgaggggt 60
tcgggggttc tgggcaggca caatggcgtc tcgagcaggc ccgcnagcgg ccggcaccga 120
cggcagcgac tttcagcacc gggagcgcgt cgccatgcac taccagatga gtgtgaccct 180
caagtacgaa atcaagaagc tgatctacgt acatctggtc atatggctgc tgctggttgc 240

taagatgagc gtggaacacc tggggctctt gtcacatgat caggtggcca tgccctatca 300
gtgggaatac ccgtatttgc tgagcatttt gccctctctc ttgggccttc tctcctttcc 360
ccgcaacaac attagctacc tgntgctctc catgatcagc atgggactct tttccatcgc 420
tccactcatt tatggcagca tggagatgtt ccctgctgca cagcaactct accgccatgg 480
gcaaggccta nccgtttcct ctttnggttt ttctgccgtt ttccaccatg cactgatgtt 540
ggtnnttggc antgccaaat gccatgcctg 570

<210> 2470
<211> 738
<212> DNA
<213> Homo sapiens

<400> 2470
gtctctcgtt ttcggacggc tgcagcatcg cggtggggat cgaaagcggg ggcttctggg 60
acgcagctct ggagacgcgg cctcggacca gccatttcgg tgtagaagtg gcagcacggc 120
agattcatct gaaaactaca ttaagatgaa gacctttgaa ggtttctgtg ctttgcatct 180
cgctgcaagt caaggacatt ggaaaatcgt acagattctt ttagaagctg gggcagatcc 240
taatgcaact actttagaag aaacgacacc attgttttca gctgttgaaa atggacagat 300
agatgtgtta aggctgttgc ttcaacacgg agcaaatgtt aatggatccc attctatgtg 360
tggatggaac tccttgcacc aggcttcttt tcaggaaaat gctgagatca taaaattgct 420
tcttagaaaa ggagcaaacn aggaatgcca ggatgacttt ggaatcacac ccttatttgt 480
ggctgctcat tatggcaagc ttanaaagct tgaaccatac ttatttcatc ggggtgcaaa 540
tgtcaattgt caagccttgg acaaagctac acccttgttc attgctgctc aagaagggac 600
ncacnaaatg tgtggaactt ttgctctcca ntggggcaaa tcctgatctt tactgtcatg 660
aagacagttg gcatttacct tattcatgcc gctngcacaa atnggcntac caaaaaatct 720
tgggaacttg tttantnc 738

<210> 2471
<211> 842
<212> DNA
<213> Homo sapiens

<400> 2471
gctgtcagct ttctccgtgg tctgagtttg tggctgcatt tttatctctg gtggctctgc 60
tacggcggcg cagaaatgag gcagaagcgg aaaggagatc tcggccctgc tgagctgatg 120
atgctgacta taggagatgt tattaaacaa ctgattgaag cccacgagca ggggaaagac 180
atcgatctaa ataaggtgaa aaccaagaca gctgccaaat atggcctttc tgcccagccc 240
cgcctggtgg atatcattgc tgccgtccct cctcagtatc gcaaggtctt gatgcccaag 300
ttaaaggcga aacccatcag aactgctagt gggattgctg tcgtggctgt gatgtgcaaa 360
ccccacagat gtccacacat cagttttaca ggaaatatat gtgtatactg ccctggtgga 420
cctgattctg attttgagta ttccacccag tcttacactg gctatgagcc aacctccatg 480
agagctatcc gtgccagata tgacccttc ctacagacaa gacaccgaat agaacagtta 540
aaacaacttg gtcatagtgt ggataaagtg gaatttattg tgatgggtgg aacgtttatg 600
gcccttccag aagaataccg agattatttt nttcgaaatt tacatgatgc cttatcagga 660
catacttcca acaatattta cgaaggcagt ccantattct ganaaaaacc tcacaaagtg 720
ttattggaat tactattgaa aaccngacca gattactgca tgaagcgact tttaagtnac 780
tgttaaccta ttgggntgca ccaaggntng aaaattgggg gttcaaaatg tttatgaaaa 840
at 842

US 2005/0260665 A1

<210> 2472
<211> 640
<212> DNA
<213> Homo sapiens

<400> 2472
gcanacacgt gatgcggggg anggcggggc gtggcaggag caagcgtctg ccgcggtggc 60
cgggtgccgg taagggtttc cagcgccccc ggcctaggtt ttggaggcgc gggaatgcgt 120
tcgttgctca gtgtcggact tccccctatt cccatcggcc gaggctgtca ctttacgctc 180
ataaccgttt ttctttactg cactcgtgtc gggaggaaag ggacttgcgt ggcaccccca 240
gacctccccg tctccgcttc cacgtttggt acatcctgcc tgaggcagga agccgcagct 300
ganggacggc ctgtcgtacg gtgcggatgg tggtggcctg cgaggctcat ttctagcaag 360
gaacaaggct ttcccgcttt gattttataa atattatgtt tacaaagctg taatatatag 420
aaattgataa gacgtgtccc tgtccctgga aacgcaggca ccgcgtgttt ggaaagacat 480
tcatctgggc tgtttgacag actccccagt tggtgccatg ctctgtgctt agggaactgt 540
gagaccctgg aagggtgggt accgggaccg cnctcancct ggggtttgga ggcggctcct 600
ataagaanca actgggacct aanatttta nactgactgt 640

<210> 2473
<211> 881
<212> DNA
<213> Homo sapiens

<400> 2473
gaggctcggc cgcctgagcc gcggacggtt tgctgagccc gttagtgcgc ccggccgaga 60
cacgccgccg ccatgtcccg ctacctgcgt ccccccaaca cgtctctgtt cgtcaggaac 120
gtggccgacg acaccaggtc tgaagacttg cggcgtgaat ttggtcgtta tggtcctata 180
gttgatgtgt atgttccact tgatttctac actcgccgtc caagaggatt tgcttatgtt 240
caatttgagg atgttcgtga tgctgaagac gctttacata atttggacag aaagtggatt 300
tgtggacggc agattgaaat acagtttgcc caggggatc gaaagacacc aaatcagatg 360
aaagccaagg aagggaggaa tgtgtacagt tcttcacgct atgatgatta tgacagatac 420
ggacnttcta caagccgaag ttatgagagg aggagatcan gaagtcggtc ttttgattac 480
aactatagna agatcgtata gtcctagaaa cagtataccg actgggaaga ccacggcgta 540
cataagccat tccgacnatg atagaccaaa ctgcagctgg aatacccagt acngttctgc 600
ttactacnct tcaagaaaga tctganagcg gaaanagaac caaagaaggg cagtccaagc 660
gaccaaaggg tgggtggaag gtctgcaata tgaatactgt tcgaatattt gactctggtc 720
tgaaaagatt aaaaatgttn tcgaaaaact acntgggaaa taattgaatc ccttccaagt 780
tttgttagtt agccttttn ggaaccaatt tnaaggacat tccactttgt tcttgttgga 840
aactattctt aaatttgaaa taggtctcaa actgnnnccc g 881

<210> 2474
<211> 669
<212> DNA
<213> Homo sapiens

<400> 2474
ttcaactagc aaaagaaagc tttctgcaca gattggccca agagagagaa gcagcaaaag 60

0960203.0942000

ctaagaaaga agaatcaaca acaggtaacg ccaacttgtt agaaaagaca ggaggagtgg 120
atttccatat gaaagctgtg ccagggacag aagtgccagg gcataagaat tgggttgtga 180
gcaaatttgg aagagtctta cctgttcttc accttaaaaa tcaacataaa cgtaaaatca 240
tcaaatatga tccctcaaaa tactgccaca acctgaagaa gatagggggag gatttctcaa 300
acaccattcc tatatccagc ctgacttggg aattagaagg agggaatgac cctatgagta 360
agaaacggcg aggagagttc tctgactttc atggccctcc caagaagata ataaaagtgc 420
agaaggatga gagttccact gggtctctgg ccatgagtac aaggcccagg agggtaatag 480
agagaccacc cttaacacag caacaggctg cacaaaaaag aacttgtgat tccattactc 540
cttctaaatc atctcctgta cctgtttctg atactcagaa acttaaaaat ctacctttta 600
agacttctgg cttgggaaac tgccaanaaa ganaaacagc attttctgat gaattttggg 660
gaaaaaatt 669

<210> 2475
<211> 692
<212> DNA
<213> Homo sapiens

<400> 2475
ttcctagcca ggcctggcgg taaccttggg ggcctcactg cagccgccgc tgctgttgga 60
gtgggctttg cgagtctgaa cgttggcggg gctaggctcg ttaactgccg agagcctccg 120
ggtttgcggt ggaggacgct gaggcccgtg gggggcaggc acccgggcgc cgggcctccc 180
agccgacatg tctctagtgg cggaagcctt cgtctcccag attgcagctg cagaaccttg 240
gcctgaaaat gctacattat atcagcaatt gaaaggggag caaattttac tttctgacaa 300
tgcagcttct cttgcagtgc aggccttttt gcaaatgtgt aacttgccta tcaaagtagt 360
ttgtagggca aatgcagaat atatgtctcc atctggtaaa gtacctttta ttcatgtggg 420
aaatcaagta gtatcaggac ttggtccaat agtccaattt gttaaagcca agggccattc 480
tcttagtgat gggctggagg aagtccaaaa agcagaaatg aaagcttaca tggaattagt 540
caacaatatg ctgttgactg cagagctgta tcttcagtgg tgtgatgaac tacagtangg 600
ganatcactc atgctaggta tggatctcct taccccttggc ctctgaatca tattttggcc 660
tatcaaaaac nctgggaant caaacgtaan at 692

<210> 2476
<211> 795
<212> DNA
<213> Homo sapiens

<400> 2476
acttcagttc tcggagagaa gaggcgggag tggacctggt cagccctacc ccactgaccc 60
caccggaccc aggcgcggcc tccgccacag ccacagcccc tgcccctgct gcggcgcggc 120
gaggcgaggc gatggccaag gtgtcggtgc tgaacgtggc ggccctggag aacccgagcc 180
ctttccacag ccccttccgg ttcgagatca gcttcgagtg cagtgaagcc ctggcggacg 240
acctggagtg gaagatcatt tatgttggct cggctgagag tgaggaattt gatcagatcc 300
tagactcggt gctggtgggc cctgtgccag cagggagaca catgtttgtc tttcaggccg 360
acgcccccaa cccatccctc atcccagaga ctgatgccgt gggtgtgact gtggtcctca 420
tcacctgcac ctaccatgga caggagttca tccgagtggg ctactacgtc aacaacgagt 480
acctcaaccc tgagctgcgt gagaacccgc ccatgaagcc agatttctcc cagctccagc 540
ggaacatctt ggcctcgaac ccccgggtga ccgcttccat atcaactggg acaacaacat 600
ggacaggctg gaggccatag agaccaggac cctccctggg ctgcggcctc ccactcaact 660

US 2005/0042600

gcactcctat caagggcttg gggctcctgg ctgcatccct gggcctcctc cctgagaact 720
ccatggactg cntctaactg cnnggaaccc aaattttcca ccccccgggg aaggggcaac 780
caaggnctcc ccanc 795

<210> 2477
<211> 665
<212> DNA
<213> Homo sapiens

<400> 2477
aagtgaccct agagaaacga gttgtggctg aggaccccgg cggcagacgc aggttcggga 60
ccatgagctg gattcctttt aagattgggc agcccaagaa acagattgtg cccaaaacac 120
catgtcaaaa tctgccgtga agatatcctt ggacttactc tccaatcccc tctgtgagca 180
agaccaggac cttctgaaca tggtgacggc cctggacacg gccatgaagc ggatggatgc 240
cttcaatcag gaaaaggtga accagatcca gaagactgtg atcgagccct taaaaaagtt 300
cggcagtgtc ttcccgagcc tcatcatggc tgtgaagagg cgggaacagg ccttgcagga 360
ctacaggagg ctgcaggcca aggtggagaa gtatgaggaa aaggagaaga cggggccagt 420
gctggccaag ctccaccagg cacganagga gctgcggcct gtgcgggagg actttgaagc 480
caanaacagg cagctgctgg aggagatgcc gcgcttctac ggcagccgcc tcgactactt 540
ccagcccagc tttgaatccc tcatccgagc tcaggttgtg tactactcgg aaatgcacaa 600
gatctttgga gacctgtcca tcagcttgac canccaggcc actccgatna ncancgggan 660
cggga 665

<210> 2478
<211> 423
<212> DNA
<213> Homo sapiens

<400> 2478
accaaaacac tagcatcccc acccgcggac tctgtaactt tttaatgtct gatgaagagt 60
atgatgacag aactgcncgg gtgctgattg gacatatctc aaagaagatg aacaaacaga 120
ctttccctga gcactgtagt ttgtgtnaag agatcttgcc attcacagat cgcaaacagg 180
cagtctgttc caatggccac atttggctcc ggtgcttctt aacctaccag tcctgccaga 240
gttggatata tagaaggtgt ttgctccctg aangcattgn ccggnatcca gctccagaag 300
atccgactgg attaagaagt tactgcaaaa cccctgccct ttctgtgatt ctcctgtctt 360
cnaaataatc ngtgacggga anatggaang gcatgatgaa ctctgccnta aaaaacttcc 420
tcc 423

<210> 2479
<211> 804
<212> DNA
<213> Homo sapiens

<400> 2479
gatgctgcag ccgtccagca gcccgctctg ggggaagctt cgtgtggaca tcaaggctta 60
cctgggctcg gccatacagc tggtgtcctg tctgtcggan acgacggtgt tggcggccgt 120
gctgcggcac atcagcgtgc tggtgccctg cttcctgacc ttccccaagc agtgccgcat 180
gctgctcaag anaatggtgg tcgtatggag cactggggag gantctctgc gggtgctggc 240

0050205450 = 0702000

tttcctggtc ctcagcagag tctgccggca caagaaggac actttccttg gccccgtcct 300
caagcaaatg tacatcacgt atgtgaggaa ctgcaagttc acctcgcctg gtgccctccc 360
cttcatcagt ttcatgcagt ggaccttgac ggagctgctg gccctggagc cgggtgtggc 420
ctaccagcac gccttcctct acatccgcca gctcgccata cacctgcgca acgccatgac 480
cacccgcaag aaggaaacat accagtctgt gtacaactgg cagtatgtgc actgcctctt 540
cctgtggtgc cgggtcctga gcactgcggg ccccatcgaa ccctccagcc cttggtctac 600
cccttgccc aagtcatcat tggctgtntc aagctcatcc ccactgcccg cttctacccc 660
gcttgcgaat gcactgcatc ccgttgccct gacgctgctc tcggggaac tcggggggc 720
tttcatcccn gtgccgcctt tccatccttg gaaaatttc cnaccanggt cgaacttcca 780
ncnagggaaa cccaggggg catt 804

<210> 2480
<211> 758
<212> DNA
<213> Homo sapiens

<400> 2480
gaagatgcac ctagcaccaa gctccatgga gaggtgctag ccctggaaga anagcgggct 60
cangtgctgg ggcacgtgga gcagctcaag gtccgtgtga aggagctaga gcancagctg 120
caggagtcag cccgagagga ggcagaggcc ctggggactg agacaaagct ctttgaggac 180
ttggagttcc agcagttgga gcgggagagc cgcgtggagg aggagcgcga gctggccggc 240
caggggctgc tccggagcaa ggctgagctg ctccgcagca tcgccaagag gaaggagcgc 300
ctggccatcc tggacagtca ggctgggcag atccgggctc aggccgtgca ggaatcagaa 360
cgcctggccc gggacaagaa tgcctcctta cagctgctgc aaaaggagaa ggagaagctg 420
actgtgctgg aaaggagata ccactcactc acanggggca ggcctttccc gaanaccnca 480
tcgaccctca aagaggttta ccgctccaag atggatggcg aggccaccat ccccttccc 540
cggacccgca gcggccccct cccctcctcc tctggctctt cctcctcctc ctcccanctc 600
agcgtggcta ccctggggcg tacccctccc caaagaacgc tctactcacc canaatggca 660
cnggcacctt cctcgcaacc tggcanccac actgcaggac tcnaaaacaa cgccaactan 720
ctctgcacag aaaggacaac aagtgattga aaaacanc 758

<210> 2481
<211> 877
<212> DNA
<213> Homo sapiens

<400> 2481
tgctgtccag ggtgacaatt ctcaggtgct gcagctcctt ggaaggaacg cagtggctgg 60
cctgaaccag gtgaataacc aagggctgac cccgctgcac ctggcctgcc agctggggaa 120
gcaggagatg gtccgcgtgc tgctgctgtg caatgctcgg tgcaacatca tgggccccaa 180
cggctacccc atccactcgg ccatgaagtt ctctcagaag ggtgtgcgg agatgatcat 240
cagcatggac agcagccaga tccacagcaa agaccccgt tacggagcca gccccctcca 300
ctgggccaag aacgcagaga tggcccgcat gctgctgaaa cggggctgca acgtgaacag 360
caccagctcc gcggggaaca cggccctgca cgtggcggtg atgcgcaacc gcttcgactg 420
tgccatagtg ctgctgaccc acggggccaa cgcggatgcc cgcggagagc acggcaacac 480
cccgctgcac ctggccatgt cgaaagacaa cgtggagatg atcaaggccc tcatcgtgtt 540
cggagcanaa gtggacaccc cgaatgactt tggggagact cctacattcc tagcctccaa 600
aatcggcaga cttgtcacca ggaaggcgat cttgactctg ccgagaaccg tgggggccga 660

atactgcttc ccacccatcc acggggtccc gcggaacaag gctctgcacg ccacatcatc 720
ccttctccct ggaaanaact caccccccacc gatcacctaa acaacctaaa actacaggat 780
ctcatgcaca tctcacnggg ccccgaaaac cacgttcatc cctggggtnc atnaaaggga 840
caaaaaaccg aancccccaaa caccttgctt ttncctg 877

<210> 2482
<211> 724
<212> DNA
<213> Homo sapiens

<400> 2482
ggctccaaat gtccacttgc acattctaca aaaagagtgt ttcaaagctg ctcaatgaaa 60
agtaaggttc aactctatga gatgaatgca caaatcacaa agaagtctgt cagaatgctt 120
ctgtctaggt tttatgtgaa gatatttcct tttccatgat aggccccaaa gcactccaca 180
ggtccagttg cagattctac aaaaagagtg tntcaaagct gctcaatcaa nagaaacgtt 240
catctctgtg acatgaatgc acacatcaca atgaaattta tcagaatgct tctgtctagt 300
ttttttgtga aaatatttcc ttttccacca taggcctcaa agtgctccaa atgtccactt 360
gtagattcta caaacagagt gtttaaaaac tgctaaatga aaagaaagat tcaactctgt 420
gagatgaata cacacatcaa gaagaagttt gtcagaatgc ttctgtctan ttnttatatg 480
atgatatgtc cttttccaca ataggccaga aagtgctccn aatgtccact tgcagattca 540
acaaaaagan tgtttcaaag ctgctcaatg ttaaagaaag gttcaacact gtgagctgaa 600
tgcccacatc tcaaagaagt ttgtaagaat gcttctgtct agtttttatg tgaacatatt 660
cctttncccc cantaggcct ccaaaagggc tccncattgt tcctcctgcn gattnctacc 720
aaaa 724

<210> 2483
<211> 894
<212> DNA
<213> Homo sapiens

<400> 2483
attgcacact gcactttctg agttatgctt ctctataaat tatgtaccaa acatggtggt 60
atgggaacat acctttaccc cacgagaata tttgacttct catctggaaa tacgctttac 120
caagtcaatt gttgggatga ctatgtataa tcaagccaca caggaaattg caaaaccttc 180
agaacttcta acaagtgtaa gagcatacat gaccgtactc cagtcaatag aaaactatgt 240
gcagattgat attacaagag tatttaataa tgtgcttctt caacaaacac aacatttaga 300
cagtcatgga gagccaacca ttacaagtct atacacaaat tggtatttgg aaactttgtt 360
acgacaagtc agcaatggcc atatagcata ttttcctgca atgaaagcgt ttgtgaactt 420
acctacagaa aatgaattaa cattcaatgc agaggaatat tctgacatat cagaaatgag 480
gtcattatca gaactactag gcccatatgg tatgaagttt ctaagtgaaa gccttatgtg 540
gcatatttca tcacaagttg ctgaacttaa gaaacttgtg gtgganaatg ttgatgtgtt 600
aacacaaatg aggaccagct ttgacaaacc agaccagatg gctgcactgt ttaaaagatt 660
atcatctgtt gacagtgtct tgaanaagat gggctactgg ganaatttct ggggcttgca 720
tcctccagtc tactgaaaat tgggcaggan accgatnaaa ctaccaccag aaatagaaaa 780
tctgtttatt tactgctana tatgaatggt ncagaatccc attcctacaa tnggatcttt 840
tgggaaactg gtttccctaa gttctggctn aaaaatgctt accagcttgt ctcn 894

<210> 2484

0058270.0450

0050250-050805

<211> 873
<212> DNA
<213> Homo sapiens

<400> 2484
ctattttagt acaagtgaaa cagcctcgaa aaaaggtcat ggcttgcaaa accgctttta 60
ataaaaccgg gttccaagaa gtgtttgatc ctcctcatta tgaactgttt tcactaaggg 120
acaaagagat ttctgcagac ctggcagact tgtcggaaga attggacaac taccagaaga 180
tgcggcgctc ctccaccgcc tcccgctgca tccacgacca ccactgtggg tcgcaggcct 240
ccagcgtcaa acaaagcagg accaacctca gttccatgga acttcctttc cgaaatgact 300
ttgcacaacc acagccaatg aaaacattta atagcacctt caagaaaagt agttacactt 360
tcaaacaggg acatgagtgc cctgagcagg ccctggaaga ccgagtaatg gaggagattc 420
cctgtgaaat ttatgtcagg gggcgagaag attctgcaca agcatccata tccattgact 480
tctaatcttc tgctaatggt gatgtgaatt cttagggtgt gtacgtacgc agcctccagg 540
gcaccatact gtttccagca gccaaccctt ttctcccatc acaactacga agaccttgat 600
ttaccgttaa cctattgtat ggtgatgttt ttattctctc aggcagtcta tatatgttaa 660
accaatcaag gacttactct attcagtgga aacaataatc atctctattg cttgggtgtc 720
atttatagga agcactgcca gtttaaagac cttaaaaaaa aggtggttgg gatggaacca 780
agctcanggc tgnctcttcn tttttaccaa ccaanaaaaa tgctcttgaa tgaataacan 840
ctctgttcaa tattttggat gccccaataa aac 873

<210> 2485
<211> 788
<212> DNA
<213> Homo sapiens

<400> 2485
gtctaccttc cggaggccca catcttgccc actccgcgcg cggggctagc gcgggtttca 60
gcgacgggag ccctcaaggg acatggcaac tacagcggcg ccggcgggcg gcgcccgaaa 120
tggagctggc ccggaatggg gagggttcga agaaaacatc cagggcggag gctcagctgt 180
gattgacatg gagaacatgg atgatacctc aggctctagc ttcgaggata tgggtgagct 240
gcatcagcgc ctgcgcgagg aanaagtaga cgctgatgca gctgatgcan ctgctgctga 300
agaggaggat ggagagttcc tgggcatgaa gggctttaag ggacagctga gccggcaggt 360
ggcagatcag atgtggcagg ctgggaaaag acaagcctcc agggccttca gcttgtncgc 420
caacatcgac atcctcagac cctactttga tgtggagcct gctcaggtgc gaagcaggct 480
cctggagtcc atgatcccta tcaagatggt caacttcccc cagaaaattg caggtgaact 540
ctatggacct ctcatgctgg tcttcactct ggttgctatc ctactccatg ggatgaagac 600
tctgacacta ttatccggga aggcaccctg atgggcncag ccattggcac ctgcttccgc 660
tactggctgg gaatctcatc cttcatttac ttccttgcct accctgtngc aacgcccaaa 720
tcaccntgct gcaaatnttn gcnctgctgg ggctattgcc tctttggggc attgcattgt 780
ccctgttc 788

<210> 2486
<211> 795
<212> DNA
<213> Homo sapiens

<400> 2486

tcagagattc gggcgcccat tgttactgtt ggtgttaata acgatccagc tgatgtaaga 60
aagaaagaac tcaagatggc tgaaataaaa gttaagctta tcgaagccaa agaagctttg 120
gaaaattgca ttaccttaca ggattttaat cgggcaccag aattaaaaga agaaataaaa 180
gcattagaag atgccagaat aaacctttg aaagagacag agcaacttga aattaaagaa 240
gtccacatag agaagaatga tgctgaaaca ttgcagaaat gtcttatttt gtgctatgaa 300
ctgttgaagc agatgtccat ttcaacaggc ttaagtgcaa ccatgaatgg aatcatcgaa 360
tctttgattc ttcctggaat aataagtatt catcctgttg taagaaacct ggctgtttta 420
tgcttgggat gctgtggact acagaatcag gattttgcaa ggaaacactt cgtattacta 480
ttgcaggttt tgcaaattga tgatgtcaca ataaaaataa gtgctttaaa ggcaatcttt 540
gaccaactga tgacgttcgg gattgaacca tttaaaacta aaaaaatcaa aacacttcat 600
tgtgaaggta cagaaataaa cagtgatgat gagcaagaat caaaagaagt tgaagagact 660
gctacagcta agaatgttct gaaactcctt tctgatttct tanatagtga agtatctgaa 720
cttaggactg gganctgcan aaggactanc ccaagctgat gttctctggg cttttggtcc 780
gcagcaagga tnctt 795

<210> 2487
<211> 656
<212> DNA
<213> Homo sapiens

<400> 2487
ctctctgacg aaggactgga aggtggcggt ggtgaaggtg caggccgttg gggcggctca 60
naggcaggtg actatgaaag gcttatattt ccaacagagt tccacaggat gaagaaataa 120
catttgtatt tcaanaaaag gaagatcttc ctgttacaga ggataacttt gtgaaacttc 180
aagttaaagc ttgtgctctg agccagataa atacaaagct tctggcagaa atgaagatga 240
aaaaggattt atttcctgtt ggganagaaa ttgctggaat tgtattagat gttggaagca 300
aggtaccatt ctttcaacca gatgatgaag tagttggaac tttgcccctg gactctgaag 360
accctggact ttgtgaagtt gttagagtac atgagcatta cttggttcat aaaccagaaa 420
aggtcacatg gacggaagca ncaggaagca ttcgggatgg agtgcgtgcc tatacagctc 480
tgcattatct ttctcatctc tctcctggaa aatcagtgct gataatggat ggancaagtg 540
catttggtac aatagctatt cagttagcac atcatanang agcccaaatg atttcaacag 600
cntgcagcct tgaagataag cagtgccttg aaagattcan acctcccata ncccga 656

<210> 2488
<211> 892
<212> DNA
<213> Homo sapiens

<400> 2488
gcagctgaga aggagccagt cccagttcca gtccaggaaa tagagattga ctccaccaca 60
gaattggatg ggcatcagga agtanagaaa gtgcagcctc caggccctgt gaaggagatg 120
gcccatggtt cacaggaggc agaagctcca ggagcagttg ctggtgctgc tgaagtccct 180
agggaaccac caattcttcc caggattcag gagcagttcc agaaaaatcc cgacagttac 240
aatggtgctg tccgagagaa ctacacctgg tcacaggact atactgacct ggaggtcagg 300
gtgccagtac ccaagcacgt ggtgaaggga aagcaggtct cagtggccct tagcagcagc 360
tccattcgtg tggccatgct ggaggaaaat ggggagcgcg tcctcatgga agggaagctc 420
acccacaaga tcaacactga gagttctctc tggagtctcg agcccgggaa gtgcgttttg 480
gtgaacctga gcaaggtggg cgagtattgg tggaacgcca tcctggaggg agaaganccc 540

0052036-0052036

atcgacattg acaagatcaa caaggagcgc tccatggcca ccgtggatga agaagaacan 600
gcggtgttgg acaggcttnc ctttgactac caccagaagc tgcagggcaa gccacaganc 660
catganctga aatccatgan atgctgaaaa aagggtggga tgctgaaggt ctcccttccg 720
aaggccancg attcaccctg ccatgttcca catctccccc gggggctgtt gcagtttaat 780
gaccanaaag gaaaggaaac ctccccngtn gggaagcaaa accttatcct ccggttgcct 840
tccttggctc cntgcattcc anggaattgc tccctcttgt tttaccccta ac 892

<210> 2489
<211> 684
<212> DNA
<213> Homo sapiens

<400> 2489
agcancggcn acaggatggc aggcttcgcg gcatctcggg ctgtcatcgt ggctcgtgga 60
acaatgtcgg canctgggtt tgaagaancc cacgcccgtg cagctcggct gcatccccgc 120
catcctggag ggtcgagact gcttgggctg tgctaagaca ggcantggga anacagcagc 180
gtttgtcctt cccatcttgc anaagctgtc tgaggatccc tatggcatct tctgcctcgt 240
cctgacaccc accagggagc tggcctacca natcgcacan cggttccggg tcctggggaa 300
gcctctaggg ctgaaagact gcatcatcgt cggtggcatg gacatggtgg cccaggcgct 360
ggagctctct cggaaaccac acgtggtcat cgccacgccg gggcgcctgg cagatcacct 420
gcgcagctcc aacactttta gtntaaagaa gatccgcttc ctggtgatgg atgaggcaga 480
ccggctgctg gaacagggct gcactgactt caccgtggac ctggaagcca tcctggcggc 540
tgtgccggcc cncangcaga cactgctgtt cacgccncgc tgaccgacac actccgggag 600
ctgcagggtc tggccaccaa accagccctt cttctgggna agcanggccc cggtgaacnc 660
cgttggaaca actggaacca anng 684

<210> 2490
<211> 490
<212> DNA
<213> Homo sapiens

<400> 2490
agttgccgct gtcgtccgca gaacagttcc tagcgcagaa cgcgcccgcc atgagggaga 60
tcgtgcacat ccaggcgggc cagtgcggga accaaatcgg caccaagttt tgggaaatga 120
tcagcgatga acacggcatc cacccggccg gaggctacgt gggagactcg gcgctgcagc 180
tggagagaat caacgtctac tacaatgagt catcgtctca cgaaatatgt gcccacggcc 240
gccctggtgg acttagaacc acgcaccatg gacagcgtgc ggtctgggcc ttttgggcag 300
cttttccggc ctgacaactt catctttggc caaaccggtg cngggaacaa ctgggcgaaa 360
gggcctacac ggaaggcgcg gaactggtgg accnatgctg gacgttgtgc ggaaagatgc 420
gaacactgcg actgcctgca gggcttccng ctcacccact ccctnggcgg cggngccngg 480
ctctccgcgt 490

<210> 2491
<211> 585
<212> DNA
<213> Homo sapiens

<400> 2491

0962945.0292000

aggggaaatg ttctaagcag agcccgtcag gagcccacgg gacacatttt ggagatgaca 60
gatttgaaga tctggaagag gcnaatccat tctctttnan agagtttctg aagaccaata 120
acctcggcct ctcgaaagag gatccggcca gcagaattta tgcaaaggaa gcctcgaggc 180
attccctggg acttgaccac tactccccac cctcccaaac cggcgggtat ggcctggagt 240
atcagcagcc atttttcgag gatccgacag gggctggtga cctcctggat gaggaggagg 300
atgaggacac cggatggant ggggcctacc tgccgtccgc cntcgagcag actcaccccn 360
anagggtccc tgccggcacg tcgccctgca gcacatacct ttccttttte tccaccccgt 420
cggaactggn agggcctgag tctctgccct cgtgggcgtt gagtgacact gattctcgcg 480
tgtctccggn ctctccggca tggaatccta ccgcanactt tgcggttcat ggaagagtct 540
ctgggagaca ggcacctncg gacgctgcan ataaattacg acnca 585

<210> 2492
<211> 646
<212> DNA
<213> Homo sapiens

<400> 2492
gatgcctaca tcattgtgtc tttcgtgaat gccaccctag tgttgtccat tggagaaact 60
gtagaagaag tgactgactc tgggttcctg gggaccaccc cgaccttgtc ctgctcctta 120
ttaggagatg atgccttggt gcaggtctat ccagatggca tccggcacat acgagcagac 180
aagagagtca atgagtggaa gacccctgga aagaaaacaa ttgtgaagtg tgcagtgaac 240
cagcgacaag tggtgattgc cctgacagga ggagagctgg tctatttcga gatggatcct 300
tcaggacagc tgaatgagta cacagaacgg aaggagatgt cagcagatgt ggtgtgcatg 360
agtctggcca atgtaccccc tggagagcag cggtctcgct tcctggctgt ggggcttgtg 420
gacaacactg tcagaaatca tctccctgga tccctcagac tgtttgcaac ctctaagcat 480
gcaggctctc ccagcccagc ctgaagtcct tgtgtatcgt ggaaatgggt gggactgaga 540
agcaggatga gctggggtga gaagggctcg attggcttcc tatacctgaa tattgggcta 600
cagaacgggg ntggtgntga gggaacnttt ccccccccnnc cccccc 646

<210> 2493
<211> 679
<212> DNA
<213> Homo sapiens

<400> 2493
ctcggcgtcg ctctggactg gcgcaggcgc aagccggcaa gatggcggcg gctggggctt 60
tccgtctgag gcgggcggca tcggctctgc tgctgcggag cccccgcctg cccgcccggg 120
agctgtcggc cccggcccga ctctatcaca agaaggtagg gacaaaagag gggacgcgcg 180
gaatgccgac tcagcggagg cctgggctgg aggggcggcc gcggggttct gcgcagctag 240
gactgggagc tgtcccctcc cacgtctttg ccctgactcg ctttcccttg ctgcgcagtg 300
aggctcactg caactgataa acaacagtta ccgctcatcg ggcggcgact tccaggggge 360
cccgccgctg gccgcgactt cgtgcgtccc aattttaaat tcgccaacag cccaggangc 420
agggtcctgt tgggacttgt ctttctgagt ccagggacag acacaccccc ggagcgggct 480
ccggcttcag ccactccgct gcccttggcc agatgacctt gggctagtca ctgcgcctct 540
ctgaacctgt ttcccaaggt gtaaatgggg ggctctcagc tgtcccttac aaangatact 600
gtgcgttgga gtcctggcat cngttccccc cccccatgtt ttttttnccn aagaaaattg 660
ttttcttgtt actgnttta 679

0956f69-0207080

<210> 2494
<211> 521
<212> DNA
<213> Homo sapiens

<400> 2494
gtgtgcggcg gcggcggcgg cggccgaggg ggatggagcg agcgccgagc cgggtcagag 60
ttgaacaatg accatagttg acaaagcttc tgaatcttca gacccatcag cctatcanaa 120
tcagcctggc agctccgagg cagtctcacc tggagacatg gatgcaggtt ctgccagctg 180
gggtgctgtg tcttcattga atgatgtgtc aaatcacaca ctttctttag gaccagtacc 240
tggtgctgta gtttattcga gttcatctgt acctgataaa tcanaaccat caccacaaaa 300
ggatcaagcc ctangtgatg gcatcgctcc tccacagaaa gttcttttcc catctgagaa 360
gatntgtctt angtggcaac aaactcatng agttggagct gggctccaga atttgggcaa 420
tacctgtttt gccaatgcac acngcantgt ttaacctaca caccaccctc ttgccaatta 480
cctgcnatca catgaacncc cncaaaatat gtcctgcaca a 521

<210> 2495
<211> 860
<212> DNA
<213> Homo sapiens

<400> 2495
cccaggctgc aacggaggca gagccaacgc ctcgcgggct tccacgtacg cactccaacg 60
cgtgttcccg gagaagaacg catccgggtc acgggagccg gtgtctcagg ctccgcccct 120
tcaccccccg aaatgctaat ccccacttcc gaccctctca ggcctttttcc gcttctcttt 180
tacctcccca ggtccgcccg tctgcgcccc tcacaggaag ccggagggtc gctctgatcc 240
cgaatctccc acaggcgtga acctgctctg ctgtgtatct ttgcggggtg gcctgcgctg 300
aggcctgccg cgcgcggtga gtccgcgcag acctgaccct gcgtctcgca gctcggttga 360
ggccgccgcc gccttctcgg gatgccgcgg ccggggtccg cgcagcgctg ggcggccgtc 420
gcgggccgtt gggggtgcaa gctgctcgca ctgctgctac tggtgcctgg acccggcggc 480
gcctctgaga tcaccttcga gcttcctgac aacgccaagc agtgcttcta cgaagacatc 540
gctcaaggca ccaagtgcac cctggaattc caggtgatta ctggtggtca ctatgatgta 600
gattgtcgat tagaagatcc tgatggtaaa gtgttatacc aaagagatga agaaacagta 660
tgatagtttt accttcncan cctccaaaaa tggggacata caaattttgc ttcancaatg 720
aattttctac tttcacacat aaaaatgtat atttttgatt ttcaaattgg aaaaaaaacc 780
aacctttgt ttcctaattg aaaaaacgaa ttcattgctc tttacccaaa antggaaatc 840
ttgccttgtn nttttccatt 860

<210> 2496
<211> 868
<212> DNA
<213> Homo sapiens

<400> 2496
atcacggggn agtctaggga aaggggggaaa gtcttccagc ctgtgaactt taaccagatt 60
cctacttgtg caagaagcag aagcacaatt tgaagttaat agaagctttc tcatggagaa 120
ctttattccg tccctgagct cttctagcaa gttgttttgg agttgactac gcagtgacga 180
cggagattac ccagtcaact atttttgaac gctgaaaggg aaaatcacct ttaaattgaa 240

0050250.0050800

aagataattt tcagaagana tttgactgta ttttgtgctc ctcagcattc atgcaaaggt 300
gttcgcggag tacagaaacg gagtatgatg actggacttc tctgttctct ttcaggttta 360
ttaatgccag aagaagaata gtacagccca tgattgacca gtcaaatcga gcagtgagcc 420
aaggagcagc atatagtcca gagggtcagc ccatggggag ctttgtgttg gatggtcagc 480
aacacatggg gatccggcct gcangtttgc anancatgcc aggggactac gtttctcang 540
gtggtcctat gggaatgant atggcacagc caagttacac tcctccccag atgacccaca 600
ccctactcaa ttaagacatg gacccccaat gcattcatat ttgccaagcc atccccacca 660
cccancccat gatgatgcac gggangaccc ctacccccct ggaaatgact atgtcagcac 720
agaacccccc caatgttnaa attctgttan atcccaatgt ttggcggaca ggtttatgga 780
cattccatgc cccattnatt tttaagggga actccccggg ggaaaaaggn anacccccc 840
ccaanaactt atttttaaaa aanttcct 868

<210> 2497
<211> 778
<212> DNA
<213> Homo sapiens

<400> 2497
agttgctgct gcaactgagg tacagcggcg gtttctgagg ttcttcactc gcgactgacg 60
gagctgcggt ggcgtctcca cacgatggac agatggatga cttggtgtgc tttgaggaat 120
tgacagatta ccagttggtc tcccctgcca agaatccctc cagtctcttc tcaaaggaag 180
cacccaagag aaaggcacaa gctgtttcag aagaagagga ggaggaggag ggaaagtcta 240
gctcaccaaa gaaaaagatc aagttgaaga aaagtaaaaa tgtagcaact gaaggaacca 300
gtacccagaa agaatttgaa gtgaaagatc ctgagctgga ggcccaggga gatgacatgg 360
tttgtgatga tccggaggct ggggagatga catcagaaaa cctggtccaa actgctccaa 420
aaaagaanaa aaataaaggg aaaaaagggt tggagccttc tcagancact gctgccaagg 480
tgcccaaaaa agcgaagaca tggattcctg aagttcatga tcagaaagca gatgtgtcng 540
cttggaagga cctgtttgtt cccaggccgg ttctccganc actcancttt ctangcttct 600
ctgcacccac accaatccna gccctgacct tggcacctgc catccgtgac aaactggaca 660
tccttggggc tgctgaaaca ggaantggga aaactcttgc cttttgccat cccaatgaat 720
tcatgcggtg tttgcnattg gccanaaaaa agaaatgctg nccccctccct cccaantt 778

<210> 2498
<211> 714
<212> DNA
<213> Homo sapiens

<400> 2498
gtgtcctgct cgctccatgt tgccgcctct cccggtacct gctgctgctc ccggggcttc 60
gggaaatgcg agagtctgag ccggggagga ggaacccgan cagcggcggc ggcggccgcg 120
gcggcgggag ccccccaaga ggaggaccgg gatccatgtg tctttcctgg tgactaggat 180
gtcgtcggag gagaacnagt gcgtggagca gccgcagcca ccacccccgg aggagcctgg 240
agccccggcc ccgagccccc cagccgcana caaaagacct cggggccggc ctcgcaaggc 300
gcttcccctt tccagagagc cagaaagaaa ctatttggag ttttcctggt cttactggat 360
gtcactctcg tccttgccga cctaattttc actgacagca aactttatat tccttcggag 420
tatcgttcta tttctctagc tattgcctta ttttttctca tggatgttct tcttcgagta 480
tttgtagaan gctcatccac accgctcagc acgaangcct tgttctcagg ggcctgcttc 540
tcaatgangc ggatctgctt tgaggttggc atggggncca atgccaaccg ggatcccgat 600

0050250-0050800

gaccttcttc ttcttcaggc cctggacgtt ancggacaaa ttcccgggga catccgttgg 660
ggctcctggc tggccntcnn gaancagggc gattcgggaa agggcttcca gggg 714

<210> 2499
<211> 596
<212> DNA
<213> Homo sapiens

<400> 2499
gatctatttc cngtaccaga tcatcatgac catgatcgtc cataagaact gggtggacct 60
ggcctgggcc gtcagctact acatccggtt cttcatcacc tacatccctt tctacggcat 120
cctgggagcc ctccttttcc tcaacttcat caggttcctg gagagccact ggtttgtgtg 180
ggtcacacag atgaatcaca tcgtcatgga gattgaccag gaggcctacc gtgactggtt 240
cagtagccag ctgacagcca cctgcaacgt ggagcagtcc ttcttcaacg actggttcag 300
tggacacctt agcttgcaga ttgagcacca cctcttcccc accatgcccc ggcacaactt 360
acacaagatc gccccgctgg tgaagtctct atgtgccaag catggcattg aataccagga 420
gaagccgcta ctgagggccc tgctggacat catcaggtcc ctgaagaagt ctgggaagct 480
gtggctggac gcctaccttc acaaatnaag ccacngcccc cgggacactg tggggaaagg 540
gtgcangtgg ggtgatggcc ncaaggaatg atgggccttt gttctgangg gtgtcc 596

<210> 2500
<211> 651
<212> DNA
<213> Homo sapiens

<400> 2500
aacgccanca ntcnccaccg tcgctgccgc cgccaccgcc ctcggccgct gccgaagcct 60
cctgcagcca tcatgtccgc cagcgccgtc tacgtgctgg acctgaaggg caaggtgctc 120
atctgccgga actaccgtgg cgacgtggac atgtcagagg tggagcactt catgcccatc 180
ctgatggaga aggaggagga ggggatgctg tcgcccatcc tggcccacgg gggggtccgt 240
ttcatgtgga tcaaacacaa caacctgtat ctggttgcca catccaagaa gaacgcgtgc 300
gtgtcgctgg tcttttcttt cctctataag gtggtgcagg tgttttccga gtacttcaag 360
gagctggagg aggagaacat ccgggacaac tttgttatca tctacgagct gctggacgag 420
ctcatggact tcggctaccc ccagaccacc gacagcaana tcctgcagga antncatcac 480
tccaggaaan gccacaanct ggaaaacagg ggccccgcgg ccaccaccca cccgtcacca 540
acgcggtgtc cttggcggtc cgaaggcatc aagttatccg aagaaatgan gttgttcttn 600
ggaacgtcnt ccnaattctg ttcaaccctc ttggtcaacc cncccaaccg g 651

<210> 2501
<211> 808
<212> DNA
<213> Homo sapiens

<400> 2501
aaaaaaaaaa aaaaaataaa gactattact aaggctgcac ctgctgcccc tccagtccca 60
gctgccaatg aaattgccac caacaagccc aaaataactt ggcaggcttt aaacctgcca 120
gtcattaccc anatcagcca ggctttacct accactgagg taaccaatac tcaggcttct 180
tcagtcactg ctcagcctaa aaaagccaac aanatgaaaa aagttactgc caaggcagcc 240

0062070 09452030

caaggctccc aatccccaac tggccatgag ggtggcacta tacagctgaa ntcacccttg 300
caggtcctaa agctaccagt catctcacan aatattcacg ctccaattgc caatgantca 360
gccagttccc aanccttgat aacctctatc aagcctaaaa aagcttccaa ggctaaaaag 420
gctgcaaata aggccatagc tantgccacc gaggtctcgc tggctgcaac tgccacccat 480
acagctacca cccaaggcca aattaccaat ganacagcca gtatccacac cacagcagcc 540
tccatccgaa ccaagaaagc ctccaaagcc aggaaaacaa ttgctaaggt cataaatact 600
gacactgagc atatanaagc tctaaatgtc actgacgcag ctaccaagca aattgaagnc 660
tcagtaatgg ctatcaggcc caaaaaatcc aagggcaaaa aggctgccaa caagggnccn 720
aattctgtct ctgaaattct gaagccccac ttgccactcc aaatattcnc aaaccaagcc 780
ctgggcanca ccctgcnggt caaaaaaa 808

<210> 2502
<211> 460
<212> DNA
<213> Homo sapiens

<400> 2502
agacaatgag ggagagtctc cgccgaccgc ctgctgctta ttgttccggg actggagact 60
gcagccggct gctgcctagt cctccggggc tccgctcctg actagctcct ccgtccctct 120
agggacggtt cggggtcacc taaccctggt ccccggggcg ctgggacgct agccccaagc 180
cgcagccgct cttcgctgac cgccctcttt ctgctttgca ggtcggcagc ttcactcccg 240
agggtgccgc gagcccaggc ggcgaacacc cggtacccct ggcgcagcga ggtgggatgc 300
tgtncggaca gcancgctaa gtgccccccc acccccggcg cagggtgcac tcgctcctgg 360
ccgcgggccc ancggcggcg gcggcggcgg cggcggaagg gattancccg ggacgcgcga 420
agcgcctgcc tcaagctacc gcccgganan ggacccgant 460

<210> 2503
<211> 439
<212> DNA
<213> Homo sapiens

<400> 2503
tactaatacc agctgtaatc ccagctactt gggaggctga ggcagaagaa tcgcttgaac 60
ccgggaggcg gaggttgagc aactacactg cgctgcatcg gactcgacgc ccgctggtga 120
cgcacacgct gcgccggaag tgtgaactgt ctgcctccag gctttgtcat ggcggctgct 180
gctgcacgct ggaaccatgt gtgggtcggc accgaaactg ggatcttgaa aggggtaaat 240
cttcagcgaa aacaggcggc gaacctcacg gccggaggac agccgcggcg cgaggaagca 300
gtgagcgccc tgtgttgggg caccggcggc gaaacccaca tgctggtggg ctgcgcggac 360
aggacggtga ancacttcag caccgaggat ggcatattcc agggtcngan acactgcccg 420
ggcggggang gcntgttcc 439

<210> 2504
<211> 928
<212> DNA
<213> Homo sapiens

<400> 2504
cggcggcgct cccatggcgc acattaccat taaccagtac ctgcagcagg tgtacgaagc 60

0960203F03 - 07SEP00

catcgacagc aganatggag catcttgtgc agagttggtg tcttttaaac atcctcatgt 120
tgcaaaccca cgacttcaaa tggcctctcc agagganaag tgtcaacaag tcttggaacc 180
cccttatgat gaaatgtttg cagctcattt aaggtgcact tatgcagtgg ggaatcatga 240
cttcatagag gcatacaagt gccagaccgt gatagtccaa tcattcttgc gagcattcca 300
ggcccacaaa gaanaaaact gggctctgcc tgtcatgtat gcagtagcgc ttgaccttcg 360
agtgtttgcc aataatgcag atcaacagtt ggtaaagaaa ggaaaaagca aagttgggga 420
catgttggaa aaagcagcaa anttactgat gagctgtttc cgggtctgtg ccagcgacac 480
ccgtgctggt atagangact ctaanaagtg gggcatgctg tttctggtga accagctgtt 540
taaaatctac atcaagatca acaaactcca tttatgtaaa cccctaatta gagcaattga 600
cagctcaaac ctgaaagacg attacagcac tgcacagana ataacataca aatactacgt 660
tggacgcaag gctatgtttg acagccgatt ttaagcaagc tgaagaatac ctgtcatttg 720
cctttgaaac attgtcaccg ttctagtccg aanaacnaaa ggatgattct gatctattgc 780
ttccaattaa aatgctattg ggtcncatgc ccctgtggaa ctcctgaaaa aatttccctg 840
atgcnatttg cggaaattac ccaaactntt aaccaanggc aacctgctct tctgcccaag 900
gccttggcaa aaccacaagg cctcctcc 928

<210> 2505
<211> 659
<212> DNA
<213> Homo sapiens

<400> 2505
acctgcaggc tcttctcccg ccgcggcccg gcgctctccg agtcgcccct gcggactggt 60
ctcgcacagt gcctgggcac cgggcgccag acagacactg gccatgacga ncggcgcaac 120
caggtaccgg ctganctgct cgctccgggg ccacganctg gacgtacggg gcctggtgtg 180
ctgcgcctat ccgccgggag cctttgtgtc cgtgtcccga gaccgcacca cccgcctctg 240
ggccccagac agtccaaaca ggagctttac agaaatgcac tgtatgagtg gccattccaa 300
ttttgtatct tgtgtatgca tcataccctc aagtgacatc taccctcatg gcctaattgc 360
caccggtgga aatgaccaca atatatgcat tttctcactg gacagtccaa tgccacttta 420
tattctaaaa ggccacaaaa atactgtttg tagtctatca tctggaaaat ttgggacatt 480
acttagtggt tcatgggaca ccactgctaa agtctggctg aatgacaagt gcatgatgac 540
cttgcagggt catncagctg cagtgtgggc ggtaaagatc ttacctgaac anggcttaat 600
gttgactgga tcagcagaca agantgttaa actgtggaaa gctggaanat gtnanaaga 659

<210> 2506
<211> 451
<212> DNA
<213> Homo sapiens

<400> 2506
aactgcgggc ggcgcagggc aggggcagtc agggagcagc ggcggcagaa acagggccgg 60
gcgggcgccg cctgcggana gcaccgggag gcgggccctg cgtggggccg cgcgcancan 120
cggcgacgac tttatctggg ccgcggggga cagcgcaggg ccatggagga ngcggccgca 180
gctccgattt ctccgtggac gatggcagcc acgattcagg ccatggagag gaagattgaa 240
tcgcaggctg ctcacctgct ttccctagaa ggtcaaaccg ggatggccga aaaaaanctg 300
gctgattgcg aaaagacagc cgtggagttc gggaaccagc tggagggcaa gtgggccntg 360
ctggggaccc tgctgcagga gtncgggctg ctgcanaagc ggctggagaa cntngagaac 420
ctgctgcaca acaggaacct ctggatcctg c 451

0052036-020200

<210> 2507
<211> 827
<212> DNA
<213> Homo sapiens

<400> 2507
atcgttttct ctcgtgcaat ggcgtccggg ctggtaagat tgctgcagca ggggacatcg 60
ctgcctcctg gctccagtcg cccccaagct ggtccctccg gttcggggag tgaagaaggg 120
attccgcgcc gccttccgct tccagaagga gttagagcgg cagcgccttc tgcggtgccc 180
gccgccgccc gtgcgccgtt caganaagcc gaactgggat taccatgcag aaatacaagc 240
ttttggacat cggttacagg aaaactttc cttagatctt ctcaaaactg cttttgttaa 300
tagctgctat attaaaagtg aggaggccaa acgccaacaa cttgggatag agaaagaagc 360
tgttcttctg aatcttaaaa gtaatcaaga actatccgaa caagggacat ctttttcaca 420
gacttgcctt acacagtttc ttgaagacna ntacccagac atgcccactg aaggcataaa 480
aaatcttgtt gactttctca ctggtgagga agtcgtgtgt cacgtggcta gaaacttggc 540
tgtggagcag ttaacactga gtgaagaatt cccagtgccc ccagctgtgt tncagcagac 600
tttctttgca gttattggag ccctgttaca gaacantgga cctgaaaagg actgcacttt 660
tcatcagggn acttcttaat tactccaant gaatgggaaa agaactcttt ganatgtgga 720
aaaaaaataa atcccatggg ggctattggt tnaaaaaact tgaaaaaaaa ggaatnttc 780
cacctccctg aatccaaaaa ntttcntaag gcctttcttg gntggcc 827

<210> 2508
<211> 501
<212> DNA
<213> Homo sapiens

<400> 2508
agctgctgcc gccgcagttg cgaatgcagc atcggcgctt agctgcctcc gcggtgcagc 60
taaggttcgt gtcgctaccc cttggccctt cgctcttgct gccttaaccc cgccggtgga 120
ncccgctctt ctggcctgtt gagcccgctc cctcactgcc acacagcaag ttccganacc 180
atggattcgg gcagcagcag cagcgactcg gcgcccgatt gctgggacca ggtggacatg 240
gaatccccgg ggttggcccc gancggggat ggantctcct ctgcggtggc cgaancccan 300
cgcgagccct cagctcggct ttcagccgta agctcaacgt caacgccaag cccttcgtgc 360
ctaacgtaca cnccgcggaa ttcgtgccgt ccttcctgcg ggggccgaat caaccgccca 420
cctcccgggc gggtccggga gcaacnanta aacctgcacc cgcgcgggat tacctccaag 480
ttaaaagatn ggancggggg n 501

<210> 2509
<211> 662
<212> DNA
<213> Homo sapiens

<400> 2509
tagcgangga cgcgtangtg tcttcataag atgccggggc agcggcgcgc gctttccccc 60
aagatggcgt ccatgcggga gagcgacacg ggcctgtggc tgcacaacaa gctgggggcc 120
acggacganc tgtgggcgcc gcccagcatc gcgtccctgc tcacggccgc ggtcatcgac 180
aacatccgtc tctgcttcca tggcctctcg tcggcagtga agctcaagtt gctactcggg 240

US 2005/0059030 A1

acgctgcacc tcccgcgccg cacggtggac ganatgaggg gcgccctaat ggagatcatc 300
cagctcgcca gcctcgactc ggacccctgg gtgctcatgg tcgccgacat cttgaagtcc 360
tttccggaca caggctcgct taacctggag ctggaggagc agaatcccna cgttcaggat 420
attttgggag aacttagaga aaangtgggt gagtgtgaaa cgtctgccat gctgccactg 480
gagtgccant acttgaaaca aaaacgccct gacgaccctc gcggggaccc tcactccccc 540
ggtgaagcat tttcagttaa agcggaaacc caagaacgcc acgctgcggg cggactgctg 600
canaantcca cggganaccg cccagcantt gaaacggaac gcccgggtgc cccttccacn 660
cc 662

<210> 2510
<211> 581
<212> DNA
<213> Homo sapiens

<400> 2510
acgtggattc ancgcgatgc ccaaatccaa gcgcgacaag aaagtctcct taaccaaaac 60
tgccaaggaa aggcttggaa ttgaaacaaa acctgataga agagcttcgg aaatgtgtgg 120
acacctacaa gtacctttc atcttctctg tggccaacat gaggaacagc aagctgaagg 180
acatccggaa cgcctggaag cacagccgga tgttctttgg caaaaacaag gtgatgatgg 240
tggccttggg tcggagccca tctgatgaat acaaagacaa cctgcaccag gtcagcaaaa 300
ggttgagggg tgaggtgggt ctcctgttca ccaaccgcac aaaggaggag gtgaatgagt 360
ggttcacgaa atacacagaa atggactacg cccgagctgg taacaaagca gctttcactg 420
tgagcctgga tccagggccc ctggagcagt tcccccactc catggagcca cagctcaggc 480
agctgggcct gcccaccgcc ctcaagagag gtgtggtgac tctgctgtct gactacnaag 540
gtgtgcaagg anggcnatgn tgctgacccc agagcangct c 581

<210> 2511
<211> 648
<212> DNA
<213> Homo sapiens

<400> 2511
acattgcagc cttctgcaag gatggggtgg tactgtcctt ctcacttctc attctcttcc 60
attttaaaat gataaacctg ggtcagagga tatttaggaa gaggcattgt cattaagtcc 120
aagacaagat ggtcagattt gttatcctag tgggttacaa tccaaaatac tctggagcat 180
gctgagatta aggtggttgc caagggaaca gaaaacagcc atgagtnaat aaatcaagac 240
tttaaaggat ttagatcggg tctatggcca nttgcagant gggcaggatc ttaagacccg 300
ataggtgcag aacccatctg gacacggana ccaggaatgg agttccatgg aggcctggct 360
ggcactgcac ccgggcatga ngacacatcc antaagaaga cctgcctcaa gaggtgcact 420
gcggtgacca gtggaggtga ctggttggan cctggaattg gaagcagatt ccaagctctg 480
gtggacaaac tctccangcc tggtgggaat cncagctggg gcagacctca tcctgnctgc 540
ctggccacaa gcccccactc tctgccactg gtggtagacc atgcctgtgt ggananctgg 600
cttctctgct ccccncctgg tcccccactt ggctagantt canaaaca 648

<210> 2512
<211> 711
<212> DNA
<213> Homo sapiens

09/02/2004 09:50:00

<400> 2512
gctgcgggga gcgccgcgca ggccgtgcag ttcctagcga ggaggcgccg ccgccattgc 60
cgctctctcg gtgagcgcag ccccgctctc cgggccgggc cttcgcgggc caccggcgcc 120
atgggccagt gcggcatcac ctcctccaag accgtgctgg tctttctcaa cctcatcttc 180
tgggggcag ctggcatttt atgctatgtg ggagcctatg tcttcatcac ttatgatgac 240
tatgaccact tctttgaaga tgtgtacacg ctcatccctg ctgtagtgat catagctgta 300
ggagccctgc ttttcatcat tgggctaatt ggctgctgtg ccacaatccg ggaaagtcgc 360
tgtggacttg ccacgtttgt catcatcctg ctcttggttt ttgtcacaga agttgttgta 420
gtggttttgg gatatgttta cagagcaaag gtggaaaatg aggttgatcg cagcattcag 480
aaagtgtata agacctacaa tggaaccaac cctgatgctg ctanccgggc tattgattat 540
gtacagagac agctgcattg ttgtggaatt cacaactact cagactggga aaatacagat 600
tggttcaaag aaaccaaaaa ccanantgtc ctcttagctg ctgcagaaan actgccanca 660
attgttatgg caagcctggc cccacccttc cgaactctat gcttnaaggg t 711

<210> 2513
<211> 794
<212> DNA
<213> Homo sapiens

<400> 2513
acaaattcca gccttctgtg gtcgctgcgg cctgtgttgg ggcctccagg atttgcctgc 60
agctttctcc ctactggacc agagacctgc agaggatctc aagctattcc ctggagcacc 120
tcagcacgtg tattgaaatc ctgctggtag tgtatgacaa cgtcctcaag gatgccgtag 180
ccgtcaagag ccaggccttg gcaatggtgc ccggcacacc ccccaccccc actcaagtgc 240
tgttccagcc accagcctac ccggccctcg gccagccagc gaccaccctg gcacagttcc 300
agacccccgt gcaggaccta tgcttggcct atcgggactc cttgcaggcc caccgttcag 360
ggagcctgct ctcggggagt acaggctcat ccctccacac cccgtaccaa ccgctgcagc 420
ccttggatat gtgtcccgtg cccgtccctg catcccttag catgcatatg gccattgcag 480
ctgagcccag gcactgcctc gccaccacct atggaagcag ctacttcagt gggagccaca 540
tgttccccac cggctgcttt gacagatagg ccacctccag acctcacgaa gaaccttggg 600
agatgtgggc agaaggaaga agacactgaa naagananct caccaagtga ggcagcagga 660
aggncatccc tgaaaaacct tggaacgtgg gaaggtctgt gctcctttta aaataaaact 720
gacccaganc aaaacattcc attaacatan ctccacccga aaancattcc tcctgaaaaa 780
cgttctggcc ncnt 794

<210> 2514
<211> 680
<212> DNA
<213> Homo sapiens

<400> 2514
acgtccgggg aggggccagg tgagcggcag acccggcacg caggtggggg ccggcggggt 60
ccgtggccag agctgcagag agacaaggcg gcggcggctg ctgtgctggg tgcagtgagg 120
aagangccct cggtggtgcc catggctggc caggatcctg cgctgagcac gagtcacccg 180
ttctacgacg tggccagaca tggcattctg caggtggcag gggatgaccg ctttggaaga 240
cgtgttgtca cgttcagctg ctgccggatg ccgccctccc acgagctgga ccaccagcgg 300
ctgctggagt atttgaagta cacactggac caatacgttg agaacgatta taccatcgtc 360

0052050-0052080

tatttccact acgggctgaa cagccggaac aagccttccc tgggctggct ccagancgca 420
tacaaggaag ttcgatagga aagacgggga tctcactatg tggcccangc tggtctcgaa 480
ctccaagctc aagcgatcct cccacctcag cctcccaaag tactgggatt acaggtacaa 540
gaagaacttg aangccctct acgtggtgca cccaccagct tcatcaaggt cctgtggaac 600
atcttgaaac ccctcatcag tcacaanttt gggaaaaaaa tctctatttc aactacctga 660
ntnaactccn cnaacacctt 680

<210> 2515
<211> 700
<212> DNA
<213> Homo sapiens

<400> 2515
aaaaaaaagc ccgagtgcag ccgccgggcg caggatggga tccggctcct ccagctaccg 60
gcccaaggcc atctacctgg acatcgatgg acgcattcag aaggtaatct tcagcaagta 120
ctgcaactcc agcgacatca tggacctgtt ctgcatcgcc accggcctgc ctcggaacac 180
gaccatctcc ctgctgacca ccgacgacgc catggtctcc atcgacccca ccatgcccgc 240
gaattcagaa cgcactccgt acaaagtgag acctgtggcc atcaagcaac tctccgagag 300
agaagaatta atccagagcg tgctggcgca ggttgcagag cagttctcaa gagcattcaa 360
aatcaatgaa ctgaaagctg aagttgcaaa tcacttggct gtcctagaga aacgcgtgga 420
attggaagga ctaaaagtgg tggagattga gaaatgcaag agtgacatta agaagatgag 480
ggaggagctg gcggccggaa gcagcaggac caactgcccc tgtaagtaca gtttttgga 540
taaccacaag aagttgactc ctcgacgcga tgttcccact taccccaagt acctgctctc 600
tccagagacc atcgangccc tgcggaagcc ganctttgac gtctggcttt gggancccaa 660
tgagatgctg anctgcctgg aacacatgtt ccacnaactc 700

<210> 2516
<211> 748
<212> DNA
<213> Homo sapiens

<400> 2516
tttgcaggct gctgggctgg ggctaagggc tgctcagttt ccttcagcgg ggcactggga 60
agcgccatgg cactgcaggg catctcggtc atggaactgt ccggcctggc cccgggcccg 120
ttctgtgcta tggtcctggc tgacttcngg gcgcgtgtgg tacgcgtgga ccggcccggc 180
tcccgctacg acgtgagccg cttgggccgg ggcaagcgct cgctagtgct ggacctgaag 240
cagccgcggg gagccgccgt gctgcggcgt ctgtgcaagc ggtcggatgt gctgctggag 300
cccttccgcc gcggtgtcat ggagaaactc cagctgggcc cagagattct gcagcgggaa 360
aatccaaggc ttatttatgc cagnctnagt ggatttgggc agtcaggaag cttctgccgg 420
ttagctggcc acgatatcaa ctatttggct ttgtcaggtg ttctctcaaa aattggcaga 480
agtggtgaga atccgtatgc cccgctgaat ctcctggctg actttgctgg tggtggcctt 540
atatgtgcac tgggcattat aatggctctt tttgaccgca cacgcactga caanggtcag 600
gtcattgatg caaatatggt ggaaagaacn gcatatttaa gttcttttct gtggaaaact 660
canaaatcna antctgtggg gaacacctcc aaggacanaa catgttggat ggttggaaca 720
cctttctata ccactttact ggacanca 748

<210> 2517
<211> 847

09629450.0970200

<212> DNA
<213> Homo sapiens

<400> 2517
caatgaatgg ggagtaaata cacagataat ccaaaattga tgtaagcatt ggaaggggaa 60
agagggaacg cttctttccc tctgggcttg gtcatttcct cccaagcaaa ccccgcgacg 120
ttcagccgtc ttcctcctat gccacgtgct ctcaccagaa ctgcagcaaa actgcatttt 180
atgtcctgtg tctaaagcta aacacatgtt cctgtctact tttgctttgt tcctgtttcc 240
cttctgtgag gaccttcccc tcctcagatg tggggagttg ccgcctccac ttgcattaca 300
tgtatttcag agtaggtcct aggctcccct tacacctctg gtcacgttgc cattattcct 360
atggtagata aaggggatga gaaagaacag agctccaggc ctttttcaaa caaactggtt 420
ttctcagtat agccctatgc tcaaaaggag tgaggacagg tatgtgactg ccataaggag 480
ctgtttgctt tgcacagaga aatctaatct ttctcctgct gggcagctca gtacagatgt 540
cccctcactg ctggaagaaa cacctgccct tgcttgttct cctgatggcc cctcacagtc 600
aggtgtggga tggcacattt ctaggtgctc ctcgccnanc tgtcatgggc ttcantcttg 660
ggcctctgca gctggctgtg aacaggtgga aactgtancc ttggctgacc anaaaaagga 720
aaggaagcat ctgccgcttg gctgatttaa gaattgtgct gaattcctgc cccatcttgt 780
tctcccactt naaccaaagg ccaaagcttn tcttancttt ttggccancc cttagggaat 840
naacccc 847

<210> 2518
<211> 840
<212> DNA
<213> Homo sapiens

<400> 2518
ttgaacattc ctttagtttc cagcttcata atttggttct tattaaaata attctagaat 60
tttcatgttt tttttaacca gctctctaaa ttgtgttaca tgcacataaa atatgccatt 120
ttaaccattt tcaggtgtgt ggttcagtgg ccttgggtac agacccagtg ttacacagcc 180
accaccacca ccatcatctc cagagccttt ttatcttccc aaactgaagc tctgccccca 240
ttaaacactc actccccacc ccgctccccc agcagggtta gatcgcagag gggcctgccg 300
ggggctctga ggtgatggaa accatctgag actgccatgg cgatgatcga gaaagtctgt 360
gaatttacgg aaaattattg cattatatac ataaaagagg tgtgtgtaaa ctgtgccata 420
ataaagccta aaaattagaa gcatgcttgt aacttagtgt atttaaatag gtaattcgtt 480
cagtcctgag gttagtatta ttgaaaaggt ttaattttgt tctcatctct gccgctgtct 540
gtagtgacct atanagaacc actgtgatca cctcctgtat gtatgcaaat ctgancaaac 600
gtaaacatat tttcttcttg ttttccttcc acaatccccc ccactcccac ccccgcccat 660
gtgtgtctgc gttttccccg caggtgcatg caggcccgcg ttcatctgtt gcaacccttc 720
ctgctgccct gcggggccca tgcactgcaa accccgctgn ctcaaactgt tgcctgcgtt 780
ggtnggacan ctgttncctg aatccgaaaa gggggttgcc ttnttaaagg cagggtgcct 840

<210> 2519
<211> 826
<212> DNA
<213> Homo sapiens

<400> 2519
aagcagcgtc ctgaggagac agcggcacgt tctagctgcg tctgcggcca gcccgtgcca 60

03052-0076US1

gtggagtggg ctccgcgttg ctcattctct ccgacaggtt gtcagcctct gtccccgctg 120
cacagggtct tgcccttct ccggggcctg tgccagctcc cttcccccc cgttgtcctg 180
tccccacagc cattctggga gctggggaac ctggtctcaa ggcaggccct gcagttccac 240
agangtggca ggtcttgccc tttggccaac agatttcttg tcctgccttc tagatgcctc 300
tgagctccaa acccagggca gccatggctt ctcatttaca ccaacaggtt tcagttccaa 360
canaaaggtc ggggtaggtt cgtgcanaaa tggggctggc agggggggcta tgggaggatt 420
attttaacag atcaagaaaa tgaagccaaa tcaagtgaat taaattcctc acaattattt 480
tctttccctg aggtttgatt ggcacagcan caaaagttga ngccacccca cttgtgtcca 540
ctgtttttag aaaaaaatga atgggcttcc tgccattgtg ggggctggac tcttgggctt 600
tcttggtggg ancggaaaaa gggcctccca cccttgtcca aattgcctcc cactggaagt 660
caggaattct acacttgcaa cctcgggcac tgtnggggaa ttgcattgcc ttggggcctc 720
ttgggttggg gaaccatgga acaggccctg ggtccctttt cctaaccctt tgttcnggga 780
aaaaaggttn ccaaaaaaga atttcctggc cnggttnggg naaaag 826

<210> 2520
<211> 697
<212> DNA
<213> Homo sapiens

<400> 2520
aaaaaaggcc gtgcagttcc tagcgaggag gcgccgccgc cattgccgct ctctcggtga 60
gcgcagcccc gctctccggg ccgggccttc gcgggccacc ggcgccatgg gccagtgcgg 120
catcacctcc tccaagaccg tgctggtctt tctcaacctc atcttctggg gggcagctgg 180
cattttatgc tatgtgggag cctatgtctt catcacttat gatgactatg accacttctt 240
tgaagatgtg tacacgctca tccctgctgt agtgatcata gctgtaggag ccctgctttt 300
catcattggg ctaattggct gctgtgccac aatccgggaa agtcgctgtg gacttgccac 360
gtttgtcatc atcctgctct tggtttttgt cacagaagtt gttgtantgg ttttgggata 420
tgtttacaga gcaaaggtgg aaaatgaggt tgatcgcagc attcanaaag tgtataagac 480
ctacaatgga accaaccctg atgctgctag ccgggctatt gattatgtac aganacagct 540
gcattgttgt ggaattcaca actactcana ctgggaaaat acagattggt tcaaagaaac 600
caaaaaccan aatgtccctc ttagctgctg caganananct gccancaatt gttatggcag 660
cctgggccac cttccgaact ctatgcttga agggtnt 697

<210> 2521
<211> 853
<212> DNA
<213> Homo sapiens

<400> 2521
atttttcccg ctcagccctg gagcgcgtag ctctaccaag aatggccact gtgccagatg 60
cccctgacca gcgttgccca tttgaatttc ctagcaggcc ccccaaagta ggtatttcag 120
taccctgtta gagctgaggc gcaggtaaaa tgactggccc aggccggtcc caccccgtaa 180
ggatttgaac gttggctcca caactcggga gcctgcgcct ttcctcctcc caacgtggac 240
tcctgcccgg cgaagtgcct cacttccttc tcccgggagt catcaagctt tggtgtatgt 300
gttggccggt tctgaagtct tgaagaagct ctgctgagga agaccaaagc agcactcgtt 360
gccaattagg gaatggaccg tttgggttcc tttagcaatg atccctctga taagccacct 420
tgccgaggct gctcctccta cctcatggan ccttatatca agtgtgctga atgtgggcca 480
cctccttttt tcctctgctt gcagtgtttc actcgaggct ttgagtacaa gaaacatcaa 540

0050204850

agcgatcata cttatgaaaa taatgacttc agattttcct gtccttgatc ccagctggga 600
ctgctcaaga agaaatggcc cttttagaan ctgtgatgga ctgtggcttt gggaaattgg 660
cagggatgta ccaatcaaat gttgcaccaa gaccaaggaa gantgtgaga aacactatgt 720
gaagcatttc atcaataacc tctgtttgca tctaccctgc tgaacctgaa aacaagcnga 780
agaaccaaaa actggctgaa aaaagcccat tccattttcc actcctacan aatnaaccct 840
ccccgaacct anc 853

<210> 2522
<211> 784
<212> DNA
<213> Homo sapiens

<400> 2522
atcttcttta acatcaaggc ctgtggaaac cactttggaa aataatgaag gtggacaaga 60
gcaaggacca agtgtggaag gtcttaatgt accaacaaag gctactttag aggtatcctc 120
tatcataaaa aagaaaccaa atcaagctaa aaaaggcctt ggggccaaaa aaggaagttt 180
gggagctcag aaactggcaa acacatgctt taatgaaatt gaaaaacaag ctcaagctgc 240
ggataaaatg aaggagcagg aagacctggc caaggtggta tctaaagaag aatcaattgt 300
ttcatcatta cgattagcct ataaggatct tgaaattcaa atgaagaaag acgaaaagat 360
gaacattagt ggcaaaaaaa atgttgactc agacagactc ggcatgggat ttggaaattg 420
cagaagtgtt atttcacatt cagtgacttc agatatgcag accatagagc aggaatcacc 480
cattatggca aaaccaagaa aaaagtataa tgatgacagt gacgattcat attttacttc 540
cagctcaagg tactttggac gagccagtgg agttaaggga gcagttcttt ctctagctgg 600
gatgacagtt cagattccta ttgggaaaaa agagaccagc aaagatactg aaacagttct 660
gaaaaccaca gggctattca gacagaccta ctgctcgccg caaagcccag attatgaacc 720
canttgaaaa ttacagatga aggccnanaa anaaatttgg gcaatgttca agggccattt 780
cntc 784

<210> 2523
<211> 690
<212> DNA
<213> Homo sapiens

<400> 2523
aatatatgca cctttcagtt cacacgtggc gccagcggag gcaggttgat gtgtttgtgc 60
ttccttctac agccaatatg aaaaggccta gtaagtgggg tcgggaggcg ggcgtggagg 120
gacccacgtc tggaagttgc tgcagccacc acgacgctct tctacggcta cggctttgtc 180
tctgctgagt taaagaaagc aagtaaacgc atgacctgcc ataagcggta taaaatccaa 240
aaaaaggttc gagaacatca tcgaaaatta agaaaggagg ctaaaaagcg gggtcacaag 300
aagcctagga aagacccagg agttccaaac agtgctccct ttaaggaggc tcttcttagg 360
gaagctgagc taaggaaaca gaggcttgaa gaactaaaac agcagcagaa acttgacagg 420
cagaaggaac tagaaaagaa aagaaaactt gaaactaatc ctgatattaa gccatcaaat 480
gtggaaccta tggaaaagga gtttgggctt tgcaaaactg anaacaaagc caagtcgggc 540
aaacagaatt caaagaagct gtactgccaa gaacttaaaa aggtgattga agcctccgat 600
gttgtcctaa aagtgttgga tgccanaaat cctcttggtt gcanatgtcc tcaggttaaa 660
aaaagncatt gtccaaantg ganaaaaaaa 690

<210> 2524

0050205.0050205

<210> 684
<211> DNA
<212> Homo sapiens

<400> 2524
ctcttctcta agctgcacag cctgaataga agggctggtc cagcggcggc ggaggctggc 60
gctgtcctga gagggagggc tctgtgcgga agagatgaat cggacaaagg gtgatgagga 120
ggagtattgg aacagctcca agttcaaggc ttttaccttt gacgatgaag acgatgagct 180
ttcacagtta aaggagtcca agcgggcggt gaacagcctc cgagacttcg tggatgatga 240
tgacgatgat gacctggagc gagtcagctg gagtggggaa cctgtgggaa gtatctcatg 300
gtccatcaga gagactgctg gtaatagcgg ctcaacccac gaggggcgtg aacagctaaa 360
gagccgaaac agcttctcct cctatgcaca actacccaag cctacttcta cctactccct 420
gagcagcttt tttagaggta gaactagacc tggaagtttc cagtcccttt ctgatgctct 480
gtcagacaca cctgccaaaa gctatgctcc agagctgggg agacccaaag gggagtatag 540
ggattacagc aatgactgga gccccagtga tacagtgcga cgtctccgga agggcaaggt 600
ttgctcacta nananattcc gctccttnca ggacaaacta caactcctaa naagaagcag 660
taagcatgca ttgatggaaa cttc 684

<210> 2525
<211> 843
<212> DNA
<213> Homo sapiens

<400> 2525
ctctggagcc gcgactgccc ggggttgtgc cggccgccgc tgccgcccag gccgcctcag 60
ctctcctctg cgccggcccg ctcactccgc ccggccccag ccctagcgct ggccgcgacc 120
ccggcggaga tcatgaatca gacagataaa aatcaacaag aaatcccatc ataccttaat 180
gatgaaccac cagaaggttc aatgaaagat cacccacagc agcagccagg catgttgtcc 240
cgtgtgactg ggggtatctt cagtgttaca aagggagctg ttggtgccac cattggtggt 300
gtggcttgga ttggtggaaa gagtctggaa gtgaccaaaa cagctgttac aactgtgcct 360
tccatgggaa tagggctggt gaaagggggt gtctctgctg tggctggagg tgttacagct 420
gttgggtctg ctgttgtaaa caaagtgccc ttaacaggaa agaagaaaga caaatctgac 480
tgaaatatag agatacactt gcgctccaca gcactgtaat gccagtggca ttgaattgct 540
aaattatgga ctacaaccaa gtcaactgtt ttgggacgtt tatcttctaa actgctgtgt 600
tgaaagtatt gatgactggc tttcatctan aaagaaaaaa ccaatncnan cacagtatat 660
gaangttctc atactttaag ttccaaggtt tttatcttgg taaaatgtta cccttactcc 720
ggttgttaac tgaaaaaaat ggtatgtttt gaaataattt aataaaaant ctttcnagtt 780
tgaactaaaa aattgttnaa aaatttgnaa atttanttaa aaatgaatct tccccagttc 840
cca 843

<210> 2526
<211> 293
<212> DNA
<213> Homo sapiens

<400> 2526
accatnccat gacttcccac cgcgccctcg ctcctacctc cccacacctc tctctcagtc 60
cccaggaaca cacngaggtg cacatcacat tcccttgtcc acactgcccg cctctcccac 120

0050150.00000

atgacacccc cttccctgtc cttccccaac tccccagctc caagagtgga agaaatcccc 180
aagatcatct gggtctccct ctccnaaccc agaactgagg ctnggatatc ttctncnaca 240
tccttggcan gacttctcca ccctctcgca tacctccagg gacagagagc tta 293

<210> 2527
<211> 567
<212> DNA
<213> Homo sapiens

<400> 2527
agcagggagg aagacaggca atccctccgg ctgtccgacc aagagaggcc ggccgagccc 60
gaggcttggg cttttgcttt ctggcggagg gatctgcggc ggtttaggag gcggcgctga 120
tcctgggagg aagangcagc tacggcggcg gcggcggtgg cggctanggc ggcggcgaat 180
aaaggggccg ccgccgggtg atgcggtgac cgctgcggca ggcccaggag ctgagtgggc 240
cccggccctc agcccgtccc gccggacccg ctttcctcaa ctctccatct tctcctgccg 300
accgagatcg ccgangcggc ctcaggctcc ctagcccctt ccccgtccct tccccgcccc 360
cgtccccgcc ccgggggccg ccgccacccg cctcccacca tggctctgaa naaaatccac 420
aangaattga atgatctggc acgggaccct ccancacagt gttcaacaag tcctgttggg 480
aaatgatatg ttccattggg caagcttaca ataattgggg nccaatnaac agtccctatc 540
anggtngaat ttttttcttg acnattc 567

<210> 2528
<211> 679
<212> DNA
<213> Homo sapiens

<400> 2528
agcggaggtt ccgggctccg ggatgaaagg agggaacgca gctggcagag agagaagttg 60
gctagcatgg aatcaccaga ggagcctgga gcatccatgg atgagaacta ctttgtgaac 120
tacactttca aagatcggtc acattcaggc cgtgtggctc aaggcatcat gaaactgtgt 180
ctagaggagg agctctttgc tgatgtcacc atttcggtgg aaggccggga gtttcagctc 240
catcggctgg tcctctcagc tcagagctgc ttcttccgat ccatgttcac ttccaacctg 300
aaggaggccc acaaccgggt gattgtgctg caggatgtca gcgagtctgt tttccagctc 360
ctggttgatt atatctacca tgggactgtg aaacttcgag ctgaggagtt gcaggaaatt 420
tatgaggtgt cagacatgta tcanctgaca tctctctttg aggaatgctc tcggtttttg 480
gcccgcacag tgcaagtggg aaactgcctt cangtgatgt ggctggcana tcggcacagt 540
gatcctgaac tctatacggg tgccaagcac tgtgccaaga cccaccttgg ccccagctgc 600
agaatacana aggaatttct ccacttgccc caccgnttta ctcncanata tcacctccgg 660
atgganttcc gtgtttctc 679

<210> 2529
<211> 654
<212> DNA
<213> Homo sapiens

<400> 2529
ttgtgcttcc ttctacagcc aatatgaaaa ggcctaagtt aaagaaagca agtaaacgca 60
tgacctgcca taagcggtat aaaatccaaa aaaaggttcg agaacatcat cgaaaattaa 120

JP2005508630A 20050407

gaaaggaggc taaaaagcgg ggtcacaaga agcctaggaa agacccagga gttccaaaca 180
gtgctccctt taaggaggct cttcttaggg aagctgagct aaggaaacag aggcttgaag 240
aactaaaaca gcagcagaaa cttgacaggc agaaggaact agaaaagaaa agaaaacttg 300
aaactaatcc tgatattaag ccatcaaatg tggaacctat ggaaaaggag tttgggcttt 360
gcaaaactga gaacaaagcc aagtcgggca aacagaattc aaagaagctg tactgccaag 420
aacttaaaaa ggtgattgaa gcctccgatg ttgtcctana ngtgttggat gccagagatc 480
ctcttggttg cagatgtcct caggtagaaa aagccattgt ccagagtgga cagaaaaagc 540
tggtacttat attaaataaa tcagatctgg taccaaaagg anaatttgga naactggctn 600
aattatttga anaaagaatt gccaacagtt ggtgttcaga acctccacna aacc 654

<210> 2530
<211> 327
<212> DNA
<213> Homo sapiens

<400> 2530
agcttctctc gccatgcgtc ctcgtggaag gttcgtgtgc taattagatg ggcgccaggg 60
gtctccggcg ggaacatgga ggggtctntg ggggcctttg ggaacatgga gtcctattct 120
gttccgcctg gggcctcggt ggcggcttgc actccccgac atgacggccg ctgccctntg 180
cagggccggc cggcgattgc ncntgtcctg ctcctcttaa gcccgggacc gcgggatggg 240
tgtcggcgtg accatccctt aactccctgt ctctcctcan tgacatcntc tttaaaccct 300
ncntggtaat ccctgactca ccgccnt 327

<210> 2531
<211> 355
<212> DNA
<213> Homo sapiens

<400> 2531
agaggaggat gacgagggac gagggatgag gatgaagatg aaattgaacc agcagcgatg 60
aaagcagcag ctgctgcccc tgcctcagag gatgaggacg atgaggatga cgaagatgat 120
gaggatgacg atgacgatga ggaagatgac tctgaagaag aagctatgga gactacacca 180
gccaaaggaa agaaagctgc aaaagttgtt cctgtgaaag ccaagaacgt ggctgaggat 240
gaagatgaag aagaggatga tgaggacgag gatgacgacg acgacnaaga tgatgaagat 300
gatgatgatg aagatgatga ggaggaggaa naanaggagg aggannagcc tgtcc 355

<210> 2532
<211> 758
<212> DNA
<213> Homo sapiens

<400> 2532
aaaaaaaaga atagtagagg atcctgaatc cctaaacatg aaaaacattc tatctattct 60
tcatacttac tcttctctca atcatgtcta caaatgccag aacaaagaac agttcgtgga 120
agttatggct agtgctctga ctggttatct tcacactatt tcttctgaaa acttattgga 180
tgcagtatat tcattttgct tgatgaatta ctttcccctg gctcctttta atcagcttct 240
gcaaaaagac atcatcagtg agctgctgac atcagatgac atgaagaatg cttacaagct 300
gcatactttg gatacttgtc taaaacttga tgatactgtc tatctgaggg acatagcctt 360

09624592 .072802

gtcactccca cagctgccgc gggagctgcc atcgtcacat acaaatgcaa aggtggcaga 420
ggtgctgagc agccttctgg gaggtgaagg acacttctca aaggatgtgc acttgccaca 480
caattatcat attgattttg aaatcagaat ggacactaac aggaatcaag tgctaccact 540
ttctgatgtg gatacaactt ctgctacaga tattcaaaga gtanctgtgc tatgtgtttc 600
cagatctgct tattgtttgg gttcaagcca ccccagaagg atccttgcta tgaaaatgcg 660
gcatttgaat gcaatgggtt ttcatgttga tcttggtcaa taactgggaa aatggacnaa 720
cttanaaaat gggaagatgc agtcccnttt ttgnaana 758

<210> 2533
<211> 780
<212> DNA
<213> Homo sapiens

<400> 2533
gagtgcaaga tcgttttctc agtggtggtg gaagttgcct catcgcaggc agatgttggg 60
gctttgtccg aacagctccc ctctgccagc ttctgtanat aagggttaaa aactaatatt 120
tatatgacag aagaaaaaga tgtcattccg taaagtaaac atcatcatct tggtcctggc 180
tgttgctctc ttcttactgg ttttgcacca taacttcctc agcttgagca gtttgttaag 240
gaatgaggtt acagattcag gaatcgtagg gcctcaacct atagactttg tcccaaatgc 300
tctccgacat gcagtagatg ggagacaaga ggagattcct gtggtcatcg ctgcatctga 360
agacaggctt gggggggcca ttgcagctat aaacagcatt cagcacaaca ctcgctccaa 420
tgtgattttc tacattgtta ctctcaacaa tacagcagac catctccggt cctggctcaa 480
cagtgattcc ctgaaaagca tcagatacaa aattgtcaat tttgacccta aacttttggg 540
aangaaaagt aaaaggaaga tcctgaccan ggggaatcca tgaaaccttt aacctttgca 600
aggttctact tgccaattct ggttccccaa cgcaaaaaaa ggcctatcnt tggatganga 660
atttattgtg caanggtgat attcttgccc tttacaatac nagcacttga aacccaggaa 720
nttgccactt gcatttttcc aaaaaaattg tnaatccccc ccnctactta aatttnttct 780

<210> 2534
<211> 591
<212> DNA
<213> Homo sapiens

<400> 2534
gggcgccatc atggacgagg gactactacg ggagcgcggc cgagtggggc gacgaggctg 60
acggcggcca gcaggaggat gattctggag aaggagagga tgatgcggag gttcagcaag 120
aatgcctgca taaattttcc acccgggatt atatcatgga accctccatc ttcaacactc 180
tgaagaggta ttttcaggca ggagggtctc caganaatgt tatccagctc ttatctgaaa 240
actacaccgc tgtggcccag actgtgaacc tgctggccga gtggctcatt cagacaggtg 300
ttgagccagt gcaggttcag gaaactgtgg aagatcactt gaagagtttg ctgatcaaac 360
attttgaccc ccgcaaagca gattctattt ttactgaaga aggagagacc ccagcgtggc 420
tggaacagat gattgcacat accacgtggc gggacctttt ttataaactg gctgaagccc 480
atccagactg tttgatgctg aacttcaccg ttaagcttat ttctgacgca gggtnccagg 540
ggganatcac cagtgtgtcc acagcatgcc agcagctana antgttctcn a 591

<210> 2535
<211> 731
<212> DNA

0509203.0015000

<213> Homo sapiens

<400> 2535
ggcttctgta ctgcgcgcgc acatgcgcgc aaacccggaa gcggattatg tggagtgaaa 60
gttacaccgt ggcggaatgg ggtgtattga ttctgagcaa taaacaacac atttttaaca 120
ttcaggattg acttctaagg actcttggta catgaggaag aaacccggaa ggggaagagg 180
aaagcaaagg cgtcaggaat ggttcttcct caggtatttt ttctaaatgt gagatcaagg 240
aattaccacc aaaaaaggag agtaatacag gagaaatatt ccagacagta atgttggaaa 300
gacatgaaag ccacgacata caagattttt gcttcagaga aacccagaaa aatgtacatg 360
actctcagtg tctgtggaaa catgattgaa gacattataa gcgagtgcgt gtgacctata 420
aggaaagtct cattggtaga agagacatgc atggtagaaa ggatgatgca caaaagcagc 480
ctgttaaaaa tcagcttgga ttaaacccgc agtcacatct accagaactg cagctatttc 540
aagctgaang gaaaatatat aaatatgatc acatggaaaa atccgtcaac agtagttcct 600
taatttcccc accccaacgt atttcttcta ctgtcaaaac ccacatttct catacatatg 660
aatgttattt tgtggattcn ttattcccnc caaaaganaa agccaatntt ggggacanaa 720
cactaccaat t 731

<210> 2536
<211> 696
<212> DNA
<213> Homo sapiens

<400> 2536
ggaccaagat ggcggcgccc tgtgagggac aagcgtttgc cgtaggggtt gaaaagaatt 60
ggggtgcagt agttcgctcc ccagaaggga ccccccagaa aatccggcag ctgatagatg 120
aggggattgc cccggaagag ggaggcgtgg acgcaaccac acccgcttga ggctctctat 180
gaatctctga nagtcttaga gaaggacacg tctgccacat cccagtcagt taatggatca 240
ccccaagcgg aacaaccttc attggaatct acaagcaaag aagccttctt tagcagagtg 300
gaaacatttt cttctttgaa atgggcaggt aagccctttg agctgtctcc actcgtctgt 360
gcaaaatatg gctgggtcac agtggaatgt gatatgctca agtgctctan ctgtcaagct 420
tttctctgtg ccagtttaca accagctttt gactttgacn gatataagca acgatgtgct 480
gagctgaaga aagccttgtg tactgcccat ganaaattct gtttctggcc agacagccca 540
tccccanacc gatttgggat gttgcccctg gatnaacctg ctattcttgt tagtgaattc 600
ctaaaatcgt ttcnaancct ttgtcacttg gaactccact tcctttccct naaggccgga 660
agaacttgaa aactattttc cttgaacnaa gnacaa 696

<210> 2537
<211> 715
<212> DNA
<213> Homo sapiens

<400> 2537
agctggagcg tncggtggac agtgagcatg cgtaccatat ctgaagttcg taaattgaaa 60
ttgaacatgc gtaattaatc tttctgaata ggaaaaaata tatacacaac aaaactctcc 120
gtttatggaa catgcgcatt tgttctcagt aagtttttcg ttttgaaagt gagcatgcgc 180
atggtgagta ggttggtccg aagtttgaac cggacagaag cgctggtcgg cgtctggcgg 240
ttgtttttag agtgactcac acagttccca ggggactctg ctctatgaga gagaatgagg 300
catatcaagc atcttgcaaa gaaagattct tcagtgagga ggagaatgga gttccaattg 360

0050150 :0N2000

cccgggctgt tcttgttgac atggaaccca aagttatcaa tcaaacgctg tcaaaggctg 420
cccagtctgg ccaatggaaa tatggtcaac atgcatgctt ctgtcaaaaa caaggttctg 480
gaaacaactg ggcatatggt tactctgttc atggacccag gcatgaagaa tctataatga 540
acataatccg gaaggaagtg gagaaatgtg actctttcag tggtttttc atcataatga 600
gtatggctgg gggcacagga tcaggattan gaactttcgt tacacagaat ttanaanatc 660
agtnctcaaa ctcattgaaa atgaatcaga ttatttggnc ttatgggaac tggtg 715

<210> 2538
<211> 451
<212> DNA
<213> Homo sapiens

<400> 2538
aggccacttc cggcgtacat ggcggctaac gctactacca acccgtcgca gctgctgccg 60
ttagagcttg tggacaaatg tataggatca agaattcaca tcgtgaggaa gagtgataag 120
gaaattgttg gtactcttct aggatttgat gactttgtca atatggtact ggaagatgtc 180
actgagtttg aaatcacacc agaaggaaga aggattacta aattagatca gattttgcta 240
aatggaaata atataacaat gctggttcct ggaggagaag gacctgaagt gtgaatgagt 300
ttccttgact tacactagat tttgttttgg ctataatgac aagaaaatgg aatttttttt 360
cccactttct aatgtttaaa tcccataaag ctaagtttcc cgttaaaagg ggaagtgctt 420
tgaagaggtg taccccantn ttgtaagtna a 451

<210> 2539
<211> 569
<212> DNA
<213> Homo sapiens

<400> 2539
ttttttgcct tcctcctcgt cctttagccg ggagcctgtc tttgcttgcc tttgcctttg 60
aggctctgtg gctgtggggc tgagtggcat catggcggct cagaaagatc tctgggacgc 120
cattgtgatt ggggcgggga tccagggctg cttcactgca taccacctgg ccaaacacag 180
gaagaggatc ctcctgctgg agcagttctt tctaccacac tcccgaggaa gctcccatgg 240
acaaagccgg ataatccgaa aggcgtacct ggaagacttt tacacccgga tgatgcatga 300
gtgctatcag atatgggccc agctggagca cgaggctgga acccaattgc acaggcagac 360
tggattactg ctgctgggaa tgaaagagaa tcaagaatta aagacaatcc aggccaatct 420
gtcgagggca gagggtagaa caccagtgtt ctttcatctg aggaactgaa gcaacgtttc 480
ccaaatattc gggttgccca aggggagaag tggggctctt ggaaaaattc nggagggagt 540
taatctaatg catnatnagg gccctcaga 569

<210> 2540
<211> 542
<212> DNA
<213> Homo sapiens

<400> 2540
aactgagcag cgccatggag gactctgaag cactgggctt cgaacacatg ggcctcgatc 60
cccggctcct tcaggctgtc accgatctgg gctggtcgcg acctacgctg atccaggaga 120
aggccatccc actggcccta gaagggaagg acctcctggc tcgggcccgc acgggctccg 180

0356045.0720001

ggaagacggc cgcttatgct attccgatgc tgcagctgtt gctccatagg aaggcgacag 240
gtccggtggt agaacaggca gtgagaggcc ttgttcttgt tcctaccaag gagctggcac 300
ggcaagcaca gtccatgatt cagcagctgg ctacctactg tgctcgggat gtccgagtgg 360
ccaatgtctc agctgctgaa gactcagtct ctcagagaag ctgtgctgat ggagaagcca 420
gatgtggtag tagggacccc atctcgcact taagccactt gcagcaagac agcctgaaac 480
ttcgtgantc cctggagctt ttgtggtgga cgangtganc cttcttttt cctttggctt 540
tg 542

<210> 2541
<211> 470
<212> DNA
<213> Homo sapiens

<400> 2541
aaaaaaaaag ctccccgccc cgccgcggcc atggaggacg agcggaaaaa cggagcctac 60
ggaacgccac agaagtatga tcccactttc aaaggaccca tttacaatag gggctgcacg 120
gatatcatat gctgtgtgtt cctgctcctg gccattgtgg gctacgtggc tgtaggcatc 180
atagcctgga ctcatggaga ccctcgaaag gtgatctacc ccactgatag ccggggcgag 240
ttctgcgggc agaagggcac aaaaaacgag aacaaaccct atctgtttta tttcaacact 300
gtgaaatgtg ccagcccccc ggttctgctg gaattccaat gtcccactcc ccagatctgc 360
gtggaaaaat gccccgaccg ctacctcacg tacctgaatg ctcgcagctc ccgggacttt 420
ganactataa gcagttctgg gttcctggct tcaagaaaat aaggnntggt 470

<210> 2542
<211> 584
<212> DNA
<213> Homo sapiens

<400> 2542
aaagtgtgat gagaggtcag gggaacatcc cagtaaaaga gaagagtcac aggaagctca 60
tctcctccct ggattctgga ttaggagctt ctgaatcttt tccagggata ggcaggtagc 120
tcactcttgg tgcaatttct tgaggatggg aacatgtaga gctgctggaa ggagtaattc 180
tgtgcttgac aaaggacgat ttctccttta tcgtgaccag tgctgccgat ttcctgacag 240
aggagcttac actctgagca ccttgtttta gcgaactcta gcaaaacttg tttagcttag 300
caaaaacaaa cacacaaaaa actgagaact ctgctgtttc agatatgcca taacatacat 360
ctgaaacaca tgtgtaacaa tcaaaatggt gggctctaga atggttttgg agctcgagat 420
cttcatgggt tagacttgct ggtcagaccc aggagcacct gtggctcaca ccttctgttc 480
ccctcctggc ctgtgcagaa tgtaaacngc agactcatac tcaatgggca ctacaggcct 540
tatcagacgt ttaacaagct gggatngcta gnggggaata aagg 584

<210> 2543
<211> 472
<212> DNA
<213> Homo sapiens

<400> 2543
agagaactgc cgcttgccgc cattgacacg cacagataga acccaaagaa aggcaaagag 60
tcctgcccgg cgccggcgcc gcgtgggcca aacctgcgcc cgtggagggg cgcgcagagg 120

US 2005/0260200 A1

gcaccgggcg ccgggagcag gcggcgcaca ccagcattgt gttagtgccg ggaggccact 180
gtgtcagcaa gctgagaggg aaactgaagc aagatgtcgg gccggagtgg gaagaagaaa 240
atgtccaagc tgtcccgttc agctagggca ggtgtcatct ttccagtggg gaggctgatg 300
cgttatctga agaaagggac gttcaagtac cggatcagcg tgggcgcccc tgtctacatg 360
gcggcagtca ttgagtacct ggcagcggaa nttctagaat tggccggcaa tgccganaag 420
gacaacaaga aggcccggnt agccccgaga cacatcttgc tggcagttgc ca 472

<210> 2544
<211> 517
<212> DNA
<213> Homo sapiens

<400> 2544
gttgtgccat gctgctctgt catgtttggt acgtgaatcg tccctttgtg cagcctatct 60
atgctatgtg ggctacctgc ccgttagtag tcacctaggg tatccaatca gctgtcctga 120
tatcagagtg cctgtgttca agtaactctt attttgctca gtggccccag attgcaagag 180
tagtgatgct ggcatgtcat aatagttcta ttttagtatt tgttattatt gttgatctgt 240
tactatgcct agctcataaa ttaaactttc tcataagtat gtatgtatag ggaaaaaaac 300
aacatatata tgggtttcgg ttctatctac ggtttcaggc atccactggg gtcttggaat 360
gtatcctcca aggataagga aggactagtg tattccccac acccctccct cttgctacct 420
tttgctgctt ttctttaatc accctctcct cctgtggcct gtttctatat acttggcatt 480
ctgttggctt cctngtgtgn ccatcacttc ctncttc 517

<210> 2545
<211> 460
<212> DNA
<213> Homo sapiens

<400> 2545
aaaaatttaa ctcagaagac tcacgtgact cttcatggaa cagaactgtg tgatgaatcc 60
tacccggctt tactcactga cattcctgtt ggagacttac atccagggga acagctggaa 120
aaaatgttgt atgttcgctg tggaacagtg ggttccagaa tgtttcttgt atatgtttct 180
tacctgataa atacaaccat tgaagaaaaa gaaattgttt gcaagtgtca caaggatgaa 240
actgtaacaa ttgaaacagt ctttccattt gatgttgcgg ttaaatttgt ttctaccaag 300
tttgagcacc tggaaagggt ttatgctgac atccccttc tgttgatgac ggacctctta 360
agtgcctcac cctgggccct cactaatgtt tccagtgagc tccagcttgc tcccatccat 420
gaccacntgg accantcgag tctcangtgg gccatggtaa 460

<210> 2546
<211> 167
<212> DNA
<213> Homo sapiens

<400> 2546
acacccagct gcctgagacc ctccttcaac ctccctagag gacagcccca ctctgcctcc 60
tgctcccaca gggcagcacc atgtngcccc tgtngctctg ctgggcactc tgggtgctgc 120
ccctggctgg ccccgggggcg gcngtgaccg aggagcagct cctgggg 167

US 2003/0186308 A1

<210> 2547
<211> 472
<212> DNA
<213> Homo sapiens

<400> 2547
tttccaaaat gaagcaccca aaagggtagt agaacgaacc cttctggaac agtttgcaga 60
taaaaatctt agctatgatg aaagatcaat cagcattatg aaggtggctc aagcgaaact 120
gaaggaaatt ggtccagatg acatgaatat ggaagagtac aagaagtggc atgaagatta 180
tagtttgttc cgaaaagtgt ctgtgtatct cctaacaggc ctagaactct atcaaaaagg 240
aaagtaccaa gaggcacttt cctacctggt atatgcctac cagagcaatg ctgccctgct 300
gatgaagggg ccccgccggg gggtcaaaga atccgtgatt gctttatacc gaagaaaatg 360
ccttctggag ctgaatgcca aagcagcttc tctttttgaa acaatgatga tcactccgta 420
acctgngggg cataatggtg atggaangga actgatcaat cccctgcnat tc 472

<210> 2548
<211> 476
<212> DNA
<213> Homo sapiens

<400> 2548
gcagtcgctg cagccgccgc gggaggcgtc cgtgacaaga tgaagctcat catcctggag 60
cactattctc aggcgagcga gtgggcggct aaatacatca ggaaccgtat catccagttt 120
aacccagggc cagagaagta cttcaccctg gggctcccca ctggccttcc tcgagacnac 180
ccggagagtt accactcctt catgtggaac aacttcttca agcacattga catccaccca 240
gaaaacgccc acattctgga tgggaatgca gtcgacctac aggcagaatg tgatgccttt 300
gaagagaaga tcaaggctgc aggtgggatc gagctatttg ttggaggcat cggccctgat 360
ggacacattg ccttcaacga gccaggctcc agtctggtgt ccaggacccg tgtgaagacg 420
ctggccatgg ataccanctg gccatgctan gntcttcgat gggagaactt caccaa 476

<210> 2549
<211> 465
<212> DNA
<213> Homo sapiens

<400> 2549
aatccgccgc cgcctgggag gggacccggg ctgccaggcg cccagctgtg cccagatgga 60
tgggacagag acccggcagc ggaggctgga cagctgtggc aagccagggg agctggggct 120
tcctcacccc ctcagcacag gaggactccc tgtagcctca gaagatggag ctctcagggc 180
ccctgagagc caaagcgtga cccccaagcc actggagact gagcctagca gggagaccgc 240
ctggtccata ggccttcagg tgaccgtgcc cttcatgttt gcaggcctgg gactgtcctg 300
ggccggcatg cttctggact atttccaggc caacactgga caaattgatg acccccagga 360
gcagcacaga gtcatcagca gcaacctggc cctcatccag gtgcanngcc actgtctngg 420
ggtcttggct gtgtggctgc gctgctgttt gggcgtgggt gtttc 465

<210> 2550
<211> 557
<212> DNA

0050305.02720

<213> Homo sapiens

<400> 2550
agaagggcaa cctcgtgctt tctgcagagg agaccggagg gcagaaggca gagtccaggc 60
ttagactgca gttcctcgct tacctgtgca gtctaatttt gagctgcctc tttgtagtct 120
taaaaggcag gagcttcgtg ttgtgggtct gctaacccgt acgtttccgt gggcaagtcg 180
tgtgtactcc tcgccatggc tcagctccaa acacgcttct acactgataa caagaaatat 240
gccgtagatg atgttccctt ctcaatccct gctgcctctg aaattgccga ccttagtaac 300
atcatcaata aactactaaa ggacaaaaat gagttccaca aacatgtgga gtttgatttc 360
cttattaagg gccagtttct gcgaatgccc ttggacaaac acatggaagt ggggaacatc 420
tcatcagaag aagttgtgga aatagatacg tggagaagtg taccgcaccc cagccagagc 480
aagcaagttc cagatgacgg nncagttcaa ttaaagggca gagganggat ctgactggtc 540
ctatgtaagg ctctcgg 557

<210> 2551
<211> 591
<212> DNA
<213> Homo sapiens

<400> 2551
agaagggcaa cctcgtgctt tctgcagagg agaccggagg cagaaggcag agtccaggct 60
tagactgcag ttcctcgctt acctgtgcag tctaattttg agctgcctct ttgtagtctt 120
aaaaggcagg agcttcgtgt tgtgggtctg ctaacccgta cgtttccgtg ggcaagtcgt 180
gtgtactcct cgccatggct cagctccaaa cacgcttcta cactgataac aagaaatatg 240
ccgtagatga tgttcccttc tcaatccctg ctgcctctga attgccgac cttagtaaca 300
tcatcaataa actactaaag gacaaaaatg agttccacaa acatgtggag tttgatttcc 360
ttattaaggg ccagtttctg cgaatgccct tggacaaaca catggaagtg gagaacatct 420
catcagaaga agttgtggaa atagatacgt gggaagtgta cgcaccccca gccngagcaa 480
tgcaggttcc atgatgactg gatcagtcca ttaaagggca aggatggatc ttgacgggtc 540
ctatgaaaag cctncggatn gggcctggaa ggaagncaaa atgccatgtg g 591

<210> 2552
<211> 443
<212> DNA
<213> Homo sapiens

<400> 2552
gggagcttcg gacccggaag tggcgccctg ggctcgcggc ggtgtcgcgg ggatggcggg 60
agccggagct ggagccggag ctcgcggcgg acggcggcgg gggtcgaggc tcgagctcgc 120
gatccaccgc ccgcgcaccg cgcacatcct cgccaccctc ggcctgcggc tcagccctcg 180
gcccgcagga tggatggcgg gtcaggggcc ctggggtctg gggacaacgc cccgaccact 240
gaggctcttt tcgtggcact gggcgcgggc gtgacggcgc tcagccatcc cctgctctac 300
gtgaagctgc tcatccaggt gggtcatgag ccgatgcccc ccacccttgg gaccaatgtg 360
ctggggagga aggtcctcta tctgccgagc ttcttcacct acgccaagta catcgtgcaa 420
ttggatggta agaangggnn ttc 443

<210> 2553
<211> 503

US 2005/0260686 A1

<212> DNA
<213> Homo sapiens

<400> 2553
aaaaaaatgc ttctgtgctc taagatatat atgtgtgtgt gtgtgctaca tatatatttt 60
taagaaagga ccatctcttt aggatatatt tttaaattct ttgaaacaca taaccaaaat 120
ggtttgattc actgactgac tttgaagctg catctgccag ttacacccca aatggcttta 180
atcccctctc gggtctggtt gccttttgca gtttgggttg tggactcagc tcctgtgaag 240
ggtctggtta ggagagagcc atttttaagg acagggagtt ttatagccct tttctacttt 300
cctcccctcc tcccagtcct tatcaatctt ttttcctttt tcctgacccc ctccttctgg 360
aggcagttgg gagctatcct tgtttatgcc tcactattgg cagaaaagac cccatttaaa 420
acccagagaa cactggaggg gangccccaa gtnggtccgg ggccaattnc cccgggccaa 480
aacagacaga cagaagcgag aga 503

<210> 2554
<211> 573
<212> DNA
<213> Homo sapiens

<400> 2554
ctgggcgcgc ggaacaaatc cactcctgga gcccgcggac cacgagcacg cgcctgacag 60
cccctgctgg cccggcgcgc ggcgtcgcca ggccagctat ggcccccgac ccggtggccg 120
ccgagaccgc ggctcaggga cctaccccgc gctacttcac ctgggacgag gtggcccagc 180
gctcagggtg cgaggagcgg tggctagtga tcgaccgtaa ggtgtacaac atcagcgagt 240
tcacccgccg gcatccaggg ggctcccggg tcatcagcca ctacgccggg caggatgcca 300
cggatccctt tgtggccttc cacatcaaca agggccttgt gaagaagtat atgaactctc 360
tcctgattgg agaactgtct ccagagcagc ccagctttga gcccaccaag aataaagagc 420
tgacagatga gttccgggag ctgcgggcaa aattggacgg atgggctcat gaggcaacca 480
gtcttcttcc tgtgtactgc tgcacatctt gctgctgatg gtgcacctgg ctcacctttg 540
gctttggngg nctttgcct cctctcnggg ggg 573

<210> 2555
<211> 554
<212> DNA
<213> Homo sapiens

<400> 2555
cttgtagttc gtggtctgag accaggcctc aagtggaaac ggcgtcacca tgatcgcacg 60
gcggaaccca gaacccttac ggtttctgcc ggatgaggcc cggagcctgc ccccgcccaa 120
gctgaccgac ccgcggctcc tctacatcgg cttcttgggc tactgctccg gcctgattga 180
taacgtgatc cggcggaggc cgatcgcgac ggctggtttg catcgccagc ttctatatat 240
tacggccttt ttttttgctg gatattatct tgtaaaacgt gaagactacc tgtatgctgt 300
gagggaccgt gaaatgtttg gatatatgaa attacatcca gaggattttc ctgaagaaga 360
taagaaaaca tatggtgaaa tttttgaaaa attccatccc aataacgttg aaagtcttca 420
aaaatgcttg ccccaagttt ccactggaaa ccgggcggtt ccggaaatta gagggaaaag 480
ngttcctaat ggcagntgaa agcctatgcc aaatccgtaa ggttgacacc cttgtaatta 540
aaatacgtac catg 554

US 2005/0260609 A1

<210> 2556
<211> 456
<212> DNA
<213> Homo sapiens

<400> 2556
agccggctcg ggaaagaatc ccccaagctc catttcatga gtaagcgtga gagccgctca 60
gtttcctcca gctctgctga agccagcaca gaagtagccc aaactcttcc ctctgctgac 120
agcaaatttt aggcaaagtc atgagaaaga agaaattggg tccagaaagg gaagtgagga 180
gaatcagatc ccagaccttt ggggagaagg agcaaccgcc tctggcacag cccatcaggg 240
agaaagagca ggttgagaag agtcctaagc taacagcccc aaacaggtgg gcgttgctca 300
gctccctgag gcatgtggtt gtaaggcaga acccacagac cttgcaggaa gaaggctctc 360
ggggccatgg cccaggtcag catcaacaat gactacagcg agtgggactt gagcacggat 420
gccggggagc gggctcggnt gttgcanaat cccgnt 456

<210> 2557
<211> 578
<212> DNA
<213> Homo sapiens

<400> 2557
cggaggtgac ggagcggcgg ccccgcccgg tgcgctggag gtcgaagctt ccaggtagcg 60
gcccgcagag cctgacccag gctctgggca tcctgagccc aagtccccca cactcagtgc 120
agtgatgagt gcggaagtga aggtgacagg gcagaaccag gagcaatttc tgctcctagc 180
caagtcggcc aagggggcag cgctggccac actcatccat caggtgctgg aggcccctgg 240
tgtctacgtg tttggagaac tgctggacat gcccaatgtt agagagctgg ctgagagtga 300
ctttgcctct accttccggc tgctcacagt gtttgcttat gggacatacg ctgactactt 360
agctgaagcc cggaatcttc ctccactaac agaggctcag aagaataagc ttcgacacct 420
nctcagttgt caccctggct gctaaagtaa aagtgtaanc ccatatgcag tgttgctgga 480
ggctcttgcc ctgggtaaat gttgcggcaa ctgggaaaga ccttgtgatt gaaggctgtg 540
taatgctgaa cgtgcttcgt ggctncccng gaacagcg 578

<210> 2558
<211> 571
<212> DNA
<213> Homo sapiens

<400> 2558
cgttccgcgc tgtcgccgcc gtcgtgcgtg ccgctcggcg gaggggacgg gcctgcgttc 60
tctcctcctt cctccccgcc tccagctgcc ggcaggacct ttctctcgct gccgctggga 120
ccccgtgtca tcgcccaggc cgagcacgat gccccctaaa aagggaggtg atggaattaa 180
accaccccca atcattggaa ggtttggaac ctcactgaaa attggtattg ttggattgcc 240
aaatgctggg aaatctactt tcttcaatgt gttaaccaat agtcaggctt cagcagaaaa 300
cttcccgttc tgcactattg atcctaatga gagcagagta cctgtgccag atgaaaggtt 360
tgactttctt tgtcaatacc acaaaccagc aagcaaaatt cctgcctttc taaatgtggt 420
ggatattgct ggccttgtga aaggagctca caatgggcaa ggccttgggg aatgcctttt 480
tatctcatat taagtgcctg tggatggcat ctttcatcta acacgtgctt tngaaagatg 540
atgatatcac gcacgttgga agggangngt a 571

US20050048500

<210> 2559
<211> 481
<212> DNA
<213> Homo sapiens

<400> 2559
atttaccaat gactctgctc cgtttttgga gcagactgtt ttaagttgct caggagcctg 60
atggaaccat gaaccgagac tcttctctgt ttcctgccaa gacctcatct gcactaatgc 120
cttctccctg naccttgaca cttccccctt tagctataaa agcacttacc agccgaacgt 180
ggaacagtat cacaaaagat tccatctccc aacgatttca gaactctgag ctcagagaga 240
ctccagattt taaaaaataa tttgagtgct tggaaactat tagcttttta agttccttcc 300
aaatatgtta gtacctaccc tttacttttt ccccaagacc atctcagggt ggagcattct 360
gtctaagaga agaaagataa ggttgctccc acccanctct cccaagggcn gacattaaac 420
atctttgtgc tttgaaggag agtggaattt tgggatagtc ctgtgatttc cngactaact 480
t 481

<210> 2560
<211> 417
<212> DNA
<213> Homo sapiens

<400> 2560
atttaccaat gactctgctc cgtttttgga gcagactgtt ttaagttgct caggagcctg 60
atggaaccat gaaccgagac tcttctctgt ttcctgccaa gacctcatct gcactaatgc 120
cttctccctg accttgacac ttcccccttt agctataaaa gcacttacca gccgaacgtg 180
gaacagtatc acaaaagatt ccatctccca acgatttcag aactctgagc tcagagagac 240
tccagatttt aaaaaataat ttgagtgctt ggaaactatt agcttttaa gttccttcca 300
aatatgttag tacctaccct ttacttttc cccaagacca tctcagggtg gagcattctg 360
tctaagaggg aaagataagg aggctcccac ccanctctcc caagagcggg ggnaana 417

<210> 2561
<211> 525
<212> DNA
<213> Homo sapiens

<400> 2561
acttccccgg gagccggaag tcccgtctca cggttgccct ggcagcgcgc gaggctggtg 60
agtcggcagc cctgtggcag ccggcgggct ggtttccatg gttgcacgat taggaaccac 120
cagctgctgc atcccatggc caggggtggc gtccaggtgg cagagcagct aggaacgcaa 180
ggcctgaacc tggggccaga caccctgctc tcccggccat ggtcaacgac cctccagtac 240
ctgccttact gtgggcccag gaggtgggcc aagtcttggc aggccgtgcc cgcaggctgc 300
tgctgcagtt tggggtgctc ttctgcacca tcctcctttt gctctgggtg tctgtcttcc 360
tctatggctc cttctactat tcctatatgc cgacagtcag ccacctcagc cctgtgcatt 420
tctactacag gaccgactgt gattcctcca ccanctcact ctgctccttc ctgttgccaa 480
tgtctcgctg ataagggtgn acgtaatcgg ggntgaagta tggaa 525

<210> 2562

0050205.0050205

<210> 547
<211> DNA
<213> Homo sapiens

<400> 2562
tctctttctc ctccacgtgg ggacgcagga tggcggcagc agtggcggac gaggcggtgg 60
cgcgcgatgt gcagcggttg ctagtgcagt tccaggatga gggcgggcag ctgctgggtt 120
ccccgttcga cgtgcccgtg gacatcaccc cggacaggct gcagctcgtg tgcaacgcgc 180
tactggccca ggaggatccc ctgccactgg ctttctttgt ccacgatgct gagatcgtct 240
cctcactggg gaagacgttg gagtcccagg cagtggagac agagaaggtc ctagacatca 300
tctaccagcc acaggctatc ttcagagtcc gggctgtgac tcgctgcacc agctccttgg 360
agggtcacag tgaggcagtc atttctgtgg ccttcagccc tacgggaaag tacctggcca 420
gtggctctgg agacaccacc gtgcgcttct gggatctcag cacagagaca ccacatttca 480
catgcaagga cacngacact gggtccttag gaaatccngg ntccaatggc aaaaactggc 540
tcaagct 547

<210> 2563
<211> 575
<212> DNA
<213> Homo sapiens

<400> 2563
gcttccggca ccggccgagg tcgggtcgcc tccagagatc ctgtgccttc aaaccctacg 60
agtccatact ttaaaacaaa atgaagaaag taaggcttaa ggaactagag agtcgcctgc 120
aacaagtgga tggatttgaa aagcccaagc tacttctggg acagtatcct accaggccgc 180
acattgcagc atgtatgctc tatacaatcc ataacactta tgatgacatt gaaaataaag 240
tcgttgcaga tctaggatgt ggttgtggag tacttagcat cggaactgca atgttaggag 300
cagggttgtg tgttggattt gacatagatg aagacgcatt ggaaatattt aataggaatg 360
cagaagagtt tgagttaaca aatattgaca tggttcaatg tgatgtgtgc ttattatcta 420
acagaatgtc caagtcattc gatacagtaa ttatgaatcc tccctttggg accaaaaata 480
ataaagggac agtatggctt tccaaagncg ccttgggaat ggcaagaccn ccgtatatcc 540
ctanaccaat ccccactggg gactgtccaa gaaag 575

<210> 2564
<211> 496
<212> DNA
<213> Homo sapiens

<400> 2564
ggaaggtgcg tccgagccat ggccgctgcc aacccgtggg acccggcgtc cgcgcctaac 60
ggcgctgggc tagtgctagg ccacttcata gcttcgggga tggtcaatca ggagatgtta 120
aacatgtcta agaaaacagt ttcttgtttt gtgaacttca ccagactaca gcagatcaca 180
aatattcaag ctgaaatcta ccagaaaaac ctggaaattg aactcctgaa actagaaaaa 240
gatacagcag atgttgttca tcctttcttt ttggctcaga agtgtcatac tctgcaaagc 300
atgaataatc atttggaagc agtgctgaaa gagaagagat cccttaggca aagactgttg 360
aaacccatgt gccaggaaaa cttacctatt gaagctgttt atcacagata tatggtacat 420
ttgctggagt tggctgtgac tttcattgag agattagaaa cccaccttga aacaattagn 480
ntattccnca tttagc 496

0950204.0002000

0080250450

<210> 2565
<211> 557
<212> DNA
<213> Homo sapiens

<400> 2565
atcttctcac cgaagcttag tacagcgggt tgaaacaatt tctctaggtg agcacccctg 60
tgacagagga gaacaagtaa ctctcttcct cttcaatgat tgcctagaga tagcaagaaa 120
acggcacaag gttattggca cttttaggag tcctcatggc caaacccgac ccccagcttc 180
tcttaagcat attcacctaa tgcctctttc tcagattaag aaggtattgg acataagaga 240
gacagaagat tgccataatg cttttgcctt gcttgtgagg ccaccaacag agcaggcaaa 300
tgtgctactc agtttccaga tgacatcaga tgaacttcca aaagaaaact ggctaaagat 360
gctgtgtcga catgtagcta acaccatttg taaagcagat gctgagaatc ttatttatac 420
tgctgatcca gaatcctttg aagtaaatac aaaagatatg gacagtacat tgagtagagc 480
tcaagggcaa taaaaaggnc ttcaaaaagg gtacagggna ttccctttct ccaaactcca 540
aaagggctct tcgangg 557

<210> 2566
<211> 471
<212> DNA
<213> Homo sapiens

<400> 2566
gaaagactgg agccgtttcc ttgtggctgg agcgcttccc gtagcctcgg ggaaggagca 60
ggatttagag gaccactagt tggaccccat cctcgtgctg gaggaacagg aacctctttc 120
aggagctata aaagaaaggg gggaatcatg tccacaattg cagctttcta tggcggcaag 180
tccatcctca tcacgggggc cacaggcttt ctgggcaaag tgctaatgga gaagctgttt 240
cgcaccagcc cagacctgaa agtcatttac atccttgtga ggcccaaggc tggccagaca 300
ctgcagcaga gggttttcca gatcctagac agtaagctat ttgagaaagt caaagaagtt 360
tgtccaaatg tgcatgagaa gatcagagct atttatgcag atctcaatca gaatgacttt 420
gcccatcagc aaagangana tgcaggagct tctctcctgt aacaaacnag a 471

<210> 2567
<211> 516
<212> DNA
<213> Homo sapiens

<400> 2567
cgcgatggag gccgccgccc agttcttcgt cgagagcccg gacgtggtct acggccccga 60
ggccatcgag gcgcaatacg agtaccggac gacgcgcgtc agccgcgagg gtggcgttct 120
caaggtgcac cccacgtcca cgcgcttcac cttccggacc gcccggcagg tgccccggct 180
cggggtcatg cttgtcggct ggggcgggaa caacggctcc acactcaccg ccgcggtgct 240
ggccaatcga ctgcgtttgt cctggcccac gcgcagggcc gcaaggaggc caactactac 300
ggctcgctga ctcaggcggg caccgtgagc ctgggcctgg acgccgaggg ccaggaggtg 360
ttcgtaccct tcagcgcggt gctgcccatg gtggcgccca acgacctcgt gttcgatggc 420
tgggacatct cgtcgtgaac ctggccgaag cgatgcggcg cgcgaaagtg ctggaactgg 480
ggcttcaaga agaaattttg ncgaanatga ggncct 516

0050050.0002000

<210> 2568
<211> 529
<212> DNA
<213> Homo sapiens

<400> 2568
gttgccaggg agcggcgcgn gagccctgag gggactgcgg cggctgcgcg gaggagcgag 60
gcgcttgctg gggtcggggc tgcgcgacgg cgcaagggct gcggggagcg ccgcgcaggc 120
cgtgcagttc ctagcgagga ggcgccgccg ccattgccgc tctctcggtg agcgcacccc 180
gctctccggg ccgggccttc gcgggccacc ggcgccatgg gccagtgcgg catcacctcc 240
tccaagaccg tgctggtctt tctcaacctc atcttctggg gggcagctgg cattttatgc 300
tatgtgggag cctatgtctt catcacttat gatgactatg accacttctt tgaagatgtg 360
tacacgctca tccctgctgt agtgatcata gctgtaggag ccctgctttt catcattggg 420
ctaattggct gctgtgccac aatccgggaa agtcgctgtg gacttgccac gtttgtcatc 480
atcctgcnct tggtttttgt cacagaagtt gtttagtggg tttnggana 529

<210> 2569
<211> 520
<212> DNA
<213> Homo sapiens

<400> 2569
accacgcgtc tcatccatgg cttccgcgga ctcgcgccgg ctggcagatg gcggcggtgc 60
cgggggcacc ttccagccct acctagacac cttgcggcag gagctgcagc agacggaccc 120
aacgctgttg tcagtagtgg tggcggttct tgcggtgctg ctgacgctag tcttctggaa 180
gttaatccgg agcagaagga gcagtcagag agctgttctt cttgttggcc tttgtgattc 240
cgggaaaacg ttgctctttg tcaggttgtt aacaggcctt tatagagaca ctcagacgtc 300
cattactgac agctgtgctg tatacagagt caacaataac aggggcaata gtctgacctt 360
gattgacctt cccggccatg agagtttgag gcttcagttc ttagagcggt ttaagtcttc 420
agccggggct attgtgtttg ttgtggatag tgcagcattc cagcgagang tgaaagatgt 480
ggctgagttt ctgnatccaa gtcccccatt gacatanggg 520

<210> 2570
<211> 544
<212> DNA
<213> Homo sapiens

<400> 2570
actctgctgc cggcttctcg gagcggcgct gggcgaccag agcagggtcg agatgtccta 60
catcccgggc cagccggtca ccgccgtggt gcaaagagtt gaaattcaca agctgcgtca 120
aggtgagaac ttaatcctgg gtttcagcat tggaggtgga atcgaccagg acccttccca 180
gaatcccttc tctgaagaca agacggacaa ggtgaggggg tctggggtcc tgggaccgct 240
ccatggggca caggggcctg agatggtggg tctctgcttc ctgggcctgc atggaaggaa 300
cagacttcat ctctcaaacc atgctctcta agaaggcatc ggaagtgacc tagtgagaat 360
aaggacgggt ggggtgagga agggctgctc agacagagcc caggaggagc aggaggcggc 420
catcagcagg gccggtgcat ggtggtgcag caactctgcc ccggctctct cagaacatcc 480
tcactgacca tatgtgctgg gaaaagctgg gttcaaggga aaaaggacgg ctaaaaatnn 540

ncca 544

<210> 2571
<211> 587
<212> DNA
<213> Homo sapiens

<400> 2571
aaaaaccatg gatcctggag gtgcccgcga acactgcttg tcgcctgggc aaccggagag 60
gacgaagcag gacctaggtg gcggcggtgg taccggctgc aatggtgtcc aatcccgtgc 120
atggcttgcc ctttcttccg ggcacgtcct ttaaggactc tacgaaaaca gccttccaca 180
gaagtcagac gctgagctac aggaacggct atgcaattgt tcgacgtcca acagttggga 240
taggcggaga ccggctccag ttcaaccagc tgtcccaggc tgagctggat gagttggcca 300
gtaaggcacc agtcttaact tatggccaac ctaaacaagc cccacctgcg gattttattc 360
ctgcgcatgt ggcctttgac aaaaaggtac tgaaatttga tgcctatttc caagaagatg 420
ttccnatgtc aaactgagga accagtatan gggttccgtc aggtgaacat ttantaatta 480
atctagaaag atgaccagca tgtctgtcat aagagcctgt tgtagaaaat tctgggaatc 540
cttcaagggc aagttaatta aaaccgccag cggggtagcc aagaatt 587

<210> 2572
<211> 690
<212> DNA
<213> Homo sapiens

<400> 2572
tcttccaaca gnaacgttgg gaagacgagc aatatctttg ggctgcagag gatcttccca 60
gccggctcca ttcccctaac caggccagcc cattccactt cagtgtccat gtccaggctg 120
tcactgccct ccaaaaatgg ttcaaagaag aaaggcctga agcccaagga actcttcaag 180
aaggcagagc gaaagggcaa ggagagttca gccttggggc ctgctggcca nttgagctat 240
aatctcatgg acacatacag tcatcaggca ctgaagacag gctctttcca gaaagcaaag 300
ttcaacatca ctggtgcctg cttgaatgac tcagatgacg actcaccaga cttggacctt 360
gatggaaatg agagcccatt ggccctattg atgtctaacg gcagtacgaa aagggtgaag 420
antttatcca aatctcggcg aaaccaagat agcaaagaaa gtagacaagg ctaggctgat 480
ggcagaacag gtgatggaag acgaatttga cttggattca gatgatgagc tgcagattga 540
cganagattg ggaaaggaga aagggaccct gatnataaga caaaatttcc ccgggaaatt 600
gcccgtgcga anccttgctc tgaacccaac ccganttcgt gaancaggaa aaatttaatt 660
ttgacatttg aaggaangac tattccnacc 690

<210> 2573
<211> 760
<212> DNA
<213> Homo sapiens

<400> 2573
aattactatg aaattctggg agtttctcga gatgctagtg acgaagagct taagaaagct 60
tacagaaaac tcgccctgaa atttcaccct gacaagaact gtgctcctgg agcaacagat 120
gctttcaaag caataggaaa tgcatttgca gtcctgagca atcctgataa gagacttcgc 180
tatgatgaat acggagatga acaggtgact ttcactgccc ctcgagccag accttataat 240

0056036-020800

tattacaggg gattttgaag ctgacatcac tccagaagag ctgttcaacg tcttctttgg 300
aggacatttt cctacaggaa atattcatat gttttcaaat gtgacagatg acacttacta 360
ttaccgtcga cggcaccgac atgagaggac acagactcag aaggaggagg aagaagagaa 420
acctcagact acatattctg catttattca gctacttcca gttcttgtga ttgtgattat 480
atctgtcatt actcagctgc tggctactaa tcccccatat agtctgttct ataaatcgac 540
cttgggctac accatttcta gagaaactca taacctgcag gtgccttact ttgtgggata 600
aaaactttga caagggctac angaaggagc ttctctgcct tgactttggg agaaaaccat 660
tanaaaaagg attacctttg attatntcca gactagttgt ttgggaangg anaaaccaca 720
aaagtccgaa ctgaacaaat tttggggcng ggatttttcc 760

<210> 2574
<211> 629
<212> DNA
<213> Homo sapiens

<400> 2574
gtgactgtgg agtttgaatt gggtggcggt tgactgtaga gccgctctct ctcactggca 60
cagcgaggtt ttgctcagcc cttgtctcgg gaccgcagcc tccgccgagc gccatggctc 120
ctaggaaggg cagtagtcgg gtggccaaga ccaactcctt acggaggcgg aagctcgcct 180
cctttctgaa agacttcgac cgtgaagtgg aaatacgaat caagcaaatt gagtcagaca 240
ggcagaacct cctcaaggag gtggataacc tctacaacat cgagatcctg cggctcccca 300
aggctctgcg cgagatgaac tggcttgact acttcgccct tggaggaaac aaacaggccc 360
tggaagangc ggcaacagct gacctggata tcaccgaaat aaacaaacta acagcagaag 420
ctattcagac acccctgaaa tctgccaaaa cacgaaaggt aatacaggta gatgaaatga 480
tagtggaaga ggaagaagaa gaagaaaatg aacgttagaa tcttcaaact gcaagantca 540
aaaggtgtcc tccatccaan aagaaaactc agtccatacn aggaaaanga aaagggaaaa 600
ngtcaagccg tgctaacact gttacccca 629

<210> 2575
<211> 732
<212> DNA
<213> Homo sapiens

<400> 2575
cttccgggtg agggtcctgc agcccgtgaa tccctggtcc cgccgagact tggacctggt 60
gcgaactgga ggcgaagcgg gtgcacccac aacctatagg aagggctggc ggcgagctct 120
gagcactcgg gcgtcggagg gaacgctctg ctttcaacac tcttggccct ttctcaagag 180
aacatgaaaa tgaaaaaatt tcagatacca gtttcattcc aggacctgac tgtgaacttc 240
acccaagagg aatggcagca actggaccct gctcagaggc tcctgtacag ggatgtgatg 300
ctggagaact acagcaactt ggtctctgtg gggtatcatg ttagcaaacc agatgtgatt 360
ttcaaattgg agcaaggaga agagccatgg atagtggagg aattctcaaa tcagaactac 420
ccagacattg atgatgcctt agagaagaac aaggaaatcc aagataaaca tttgacacaa 480
actgtattct tcagcaacaa aacactgatt acagaaagan agaatgtatt tggggaaaca 540
cttaatctgg gcatgaatag tgttccctca agaaaaatgc cctataaatg tnatccanga 600
aggaaacagt ttgaaaacta attcagaagt tattgttgcc aagaaaaccn anaaaacana 660
aagattcctg atggataccg tgggatttgg ggaancatna aaaaaagtcc tttggggaaa 720
tgaaaaaatt cc 732

0605769.0002000

<210> 2576
<211> 825
<212> DNA
<213> Homo sapiens

<400> 2576
ttgttcagtc ctcaattgtt ggacattttt tttattataa tgatgccatg atgatcgttt 60
atgattcact gtttttattt tttgatttct ttgattttag tggaggtgaa catttcccca 120
taataatgag cttcattgat ttgtaaatta tattatcttt gagattatat tcaaagctat 180
aaaatcatca actcttagga tcacaggcaa cctcaaaagt tgtctagttc ccatctattc 240
ctcgaccctc tctacggagt ttgtataaaa cccatatttt cattacttcc taactctgat 300
aattataggg gatatatttt aaggattaaa actagtatct taaatgtttt tatatcagtc 360
agtttaaaaa ctaatattca gtttagtctt tcagaacttt gagtcacgaa atgcatcttt 420
aaaagcaggg tacatttatt gaaataaaac actctacagt gatctggatc ttttttaat 480
ttatttttt attatacttt taagttctgg gatacatgtg cagaatgtgc aggcttgtta 540
cataggtata cacgtgccac ggtggtttac tgcacccatc aacctgtcat ctacattagg 600
tatttctcct aatgctatcc ctcccctacc atcccacccc ctgacangcg ccttgggtgt 660
gtgatgtttg gatcgttttt tttccttgna acattacaaa cgttaggtac attacccttt 720
tcctgtttgg tttgccaaac attattgaaa ttgttttttt tcccgaaaan aaaggaattt 780
tccnctggtt tncaacacca ccaggtnccc ttaccaggnt tttaa 825

<210> 2577
<211> 755
<212> DNA
<213> Homo sapiens

<400> 2577
attctcatgg tcagtagcaa cttttggttc aaatatccca aaacatgctc aaaagtagaa 60
cattttgttt caatattagg aaagtgcttt gaatcccctt ggacgacaaa agcgttgtct 120
gagacagcat gcgaagactc agaggaaaac aagcagagaa taacaggtgc ccagactcta 180
ccaaagcatg tttctaccag cagtgatgaa gggagcccca gtgccagtac accaatgatc 240
aataaaactg gctttaaatt ttcanctgag aagcctgtga ttgaagttcc cagcatgaca 300
atcctggata aaaaggatgg agagcaggcc aaanccctgt ttgagaaagt gaggaagttc 360
cgtgcccntg tggaagatan tgacttgatc tataaactct atgtggtcca aacagttatc 420
aaaacagcca agtncatttt tattctctgc tatacagcga actttgtcaa cgcaatcagc 480
tttgaacacg tctgcaagcc caaagttgan catctgattg gttatgaagt atttgagtgc 540
cccacaatat ggcttacatg ttgaaaaagc ttctcatcca gttacatatc cattatttgt 600
gtttatggct ttatctgcct ctacactctc ttctggttat tccggatacc tttgaaagga 660
atattctttc naaaaaagtc ngaaaaanaa aaacagtttt agtgacattc caaaatttca 720
aaaaacnaat ttgggnttcc tccttcccat gggta 755

<210> 2578
<211> 576
<212> DNA
<213> Homo sapiens

<400> 2578
agctgatcgc aagactaggc aacctccagc cagtccctgg gtcgggcgga tcctcccaga 60

0956048 .0/2006

ggtggcacaa tggagcgatc tccaggagag ggccccagcc ccagccccat ggaccagccc 120
tctgctccct ccgaccccac tgaccagccc cccgctgctc acgcaaagcc agacccaggt 180
tctgggggcc aacctgctgg ccctggcgcg gcgggtgagg ccctggcggt gctgacttca 240
ttcgggaggc ggttgctggt gctgatacct gtgtatttgg ccggggcagt gggactcanc 300
gtgggtttcg tgctcttcgg cctcgccctc tacctgggct ggcgccgggt ccgcgacnag 360
aaagaacgga gccttcnagc agcgaggcag ctactggacg acgangagca gctcactgcg 420
aaaactctct atatgagtca tcgagagcta cctgcctggg tcagcttccc agacgtggaa 480
aaggctgaat ggctcaataa nattgtggcc cangtctggc ccttcctggg ccantatatg 540
ganaacttct ggctgaaact gtggctccng ctgtta 576

<210> 2579
<211> 467
<212> DNA
<213> Homo sapiens

<400> 2579
agagtccccg ggccaagatg gctgcgcggt gctccacacg ctggttgctg gtggttgtgg 60
ggaccccgcg gctgccggct atatcgggta gaggggcccg gccgcccagg gagggcgtgg 120
tgggggcatg gctganccgc aagctgagcg tccccgcctt tgcgtcttcc ctgacctctt 180
gcggcccccg agcgctgctg acattgagac ctggtgtcag ccttacagga acaaaacata 240
accctttcat ttgtactgcc tccttccaca cnagtgcccc tttggccaaa gaagattatt 300
atcagatatt aggagtgcct caaaatgcca gccagaaaga gatcaagaaa gcctattatc 360
agcttgccaa gaantatcac cctgacacaa ataaggatga tcccnaagcc naggganaan 420
ttctcccagc tggcagaaac ctatgaagtt ttgagtgatg aagtgaa 467

<210> 2580
<211> 593
<212> DNA
<213> Homo sapiens

<400> 2580
gctgcttggt aacaatgggg aagataatgg ctgcctgagc aacgtctccg agcaggcgct 60
gagctagagg cgggtctcaa ccagctactc attggaggcg ggcttgagag cggcggccag 120
ggaggtgcgg agcagcctcg gcggcggcgg ccgaaccaac cgagtcggat cctgacccta 180
aaacctagta ttttccactt gttcatcaat atggaaaact cagattccaa tgacaaagga 240
agtggtgatc agtctgcagc acagcgcaga agtcagatgg accgattgga tcgagaagaa 300
gctttctatc aatttgtaaa taacctgagt gaagaagatt atnggcttat gagagataac 360
aatttgctag gcaccccagg tgaaagtact gaggaagagt tgctgagacg actacagcaa 420
attaaagaag cccaccaccg caaaactcag atgaaaatag aggaggagac tcttcanatg 480
atgtgtctaa tggtgactct ataatanact ggcttaactc tgtcngacaa actggaaata 540
caacaagaan tgggcaaaga agaaaccaat cttggagaac antgaatcng act 593

<210> 2581
<211> 892
<212> DNA
<213> Homo sapiens

<400> 2581

ttttagatgt atttcaagct gtgaagagtt tacgacttca gagaccacat atggtgcaaa 60
ccctggaaca gtatgaattc tgctacaaag tggtacaaga ttttattgat atattttctg 120
attatgctaa tttcaaatga agattcctgc cttaaaatat tttttaattt aatggtcagt 180
atattttgta aaaatcatgt taatttattt catanttgac attaatatct tccctaattt 240
ctttgtatat attttgttat gccttaaagg ccacctgcta tacagttgtt aaatcttaaa 300
tatgcttttt aaaaattgga ataatgtatt aaggtcaaat aatatcccat aaaatatata 360
tttctgctaa tattagtaaa tatcttaatt tttcattana ttcatatcat ttaatttcac 420
atattcaaca cctttaaatg ttgtaatctt aatatgcgaa gtgtgcctct gcaanatact 480
aacacaaagc tcatgttaag aaaacagttg aggactcgga agtcagttga aaatgcactt 540
tcctaacagt gaattcacaa ccctgaacag cagcattttt ggaaggcaaa ctgttcgtga 600
tggtacaatg taaatggggg acttctgtaa agttctcagt ttcggtccat gtggtttatc 660
tttacatttt gaanatcaaa aaaatcttta caacctgaaa tccaggtcct aaaacaccnc 720
taaaattact ggggactata aattaatatt ttaaaaaatg cctgtttcta cacccatcna 780
anaacggttg tctacccnta atctttgggt gnaaccaaaa aaaaaaattt tnaatgcctg 840
ggggtggtnc cccgttgaaa ccccnggggg tttggggttt caanaaaaac cn 892

<210> 2582
<211> 776
<212> DNA
<213> Homo sapiens

<400> 2582
agttttgttt acttaccatg gcaatagtgg ccttttagcc actaaaagtg atgaaactgg 60
atggacaacg ttttttgact atgacagtga aggtcgtctg acaaatgtta cgtttccaac 120
tggagtggtc acaaacctgc atggggacat ggacaaggct atcacagtgg acattgagtc 180
atctagccga gaagaagatg tcagcatcac ttcaaatctg tcctcgatcg attctttcta 240
caccatggtt caagatcagt taagaaacag ctaccagatt ggttatgacg gctccctcag 300
aattatctac gccagtggcc tggactcaca ctaccaaaca gagccgcacg ttctggctgg 360
caccgctaat ccgacggttg ccaaaagaaa catgactttg cctggcgaga acggtcaaaa 420
cttggtggaa tggagattcc gaaaagagca agcccaaggg aaagtcaatg tctttggccg 480
caagctcagg gttaatggca gaaacctcct ttcagttgac tttgatcgaa caacnaagac 540
agaaaagatc tatgacgacc accgtnaatt tctactgagg atcgcctacg acacgtctgg 600
gcacccgact ctctggctgc caagcancaa gctgatgggc cgtcaatgtc acctattcct 660
ccacaggtcc aattgccagc atccagcgaa ggcaccacta gcnaaaaaan tnaattatna 720
cggacagggg aagatcntgt ctcgggtctt tggctgatgg ttaaacatgg aatttc 776

<210> 2583
<211> 597
<212> DNA
<213> Homo sapiens

<400> 2583
agcaagcagg aagaggaggc tttctaaggc ggtcgctccg ggaaatccgg gccctaggat 60
tgtccactca tcccagtatc agcgagatac ggggaagata gagttagcga cagcgtgagc 120
cagagctgga gcacgtttgg tgagagacca gaaagcaatg gangccggag aggggaagga 180
gcgcgttccg aaacaaaggc aagtcctgat attctttgtt ttgctgggca tagctcaggc 240
tagttgccag cctaggcact attcagtggc cgaggaaacg ganagtggct cctttgtggc 300
caatttgtta aaagacctgg ggctgganat aggaaaactt gctgtgaggg gggccagggt 360

09539480.070200

ctttccaaa ggaaaaaaan tgcatttgca gttcgatagg canaccgggg atttgttgtt 420
aaatgaaaaa ttggaccggg angagctttg cggccccaca aaaccctgtn tcctaccttt 480
ccaggtttta ctaaaaaatc ccttgcantt ttttcaggcg ganctacgga ttagggacnt 540
aaatgatcat tccccagttt tcctanacaa anaaatactt ttgaaaaatt ccaaaaa 597

<210> 2584
<211> 710
<212> DNA
<213> Homo sapiens

<400> 2584
agtgatggag gagagaagat ggcggaagcg gaatttaagg accatagtac agctatggat 60
actgaaccaa acccgggaac atcttctgtg tcaacaacaa ccagcagtac caccaccacc 120
accatcacca cttcctcctc tcgaatgcag cagccacaga tctctgtcta cagtggttca 180
gaccgacatg ctgtacaggt aattcaacag gcattgcatc ggcccccccag ctcagctgct 240
cagtaccttc agcaaatgta tgcagcccaa caacagcact tgatgctgca tactgcagct 300
cttcagcagc agcatttaag cagctcccag cttcagagcc ttgctgctgt tcaggcaagt 360
ttgtccagtg gaagaccatc tacatctccc acaggaagtg tcacacagca gtcaagtatg 420
tcccaaacgt ctgtaagttc cctaaatttt ttttttcctg gatttaaaat tttaaagaat 480
tgttttccaa aagtaaactg ttgttattta tgaagctgtt attataattt gttgcatgct 540
gtttaaagta acaattgccc agaaatagaa atgataaaat tcaagaattc agaactagtg 600
ttnaacttat gaaaatctga atcttaaaaa aatctttngg tattatttct ggtatatcca 660
tttgcactga tcatgttcca aatcttaagn tgggttncan cttnctgtgt 710

<210> 2585
<211> 518
<212> DNA
<213> Homo sapiens

<400> 2585
gagtcgccgc tgggcctgtc cgctggcgtc atggcaccga aaaagaaagg gaagaaaggc 60
aaagccaaag gcaccccgat tgtcgatggg ctcgctccag aggacatgag caaggagcag 120
ctgtttattt ttaggtgaag ttgagtcctc cctctttctt ccttgccttt cgccggccac 180
acgccccgtt gccgtgcatg ggcccctgat cagtgcctca cctgacccac tgcacctggc 240
caggtggagg agcatgtcag ccgcatccgg gaggagctgg accgcgagcg ggaggaacga 300
aactacttcc agctggagcg ggacaagatc cacaccttct gggagatcac acggaggcag 360
ctggaggana agaagctgag ctgcggaaca aagaccggga gatggaagaa gccgaggaga 420
ggcaccaggt ggagatcaag gtgtacaanc agaaagtgaa gcacctgcta tatgagcacc 480
anaacaacct gacanaaatg aangctgang gcactgtt 518

<210> 2586
<211> 670
<212> DNA
<213> Homo sapiens

<400> 2586
agacacggaa gtgctgggag gcgccgggag cccgttcggt tgcgggtgtc tctggccctg 60
cggtcagccc tgggaacgtc ccggagagct agattcctag aggcccgatt ccgctagccc 120

US 2003/0224000 A1

ggaacagaca aagccagcgc tcccgcccgc tccccgactt aggatccgat gccggcagcg 180
tcctggggcc cccgtagcgg ggctggacca tgancctgct ggacggcctc gcttcctcgc 240
cgcgggctcc gctgcagtcc agcaaggcca ggatgaaaaa gctcccgaag aagagccaga 300
atgagaagta ccggctgaag tacctgcggc tgcgcaaagc ggccaaggcc acggtgtttg 360
aaaatgctgc tatttgtgat gaaattgctc gtcttgagga aaaatttctt aaagcaaaag 420
aagaaagaan gtncttgcta aagaaactcc tccagcttca ggctctaact gaaggggaaa 480
tacaggctgc agctccttcc cacagttcca gtttgcccct gacttatggt gtggccagct 540
ctgtgggaac tatacaggga gctgggccta tttcanggcc cancactggg gctgaagaac 600
catttgggaa gaaaacttnn aaaggagaaa aaagaaaaag gccnagaaaa caacaaactg 660
gaaaatcatc 670

<210> 2587
<211> 752
<212> DNA
<213> Homo sapiens

<400> 2587
tttccccatg tctaattttg ggatttcagt gaggcctttt ccatctgtcc aggagaacag 60
aagggaaaaa aagatacttg aaagaaactg aaggaaattt aaacaaagaa acacttgaaa 120
gaaactggaa agaaaaataa ttttttatg tgaacaaatt ttgcaagaag aaaaaagcat 180
aaaagacact aacggcaaat ctatgtttaa atggaaaatc gtctaactgg agaagggcgg 240
tatccacccc acattcggat cccagggtcc tgaggcctcg cattgagctg ggggttccct 300
ctgagcccca gtgtgtgtgg aatcagtgca ctcttgactg ggcctgtagt aaggtgctca 360
tggggtttgt cttctcaccc accatcagag gacttttaaa atcataggcg tananagtta 420
gctatctgct gaattactgc cactcttctt ggtgggggct cctanctgtg gctgggggct 480
ccaggcgccc ctgtgattac ctcctactgc caccatggcg ctcattcana ttccccactc 540
tcactaacat tgcttccttt tttgaccanc aggaaacagc aggtctggcc anattctcac 600
ttgcccatca atctcgttct tgggatgatt tccctcattg tgatgcttct ggggcacgtt 660
gaacatatnc acctctanaa nctaaccagg cttccttcta ccanctgtng ggcgggcttg 720
ggtctggtaa ccttgtctgc tctgccattc ca 752

<210> 2588
<211> 734
<212> DNA
<213> Homo sapiens

<400> 2588
actcccgcct tcatttccca tcgtgctgag gcgggtggca tggcgganaa ggatgacacc 60
ggagtttgac gaagaggtgg tttttgagaa ttctccactt taccaatact tacaggatct 120
gggacacaca gactttgaaa tatgttcttc tttgtcacca aaaacagaaa aatgcacaac 180
agagggacga caaaagcctc ctacaagagt cctaccaaaa ggatctctca gtgctatttg 240
ccttcattag cttgctcgtt atgcttcccg cttggtggat tgtgtcttcc tggctggtat 300
ggggagtgat tctatttgtg tatctggtca taagagcttt gagattatgg aggacagcca 360
aactacaagt gaccctaaaa aaatacagcg ttcatttgga agatatggcc acaaacagcc 420
gagcttttac taacctcgtg agaaaagctt tacgtctcat tcaagaaacc gaagtgattt 480
ccagaggatt tacactggtc agtgctgctt gcccatttaa taaagctgga cagcatccaa 540
gtcagcatct catcggtctt cggaaagctg tctaccgaac tctaagancc aacttccaag 600
cagcaangct agctacccta tatatgctga aaaaactacc ccctgaactc tganantgac 660

0962346.0002

aatgtaacca actacatctg tngtggtgcc ttttaaagaa ctggggcttg ggactttatt 720
gaanaacnga tttc 734

<210> 2589
<211> 529
<212> DNA
<213> Homo sapiens

<400> 2589
gnaagctgcc tccgccatct tggagatggg agacgggcga tggctgtggt ccttctgcta 60
atgcaaacaa caaaacgggc acactagtca cccccgaggg aggccaccat cactgtaact 120
gttggccaaa gctacaaaag aagcgaggga atccaaccga gcgcagcgac actgagaaca 180
gcttcccctg ccttctgcgg cggcagaagt gaagtgcctg aggaccggaa ggatggtgca 240
gtcctgctcc gcctacggct gcaagaaccg ctacgacaag gacaagcccg tttctttcca 300
caagtttcct cttactcgac ccagtctttg taaagaatgg gaggcagctg tcagaagaaa 360
aaactttaaa cccaccaagt atagcagtat ttgttcagan cactttactc cagactgctt 420
taagagagag tgcaacaaca agttactgaa aganaatgct gtgcccacaa tatttctttg 480
tnctgagcca catgacaaga aagaanatct tctggancca canggaaca 529

<210> 2590
<211> 670
<212> DNA
<213> Homo sapiens

<400> 2590
tatatcaata caccagtggc tgaaattatc atgaaaccaa atgttggaca aggcagcaca 60
agtgtgcaaa cagctatgga aagtgaactc ggagagtcta gtgccacaat caataaaaga 120
ctctgcaaaa gtacaataga actttcagaa aattctttac ttccagcttc ttctatgttg 180
actggcacac aaagtaaggc tgttgctttc aatgcatgca atattaactt tgagtgttta 240
ctaactctgt gttttgctta cctggctttt cttccttgaa gttgcttttt tttttcctcc 300
aagaggaatt atttaaaaag actttagtct gtgacataac caagatttat tctgtttacc 360
taaggaactt attttctttt ttgcaatttc atttattctg agtcacttta tttgtaataa 420
gtgaagaatt ttaatactta gaaataagtt gtnaagaaaa taatgagaat cttaccatgc 480
tttagaggaa cgtaatttct anaaatagtt aaaagatgaa atactaagat attattttac 540
cttctttata tagctgtata tactggtagt atgaaagcaa ctagtgtcnt tgatgaattt 600
ttgggggggt atttttggta ttcctaggct tgctgccacc tcntttanaa aaaggtggcc 660
atcnaagcnc 670

<210> 2591
<211> 720
<212> DNA
<213> Homo sapiens

<400> 2591
gagcttggga tcgctttctg ctattcaacg tcctccacct ctgcccccct ctccccccag 60
ccggtgacag gctgttgccc tgtgatctgc aggtcctggg acgtgcacag acagctaaga 120
tgccaggaca ttccagaagg tgggaaaggc acctgagtaa tttgactctc ctgcctggac 180
ccagcgtaca gatgggattg tgcttcattg ctggacccag catttaggga tcgtcactcc 240

09529465.092200

cgtggatgat caaagctact ccgggggctg aggcaggaga atcgcttgaa ctcgggaagc 300
agaagttgca gtgagccaag gtcgcaccac tgcactccag cccaggcgac attgtgagac 360
tccatctcaa aaaaaaagaa aaaaagtgta ctaacaagac ccagcacaca gaggagactt 420
ttaccattgt atgaacaccc atcaaacagt acacatcatc attgtgagtt ctgaatctca 480
cacatagang aagtcaaagg tggaaaactt gactctcata tttggatcca gtccacaggt 540
gtgattttga cgcacacttc tgcccancac ctgagtaatg tgattcttca aaattggggc 600
cggcccacna ataggattgt gccncactgc tggacccant gcctaanttg atgttactct 660
attctctgcc ttggtgccta ctccgaaaaa aaaattgnta acatatctca gaaaccttnc 720

<210> 2592
<211> 551
<212> DNA
<213> Homo sapiens

<400> 2592
cagctgaatg ggcgcgagag cggcgctggg ggcgggtggg ggcgcggggt accgggctgg 60
cggccggccg gcgccccctc attagtatgc ggacgaaggc ggcgggctgc gcggagcggc 120
gtcccctgca gccgcggacc gaggcancgg cggcacctgc cggccganca atgccaagtg 180
agtacaccta tgtgaaactg agaagtgatt gctcgaggcc ttccctgcaa tggtacaccc 240
gagctcaaag caagatgaga angcccagct tgttattaaa agacatcctc aaatgtacat 300
tgcttgtgtt tggagtgtgg atcctttatn tcctcaantt aaattatact actgaagaat 360
gtgacatgaa aaaaatgcat tatgtggacc ctgaccatgt aaagagagct cagaaatatg 420
ctcagcaagt cttgcagaag gaatgtcgtc ccangtttgc caagacatca atggcgctgt 480
tatttgagca caggtatagc gtggacttac tccctttgt ngcncaangc cccccaanac 540
agtgaagctg a 551

<210> 2593
<211> 716
<212> DNA
<213> Homo sapiens

<400> 2593
gaagtctcgt atcgcgcccg ggaggcgccg gagcccagcg gctggcgcca gatccaggct 60
cctggaagaa ccatgtccgg cagctactgg tcatgccagg cacacactgc tgcccaagag 120
gagctgctgt ttgaattatc tgtgaatgtt gggaagagga atgccagagc tgccggctga 180
aaattaccca accaagagaa atctgcagga tggactttct ggtcctcttc ttgttctacc 240
tggcttcggt gctgatgggt cttgttctta tctgcgtctg ctcgaaaacc catagcttga 300
aaggcctggc caggggagga gcacagatat tttcctgtat aattccagaa tgtcttcaga 360
gagccgtgca tggattgctt cattaccttt tccatacgag aaaccacacc ttcattgtcc 420
tgcacctggt cttgcaaggg atggtttata ctgagtacac ctgggaaagt atttggctac 480
tgtcaggaag ctgggagttg tccttgcatt accttcttct gccctatctg ctgctaggtg 540
taaacctgtt ttttttcacc ctgacttgtg gaaccaatcc tgggcattat aacaaaagca 600
aatgaattat tatttcttca tgtttatgaa tttgaatgaa ntgatgtttc cnaaanaacg 660
tgaaggtgct ctacttgtga tttaaggaaa accanctcga tccaaagcca ctggcn 716

<210> 2594
<211> 642
<212> DNA

09/05/2005 10:00:00

<213> Homo sapiens

<400> 2594
gcggggcctc taccggcccg atggagcgcg cgggcgctac tagccgcggg ggccaagccc 60
ctggcttctt actgcggctt catactgagg gccgagccga ggcggcgcgg gtgcagganc 120
aggacttacg gcagtggggg ctgacaggga ttcacctacg ctcttaccag ctggagggag 180
taaactggct cgcccagcgc ttccattgtc agaatggctg tatcctggga gatgagatgg 240
gcctggggaa gacctgccag actattgctc tcttcattta tttggcagga agattaaatg 300
atgaagggcc atttctgatt ctttgtccct tgtctgtttt gagcaactgg aaagaagaaa 360
tgcananatt tgctccaggt ctttcctgtg taacatatgc aggcgacaag gangaaagac 420
ctgccttcag caagacctga aacaggaatc acgttttcat gttctactga ctacctatga 480
natttgcttg aaagatncat catttctaaa atcattccct tggagtgttc ttgttgtgga 540
tgaactcaca ggttgaaaaa ccnaagctcc cttgctgcat aanaacttgt canaattctc 600
cantnatctt caatctccct gttgaccgga actccccatc ca 642

<210> 2595
<211> 539
<212> DNA
<213> Homo sapiens

<400> 2595
cagagcgtcg gcgccacggc gagaacacat cttcgccgcc gagctgagct gggccgagcc 60
ggaggttgtg gtgtctgact gcgctgggca ccctcgggcc gcagcggtgc tctggggcca 120
ggtgccaccg gccattgtcc aggcagctgt gtgcaagcca aagaagcatg aggacactgg 180
aagactcctc ggggacagtc ctgcaccgcc tcatccagga gcagctgcgc tacggcaacc 240
tgactgagac gcgcacgctg ctagccatcc agcagcaggc cctgaggggt ggggctggaa 300
ctgggggtac agggagcccc caggcctccc tggaaatcct ggccccagag gacagtcagg 360
tgctgcagca ggccaccagg caggaacccc agggccagga acaccagggc ggtgagaacc 420
acctggcaga aaacaccctc taccggctat gcccacagcc cagcaaggga gaggagctgc 480
ccacctatga agaggcaaag cccactcnca ntactatgcg gccancangc anggacccg 539

<210> 2596
<211> 656
<212> DNA
<213> Homo sapiens

<400> 2596
gtcgtcgctg ccgccgccac cgccctcggc cgctgccgcc gccaccgccc tcggccgctg 60
ccgaggcctc ctgcagccat catgtccgcc agcgccgtct acgtgctgga cctgaagggc 120
aaggtgctca tctgccggaa ctaccgtggc gacgtggaca tgtcagaggt ggagcacttc 180
atgcccatcc tgatggagaa ggaggaggag gggatgctgt cgcccatcct ggcccacggg 240
ggggtccgtt tcatgtggat caaacacaac aacctgtatc tggttgccac atccaagaan 300
aacgcgtgcg tgtcgctggt cttttctttc ctctataagg tggtgcaggt gttttccgag 360
tacttcaagg gagctggagg aggagagcat ccgggacaac tttgttatca tctacgagct 420
gctggacgag ctcatggact tcggctaccc ccagaccacc gacagcaaga tcctgcagga 480
gtncatcact caggaangcc acaagctgga aacaggggcc ccgcggccac canccaccgt 540
caccaacgcg gtgtcctggc ggtccgaaag catcaagtat cggaaagaat gaagtgttct 600
tggacgtcat cnaatctgtc aacctcttgg tcancnccaa cngcnatgtc tgccca 656

US 2002/0090639 A1

<210> 2597
<211> 580
<212> DNA
<213> Homo sapiens

<400> 2597
attttgcggg aagaggaggc gctgtacctg cagtgctgct tttcttgcct agactctagg 60
aactatccga gctccactcc ccacaacata ctcaaaggaa cggagagaac cgggaccccc 120
ctgcggggga cccggaactg atctgacagg atggcatctg atgactttga catagtgatt 180
gaggccatgc tggaagctcc ctataaaaaa gaagaggatg agcaacaaag gaaagaagtt 240
aaaaaggatt atcctagcaa taccaccagc agcaccagca acagtggcaa tgagaccagt 300
ggaagcagca ccatcgggga gacaagcaat cgtagtcgag atcgggatcg gtatagacgg 360
agaaatagtc ggagccgaag tccaggtcgg cagtgtcgtc accgtanccg tagctgggat 420
cgtcgacatg gtagtgagtc ccgaagtcgg gaccatcgtc ntgaggatcg tgtgcattac 480
aggantcctc cacttaccac tggggagcca gttgataatc tgagtcctga ngancgtgat 540
gcccgcacag ttttctgtat gcanttagct gcccnaattc 580

<210> 2598
<211> 711
<212> DNA
<213> Homo sapiens

<400> 2598
atttttgga ttgtactgca tttgcaagag accttatcct gatcctgaag acgagattcc 60
agatgagatg atccagtgcg tagtctgtga agactggttc catggaaggc atcttggtgc 120
cactcccct gagagtgggg attttcagga gatggtatgc caggcctgca tgaaacgttg 180
ttctttttg tgggcttatg ctgcacaatt ggcagtaacc aaaatatcca ctgaggatga 240
tggattggtg cggaacattg atggaatagg tgatcaggaa gttatcaaac ctgaaaatgg 300
agagcatcaa gatagtaccc tcaaagagga tgttccagaa cagggaaagg atgatgtccg 360
ggaggttaaa gtagagcaga acagtgaacc atgtgccggc tctagttctg aatctgatct 420
ccagacagtg tttaagaatg aaagcctcaa cgcagaatca aaatctggct gcaaacttca 480
ggagcttaaa gctaagcagc ttataaagaa agacactgcc acctattggc ccctgaactg 540
gcgtancaag ttgtgtncct gccaagactg tatgaaaatg tttgggagat ctagatgtct 600
tattcctgac agatgaatac gacncagttc tggcttatga aaacnaaggg aagattgccc 660
angcccctga caggancgat cccctaatgg atacccttan cagcatgaat a 711

<210> 2599
<211> 808
<212> DNA
<213> Homo sapiens

<400> 2599
tttcatcact atggcttagc gtctccaata tacacacatt ttacttcacc cattagaaga 60
tacgcagatg tcattgttca tcggcttttg gctgtggcta ttggggctga ctgtacttat 120
ccagagttga cagacaaaca caagcttgca gatatatgta aaaatctaaa tttccggcac 180
aaaatggctc aatatgccca acgtgcatca gtggctttc atacccagtt attcttcaaa 240
agcaaaggaa tagtaagtga agaagcctat attttatttg taagaaagaa tgccattgtg 300

D0820760.3050.0

gtattaattc caaagtatgg tttagaaggg acagtctttt ttgaagaaaa ggacaaacca 360
aacccacagc ttatttatga tgatgagata ccctcactta aaatagaaga tacagtgttc 420
catgtatttg ataaagttaa agtgaaaatc atgttagact catctaatct tcaacatcag 480
aagatccgaa tgtccctggt agaaccacag ataccaggaa ataagcattc ctactgatac 540
ttcaaacatg gaccttaatg gacccnagaa aaagaagatg aagcttggga aaatagctat 600
attcaacaaa aatcttcaaa gactggtttc ttttttaaaa gaaaaaactt gaaagaacac 660
ttctaagcct aagtgtgtga tacagtttgt tacttttaag ttcattttga ataaatttca 720
gacatctgca tttttattga aacagttgan tgtttctgaa ccctcatact actattcttn 780
ctggggttga acanaatttn tttntgcc 808

<210> 2600
<211> 479
<212> DNA
<213> Homo sapiens

<400> 2600
atattttgat aatggcacag cacttgtggt ccagtgggga ccatgtacat ctccaggata 60
attataacct ggggaagctt cacattccag gcaaccctgc tcatggatgg acgaatcatc 120
tttggatacn aagaaattcc tgtcttggtc acacagataa gttcaaccaa tcatccagtg 180
aaagtcngac tgtccgatgc atttgtcgtn gtccacagga tccaacaaat tcccaatgtn 240
cnaagaagaa caatttatga ataccaccga ntagagctac aaatgtcaaa aattaccaac 300
ntttcggctg tggagatgac cccattaccc acatgcctcc agtttaacaa atgtggcccc 360
tgtgtatctt cccagattgg cttcaactgc agttggtgta gtaaacttca aagtcnanag 420
agaagatgtg tgagaataca gaaccngtgg aaacttcttc tcgaaccncc acaancata 479

<210> 2601
<211> 684
<212> DNA
<213> Homo sapiens

<400> 2601
gcgatctctg cggggcaaga tggcggcgcc cagacaggcc tggagcacgg atgaataaga 60
gggtaccccc acacggagac actgctggaa tcagccacaa gggtcctgga gtgccctcgg 120
ctgatagaga ctatagttcg agagttcttg cccaccagtt ggtctcctgt gggggcaggg 180
cctaccccta gtctatacaa agtaccctgt gctactgcca tgaaactact tcgtgtcctg 240
gcctcagctg ggaggaatat tgctgcccgg ctgttgagca gctttgatct ccggagccgc 300
ctgtgccgca tcatagctga ggctccccaa gaactggcct tgcccccaga ggaagctgag 360
atgctgagca ccgangccct ccgtctgtgg gctgtggctg cctcctatgg ccagggcggt 420
tacctttaca gggagctcta cccantgctg atgcgggcct tgcangtggt gccgcgggag 480
ctcancaccc acccacctca acccctgtcc atgcagcgga taacctcact gctcactctc 540
ctcacccanc taaccctggc agccggcant acccctgctg aaaccatcan tgattctgct 600
gaaggcagcc tctcggccac ccttccttaa tcccttggac acangtttnt gggctccacc 660
tcttgttnaa ccgtttctaa ggcn 684

<210> 2602
<211> 655
<212> DNA
<213> Homo sapiens

0960564 - 070800

<400> 2602
atgagaacgg cgtcttcatg tgcgccgagg gcaccggcaa gttctgtccc ctgaggtcct 60
tcccagacac tgtctacaag aagctggtcc agagagagaa gactttaaag gttagaggag 120
tggaccgcac tccctacctg ggggatgtcg ctgttgtcgt gcaccctggg aaaaaagaga 180
tgggaacccc actcgcagac actcctaccc ggcccgtcac ccggcatggg ggcatgaggg 240
accttcacga atccagcttc agcctctctg gctctcagat cgatgaccat gttccaaagc 300
gagcttcagc tcggatcctc gctcctcccg gaggaaggtc gagtggcatt tggtaaaggc 360
attgccaagc cccccgagtg aggacgcacc gccgccacca gcccgcaact ctccagccga 420
agctgcaggg gcangaaang ctgggctggg tggcacacca cccgaggggg gccccgggac 480
ccacggagcc ctccctatgt ctgcaaagtg attcactgtg cttcgagcca actctaacag 540
gcactttgag atgtgttcct cctgctgtan tcctttctgc cttggcctcn gcgggctttt 600
ctggggccca ngaacccaca ctatgcacag ancccaatgc atanaaccct ggcca 655

<210> 2603
<211> 807
<212> DNA
<213> Homo sapiens

<400> 2603
cagccggtcc aggcctctgg cgaacatggc gcttgtcccc tgccaggtgc tgcggatggc 60
aatcctgctg tcttactgct ctatcctgtg taactacaag gccatcgaaa tgccctcaca 120
ccagacctac ggagggagct ggaaattcct gacgttcatt gatctggtta tccaggctgt 180
ctttttggc atctgtgtgc tgactgatct ttccagtctt ctgactcgag gaagtgggaa 240
ccaggagcaa gagaggcagc tcaagaagct catctctctc cgggactgga tgttagctgt 300
gttggccttt cctgttgggg tttttgttgt agcagtgttc tggatcattt atgcctatga 360
cagagagatg atatacccga agctgctgga taattttatc ccagggtggc tgaatcacgg 420
aatgcacacg acggttctgc cctttatatt aatcgagatg aggacatcgc accatcagta 480
tcccagcagg agcagcggac ttaccgccat atgtaccttc tctgttggct atatattatg 540
ggtgtgctgg gtgcatcatg taactggcat gtgggtgtac cctttcctgg aacactttgg 600
cccaggancc anaatcatct tctttgggtc tacaaccatc ttaatgaact tcctgtacct 660
gctggggaaa aattctgaac aactatatct nggatacaca naaaaaagcc ccctcttggg 720
cgagatatna aaattaantt tatgttccta ggaaccatcc tattantccc ccaaaaacaa 780
atttttgtt gccaanttaa ttttccn 807

<210> 2604
<211> 680
<212> DNA
<213> Homo sapiens

<400> 2604
agcaatggcg gttcccggcg tggggctctt gacccgtttg aacctgtgtg cccggagaag 60
aactcgagtc cagcggccta tcgtcaggct tttgagttgc ccaggaactg tggccaaaga 120
ccttaggaga gacgagcagc cttcagggag cgtggagaca ggctttgaag acaagattcc 180
caaaaggaga ttctctgaga tgcaaaatga aagacgagaa caggcacagc ggactgtttt 240
aatacattgc ccagagaaaa tcagtgaaaa caagtttctt aaatatttat cccaatttgg 300
acctattaat aatcatttct tctatgaaag ctttggtctc tatgctgtcg taaaattttg 360
ccaaaaggaa agcataggtt cactgcagaa tgggactcnt actccaagca cggccatgga 420

0962946.0720000

gactgcaatt ccattcagat cacgtttctt caatctgaag ttgaaaaacc agacttctga 480
acggtcacgc gtacggtcaa ntaatcagtt gccacgttca aacaagcagc tttttgaatt 540
actttgttat gcngaaagta tngacgatca gctgaacact ctcttgaagg attccnncta 600
acagaagaga acactaagct ccgatatctc cctgttctct tattgaaaac ttngccgccg 660
cgtnttttcc agactgcnta 680

<210> 2605
<211> 621
<212> DNA
<213> Homo sapiens

<400> 2605
gtgggccttc atcgtcacca acctggcgag tgtgtatata cgggaaggaa atagacacca 60
agagctctac agtctgctgg agaggatcaa cccggaccac agcttccctg tcagctcgca 120
ctgcctccga gcagccgcct tctatgtgcg tgggctcttc tccttcttcc agggacgcta 180
caacgaggcc aagcgatttc tgcgggaaac tctgaagatg tccaatgctg aggacctgaa 240
ccggctcaca gcctgctccc tcgtgcttct gggccacatc ttctatgtgc tgggaaacca 300
cagggagagt aacaacatgg tggtgcctgc catgcagctc gccancaaga tcccggacat 360
gtcggtacag ctgtggtcgt cagcactgct ganagacctg aataaagcct gtgggaacgc 420
catggatgcc catgaagccg cccagatgca ccagaacttc tcgcagcagc tgctccagga 480
ccacattgag gcctgcagcc tccccgaaca caacctcatc acntngacag acngtccacc 540
ccccgtgcag ttccaagctc agaatggacc ccaacaccag nctggccagc ctcctgtgag 600
gccttgatgg gggccntccc a 621

<210> 2606
<211> 725
<212> DNA
<213> Homo sapiens

<400> 2606
gtcccagccg gagccccagc cggagcccga tccctagccc tgcggccgcg cctccctcgc 60
cgtccccgcc tggagccccgg cgccgccgcc gcccagcagg cgcggggcga aggagctgct 120
agaacaatgc tgaggcgggt gaggtgagga gcagcccctc gcggcagccc cgacagagtg 180
tctggaacag gtgattggag gagccggaga cccaggcacc tgggcatcct tcccctcgcc 240
tctgccaggc cccgcgcccc taaaaggtgg gaaaaccatg gcgaccaatt tcagtgacat 300
cgtcaagcaa ggctacgtga agatgaagag caggaagctc gggatctacc ggaggtgctg 360
gctggtgttc cggaaatcct ccagcaaggg gccccagcgg ctggagaagt atccagatga 420
gaatcggtgt gcctccgggg ctgccccaag gtgactgaaa tcagcagcgt caagtgtgtt 480
ncgcggctcc ccaaggaaac caagcggcag gcggtggcca tcatattcac tgatgactcg 540
gcacntacct tcacctgcga ctcagaacta gaagcanaag aattgtacna gacactatct 600
gtggagtgtc tggggtccgc ctcaacgaca tcantcttgg ggaaaaacct gaactcctgg 660
cccccagggg tncnattgtt taacanaaca nattcgcttt ccattgttct tccctgcttg 720
cccct 725

<210> 2607
<211> 557
<212> DNA
<213> Homo sapiens

09502450.030208

<400> 2607
acagatggcc tggatcagtg caatgtgcaa caagaggact atatcgtctc agtaaaaacc 60
ttgaagagat gaacccattt cagagaccca gcaagggatc acctgcatat acaggcatca 120
gcagaaacag gaatttggga tttatcctgg aggtagtgga agcttttgga ggtcttaacc 180
aggacagcac atgtggcttt cctgcaatgg gatcgtcctt caagaggacc tcacaggctc 240
tccacccgga ctgtgacgta agcanctgca gcagccttgg atgtttctgg atagccagcc 300
ccatgagaac agctttaaaa taggagactg gcattgtgat gaantgtgga cttcgctgtc 360
atatagacct ggatttaaat cctggcttca gtgtttatgg atgacattgg acaagtcatt 420
taacctcctt aagtctcaga gttctcatta cggaaatgga gctcttaata gtacctaccc 480
cctantgtgg ttgtgagggt tgagatcatc tatgttcaaa gtgcttatta tacanaanac 540
ngggacatgt nagtgct 557

<210> 2608
<211> 549
<212> DNA
<213> Homo sapiens

<400> 2608
gatgtcacct ggagcgagta gcgcgcggcg tggaacgcga gtcgcgaccc cggctcccgg 60
cagtggcgcg cactagccct cgcgccgcac gggacacgag ggctgggcgg gcagcgggat 120
gaggctaaag gttggatttc aaggcggggg ctgcttccgg aaagacgcgc tgtgtttgga 180
aggtggagtg agcgcccggt gggcgagggc acctcattct gcacccctgc gcccgcctcg 240
ggaactgcac gcggcacccc cacccgcgac tcccacgcag acagtagtgc ggcctgcagg 300
gttcccccgg cggacgangc taatggttcg ctccgccccg cccacacaga ggccgcccac 360
tggctccggc tgcgtttcag gactctggag gaagggactt ggccttcgcc ctcagacgct 420
cttaagggta ngcggcgttg tcctcagttc tgccccanca ctcanaccca gactgggtcc 480
ctgcctccgc cctccgccct cggactantc tcttggaagc cggcctgtct ccgccttcan 540
acctangga 549

<210> 2609
<211> 503
<212> DNA
<213> Homo sapiens

<400> 2609
gtgctgcggc tgtgctcggc cttagtggtg tcggggtcta gtggacagaa aagactcttg 60
gccaggcaga tggcttctcg gtggcagaac atggggacct ccgtgcgccg ganatctctc 120
cagcaccagg agcagctgga ggacagcaag gagctgcagc ctgtggtcag ccatcaggag 180
acctctgtag gggccctggg gtccctgtgc agacagttcc aaaggaggct gcccctgana 240
nccgtcaacc tcaacctccg cgcagggccc tcctggaaac gcctggaaac cccagagcca 300
ggtcagcagg gcctccaggc tgcagctcgc tcagctaaaa ntgctttggg tgccgtgtcc 360
canaaaatcc aggagtcctg ccaaagtggc accaagtggc tggtgganac ccnggtgaag 420
gccaggaggc ggaaganagg agcacagaag ggcagtggat ccccnactca cagcctgagc 480
cagaanacac ccggctgtct gga 503

<210> 2610
<211> 666

0952946.07200

<212> DNA
<213> Homo sapiens

<400> 2610
aagagcaagg gatcactgtg ctgggtttaa atgcggtatt tgacatcttg gtgataggca 60
aattcaatgt tctggaaatt gtccagaagg tactacataa ggacaagtca ttagagaatc 120
tcggcatgct caggaacggg ggcctcctct tcagaatgac cctgctcacc tctggagggg 180
ctgggatgct ctacgtgcgc tggangatca tgggcacggg cccgccggcc ttcaccgagg 240
tggacaaccc ggcctccttt gctgacagca tgctggtgag ggccgtaaac tacaattact 300
actattcatt gaatgcctgg ctgctgctgt gtccctggtg gctgtgtttt gattggtcaa 360
tgggctgcat ccccctcatt aagtccatca gcgactggag ggtaattgca cttgcagcac 420
tctggttctg cctaattggc ctgatatgcc aagccctgtg ctctgaanac gccacaanaa 480
aaagatcctt actctgggcc tgggatttct cgttatccca tttctccccg cgantaacct 540
gttcttccga atgggcttcc tggtcccgga acgtgtcctc tacctcccca ncgttgggta 600
ctgtgtnctg ctgacttttg gattcngaac cctgaacaaa cattcccaan aaaaaaaaaa 660
cccntt 666

<210> 2611
<211> 708
<212> DNA
<213> Homo sapiens

<400> 2611
actagagtct ccggcttcgc tcacgcgcct tgggcataag agtcctctcg ttggtcccgg 60
aggtggggtt gcgctcacaa ggggcgaccg tcgccacggt ggcggccact gcatcgcgtc 120
ccacctccgc ggccctgggc gccgtggtgt cgacgggccc cgagcctatg acgggccagg 180
gccagtcggc gtccgggtcg tcggcgtgga ncacggtatt ccgccacgtc cggtatgaga 240
acctgatagc gggcgtgagc ggcggcgtct tatccaacct tgcgctgcat ccgctcgacc 300
tcgtgaanat ccgcttcgcc gtgagtgatg gattggaact ganaccgaaa tataatggaa 360
ttttacattg cttgactacc atttggaaac ttgatggact acggggactt tatcaaggag 420
taaccccaaa tatatggggt gcangtttat cctggggact ctacttttc ttttacaatg 480
ccatcaagtc atntaaaaca gaaggaagan ctgaacgttt agaggcaaca gaataccttg 540
tctcanctgc tgaagctgga ccatgaccct ctgcattaca aacccattat nggtaacaaa 600
aactcgcctt atgttacant atgatgctgt tgttaactcc ccacncccga cnatattaaa 660
aggaatgttt gaataccctt gtttaaaata ttttaagttn ttnaaagt 708

<210> 2612
<211> 724
<212> DNA
<213> Homo sapiens

<400> 2612
agaattagaa ttggctgttt tggaagctgg aagttctgaa gctgtgaaac caaaatgcac 60
tctagaagaa agacagcaat ttatgaaagc atttaggcag ccagcatcag atgcacttaa 120
aaatggagtt aaaaagtctt ctgataagca gaaagacctt aatgaaaaat gtctatatga 180
agtaggaaga gatgataatt ctaaaaaaat catggaaaat tctggtatcc aaatggtttc 240
aaaaaatggc aatttacagt tacacactga taaaggaagt tttctgaagg agaaagataa 300
aaagctaaag aagaagaata agaaaacatt agatactggg gctattccag gcaaaaacag 360

0050305-0050800

agagggaaac actcaaaaga aagaaacaac ctttttctta aaagagaaac aatatcaaaa 420
tagaatgagt ttaagacaaa ggaaaacaga gtttttcaaa agcagcactt tatttaacaa 480
tgaaagtctt gtttatgaag atatagcaaa tgatgacctt ctaaaggttt cctctctgtg 540
ttacaataat aaattgtcaa gaaaaaccag cataccagtt aaagatatta agcttacaca 600
gtctaaagct gaatctgaag ccagcttgct naatgtttcc acgcccaagt cactanaaga 660
tctggaagaa ttagcagccn ccctactaca gaaaccctta naagttttga ttctgacnat 720
gttc 724

<210> 2613
<211> 701
<212> DNA
<213> Homo sapiens

<400> 2613
ggtccaaact cctaagagct aggcttcgga aataccatgt gtacagtcat ctttccagca 60
cctgcacaat atcataaaat cattgtcttt gagctgaagt ggtcctaaaa agtcagcctt 120
tccattttac agatgagaaa atagacccag agaggttaag tcacacggtg gtttgtggca 180
aagctagaaa cataactgtg gtctcctctt catagttctt tccactacac tattacattt 240
ctcaactctg aaaaaccacc ataaagcata atggctacct aaaataaatg gcccatttct 300
aaagtaatta gtattcctaa acaaatttta agtagctctg cttctccagt gacattttgg 360
tttaaagaat caaggggagg ctgggtgcag tggctcatcc ctgtaatccc agcactttgc 420
aaggccgang tgggcagatc acttgaaccc agganttcaa gacaagcctc ggcaacatga 480
caaaacctca tctctacaaa aaatacaaaa attagccagg cccagtggca tgtgcctgta 540
atcccaacta ctcangaagc tgaagtggga agattgtttg aacttgggaa gctgaagtag 600
gaatganccc anatcacgcc acttgcactc ctgcctaggc nacanaacta gaccctgtct 660
ccaaattaaa aaanaaagga ttaaggaaaa tttgattaat a 701

<210> 2614
<211> 576
<212> DNA
<213> Homo sapiens

<400> 2614
gctggagccg gcgcggagga gcgggcggcc gcggctgtgc cctctcctac tcctcaccgc 60
gcgcgcgcgg ggaaccagta gccgcggctg cttcggttgc cgcggtcggt ggtcgttatg 120
gattctccat gggacgagtt ggctctggcc ttctcccgca cgtccatgtt tccctttttt 180
gacatcgcgc actatctagt gtcagtgatg gcggtgaaac gtcagccggg agcagctgca 240
ttggcatgga anaatcctat ttcaagctgg tttactgcta tgctccactg ttttggtgga 300
ggaattttat cctgtctact gcttgcagag cctccattga agtttcttgc aaaccacact 360
aacatattac tggcatcttc aatctggtat attacatttt tttgcccgca tgacctantt 420
tcccagggct attcatatct acctgttcaa ctactggctt cgggaatgaa ggaagtgacc 480
anaacttgga aaatagtagg tggagtcaca catgctaata nctattacaa aaatggctgg 540
atantcatga tanctattgg atgggcccga ngtgca 576

<210> 2615
<211> 686
<212> DNA
<213> Homo sapiens

US 2005/0250150 A1 Nov 10 2005

<400> 2615
gtttctgtcg caggctgcga ggaaaggccc ctaggctggg tctgggtgct tggcggcggc 60
ggcttcctcc ccgctcgtcc tccccgggcc cagaggcacc tcggcttcag tcatgctgag 120
cagagtatgg aagcacctga ctacgaagtg ctatccgtgc gagaacagct attccacgag 180
aggatccgcg agtgtattat atcaacactt ctgtttgcaa cactgtacat cctctgccac 240
atcttcctga cccgcttcaa gaagcctgct gagttcacca cagtttcatc ctacaaaatg 300
ggcgtaacaa tgtctaccta ctccattgtg tggaccaaag gagatggtta atgtgaaagc 360
cctttgtgaa cctgaagtga gcaactgctg gatgaatgtc attacgggca caggctctgt 420
gtcatctcct ctcctagtgc ttccacagcc aggaccagag acctccctga tgactgggga 480
acctgtggat gatgaaaatg ccaccgtcaa caagattgcg ctcganctgt gcacctttac 540
cctggcaatt gccctgggtg ctgtcctgct cctgcccttc tccatcatca ncaatgaagt 600
gctgctctcc ctgcctcgga aactactaca tccantgggt caacgggntc ccncatccca 660
tggccctgga aaccttgntt tttcct 686

<210> 2616
<211> 722
<212> DNA
<213> Homo sapiens

<400> 2616
tatattatcc tgtacatgca aatcactgag gagcagatta aagtatggac agccaacccc 60
caacaatttg tagaagatga agatgatgat acattctcct atactgttag aatagcagct 120
caagacttgt tgctggctgt ggccacagat ttccagaatg aaagtgcagc agccctggct 180
gctgcagcca ctcgacattt acaagaagct gagcaaacca aaaacagtgg cactgagcac 240
tggtggaaga tccatgaggc atgcatgctt gccctaggct cagtgaaggc catcatcact 300
gacagtgtga aaaatggcag gattcatttt gacatgcatg ggttcctgac caatgtcatc 360
cttgcagacc tcaacctctc agtgtctcct ttcctcttgg gccgggcact ttgggctgcc 420
agtcggttca ctgttgctat gtcccctgaa ctgatccagc agttcctaca ggcaacagtt 480
agtggtcttc acgagacaca gcccccatca gttcgaattt ctgcagtgag agccatctgg 540
ggttattgtt gaccaactga aatctcagan agttacccac gtgctccagc ccttcctccc 600
cagcatcctt gatgggctta attcccctan cagcccagtt cacncagang tcctcaacct 660
ggtgatggag acctgtgcat cntttgttac cgttnaaccc caaattccca ggcaagcctt 720
gg 722

<210> 2617
<211> 624
<212> DNA
<213> Homo sapiens

<400> 2617
gatgcggctg tgattgctga attgtctggg caggtttgga gtctctggca agctcccctg 60
actgtgcatc cctctggaga cgaagaggag ggggaggcct gtcctctctg ggatccattg 120
gtcacatccc cctgaggatt cccgaatgcc tacctccagt gtcgtcaaca tggagttctg 180
aagtccatgt ggctcttcac agtgaatcag gtgttaagga agatgcagag acgccacagc 240
agcaacacgg ataacattcc acctgaaagc tgtgaccaag gctggcccct ctggggaact 300
gggggccatt gaacttgaag actgcanagc cagcggtcct tgggatcccg agaaaccgca 360
gccaggcgct cagctccgan gcgagtgtgg atgaaggtgg cgtctttgag antctgaang 420

0963030-090800

cagangcagc ctccccacca gcgctcttct cgggcttatc aggcagcctc cccaccagct 480
cgttcccctc cagcctggtt gctgggctcc tcggctggcg gcggggacgt gttcatccan 540
atgcccgcgt ccaanggaag aaagaagggg ccggggcgaa ggggggncct accaccacng 600
canccccacc accatttcca ccat 624

<210> 2618
<211> 743
<212> DNA
<213> Homo sapiens

<400> 2618
atgtaaacat gtcgaaaaac ctatcaacaa cagttcctta gtttcaccac ttcaaaaaat 60
ttattctagt gtcaaatccc acattttaaa taaatacaga aatgattttg atgattctcc 120
atttctccca caagaacaaa aagcacaaat aagggaaaaa ccgtgtgaat gtaatgagca 180
tggcaaagcc tttagagtgt cttcaagcct tgctaaccat caagtaatcc acactgcaga 240
taacccttac aaatgtaatg aatgtgacaa ggtcttcagt aacagttcaa accttgtaca 300
acatcaaaga attcatactg gagagaagcc ttacaagtgt catgaatgtg gcaagctctt 360
caatcgaatt tcactccttg cacgacatca gagaatacat actggagaga aaccttacaa 420
atgtcatgag tgtggcaaag tcttcactca aaattctcac cttgcaaatc atcacagaat 480
ccacactgga gagaaacctt acaaatgtaa tgagtgtggc aaggtcttca acagaaatgc 540
acaccttgca cgacatcaga aaattcatag tggganaaa accttacaaa tgttagggaa 600
tgtggcaaag cattttcagg gggttcangg cttactgctc atcttgttat tcacactgga 660
nanaacttta caaatgttat aaatgcggga aggtcttcca tccaaatgcc nccttaccag 720
actccaagaa accatnctgg ana 743

<210> 2619
<211> 517
<212> DNA
<213> Homo sapiens

<400> 2619
ccttccggtc accatggcga ccaggcgcct tggggtcggg gagacgctgg gggccctcaa 60
cgcggccctg gggccaggcg gtccggtgtg gaccaaggag acgcgcaccc gccacctgcg 120
ttcccganac tttctggcac cgcaccgcgc gctgcaggcg cgcttcgatg acggccaggt 180
tccggagcat ttgctccatg ccctcgcctg cctgcagggc cccggtgtgg ccccggtgct 240
gcgctgcgcg ccgacccccg cgggtctgtc tctccaactg cagcggtccg ccgtcttcga 300
ncgcgtcctc ancgccgtgg ccgcctatgc cacgcccgcc tcncctgcct cgctgggcca 360
gcgcgtctta ctacactgcc caacactgcg cagntccccc tgcgcgctca cggggtgtgc 420
gtgcgcctag tgccanctgt gcgggatccg cacatgctga ccttcctgca ncaactgcgg 480
gtgnactggc ccgctgcctc ngaaaaanct tcctccc 517

<210> 2620
<211> 553
<212> DNA
<213> Homo sapiens

<400> 2620
aatatttata tttcctctgt cttttaaaac tgaacaccga ggtgggtttt gtggtgggtg 60

gtgaacggac aggtttgggc ctcgatcccc cacccgaccc tagcacccac aggtgggggt 120
gccccctctg ctgatgcgcc tcctccctca gcaccatgga cctgctggac tggggcagcc 180
tcatcgacag caggaccaag ctgtccaagc acttggtagt ccccaacgca caggtaacac 240
ctccgctcct cagtgaggcc cagctcagca gggcgctgcg ctaagaaggg aattcagcct 300
gccacgtgtg tctcttgttg cctaccctgg gaacttaaca tgaccaaaat cactgcacac 360
tatggcccca cagacccccc gtggtccagg gggaanaaga caagcccact antgtccaca 420
gantgcttgg cgggacagaa acccacgcgg aagccttaag acaccacaan gaaaaggggt 480
ctgggggcct tccccaagtc atctgtcttg tgcatcangt caccccaaac ttcanaagcc 540
tnaaacggca nca 553

<210> 2621
<211> 805
<212> DNA
<213> Homo sapiens

<400> 2621
gtatgtacaa aggaagagtt ttactcttta agaaacatat aaagacttaa gatactcaat 60
gtgggacgac atattgagaa gttaatatat atattaaatg tgtttgagtt ntggtcgact 120
ttctaaaagg taatcattta ataaaacctt gaatangagt tggtataaat aaggaaggga 180
aaanattgac aagtcanccc aaaagcacag acacttnatg taggcaaatg aatgtctgtg 240
gttatccact cacaacttaa actttgaaat ccctgctttt tgactgcctc ccaggtttct 300
ctgctatttc gcaaatgagc cctcactatc tcaggtcacc ctctcacctc cttttccttg 360
gcctggagct gcaaagtctt cttttgcagc tggtctctga natcccagtc tttctccttc 420
cctgtaccct caggctccac ttcgttaggg aaggactttg gactccacac gggcaaagcc 480
tgatctaaaa aagcagccag attcttggtg acagtgaggc ccacacctct gangaagggc 540
cctgaaggtg aaaccactat gantggggan angggaagga acttgggaag gcgtgctttt 600
ggctanactg atggcattct ctgacataaa ggttaacttc cagtanggcc ctgctaagct 660
tggacagaaa agctggaatc tgaaactccc tggaaagggc aagaattggg gatcttttct 720
ttgttatccc cccagtccta tctagtgcct aaatagtttt anntgaatta ctncttaaat 780
tgaaatttcn ttgggttggt ntgtt 805

<210> 2622
<211> 618
<212> DNA
<213> Homo sapiens

<400> 2622
caaataaacc cagcaaagga actagcagag ctggtgatgt atatggcaca gattagtcac 60
tgctacccag agtacctaag taattttcct caagaggtga aagatcttct ctcctgcaat 120
cataccgtat tggatccaga tctgcgaatg acattttgca aagctttgat cttgntgaga 180
aataagaatc tcatcaatcc atcaagcctg ctagaactct tctttgaact ttttcgttgc 240
catgataaac ttctgcgaaa gactttatac acacatattg tgactgatat caagaatatn 300
aatgcaaaac acaagaacaa taaagtgaat gtagtattgc aaaatttcat gtacaccatg 360
ttaagagata gcaatgcaac cgcagccaag atgtctttag atgtnatgat tgaactctac 420
anaaggaaca tctggaatga tgcaanaact gtcaatgtta tcacaactgc ntgtttctct 480
aaggtcacca agatattagt tgccgctttg acattctttc ttgggaaaga tgaagatgaa 540
naacaggaca gtgactccga atctgaggat gatggaccac cagcaagana cctgctagtt 600
ncnatntgct ccgggaaa 618

0023705.0045

0020020050 : 0020020050

<210> 2623
<211> 639
<212> DNA
<213> Homo sapiens

<400> 2623
ctcagtctgc ggccatgggg gcgtccgcgc ggctgctgcg agcggtgatc atgggggccc 60
cgggctcggg caagggcacc gtgtcgtcgc gcatcactac acacttcgag ctgaagcacc 120
tctccagcgg ggacctgctc cgggacaaca tgctgcgggg cacagaaatt ggcgtgttag 180
ccaaggcttt cattgaccaa gggaaactca tcccagatga tgtcatgact cggctggccc 240
ttcatganct gaaaaatctc acccagtata gctggctgtt ggatggtttt ccaaggacac 300
ttccacaggc agaagcccta gatagagctt atcagatcga cacagtgatt aacctgaatg 360
tgccctttga ggtcattaaa caacgcctta ctgctcgctg gattcatccc gccagtggcc 420
gaatctataa cattgaattc aaccctccca aaactgtggg cattgatnac ctgactgggg 480
acctctcatt cancgtgagg atgataaacc agaaacngtt atcaagaaac taaaggctta 540
tgaagaccaa acaaaccagt cctggaaata ttaccanaaa aaangggtgc tggaaacatt 600
ctccggaaca naaaccaaca anatttggnc ctatttttt 639

<210> 2624
<211> 472
<212> DNA
<213> Homo sapiens

<400> 2624
caggaatttg gaagcaggct ataaatctca tgaattccac ccagaatcac atttacaaat 60
aaaaaatcat ntgataaaaa gatcacatgt acatgaagac aatggaaagt tatttccttc 120
atccagtcta caaataccca aggaccataa tgcaagagaa catatccacc agtcngatga 180
acagaaactt ggaaaaccga atgaatgcaa atttnctgag tggcttaata tagaaaattc 240
tgagagaaca ggtttgcctt ttcacgttga taactctgct tctgggaaga gagtgaacag 300
tnatgaacca tcttcattat ggtcttcaca cctaaagaan tgtagggttn aagccagaaa 360
ctgctcccct catccngcaa caaaatatca tggatcgatg ttactttgan aactctctat 420
ccacagaatg tntgattcgg tcagccncca aatctgatgg gtgtcncatg cc 472

<210> 2625
<211> 642
<212> DNA
<213> Homo sapiens

<400> 2625
gctcttatcg gttcccatcc cagttgttga tcttatgcaa gacgctgcac gaccccgcgc 60
ccgcttgtcg ccacggcact tgaggcagcc ggagatactc tgagttactc ggagcccgac 120
gcctgagggt gagatgaacg cgctggcctc cctaaccgtc cggacctgtg atcgcttctg 180
gcagaccgaa ccggcgctcc tgcccccggg gtgacgcgca gcccccagcc gcccagacac 240
atggccccag gccaagcacc ccatcaggct accccgtgga gggatgccca ccctttcttc 300
ctcctgtccc cagtgatggg cctcctcagc cgcgcctgga gccgcctgag gggcctggga 360
cctctanagc cctggctggt ggaagcagta aaaggagcag ctctggtaga agctggcctg 420
gagggagaag ctaggactcc tctggcaatc ccccataccc cttggggcag acgccctgga 480

gaggagctga agacagtgga agccctggag aggacagaga aacactgggg ctgaaaacag 540
cagttccctt cctgaacctg gggacttttg gatgatgatg atggcatgtt tggtgagcga 600
aaagcaacca ntgttcctan anggcangga antcaatttg ca 642

<210> 2626
<211> 738
<212> DNA
<213> Homo sapiens

<400> 2626
taccaatgct gcaggtacat taatgaactc gagatggctc tgtaagcctg actggcaata 60
acgcacggta ctgttcttga aatacctaat ggcttgaaat tctagtctgt ttgtgaaaga 120
tgggtactat catgatttcc tcttctattc ctatattctt ttctggattt tttttaataa 180
ttagtgatat aagcattgtt tttattgcag ccatatccac ttacccatct taagatctgt 240
agctgggatt ttctgacttg taatgagcag ggggattgct ttttcacttt gtgacactct 300
ttagagcttt aatgcttcac agtatatggc ctggtctcat ccttgcgtgt tccacttgag 360
gccctttggt gtcttgcccc attcttgtgt ttataaaatg tttgagtatt tctgatgagt 420
gatgcttgcc ttantctcat gaattcagat cccttcatgt cctttaagta tgctcctcaa 480
tgtgtaaaca ggaacaactt tatgatttga aagctttaaa gganattctt ctcccacccc 540
caactttatt tgcaatggga tttttcctag gananttatg aaaagttgaa ggcttctaag 600
ggaatactgt aaacatgacc acttatattt atcacagtgg aaaggcaaaa ttattcnctc 660
anaaataata taaattanct ctttaaaaaa ntaacaaaat ttgtcctttt tgggtttatc 720
atttcncaaa catatacc 738

<210> 2627
<211> 825
<212> DNA
<213> Homo sapiens

<400> 2627
aagaaggcgg cgggggaaga tggcggtcct ggggtagagt ttgcaagctt tctgactagg 60
ctagtcgagt aactattcgg gtcatggcgt caaactcaac taagtctttc ctggcagatg 120
ccggctatgg cgaacaggaa ctggatgcca actctgccct tatggaattg gacaaaggcc 180
taagatctgg caaacttggt gaacagtgtg aagcagttgt tcgctttccc agacttttc 240
agaagtatcc attccctatt cttatcaatt ctgcattcct aaagttagct gatgttttca 300
gagttggaaa taatttcctg aggctatgtg ttcttaaagt tacccaacaa agtgagaaac 360
atttggagaa gattctaaat gtggatgaat ttgtgaagag aatttttct gtgattcata 420
gtaatgatcc tgtggcaaga gccatcaccc tccggatgtt gggaagtctg gcatcaataa 480
ttcctgagag gaagaatgct catcatagta ttcgtcagag tttagattca catgataatg 540
tanaagttga agctgctgtt tttgctgctg caaacttctc tgcacagtca aaggattttg 600
ctgtaggaat ctgtaacaaa atcagtgaaa tgatcaaggt ttaaccgaca ccagttanac 660
ttgaagctaa aattgatacc cattctacag cacatgcacc atgatgcaat ccttgggttc 720
caatgctccg tccagctttt acaacagctt ggtcccatcc tatccgtccc accaaaatgg 780
tgaattgttt tctttggaca ctttccctcc tgcttgcaan cgttc 825

<210> 2628
<211> 807
<212> DNA

0952945.0720

<213> Homo sapiens

<400> 2628
gctcgcaggc gggggtttcc atggtgatgg tcaacaagcc tcaactgcct ctgctacaac 60
tgccaagttc cccgcgtccc accctcctct aggtgctcca agggaccacc ggggtgcctg 120
atacgagagc gggagtgtag agactcggag gccgaggttg anaacaaaaa catgcacctg 180
gagtttcccc ggagccctct gcgtggttga gcttcggtgg aatttcgggg ctcttggctg 240
ccagccgcgc ttgcctggta gcaacagaaa ccagtcctgc tcgcctccgt ggacatttca 300
ttaccatcca gaagtgtctc ccactgaagg catccgtggt tgtttttaag ccacaaaaaa 360
gccacaccca agatcacctg acacccaccc tgtcaagtgt ccatgatgct gggccctgag 420
ggaggtgaan gctttgtggt caagctccgt ggcctgccct ggtcctgctc tgttgaggac 480
gtgcagaact tcctctctga ctgcacgatt catgatgggg ccgcaggtgt ccatttcatc 540
tacactanaa anggcaggca naatggtgaa gcttttgttg aacttgggat canaagatga 600
tgttaaaatg gccctgaaaa aagacaggga aaagcatggg acaccggtac attgaaggtg 660
ttcaagtcca cagaacccaa atggattggg tgttgaaaca cagtgggtcc ccaacaattg 720
ccnaaangcg ccaacgaatg gcttccttgc gggcttccaa ggantcccat tttggnatnc 780
cccaaaagga aaaaaaattg ttcaatt 807

<210> 2629
<211> 814
<212> DNA
<213> Homo sapiens

<400> 2629
agtanagtgt ccggcttcgg tgccgagtgc caccgcgagt gggccgagac gcggagggag 60
gcgcggccgg agctcgggtc gccgacgctg gccaggaccg cgcttcttcc cggcggcagg 120
cggcgcggtc cccgtgactc tcagaagccg cccgatgtag agccgcttct ttgtcccata 180
cccctgacca ttcgtgcgtg gcacggagcc gggtatctgc gggtacagcg atgaacaggg 240
cagacgtggc caggccacac taccatcacc cctttctcca accctgaaaa acagttcctg 300
agacctgaac tattgaccat cattttaatc ggaccaactg cagctgtaac aagcttctct 360
ttggggtcac aatgaccact gcaggcaggg gaaatttagg cctcatcccc aggagcactg 420
ctttccanaa gcaagagggg cgcctgactg tgaagcagga gccagcaaac canacctggg 480
ggcagggcag cagtctccag aagaactatc ctcctgtctg cgaaatcttc cggctacact 540
tcaggcaatt gtgttaccac ganatgtctg ggccgcanga acattgatcc ggcttcggga 600
nctctgccgc tggtgggctc atgccagaag ttgcacacca angancaaat cctggaactg 660
ctgggtgctt gaacagttcc tgaacatcct ccctgggggg aactcccgga acttgggttc 720
aacttgcatc nccccttgaa aaattgttaa agaaagcttg ttggcttttt gttggaaaga 780
atttcccaaa aaaacccctc nanttgggan tnaa 814

<210> 2630
<211> 660
<212> DNA
<213> Homo sapiens

<400> 2630
gttgttgctt gggcgcttct ccgctgcgtg taggtgaagg gggcttcctg accgaggaag 60
acaatggtgt aaaattggtt gatcctttgg gtgaaatgtt ggcaccatcc tgggaggaac 120
atgccacctg tttagcanat gctgaggaac aagatatgcn gagagtgctt attgacatca 180

09/27/2006 09:56:56 PM

gcgagaaaga agctgtgaat ctgcaacaag atgcctttgt agttattggt agagatacca 240
ggcccagcag tgagaaactt tcacaatctg taatagatgg tgtgactgtt ctaggaggtc 300
aattccatga ttatggcttg ttaacaacac cccagctgca ctacatggtg tattgtcnaa 360
acccgggtgg ccgatatgga naggctacta tagaangtta ctaccanaaa ctctctaagg 420
cttttgtgga actcaccaaa caagcttctn gcagtggaga tgaatacaca tcacttaacg 480
ttgactgtgc aaatggcata tgggccctga agctantggg aaatggaaca ctacttctca 540
cagggcctgt cagttcacct gtttaatgat gggtccaagg gcanactcan tcatttatgt 600
ggagctgact ttgtgaaaag tcatcanaaa cctccacnng gaatggaaat ttaatccaat 660

<210> 2631
<211> 573
<212> DNA
<213> Homo sapiens

<400> 2631
agcgcagtat ggcgggcggg gcccgggagg tgctcacact gcagttggga cattttgccg 60
gtttcgtggg cgcgcactgg tggaaccagc aggatgctgc gctgggccga gcgaccgatt 120
ccaaggagcc cccgggagag ctgtgccccg acgtcctgta tcgtacgggc cggacgctgc 180
acggccagga gacctacacg ccgcgactca tcctcatgga tctgaagggt agtttgagct 240
ccctaaaaga ggaaggtgga ctctacaggg acaaacagtt ggatgctgca atagcatggc 300
aggggaagct caccacacac aaagaggaac tctatcccaa gaacccttat ctccaagact 360
ttctgagtgc agagggagtg ctgaatantg atggtgtctg gagggtcaaa tccattccca 420
atggcaaagg ttcctcacca ctccccaccg ctacaactcc aaaaccactt atccctacag 480
angccancat cagggtctgg tcagacttcc tcagantcca tctccatccc cggagcatct 540
gtatgattca naagtacaac cacnatgggg gaa 573

<210> 2632
<211> 806
<212> DNA
<213> Homo sapiens

<400> 2632
tcccaagatg gcgtccatca tggaagggcc gctgagcaaa tggactaacg tgatgaaggg 60
ctggcagtac cgttggttcg tgctggacta caatgcagga ctgctctcct actacacgtc 120
caaggacaaa atgatgagag gctctcgcag aggatgtgtt agactcagag gagctgtgat 180
tggtatagac gatgaggacg acagcacctt cacaataact gttgatcaga aaaccttcca 240
tttccaggcc cgtgatgctg atgagcgaga gaagtggatc catgccttag aagaaacaat 300
tcttcgacat actctccagc ttcaaggttt ggattcagga tttgttccta ntgtccaaga 360
ttttgataag aaacttacag aagctgatgc ttacctacaa atcttgattg aacaattaaa 420
gctttttgat gacaagcttc aaaactgcaa agaagatgaa cagagaaaga aaattgaaac 480
tctcnaagag acaacnaata gcatggtana atcaattaaa cactggcatt gtgttgctgc 540
agattgccaa aagtactatt aatcccgttn atgcnatata tcaacctatc ctttgggaac 600
ctgtgatcag cacaatgcct tcccagactg tgttacctcc agaacctgtt cagttgtgtt 660
agtcanaaca gcgtccatct tcctacccat ttgganctgt ttttgggcta ccttggggaa 720
ctcntccaga ctcctacccc caaatttttt cagggcgntg ggcctttcc cccacccgaa 780
tttaccantc ctccnctttc ctncca 806

<210> 2633

US 2005/0059005 A1

0956245 - 0970000

<211> 570
<212> DNA
<213> Homo sapiens

<400> 2633
agaccggaaa cggaggagag cgcgggggat gtgtttggca tggggacgca ctgttacagt 60
tgcgctcctg gttggctttg tgtttccgcg gtgttggtag agtctcggtg tttctacctc 120
ttagcaccct ttcctgccac cctttgtcct gtggaagccc ggagacatca gcggctgcaa 180
ttttgctact cgctgctcgg catggaacgg tcaggtaccg cagttcagcg ctcttggccc 240
cgcaggtcct cgggcatccc cgtgccccgt gctgtacatt cagttatcct ccgacttccc 300
ggggtcgaag gtattacctg ctgggtttta gaatctattg ctttacatct gagaaaagaa 360
aaatcccaga aagataagat gacttgccca agatcatagc gtgcctggaa agacagtgct 420
ccgattacaa gctggtcgct gtgcctcatt cgtcttgtca tcaactcctg tcagtttatc 480
caagctccaa aagcgaantt gttttaactt ttgcttccca aganttattt gatantctca 540
tttctgtttc cctnctttta tccttncgtt 570

<210> 2634
<211> 459
<212> DNA
<213> Homo sapiens

<400> 2634
gataactaaa ttgaaagtgc tggcagtcca tntggggatt gattagaatc taggggagat 60
gtagttgtca gtgttcattc tgtatgtaac tcctgtcttt ggtttcagat ctggttaggt 120
tctgttgatc cttggggaac tttctcattt gtttttattt ttgccttgga tctatgaata 180
cctgaatgta ttgtctaaaa tggaaaaatc ttaatgtagc cattctatta ctatcactga 240
ccctaggcct gaaaaaagtc acacctaggg ttaaaaaatt tttatttnat tttattttat 300
ttacttattt agagacagtt tccctctttt gcccaggctg gantgcattg gcatgatccc 360
acttcactgt aacctctgcc tcccaagctc aantgattct ataaccncaa gcctcctgag 420
tagctaggga ttacaggccc cncaccaatn cccaacnaa 459

<210> 2635
<211> 780
<212> DNA
<213> Homo sapiens

<400> 2635
agaaaaaatg aatgtcataa taaaatataa aacttacgta aagaaaataa agtcattgtc 60
caccttaata gctaaggtcc acaagggtaa cttatgcagc atttatttttt tttgaaagtc 120
aaaattgaat ttatttcttt cacatggctg gtttgctgca atatgaagtt tcagaatggg 180
ctgaagtaag ttgattgagg gatttgagtt gaatgacatt ttcaagttca tttaaatatg 240
ataaaaattc attggtggta aataacatct gtctttcctg gaaaaaaaaa agttgtgtat 300
tttcatgatt cagttaaaac aaaaaatgag cctgtgaatc ccaggccttt ttagtcctcc 360
ataacatttg aacagtttga cttgtcagca aagaaataca cttatcaaat tttaaaccaa 420
tgggagcctg aaagtgttac agtgtactgc ttctttgaca aaattctgtt taacaactac 480
cctaacataa tttataaatc aattaagata aaaccatttt tttctganta tttangaatt 540
tgtgtcctca aaatactgtg acatgaaaga taggaaagaa attacctggt tgccagacat 600
gcncgattat ctttcctcat ttcagctgga ttttccaaag tccgtanatt ggataaagca 660

gcatctcatt cactgaagtc acaagatagg taggaacttc tttaatgtga atttgcatat 720
tttaacnatt ccttnnaaaa acanaaaccc cttgatggat tataatntta aatgttttac 780

<210> 2636
<211> 849
<212> DNA
<213> Homo sapiens

<400> 2636
agaacgcaca ggagttccat ttttacaggt aataccctgc tttcagcgtg atggtttatt 60
ttgtctacat gaaaatggtt gtataacttt acgtgttcga agatcttata ataacatttn 120
taccacttca aatgaggaac cagatccaga tccagttcag gagcttacct atgatttacg 180
aagccagtgt gatgcaatca gggtgacaaa aaccgtccgt cccttcagta tggtgtgctg 240
tcctgtcaat gagaatgcag ccgccctcgt agtgagtgat ggcagggtca tgatatggga 300
actcaagtct gcagtttgta atcgaaattc acggaacagt agttctggtg tgtcaccttt 360
atattcacca gtgtctttct gtggaattcc tgtaggagtg ctacagaata aactcccaga 420
cctttcctta gataacatga ttgggcaaag tgcaattgct ggggaagaac atcccagagg 480
ttcaattctg cgggaagtgc acctcaagtt cctgctgacg ggactgcttt caggactgcc 540
cgcaccacag tttgctattc gtatgtgtcc accgttganc acaaaaaaca tcaagatgta 600
tcagccactg ctggctgttg gtacaagtta atggtcctgt cctggtgtta catctcacca 660
gtggtctgct acacaaagan ttaagcatcc actcatgttn aantcaaggg gtattgaatg 720
gacaaatttg actaagtttc cttccttttg gctacctcaa caccaaacaa tatggggaat 780
tangtgaana aattgaactt cnacctgggt tgaatcttcc caaccanggt taggaacant 840
ggcttttcc 849

<210> 2637
<211> 759
<212> DNA
<213> Homo sapiens

<400> 2637
atagcattgt aactcagaat ggtgaagtat gctggaaaac aatcacagac tgtgtgagct 60
acacagagtc agagcagggt ctggattact ggggaagcgt gaggctgctg ggccctgtgt 120
gtgaggctgt ccattcacat ttcttatctc tgaccaaggg gcaatttgaa attcgatatg 180
caccgtggtt ccagtggaca agttttccag agttatttcc tgaaatattt gatgccttgg 240
aaagtctaca atctcccgct atttctctta gcttaatgaa actgacatcg tgtctagaac 300
gagccttggg tgatgtattt ttactgattg ggaaggaatg ccccttttct ttaagagatc 360
tgctttcatc tgaggagctt gctcaagtct tcagtcagtc tgtgatgaat gtgctaaaag 420
tcttcgttgg ctctccgtgt ggtctcaacc tgcgtaacgt cttatggcat gggtttgcgt 480
cacctgaaga aattcctcca aaatactgtt caatgatgat actgttgacn gcaggattgg 540
gtcagttact gaananttac cttcaaaaca ctaaacttac attggcacat cgctctttca 600
tatctcttac aaacctcnaa gatttgattg tttttcctga tgttacttat gaagtgcttt 660
ccagtattan aaaaantgat gatnaaatct gcttttatat ttaaaaaatc ctgtttccat 720
attggggaaa ttgcnctggt ccaanttcaa attcccaca 759

<210> 2638
<211> 571
<212> DNA

05529000

<213> Homo sapiens

<400> 2638
gaaaagaggg gctgaagtcg cccttgaata accacagcag tggcacccac aaaggtgcag 60
ttcccacagc ctcatagctg cttgtaggtg ccacctctta aggccattac catagcaatt 120
aatactgaac atgagctttg gagcagacaa acactcaaac cgaacagggg gatggaggaa 180
aggagcttca atggcaagat ctcctggact cctgtcctgg cccctcctcc ccctgcccca 240
cccctgctct cctcctgctc cccctctcag ancttgccct gaccctgctc ctctcccagg 300
tgtattccga acttaagtac cacccagana tganattctt ccactggttc agcaagtgga 360
ngaagctgca tcntgaccag gantatgagg tcacctggta catatcctgg agcccctgca 420
caaagtgtnc aagggatatg gccacgttcc tggccgaaga ccgaaggtta ccctgaccat 480
ctttgttgcc cgcctctact acttctggga cccanattac caggaagcgc ttcncancct 540
gtgtcanaaa aaaaacggnc cgcgtgcccc c 571

<210> 2639
<211> 631
<212> DNA
<213> Homo sapiens

<400> 2639
agtcccggga gcccggcctc gtgcgccgcg ctttgagcct ctaggccatg aaactgcctc 60
accaagcact atgcaattga gtgcccacca gaagacaccc ctccagtcaa cccacagacc 120
ccagaaagag tacccagagg agcctgagca cactccaccc tatctgttct ctgaaattca 180
atcaaatgag tcactctact tctctggaag cagaaagagg ctggaagttt ttctccagca 240
gcagactgct cgacaaacac tgcgccaaga gctcctcagc agaagctcct cgcatcagat 300
cctctgtgct gggaatcctc ccctcttgag cacactctgt gctcctcttc cagttacggt 360
gcatgtgaan caatggtatg ggaaaattgt ttgcagaagg atgaaaaggc tttattgcca 420
aactcttaag gtattttgtt aataaaatca ttttcataat ggaaaagact cagaaaattc 480
ccctcgcatg acatataaca tccaacaagg ggctgaacca anaaaaaata ctgcagctgc 540
tgctaatggc aacactgaag caagcacctg gcctgtgcca ngcactgtcc tgtgcantct 600
gtgtttgcac tcattttatc ctccngancc n 631

<210> 2640
<211> 754
<212> DNA
<213> Homo sapiens

<400> 2640
agcaacatgg ccgccgcctg agaggagagc cgggccgccg ccgtctctgc agcccgcggg 60
taactgggcc gttgccgccg tccgcgctcg gcccccgcgg aaaaatcgag ctgaaggact 120
gcgcggctgg ctctcctcta gtatggccaa tgaagaggat gacccagttg tacaggagat 180
cgatgtgtac ttggccaana ntctggcgga aaagctgtat ctatttcagt accctgtgcg 240
tccagcctcg atgacctacg atgacattcc gcacctctca gccaagatca agcccaagca 300
gcagaaggta gagcttgaga tggccatcga caccctgaac cccaactatt gccgcagcaa 360
aggggagcag attgcgctga acgtggacgg ggcctgcgcc gacganacca gcacgtattc 420
ctcgaagctg atggacaagc agaccttctg ctcttcccag accaccagta acacatcccg 480
ttatgccgct gcactctaca ggcaaggtga gctccacctg acacctttac atggcatcct 540
gcagctgcgg gccagcttct cctacctgga tnaggctgac gccaagcacc gggagaggga 600

US 2005/0059000 A1

agcggccaac gaagcagggg gactcttcac aggatgaagg cggaaaacga tgtttancag 660
atcacggtgn cggttctccc ggccggantc agaacagggc ccgcagcgcc cgtgttgcca 720
gtcctatgaa ttccnggcan aaaaaaaccc ccca 754

<210> 2641
<211> 744
<212> DNA
<213> Homo sapiens

<400> 2641
cactggcaga tggagctgcg cacctgcggc ctcccctaca tcaacctcga gttcctcaag 60
gcccacacca tgtaccaagt ggggctgatg gagacggacc agcacatcga gttcttctgg 120
ggggccctgg agatgttcac ccaggaggag ctgtgcaagt tcatcaagtt tgcctgcaac 180
caggagcgca tcccgttcac ctgcccctgc aaagatgggg gtcccgacac tgcccatgtg 240
cccccgtacc ccatgaagat cgcccccccca gatggcacag caggttcccc agactctcgc 300
tacatccgcg tggagacctg catgttcatg atcaagcttc cccagtactc ctctctggaa 360
atcatgctgg agaaacttcg ttgtgccatt cactaccgtg aagacccccct cagtggctga 420
tgggagggag ccccacaatt aggctgtcac tgaggcaccc actctgctgg cttgggaagc 480
caccactgcg gcccgtccct ccagggccct gcgtgaggag ttggcaacat tttgcttttc 540
caaactttcg tccacattcc agggcctcct ggaaaattaa ccttttgtct ttgtacgttt 600
cgtgatgggt tggttctttt gctgcctgtt tgtggtctat ttgtangata gtttantttc 660
ccanaacagt ttgtgtctaa ttttgatctt tcttgggaca ttgtccctcc attggccacc 720
anaattccta atngccatta aggg 744

<210> 2642
<211> 865
<212> DNA
<213> Homo sapiens

<400> 2642
aagaaggaaa atggacaatc atttctgcac atatagggtt taataaaaca tgtataataa 60
aatatctcat attttaaatt tccaccttat tggtagcttt catgacaaag ggctagggtg 120
ctgatggcca tacaattaag gtttttggtt agttagttag cagaactaac tggctcctac 180
ctggtgggtt tttcttttgt ttggttggtt ggttggttgg ttttttccca natggctcag 240
gaggaaggta aatagcagtc attgtatgtg tgacagagtt tgagatagaa tgagcatatt 300
gaatctcaca tcctattctt attactgtca ggcagcgttg acctagcagt ataaaactat 360
ctgaagcaat gtagtcactc agttctcata aagtttattt caagtactgt aacaattcat 420
gtttggatta gaaaagtcac tagaaatttg acttccatat agtaatctat actttttct 480
ctcatttcct tcatttttg agccgtaagt gtaaggcatt ttgctggtat tattacaatg 540
gttatgagga nttttctttgc ttgcccaagg tcacatanct agcaagttaa agtaaattca 600
aatccaggcc tgctanatac caaattatta tttaagaata cttttcacta ctcctaaatt 660
atgacacaga tacntttgtc ttacacattt cactttattg tccagtttat taatatgttt 720
tattttccaa aagttatttt tttggcaatt tccttttta ttaattcccg tacttttta 780
aaattttact tccatttaat ncaccgttct tcccttttaa ttcctttttt aaaattaaat 840
ttttttggcc tttttggttt atttn 865

<210> 2643
<211> 624

US 2005/0059000 A1

<212> DNA
<213> Homo sapiens

<400> 2643
agcgccttcg ctctttggct ccctgagtta gtccggttgt ttgcgatcgc cgcggccggg 60
gctgcgaacc gaagggctcg ctccgcgccg cctgggtctc tacctcatcc gtaggtgtgg 120
ccctgatggt gtggcaggct ctggactcct aaagctctgg agcgaattta agattttatt 180
catgtgcatg gcatagaaga tgaattcttc cacttccacc atgagtgaag agcctgacgc 240
tctatcggta gttaaccagt tacgggatct agcagcagat ccgttaaaca gaagagccat 300
cgtccaggat cagggatgtc tgcctggcct tattttattt atggaccatc ccaaccctcc 360
agtcgtccac tccgctttgc ttgctcttcg atacttggca naatgccgtg cnaacagaga 420
aaagatgaaa ggagaactgg gtatgatgtt gagcttacaa aatgttatac agaaaactac 480
nactccaggg agaaacaaaa cttctggcct ctgaaatcta tgacattctt cagtcctccn 540
atatggcaga tggtgatagt tttaatggag atgaatncac ctccaangga aagctcaatt 600
ttttctgggg aactacnaac naac 624

<210> 2644
<211> 708
<212> DNA
<213> Homo sapiens

<400> 2644
gactatacag gacatgttca tcctggaact tacacaaata ccttagaacg tctagtgaag 60
gaaatggaag acacacaaag gctagatgaa ctgcagaagc aactacaaga agacataagg 120
caaggccgag gcattaaatc cccaatcaga attggagaag aagacagtac agatgatgag 180
gatggcctct tagaagagca caaggaattt ctaaagaaat tttcagttac aattgatgct 240
attcctgatc atcatccagg tgaagaaata tttaatttcc tcaattctgg aaaaattttc 300
aatcagtata ccttggattt aagagactct ggttttattg gacaaagtgc tgtagaaaaa 360
cttattctta aatcgggaaa aacagatcag attttttga caacacaagg tttccttacg 420
tctgcttatc actatgtcca gtgtcctgtc cctgtgttaa agtggctgtt tcggatgatg 480
tcagttcata cagactgtat tgtgtcagtg cagattttaa gtacattgat ggaaataacn 540
attanaaatg ataccttcag tgactcacca gtttggccat ggatcccatc attgtctgat 600
gtacagctgt gtttttccat atggggattg attttagatc tttgtttccc tggagaatct 660
tcnnccagac tttnatgaaa aactatctan tttctgaaac ccngacac 708

<210> 2645
<211> 644
<212> DNA
<213> Homo sapiens

<400> 2645
cgctgtgagg gagtcgctgt gatccggggc cccggaaccc gagctggagc tgaagcgcag 60
gctgcggggc gcggagtcgg gagtgcaggc ctgagtgttc cttccagcat gtcggagggg 120
gagtcccaga cagtacttag cagtggctca gacccaaagg tagaatcctc atcttcagct 180
cctggcctga catcagtgtc acctcctgtg acctccacaa cctcagctgc ttccccagag 240
gaagaagaag aaagtgaaga tgagtctgag attttggaag agtcgccctg tgggcgctgg 300
cagaagaggc gagaagaggt gaatcaacgg aatgtnccag gtattgacag tgcatacctg 360
gccatggata cagaggaagg tgtagaggtt atgtggaatg angtacagtt ctctgaacgc 420

0050203650.0070000

aagaactaca agctgcagga ggaaaangtt cgtgctgtgt ttgataatct gattcaattg 480
ggagcatctt aacattgtta agtttcacaa atattgggct gacattaaag aaaaacaang 540
ccagggtcat ttttatcaca gaatacatgt catctgggga atctgaagca atttctgaag 600
aanaccanna agaacnccag acgatgaatg aaaagcatgg aanc 644

<210> 2646
<211> 752
<212> DNA
<213> Homo sapiens

<400> 2646
tttcataaat catttgctcc tgtcttttgc tttaattgtc ctatttgcta taaatacttt 60
tttatactct acttttttat tcaatttaat atgatcaagt atgttcgtct tttttgtatg 120
ttgacctttc ggtgatattt ttgtttttt taatttgggg tgtgtgtgtg tgtggtggtg 180
gtggtggttg ttatatanta ctgatgtggt attacttgtt cttgatacta tagctctata 240
gctttgtgat tactanttct tgacatgtta gggtggcatt tactgcttgt ctcctgttca 300
agtaactttt ctttctagtt aaaatgagaa tgaaattttc cttaaaatta ataaacttac 360
ctttttatat tgagattaat cattcatttt tttttganat ggggtctcgc tatgctgacc 420
aggctgttct tgaactcctg gtctccagtg atcctcctat ttcagcctcc caaagggcta 480
gaattacagg tgtgagccac tgcaactggc tatattaaga ttaatcttta ttctctattt 540
acagcaagta tttgcccact tgtgttctgt tnaacaaaga aatcaantgt ttttcctttg 600
taacgtanca caattaattt ctttgtcatt ttaatgccnt cctttgaata aattttttt 660
atcattaagg tggnaataat tatccccant aattttnatg gttgtttatt aatngaaaac 720
aaactttcct acccaaactt tttggggcat tn 752

<210> 2647
<211> 828
<212> DNA
<213> Homo sapiens

<400> 2647
atctgctgat gagtccaggc cccggtccat tctcctcgcg ctgcaaggat gctcctggga 60
tttcggagag gccgcaggag tcatttcaaa cagggtctcg ctctgtcgcc caggctagag 120
tgcagtggtg cgatcatagc tcactgcatc ctcgaactcc tgggctcaag cgatcttccc 180
accccagcct cccgaggagc tgagactaca ggcgcgcgcc actactcccg gctaattgtt 240
caatattttt gtggaaacag ggatcttgct atgttcctat ggtggtcttg agctccttag 300
cctcctaaag tgttggtatc acaggcgtga gccactgtgc ccggcgttaa caatcttctg 360
ccccagggtc ggccacagtt ggacaggagc accctgcctc ccctgtagca ttcgtccccg 420
tgcccggagt taactcctgg acgacgtaca cctgctgcac tgctggatat agccattctt 480
catttttccc tcctccaccc accatgtaca ccccatcagc aagtcccatc cgatataccc 540
actacataca tctgccagct gttcccatct ccacccacac cccgggctcc agcatctgtc 600
tggactgctg cggcaaatcc tcactggttt ctctgcttcc actctcgccc ttcccctang 660
tcattctcca cgttacancc caaggggnat cttaatattt atttattaat tttaatttaa 720
gtttttaaaa aaacagggtt ctttgttccc tggattttcc cccccnttgg gaattcnccc 780
cggccccnac ttcttaactt tantgcgttg cgcnctcccc cccccccc 828

<210> 2648
<211> 786

0 0 5 2 0 3 5 0 . 0 2 2 0 0 0

<212> DNA
<213> Homo sapiens

<400> 2648
agttaaaaca gctgagcttc tgaatgcctg caagaagctg ccctttgaaa ttaagaactt 60
cgtgaagaaa acagaggctc ttcggttgca gtatcgctac ttagacttgc gtagtttcca 120
aatgcagtat aacctgcgac tgaggtccca gatggtcatg aaaatgcggg aatatctctg 180
taatctgcat gggtttgtgg atatagaaac ccccacattg tttaagagga ccccaggggg 240
tgccaaagag tttttagtac catccagggg aacctggaaa gttttgttct ctccctcaga 300
gtcctcaaca gtttaagcaa cttctgatgg ttggcggttt agacagatat tttcaggttg 360
cccgatgtta tcgagatgaa ggttcaagac cagacagaca gcctgagttt actcagattg 420
acatagagat gtcatttgta gaccagactg ggatccagag tttaattgag ggtttgctcc 480
agtattcctg gcccaatgac aaagatcctg tggttgttcc ttttcctact atgacttttg 540
ctgaagtgct ggccacctat ggaactgata aacctgacac tcgctttggg aatgaagatt 600
atagatatca gtgatgttgt ttagaaacnc agagattgga tttcttcaaa atgcccttag 660
ttaacccccc gggaactgtt gaaaagccat tttgtttccc tgaaaggaac caaaatactt 720
taaaaaaggg aaaagaactt tgaaatncca tttaanaaan cttccggaag nnttgaaccc 780
attttt 786

<210> 2649
<211> 546
<212> DNA
<213> Homo sapiens

<400> 2649
ctttttccc gggaactaag tgttaaacat ttaccagcac accactgcct agacttgtta 60
ggaaattcac aagtgagaag aaattctgtg attccaggag atgaaagagg gaagtgtaat 120
gagaatatca acttgagtat tttatccgtt gctttcttta attgggtcat ttcagagggt 180
gggtagattt tgttaagaca gttgaaatat ttaggtaggt agaggggtga gtgcagttga 240
agagtaaagg ctgtttgggg cagacaaaag gatgatagca ctctttcaag tgctctgcca 300
ccagcagtaa aagtcgggag aaggacctag caccaggaca cgtgatctgt ccggcgtaag 360
cgagtgctga gtcaaaggcc tgcaattcag gcccctgctc tggggcacgg tcagtttcag 420
ccaggcccaa ctctctttcc caggtccatg gcgtggatgg cacccanaat ccagcanggg 480
antgctggtg gatacacctg gganggcctg gtggaagatc atttgcgttg canaaataag 540
gaaata 546

<210> 2650
<211> 783
<212> DNA
<213> Homo sapiens

<400> 2650
aaggggctcc gtagctcggg gcagggtggg cgcgagagan cctagaagcc catgtagccg 60
cgaatcccgc agccccagta cacctccctc cgtgcctccc cgcctttttct gcagagctcc 120
gccctggant gaaggaggag ccgtcacctg gagctccgaa aaaagcagaa gaaggcgctt 180
tttatttagc cagtgtgacc ccgccagggc cttctcggtt gggtgagcac tctctctgac 240
caggccatga aaagaaaaat ctgtgcgatg cctccccaca tgtcacggga ctctgacttg 300
cctttgtcgt cagagtttgc agaactttgg gggacctgag aggggagtgc cccctggacg 360

0052050.0052050

ggccacggct gtctgtggct taagggcttt tggaagggcg gaganaggga aacggcgtcc 420
tagtggcctg cttcagggcc acccacgggc cctcccccaa cctctctctg atccaacttg 480
tttttccagc ctaattggaa acttgtggat gctgtgacct caanaaaatt ggcattttat 540
ttggaagata gacatctatt tgcaactgtc ctgagcccct attttcctcc cacctttctt 600
ggggaaactt gtttttaang ggtgccactg tttttgttac atgttgctcc tagctcttan 660
cattcatggg tactgttgtt aaccgtccaa tgggttcact tttgtctgct agatagaacc 720
gatttntcca gaacggggga attaccantg gaanaaagaa tttnttcccc nccaaaaacc 780
cgg 783

<210> 2651
<211> 718
<212> DNA
<213> Homo sapiens

<400> 2651
gctgtcggag ctcagaccag caggcctacg acctagaaag tgctcaaaac cccacttcct 60
aaggcctaga aggagcgacg tgaagatata aggtctcact atgttgccca tgctggtttc 120
aaactcctgg gctcaagtga tcctcctgcc tctgtcttcc aaattgctga gattactggc 180
atgagccatt gcacctggcc ttctttttg agatggcctc aggttggctc tgcctggaga 240
gggggaagct tgtaaagatg gcttagaaaa aaagtcctgg ctccatttct attttctccc 300
ttcttttgct ggcctgtttc ctgcttttg caaattgcag gaacaagacc ctgcanatgg 360
agaagatcaa ggctcgtttg aaggctgagt ttgaggcact tgagtcagag gaaaggcacc 420
tgaaggaata caagcaggag atggaccttc tgctacagga gaagatggcc catgtggagg 480
aactccgact gatccacgct gacatcaatg tgatggaaaa cactatcaaa caatctgaga 540
atgacctaaa caagctgcta naatctacaa aggaagctgc atgatgagta taagccactg 600
aaagaacatg tggatgccct gcgcatgact ctgggcctgc anaagctccc tgacttgtgt 660
gaanaaaaag aanaactttc ctttggatta ctttgnaaaa gccanaaagc agaatggc 718

<210> 2652
<211> 700
<212> DNA
<213> Homo sapiens

<400> 2652
acgcctcgtg accatcatgc tggccaacaa tgagactggc attgtcatgc ctgtccctga 60
aatcagtcag cgcattaaag ccctgaacca ggaacgggtg gcagctgggc tacctcccat 120
cctcgtgcac acggatgctg cacaggcctt ggggaagcag cgcgtggatg tggaggacct 180
gggcgtggac ttccttacaa tcgtggggca caagttttat ggtcccagga ttggcgcact 240
ttatatacga ggacttggtg aatttacccc tctctaccct atgctatttg gaggtggaca 300
agaacggaat ttcaggccag ggacagagaa caccccaatg attgctggcc ttgggaaggc 360
cgcggagctg gtgacccana actgcgaggc ttatgaagcc cacatgaggg acgtccgcga 420
ctacctggaa gagaggctgg aagctgaatt cggtcagaag agaatccatc tgaatagcca 480
gtttccaggc acccagcggc ttcccaatac ctgtaacttt tccatccggg gaccccggct 540
tcaagccacg tggtgcttgc gcagtgccga atgctgatgg ccantgtggg ggccgcgtgc 600
cactcggaac acggggacca nccgtcccca gtgctgctga actacggtgt cccttcnact 660
tggcaagaaa ncnctccggg ttcaangttg ggcccccccc 700

<210> 2653

09/02/2005 10:03:03

0962945.0720

<211> 645
<212> DNA
<213> Homo sapiens

<400> 2653
gaaattatcg gagggaggta gtanaagata tcaacaaatt attgaaatat ctggatttgg 60
aagaggaagc agacacaact aaagcatttg acctgagaca gaatcattcc attttaaaaa 120
tagaaaaggt cctcaagaga atgagagaaa taaaaaatga acttctccaa gcacaaaacc 180
cttctgaatt gtacctgagc tccaaaacag aattgcaggg tttaattgga cagttggatg 240
aggtaagtct tgaaaaaaac ccctgcatcc gggaagccag ganaaganca gtgatcgagg 300
tgcaaactct gatcacatat attgacttga aggaggccct tganaaaaga aagctgtttg 360
cttgtgagga gcacccatcc cataaagccg tctggaacgt ccttggaaac ttgtctgaga 420
tccagggana anttctttca tttgatggga aatcgaaccg attagaacta cntccggctg 480
gaagagctgc tcaccaaagc agctgctagc cctggatgct gttgatccgc aggganaana 540
aaaatgttag gntgccanga aaacaagctg tgaagcttgc gcagaaatat tctcagctat 600
ctcgaccttg aaatcttgat gaatggggaa ttctngnaat tnccc 645

<210> 2654
<211> 705
<212> DNA
<213> Homo sapiens

<400> 2654
gcaaacatac tttaataagt taaagaaaat aacaaaaaca gtacagcaaa gatactgggc 60
aatgaaagaa agaaacatac aatttcaaag gtataacaaa ctgaggcatt ctgtaatata 120
cattcaggct atttttaggg gaaagaaagc tagaagacat ttaaaaatga tgcatatagc 180
cgcaactctc attcagagga gatttagaac tctaatgatg agaagaagat tcctctctct 240
caagaaaact gctattttga ttcagagaaa atatcgggca catctttgta caaagcatca 300
cttacagttc cttcaggtac aaaatgcagt tattaaaatc cagtcatcat acagaagatg 360
gatgataagg aaaaggatgc gagagatgca cagggctgct actttcatcc agtctacttt 420
cagaatgcac agattacata tgagatatca ggctttgaaa caggcctccg ttgtgatcca 480
acagcaatac caagcaaata gaagctgcaa aactgcagag gcagcattnt ctcagacaaa 540
gacactctgc tgtgatcctt caggctgcat tcaggggttt gaaaactaga agacatttga 600
agaatatgca ttcctctgca acccttattc agantaggtt tagatcatta ctgggtgagg 660
ganaanatcn tttccctcna aaaaaagcta ctatttttt gtttc 705

<210> 2655
<211> 771
<212> DNA
<213> Homo sapiens

<400> 2655
tttatgatga acgctggaag gaaaagcagg aacagggctt cacttggtgg ttaaatttta 60
tattaacccc tgatgacttc actgtaaaaa caaatatttc tgaagtaaat gctgctactc 120
ttcttttggg aatagagaat caacataaaa taagtgttcc tagagcacct acaaaagagg 180
aaatgtctct cagagcttat actgctcggt gtaggttaaa cagactacgt cgtgcagcat 240
gccgtttgtt tacttctgaa aaaatggtta aagctattaa aaagcttgaa attgaaattg 300
aagctaggcg gttaattgtt cgaaaagata gacacctatg gaaagatgtg ggagaacgtc 360

agaaagtcct gaattggctg ttgtcctaca atcctttgtg gcttcgaatt ggtctagaga 420
caacttatgg agaactcata tctttggaag ataacagtga tgtcacaggg ttggctatgt 480
ttattctgaa tcgcctactt tggaatcctg atatagcagc tgagtataga caccccactg 540
ttcctcacct gtataganat ggtcatgaag aactttgtcc aagtttacat tgaaaaaatt 600
attgttgttg gtctgtttct tgaattatgc taaaaatttt ccagactcct tgatcatgat 660
ccttggtctc ttctgttnaa gatgcccaaa ttccanggnt agtaaaaaaa atccctttaa 720
ggnttttttcc ccaaaaattt ccctaanttt gttgaaaggt gaacctttcc c 771

<210> 2656
<211> 650
<212> DNA
<213> Homo sapiens

<400> 2656
gtcgttaggg gagcgagtcg tgaccggttg ggccacactc aacgtgggac gaagcttcgc 60
ctactgtttg actacgtgcg tgcagcctcc cctcgatgtc ggccctcgaa aagagcatgc 120
acctcggccg ccttccctct cgcccacctc tacccggcag cgggggcagt cagagcggag 180
ccaagatgcg aatgggccct ggaagaaagc gggacttttc ccctgttcct tggagtcagt 240
attttgagtc catggaagat gtagaagtag agaatgaaac tggcaaggat actttcgag 300
tctacaagag tggttcagag ggtccagtcc tgctccttct gcatggagga ngtcattctg 360
ccctttcttg ggctgtgttc acggcagcga ttattantan agttcagtgt angattgtan 420
ctttggatct gcgaaatcat ggtgaaacaa aggtcaagaa tcctgaagat ctgtctgcan 480
aaacaatggc aaaagacgtt ggcaatgtng ttgaaccatg tttggggacc ttcctcctcc 540
aattatgctg attggacntt agcatggggt tgtgctattg cantccacac aagcatcatc 600
ccaacctggt taccnancct ctttgggtct gttcatgaat tgatnttgtt 650

<210> 2657
<211> 683
<212> DNA
<213> Homo sapiens

<400> 2657
ccaggcacag tgacattgtc gtcctttatg cccgaaccct gagagctttg gacactagtg 60
aacaggagcg catgaaaagt tccctactga aggaacagat gctaaggaaa caggccgagt 120
tagaatcagc acagtgccga ctccaactgc aggtcctcac tgataagtgc actaggcttc 180
aaaggcgtgt tcaggacttg caaaaactta cgtcacatca aagtcagaat ttacagcaac 240
ccaggggctc ccaagcatgg gtcctgagct gctcaccctc cagccagggc cagcacaagc 300
acaagtacca cttccaaaag accttcacag tatctcaggc aggaaactgc cggatcatgg 360
catactgtga tgctctgagc tgcctggtga tatcacagcc ttctcctcag gcctcttttc 420
ttccaggctt tggtgttaag atgttganta ctgccaacat gaagagcagt cagtacattc 480
cgatgcatgg caaacagatc cgtggactgg cgtttaacag ttacctcana agcttgctac 540
tctctgcttc cctagacaac actattaaac tgaccagcct ggganacaaa taccgtggtc 600
caaacttata atgctgggac tccttgtctg gaactgttgc tggtgtcttg atnaaactaa 660
ctncntctat gctggactan ccc 683

<210> 2658
<211> 514
<212> DNA

US20050250120A1

<213> Homo sapiens

<400> 2658
aagcccatcc agaggttccc acagttcata ctcctgcttc aggacatgct gaagaacacc 60
cccaggggcc atccggacag gctgtcgctg cagctggccc tcacagagct ggagacgctg 120
gctgagaagc tgaacgagca gaagcggctg gctgaccagg tggctgagat ccagcagctg 180
accaagagcg tcagtgaccg cagcagcctc aacaagctgt tgacctcagg ccagcggcag 240
ctgctcctgt gtgagacgtt gacggagacc gtgtacggtg accgcgggca gctaattaag 300
tccaaggagc gtcgggtctt cctgctcaac gacatgcttg tctgtgccaa catcaacttc 360
aagggccagc tggagatcag cagcctggtg cccctggggc ccaagtatgt ggtgaantgg 420
aacacggcgc tgccccangt gcangtggtg gaagtgggcc agacggtggc acctatgaca 480
aggacaatgt gctcatccan cactcangcg ccaa 514

<210> 2659
<211> 489
<212> DNA
<213> Homo sapiens

<400> 2659
acggcgcgct gggctcacac tgtcccgccg cggacgggct ttgtggttgg gggcgcgcgt 60
gcgagtgcca gtgagagtgt gggtgcgcgc tgtgggccgc ggcgcgggtg ggtggccgtg 120
cgttcttgcg agccggcctg caggaggcga ggctcccctg gcctcccgca cccagcggcg 180
gaccgagccc ctggagggaa gttgccgcag ccgcccgggc cgccggccct cctgtcccgc 240
gccaggtaca cagcttctcc taccatgact tcgatctgat cagcaaacaa gaaaattngt 300
ctcccntant tctggggcgt gttcaccacc tacaaccaca nagctgtcat ggctgccatc 360
tctacttcca tccctgtaat ttcacagccc canttcacan ccatgaaatg aaccacagtg 420
cttctacaac nantccattg ccttctttta taaccgaagt ggaaagcatc tttgccacaa 480
aatggnaac 489

<210> 2660
<211> 703
<212> DNA
<213> Homo sapiens

<400> 2660
ttactgaaag acctttgga ccacccctaa atggagcatc ttgatagatg gcaaatccag 60
tgtttcttaa acttgtccat gctgcccaga gcccactgcc ttttatcaga tgtgagactt 120
cactgccaca gtgtcatccc acagtttcct tccctggaca tttgataaag ggaaaatcat 180
ttcttgtcct ttaaggcagg gactattatt ttttcacttt tccacatacc ccacaacacc 240
taacattgat ttactcgtag taggantttc atactgttga actctctaaa ggccatttgt 300
tccagggcct anctgggctt gtgaaggaca acagantcat ttcctaagga ccccaaaaga 360
cagcatgaag gaaaaaataa taataaactg ctgttcacag tgccttgagt gtaccaccgt 420
actttctgct atgccttgtc cattccaatc tggacagtct ctgtgcccct cctttccact 480
caagtgttat ccagcactca agttctggct caanggccaa catctccgtg ggggacctca 540
nccatcccag ggcattgtga ccccttcctc taantccccg ggnacactcc ctgattggta 600
ccctctcatt ccacnaacat atgccattgt ggcttacttg tcatttcttt angtcttgcc 660
ttccccagtt gatnatgaac cnctataana actaactccc ata 703

0505050505-050505

<210> 2661
<211> 743
<212> DNA
<213> Homo sapiens

<400> 2661
naaatggaaa attagaagat aatccttcct ctggcagtcc cccaaggact actttgttgg 60
ggaccatatt ttcacctgtc ttcaactttt tttcaccagc aaataaaaat ggaacgtcag 120
gatcagattc tccaggacag gctgtggaag ctgaagaaat agtaaaacaa cttgatatgg 180
aacaggtgga tgagatcact accagtacta ctacatcaac taatggagca gcttactcaa 240
atcaagcagt tcaagtgaga ccatcactaa acaatggttt agaagaagca gaagaaacag 300
ttaatcgtga tatcccaccc cttacagcac cagtaactcc agatagtggt tattcatcag 360
cccacgcgga ggccacctat gaagaagact gggaagtatt tgacccctat tatttcatca 420
aacatgtccc gccactgaca gaagaacaac taaataggaa acctgctctt ccgttgaaaa 480
caagaagcac accggaattc tccctagttt tagacttgga tgaaacacta ntgcattgta 540
gtctaaatga gctanaagat gcagcactta cttttccagt ccttttccaa gatgtcgttt 600
atcaggttta tgttgagatt aaagaccatt tttcagggaa ttcctgggaa cgaatgtctc 660
agatgtttga aaatcattcc tttttactgc ttctaaagaa gggtttttgc caaaacnant 720
tactgaaacn tncttanaac cct 743

<210> 2662
<211> 739
<212> DNA
<213> Homo sapiens

<400> 2662
gtaaaagaaa accctgaaga ggaggaggag gaggaagaag aggaagaaga agatgaagaa 60
agtgaagaag aggaggaaga ggagggagaa agtgaaggca gtgaaggtga tgaggaagat 120
gaaaaggtgt cagatgagaa ggattcaggg aagacattag ataaaaagcc aagtaaagaa 180
atgagctcag attctgaata tgactctgat gatgatcgga ctaaagaaga aagggcttat 240
gacaaagcaa aacggaggat tgagaaacgg cgacttgaac atagtaaaaa tgtaaacacc 300
gaaaagctaa gagcccctat tatctgcgta cttgggcatg tggacacagg gaagacaaaa 360
attctagata agctccgtca cncacatgta caagacggtg aagcaggtgg tatcncacaa 420
caaattgggg ccaccaatgt tcctcttgaa gctattaatg aacagactaa gatgattgaa 480
aattttgata gaganaatgt tcggattcca ggaatgctaa ttattgatac tcctgggcct 540
gaatctttcn gttatctgag aaattnaaga aactctcttt gtgacattgc cattttantt 600
tgttgatatt atgcatggtt tgggancccc cgacaattga atctntccac cttctccaat 660
cctaaaaaaa ttttccctcc ttgtttgncc cnccattaaa aattgattag gtttttntga 720
attgggaaaa aanaattcc 739

<210> 2663
<211> 753
<212> DNA
<213> Homo sapiens

<400> 2663
aataacctgg agccggcggc gtaggttggc tctttagggc ttcaccccga agctccacct 60
tcgctcccgt ctttctggaa acaccgcttt gatctcggcg gtgcgggaca ggtacctccc 120

0956356 .0N2800

ggctgctgcg ggtgccctgg atccagtcgg ctgcaccagg cgagcgagac ccttccctgg 180
tggaggctca gagttccggc agggtgcatc cggcctgtgt gtggcgcgag gcagggaagc 240
cggtacccgg gtcctggccc cagcgctgac gttttctctc ccctttcttc tctcttcgcg 300
gttgcggcgt cgcagacgct agtgtgagcc cccatggcag atacgacccc gagcggcccc 360
caaggggcgg gcgctgtgca attcatgatg accaataaac tggacacggc aatgtggctt 420
tctcgcttgt tcacagttta ctgctctgct ctgtttgttc tgcctcttct tgggttgcat 480
gaagcagcaa gcttttacca acgtgctttg ctggcaaatg ctcttaccag tgctctgagg 540
ctgcatcaaa gattaccaca cttccagtta agcagaacat tcctggccca ngctttgtta 600
gaagacagct gccactacct gttgtattca ctcatctttg taaattccta tccagttaca 660
atgaattatc ttcccantct tgttattctc tttgcttcat gctgccacat atacnaaaaa 720
agtccttgaa gcaagggggt caaaataatt ttt 753

<210> 2664
<211> 611
<212> DNA
<213> Homo sapiens

<400> 2664
tccatggact cttaccgaag ggttatcccc atctgtgctc tatatgtgat ttgccagttc 60
attctaataa ggagtggagt caacatatca atggagcaag tcacagtcgt cgatgccagc 120
ttcttcttga aatctaccca gaatggaatc ctgacaatga tacaggacac acaatgggtg 180
atccattcat gttgcagcag tctacaaatc cagcaccagg aattctggga cctccacctc 240
cctcatttca tcttggggga ccagcagttg gaccaagagg aaatctgggt gctggaaatg 300
gaaacctgca aggacctana cacatgcaga aaggcagagt ggaaactagc agagttgttc 360
acatcatgga ttttcaacga gggaaaaact tgagatacca gctattacag ctggtagaac 420
catttggagt catttcaaat catctgattc taaataaaat taatgaggca tttattgaaa 480
tggcaaccac agaggatgct caggccgcag tggattatta cacaaccaca ccagcgttag 540
tatttggcaa gccagtgaga nttcatttat cccacaagtt ttnaanaata aanaaacctg 600
aangaaagcc c 611

<210> 2665
<211> 672
<212> DNA
<213> Homo sapiens

<400> 2665
agggcctgcg ggagaccgtc cgcctggctc gccgagctcg cccgctgtcc gccagcccgc 60
gggagggagg anagaagcga agcgtttccg cggttggcta ctcagtgtct tggtctcaag 120
ttgcctcatt gcggctggcg ttcccaatac agacgcatcg tttctttttt aatactccct 180
aagaaaggga ataaccttca agctggcggg agcaatggtt cacataaaga aaggcgagct 240
gacccaggag gagaaggagc tactggaagt catcgggaaa ggtactgtcc aagaagctgg 300
aacattatta tccagcaaga atgttcgtgt caactgtttg gacgagaatg gaatgactcc 360
tctaatgcat gcagcatata aaggaaaact cgatatgtgc aaattactac tgcgacatgg 420
agccgatgta aattgtcatc agcatgaaca tggatacaca gccctcatgt ttgctgcact 480
ttctggtaat aaagacatca catgggtaat gttagaagct ggtgctgana cagatgttgt 540
caactctgtg ggaagaacag cagctcagat ggcagccttt gtggatcaac atgattgtgt 600
gaccataatc aacaatttct ttcctccaaa nanactggat tattacnctn ancccaggg 660
actggataaa ga 672

0050250-0050450

<210> 2666
<211> 693
<212> DNA
<213> Homo sapiens

<400> 2666
gcgagtggtt aaaagacagt tggtgtcggt tcgccttctc gggtcggatt ccgcggtccc 60
aacccttccc catggccgac cctgaggagt tgcaggtttc ttcgccgccc ccgccgcctc 120
cctcttctcc ctcctcttca gacgcctctg cagcatcttc cccgggcggc ccagtgagtt 180
tgggctggcc agttccgagc aggagcagcg gcccaacggt ggaccagctg gaggaagtgg 240
agctgcagat cggagacgca gccttttcat taaccaaact tcttgaagcc acatctgcag 300
tatcagctca agtggaagaa cttgccttca aatgtacaga aaatgcacgt ttccttaaaa 360
cgtggcggga cctcttgaaa gaagctatga ttctttgaaa cctgatgact gatttggcat 420
acttcgttgt ttaataatga ctgcaataat tcatacttct tatgtcatat tttgtacatg 480
taccacacat atangatgac ctctgtccan cagttctgta tatactcaga atgaaatttt 540
tcttggtttt cttggttttt gtgaaagcan aataccnatg ctatttttgt tgcggaccaa 600
tacttgtttg tccttaaata ctttatgcct ctgaactttc atanaatcct ttatgaaagt 660
taacttcntc natanacggt taatattaat ana 693

<210> 2667
<211> 533
<212> DNA
<213> Homo sapiens

<400> 2667
tatatccact tcatctgtca cccagctggg cagccagctc agtgctatgc aaatcaacag 60
ctatggttca ggcatggctc ctccaagcca ggggaccccc tggccctctg tcagccacat 120
cattgcagac tcctccacga cctccacagc cgtccatttt gcagcctgga tctcaagttc 180
ttccaccacc acccaccaca ctcaatggtc ctggtgcctc acctttgcct ctaccaatgt 240
acagaccaga tgggctctct gggcctcctc ctccaaatgc ccagtaccag cccccacctc 300
ttccaggcca gaccttgggt gctggatatc ctccgcagca ggccaactct ggtccccaga 360
tggcaggcgc acaactgtct tacccaggan gcttccctgg aggtcctgca cagatggctg 420
gtccgccaca gccccagaag aanctggatc ctgactctat ccctanccca atccaggtga 480
ttgagaatga taganccagc agangangac aagtttatgc caccaacacc aga 533

<210> 2668
<211> 820
<212> DNA
<213> Homo sapiens

<400> 2668
ttgaaaccag ttgacaacac ttactacaaa gaggcagaaa aagaaaatct tgtggaacaa 60
tccattccgt caaatgcttg ttcttccctg gaagttgagg cagccatatc aagaaaaact 120
ccagcccagc ctcaganaag atctcttagg ctttctgctc agaaggattt ggaacagaaa 180
gaaaagcatc atgtnaaaat gaaagccaag agatgtgcca ctcctgtaat catcgatgaa 240
attctaccct ctaagaaaat gaaagtttct aacaacaaaa agaagccaga ggaagaaggc 300
agtgctcatc aagatactgc tgaaaagaat gcatcttccc cagagaaagc caagggtaga 360

0050250.0050450

catactgtgc cttgtatgcc acctgcaaag cagaagtttc taaaaagtnc tgaggagcaa 420
gagctggaga agantatgaa aatgcagcaa gangtggtgg agatgcggaa aaagaatgaa 480
gaattcnaga aacttgctct ggctggaata gggcaacctg tgaagaaatc antgagccag 540
gtcccaaatc agttgacttc cacttccgcn cagatgagcg aatcnaacaa catcctaaga 600
accaggaaga atattaggaa ntgaacttta cntctgaact acgaaagcat ccttcatctc 660
ctgcccgaat tgactaaggg atgttncatt gtttaaaccc ttccaccctg tcccagggaa 720
agaaaaaaaa ntttgatgaa accgtttcta ctttttncc ccttgcaccg caanttgaaa 780
attccctnaa ccaaacccct aaccgatntt cttttgaagg 820

<210> 2669
<211> 507
<212> DNA
<213> Homo sapiens

<400> 2669
tctttctcgt ggcaaatccc aatgtacacg atttcaggtc tcagacgcca tgcctctcca 60
gcccacgccc ttaggcaggt gatggcagca gctaggaata aggtgtacat gatccacagc 120
cctgcggagc caggtcaagc cgctgctatg agagctccag ggtgatgggg acgattctgc 180
ccagtgtcct cagtctgtcc cctcaggtca tggtcccaag tgaaatgaca ganttcacag 240
ccctggtctt ggctgangtc caggtcatan taagggcatg ttcttggggc cctcgacctg 300
aactctgacc ctccgggcag ggaanaagaa gttgtcccct ttggttgtcc tggctttgga 360
gtcctttgca aaaatatttt gggccccctg ccactggctg cagaaatggc tcnaccgggt 420
gtgtggggac agacacccan aaagaatgtn cttttgtggc cttggtgtcc natggggctg 480
gggganaatg ctctccactg acccaca 507

<210> 2670
<211> 584
<212> DNA
<213> Homo sapiens

<400> 2670
agcggctagg tggtgcacgg gaaacgcggg cgtaggtgac cggcggcttt ctcagttttg 60
gtggagacgg gcgcatgtgg gcgctttgct cgctgctgcg gtccgcggcc ggacgcacca 120
tgtcgcaggg acgcaccata tcgcaggcac ccgcccgccg cgagcggccg cgcaaggacc 180
cgctgcggca cctgcgcacg cgagagaagc gcggaccgtc ggggtgctcc ggcggcccaa 240
acaccgtgta cctgcaggtg gtggcagcgg gtagccggga ctcgggcgcc gcgctctacg 300
tcttctccga gttcaaccgg tatctcttca actgtggaga aggcgttcag agactcatgc 360
aggagcacaa gttaaaggtt gctcgcctgg acaacatatt cctgacacga atgcactggt 420
ctaatgttgg gggcttaaat ggaatgattc ttactttaaa agaaaccggc ttcccaagtg 480
tgtgctttct ggacctccac aactggaaaa atacctcgaa acaatcaaaa tattttctgg 540
tccnttgaaa agaatanaac tggctatgcg gcccnctctg cccc 584

<210> 2671
<211> 560
<212> DNA
<213> Homo sapiens

<400> 2671

0960745 0960720

atttagtgtt cataaataaa gtttgttgaa acacaaccaa gatcattctt ttacttgtct 60
atggctgctt ttctgtggca gagtagctgc cacagaaaac tatagcccac aaagcctgat 120
atttactgtc tgtctgttta tggaaaaaat ttatcaaccc atggtctata gtatagtgtg 180
atatgactac tgttccaatg tattgaagtg ttgggatagt tttttcaaat gttttcagat 240
gttcttgttt tagaatcatt gtcaccttta agaggaaaaa ggtcatcact agataatcta 300
aacagattgt tgcttctcag tgttagcaag gaaaataatc tagtttcaaa ttacattgca 360
gtataatgaa aaagatccat atactgtgga atgatattct tttaaaatta tttgctatgg 420
cttgggtaaa aatgttcttt ttccagtagc acatatcaca agaanctcac tggtagtttg 480
aaaagccatc tttctttaat tatttgttta tccctntang aanaattcaa gccaaangtt 540
ttccccccc tgttttgaac 560

<210> 2672
<211> 720
<212> DNA
<213> Homo sapiens

<400> 2672
atctcccagg cgaccggctc cgcagcaaga tggcggacga gaaggacagg ggaagagaga 60
ttggaacaat tatcaggtca ttaggatgct gtcctacgga aggagagctg catgatctga 120
ttgcagaggt agaggaagaa gaacctactg gatacattcg attcgaaaaa tttcttccgg 180
tgatgacaga aatactacta naaagaaaat acagaccaat tccagaagat gtccttcttc 240
gagcttttga ggttttagat tcagctaaac gtgggtttct tactaaggac gagctgatca 300
agtatatgac tgaagaagat ggagtttcgc tccgtcgccc aggctgaagt gcagtggcgt 360
gatcttggct cgttgcaacc tccacctccc gggttcaaga gattctcctg cctcagcctc 420
ctgagcagct gggatgacag gcacactcca ccacgcctgg ctaatttctg tatttttagt 480
agagacgggg tttcaccatg gtctggtgac ctcctggtct cgaactcctg acctcaagtg 540
atcctcccgc ctcagcctcc caaaattctg ggattncagg catgagccac cgcacccggc 600
tgcttcctta actcttgatc tcctctctgt atcttgcttt gtctagctgt tctcttctct 660
ccatattcat ccanacattt gcttagaant ncccngaanc ctgggcggtt gaatgttggt 720

<210> 2673
<211> 669
<212> DNA
<213> Homo sapiens

<400> 2673
cgataatgac tttgcacgat tcactttggg atctcaaagt gcttccaaag cattcagatt 60
tacaaacaat tcacaagaca ggtcatcttt gtaataccca tacttacaac gaattaacaa 120
gaggagtgac ttaagattct ccaggaacac agtggcagct attgatgatc tgttttctat 180
ctgtttgata gagcatcatg agaaatcaca aaatacaatg ctatttttct gatgtgtgct 240
aataaagtca aagaaagcaa atacatcttg acacttttgt ccattttcat taaaaaaaaa 300
aaaaagttca gggtgtttgg aattttacac ctcagcacac cttactggta tcaatggata 360
aagcgggtaa ttgacagatc cacccaaatg ccactgcagt cagaagcaga tctggacaca 420
cccttgttta cagtttcata ttgggttgct atagttcccg tgctaaatca ccagctttca 480
ggaacatgac tgctcctggc agtggaaggt gctgaaacag aaattttaat taaaaacttt 540
atcaagtact cttcacagtg ctgcttggca ccatanaaaa tcagtacaat atatcgagcc 600
ctactttgga nganctggat ttctgaagga gctgatccag ttctaantgt cttctcnaat 660
taggagata 669

09500-0050-00-US

0002502650

<210> 2674
<211> 697
<212> DNA
<213> Homo sapiens

<400> 2674
gtagataatg cataagaagc accaagtcag gctcagatgc aactaaaaca catctttgag 60
ccttttcttt ttcccttctc ccctttctaa gcaaaaacct tcctaggatg gcatcttttg 120
ctctaactgg gagacagtca taattggttg tagtcaattc tactaagcag tgttggggtg 180
gttggaaagt ctcttttttg taatttgttt ttgcaaatca ttgtgaggcc acttttttctt 240
tctttctttc tttctttctt tctttctttc gttctttcgt tctttcgttc tttctttctt 300
tctttctttc tctttctttc ttttgctttc cttctttcat ctctttttttg taatttgttg 360
ttgcaaatca ttgtgaggcc acttttcttt ccccttcctt ccttcctttt tttctgtttt 420
ttttttttttt tttcccanan tcttgctctg tcgcccaggt tggagtgcag tggcacgatc 480
tcggctcact gcaccctctg cctcttgggt tcaagcgatt ctcctgcctc agcctcccaa 540
gtagctggga ttacaggcat acaccaccac gccccactaa ttttttgtat ttttggtang 600
gggggggtttc accatgatgg ccangttggt tttgaactcc tgaactcaag tnatctgccc 660
acctcgggnc tcccaaantg ccaaggaatt acaggaa 697

<210> 2675
<211> 627
<212> DNA
<213> Homo sapiens

<400> 2675
tttcacctca gcaaggccag gggatctgca cgttgtgtta gacatggcta aagtagctga 60
taccatcctg ttcctccttg atccactaga aggctgggac agcaccggtg attactgtct 120
ttcctgcctc tttgctcagg gccttccgac ctatacacta gctgtccagg ggatttctgg 180
cctcccactg aagaaacaaa tagataccag gaagaagcta agtaaagcag tggagaagcg 240
ctttccgcat gacaaactcc tcttgttaga cactcaacag gaggcaggga tgctgcttan 300
gcagttggct aaccagaagc aacagcatct tgcttttcga gatcggcggg cctacctatt 360
tgcccatgct gttgattttg ttcctagtga ananaataac ttggtgggca ccttgaaaat 420
ttcaggctat gttcgagggc anactctgaa tgtcaatang ttgctgcata tcgttggata 480
tggtgatttc cagatgaaac agatagatgc ccccggagac cctttccctt taaatcctag 540
angaattaaa ccccaaaagg acccanacat ggcaatggan atttgtgcta cgggatgctg 600
ttnatgatat gggaagaang tcttaaa 627

<210> 2676
<211> 799
<212> DNA
<213> Homo sapiens

<400> 2676
aaatccttcc ttccccgggg tagaagtcca gggtgagaaa ttggttccga actcaaagga 60
acccagtgcc gggccacagc cgggtcacgt ggccggcggc cccccatgac gtgctggctg 120
cggggcgtca cggcgacgtt cgggcgacct gccgagtggc caggctacct cagtcacctg 180
tgtggtcgca gtgctgccat ggacctggga cccatgcgca agagttaccg cggggaccga 240

gaggcatttg aggagactca tctgacctcc cttgacccag tgaaacagtt tgctgcctgg 300
tttgaggagg ctgttcagtg tcctgacata ngggaagcca atgccatgtg tctggctacc 360
tgcaccagan atggaaaacc ctctgctcgc atgttgctgc tgaagggctt cgggaaagat 420
ggcttccgct tcttcactaa cttcgagagt cnaaaaggaa aagactggac tctaatccct 480
ttgcttccct tgtcttctac tggganccac ttaaccgtca ggtgcgtgtg gaaggcctgt 540
gaanaaactg cctgaagaag aagctgaatg ctacttccac tcccgcccca agaacaccan 600
attggggctg tggtcaccac canaattctg tnatccctga tcgggaattt ctgaaaaaan 660
aaaaatgaag aactggaaca ctctacccag aatcaanaag ttgccccaan cccaaaatcc 720
ctgggggttg gtnattttcc tgttcccccc cggttnatgg aattcctggg caaggtccaa 780
acccaacccn ccctgcntt 799

<210> 2677
<211> 489
<212> DNA
<213> Homo sapiens

<400> 2677
agagcatccc cggagcatct taagagctga gcgcagctga caactagggg ccggaccgtc 60
gcaggaggcg tccgctggat accttccccc ttccctgacc tagagctcta cagctgctgc 120
ctcggtactg accgagggtt cccagagctg tctcaccatt gcaaaaacgt tatagcaaca 180
gcctctgatt acgacatggc tgagatcacc aatatccgac ctagctttga tgtgtcaccg 240
gtggtggccg gcctcatcgg ggcctctgtg ctggtggtgt gtgtctcggt gaccgtcttt 300
gtctggtcat gctgccacca gcaggcagag aagaagcaca agagcccacc atacaagttt 360
attcacatgc tcaaaggcat cagcatatac ccagagaccc tcagcaacaa gaagaaaatc 420
atcnaagtgc ggagagacaa anatggtcct gggagggaan gtggacntan gaacctgttg 480
gtggacgca 489

<210> 2678
<211> 768
<212> DNA
<213> Homo sapiens

<400> 2678
atgtaanatg tgtgacatct tatcctgtgg catgctgagc accgacagcc tctgaagccc 60
acactcaacc aggacacaca tgctccctgc tcttggggtt gacctggggt ttatggagtc 120
agtgtgcttg ctcacaaacc tctttatgcc aattgcactg gttatcagaa ttatgtaatt 180
taatgaaata gtaccaaata tttcataaac taattaaata tgactacata aaggtcactg 240
cttctttgaa agttcactat tttggaaaag actcaaaatt agtcactaca gaagcatttc 300
tgtcaatgta aatgtgttat gataactata aaaggcgagg gggaatatta taaaatctaa 360
gaggattcta ctcttcataa gcatcttcag ctccgctgac ttcaaagaaa ctagactgga 420
aatcanacct tgttattgga gtgagttgta aaagaaagtc tacatggaat tccaatgggt 480
agatccttat tcagagaact atttgtgcct catcacaggt tagaccggca tgttttgcca 540
caatagctgc gagttcaaaa tgttgtaagg tctcgtttat gttttatgta tttcnntatg 600
tattgtnttc caaaaggatt ttctgcttta atcagctttt accatttaat ttgccttagg 660
gcctggaatt atgttcagat gaanaaagga tttgggccgt tattaaaact naacanccac 720
cncottaaaa aaaaggaaaa agtttttcc cntttggttt ttaaaaag 768

<210> 2679

0050503-0050800

0509209.00200

<211> 858
<212> DNA
<213> Homo sapiens

<400> 2679
agctgggtcg cggcgtctcg ctccggtcgg gaggactgag gacagccccg cctccgcccc 60
ctgggtcaag cccggcttcc ttttcagttc gtccatcttc tanaaacgag tccccgagac 120
cccgggctgc cttcttgggg ctgctccgcc tcctgaccag ccctcgtcag ccactcgaag 180
tccctgagga gacgtggaga ggaggaggga cacggcatgg ggggagtccg ggaagggaga 240
cgagcgtctg aagacgtcct cccgagggca gaaggggccg ggggagctgg cgcanggctc 300
tctacctatc gctgcaggct cctgggcgat tgtancggga ccgtcacaca caactggcac 360
ccaggccagg ggtccagagc taaattctgc ctgcaggagc ggttattgtg gcatccgttt 420
ctaaaaagtt taaaggcaac attttatttt attttaattt ttttgagaca agatctgcct 480
ctgtcgccca ggctggagtg cagtggcgag atctcagctc acttgcaacc tgtgcctccc 540
ggcttcaagc gattctcagc ctcagcctcc cgagtagctg ggattgcang cgcccggcac 600
cacgcccggc taatttttt ntttttttctt tcngttttgt ttgaaactca ntctcgctct 660
gtttgcccaa gctgaaatnc agtgggggcg ctctcggctc ncttgcaaac ctctgcctcc 720
caaggtttca aagcnattct ccttgcctcc agcctccccc gaattacctg gggaatttnc 780
agggaaccgt tgccccccc ctcccgggct taaantttt gnttttttt aaagtttnaa 840
aaattggggg tttncccc 858

<210> 2680
<211> 548
<212> DNA
<213> Homo sapiens

<400> 2680
tttgctgagg ctgttaactt ctgcactgtt gattggctgc cattaggccg acagtgtgtg 60
gagcattatc gcttgcttca tcgatattgt gtgttttccc atgatgagat gatctgcaag 120
atggcttcca aggctgatgt attagatgtt gtagtggctt caactgttca gaaagacatg 180
gccattatga ttgaggatga gaaagcttta agagaaactg tccgtaaatt gggagtgatt 240
gattcggaaa gaatggattt tgagctgttg ccagatgatg aacgtcagtg tgttaaatgc 300
aaaactacat gcttcatgtc tgccatctcc tgttcttgta aacctggcct tcttgtttgc 360
ctgcatcatg taaaanaatt gtgttcctgt cctccttata aatataaatt gcggtatang 420
tacacnctgg atgatctcta ccctatgatg aatgcattga agcttccaac canaatctta 480
caaccaaatg ggccttgaat gtgaatgaag ctttggaggc aaacatcnac canaanaaaa 540
ccttgtcn 548

<210> 2681
<211> 529
<212> DNA
<213> Homo sapiens

<400> 2681
gggagcgggg cggcgggcgc cggggctggc atggcgtggc cctgtatcag ccgcctgtgc 60
tgcctggcgc ggcgctggaa ccagctggac cgctccgacg tggcggtgcc gctcactctg 120
cacggctact cggacctcga cagcgaggag ccgggcacgg gcggcgccgc ctcgcgcagg 180
ggccagcctc ccgcgggcgc ccgggattcc ggccgggacg tgccgctcac tcagtaccag 240

cgggacttcg gcttgtggac cacgcccgcc gggcccaagg atccgccgcc ggggcgcgga 300
ccgggggcgg gcggccgcag gggcaaatcc tccgcgcagt cctccgcgcc acctgcgccc 360
ggcgcccgcg gggtctacgt tctgcccatc cgcgacacgg acgcagctgc agcagtgacc 420
acgtcgtaca gacaggaatt ccaggcttgg actggaatga aaccctccag atccacnaag 480
acggaanccn cccgaatcat cacaacccac acttccggat tggacaaca 529

<210> 2682
<211> 505
<212> DNA
<213> Homo sapiens

<400> 2682
agttctncag gggtgaggga tggaangact tttttggcaa tgatggaaat gagatgtctg 60
caggaagatg ggatttacaa agaaatagga aatgtttatc attgaccata caaagctggc 120
ttatcttact tgtagaagag tgtttggcag ctgaaaccca agggaaagaa aggaattgcg 180
tcattatagg caattcaggc taaatattat actacgtact ccatataccc tctttttgt 240
ttttgccccc aacaaagaga aggggtcttg ctctgtcacc cagtctggag tgcagtggct 300
aaatcatggc tcactgcagc ctgcacctcc tgggcacaag tgatcctccc atctctgcct 360
tgaatagctg ggactccagg tgcacgccac aatgcctaat ttcctagttn tttgtnaaca 420
cagggtctcg ctgtgtagcc caggctggtt tcaacctcct ggcctcaagt gatcctcttg 480
cctcagnctc ccaaatatcc tctac 505

<210> 2683
<211> 571
<212> DNA
<213> Homo sapiens

<400> 2683
gtcacgtgtc ccccccgcgg ggggcggccc ttgagggcgg cgcttccggt cggcgggagc 60
ctggtggccg cagcggcggt ggcgacgacg gccgagacgt ggggatggcg ggcgccggga 120
gcgaatcccg gttcgccggg ctgtcgctgg tgcagctcaa cgagctgctg gaggacgagg 180
gccagctgac ggagatggtg cagaagatgg aggagacact naatgttcag cttaacaaag 240
aaatgacact tgccagcaac cggagcctgg cagaaagaaa ccttttgtac cagccccagc 300
tggacacgtt gaaagcacgc ttgacccaga aataccagga actccaggtt ctctttgaag 360
cctatcagat aaagaatacc aaattagaca gacagtctag cagtgcttcc ttggagaccc 420
tgttatcact tcttcacgca caaggggcca agattgagga cgacactgag aacatggcag 480
agaatttctg gatggagaac ttcctctgga ttccttcatt gatgtctttc agagcaaacg 540
ganactgncc cacatgcnac gggtgaaaat c 571

<210> 2684
<211> 567
<212> DNA
<213> Homo sapiens

<400> 2684
aataacaatg gaacatatga tggtattgca tattttgagt gcaaagaaaa gcatggtatt 60
tttgctcctc ctcaaaaaat atctcacatt ccagaaaact ttgatgacta tgtagacatt 120
aatgaagatg aagactgtta ctcaggatga acgatatcag tgctataatc aagagcaaaa 180

05052005-0702300

tgatacagag ggtccaaaag acagagaaaa ggatgtcagt gaatattttt atgagaaatc 240
cctacctagt gtgaatgata tagaagcctc agttaataga agtagaagcc ttaaaataga 300
aacagacaat gtncaggaca tttctggggt acttgaagcc catgttcacc ancagtcttc 360
agtggattca cagatttctt caaaggaaaa caaaggacct catttctgat gccacagaaa 420
aggtttccat cgctgcanaa gatggcactt tagacgatac cttttccgan gaattggaga 480
agccccgcag tttacggaaa caagaagaca acctatntgc tnaancttca aaagagcttt 540
gttcancact tctggatctt ttaacaa 567

<210> 2685
<211> 690
<212> DNA
<213> Homo sapiens

<400> 2685
tttataatat tccacctaat aatgaaacga atttagaaga ttgctcagta atgcagccac 60
ctgttgccta tccagaagaa aatacactac tcatcaagga agaaccagat ttagatggtg 120
ctctactctc ggggccagat ggtgatagga atgtgaatgc aaatttattg gctgaagctg 180
gcactagtca agatggaggt gatgctggta cttcacatga tttcaagtat ggtttgatgc 240
ctggtccttc aaatgatttc aagtatggat tattgccaga atcttggcca aaacaagaaa 300
cctgggaaaa tggtgaatca tctctaatca tgaacaagtt aaaatgccct cattgtagct 360
atgtagccaa atacagacga acactaaaaa ggcacttgct cattcacaca ggagtgagat 420
catttagctg tgatatttgt ggaaaactgt ttactcgaag agaacatgta aaaagacatt 480
ccctggtgca taaaaaggat aaaaaataca aatgtttggt gtgtaagaag atcttcatgt 540
tagcagccag tgttggaata agacatggat ctcgacgtta tggtgtttgt gtaactgtgc 600
anataaatca cagccaggaa ggcaagaagt gtnatcaggg acaggatcaa attccccccgg 660
atganatacg aganatgagt ngaaactgat 690

<210> 2686
<211> 608
<212> DNA
<213> Homo sapiens

<400> 2686
aagatgcccc ggcgtctttc tagcctccgc ctccaggcgg gtgaggaggt gacacctgag 60
aattcctccc tctcacccct gaccctgccg gaaagcgaaa ctganatgcg ggcattgggc 120
cctgggaagc gtggggaagg ggaaaggaga aagccagaaa atggagaaat taagtccttt 180
ccatggatca ttccttctgt aaacaganat cacaaagcaa gagcttcanc atcctcgtga 240
aaaagacatt ttgttctggg tgtcatcatc tccttccact acagcttgca attggaacaa 300
gcttcacatc ctgggggtgc tgcctatctc tgtcttgatt tctgtctgtc tattcctccc 360
attgacagga atgtcgtttg tatcctccac gcancagttt gcaaaaatcc agcaaggttt 420
atggtttatg ttgcccanca tgtntaaaca caacgctctc aaatgctttt taaaaatcta 480
tgaatttgtt agatgtcttc acatcctggt cctcctaccc caattctcaa acacaaanta 540
ctctgttgcc ctattatant cctgcganaa ttctggctaa ngattaagtt gacngtctaa 600
gcccccaa 608

<210> 2687
<211> 511
<212> DNA

US 2003/0224380 A1

<213> Homo sapiens

<400> 2687
gtccctcaca ccgagagttc ctgcgcgtgg ggagttggag agtttgcgtg gcgggaacgc 60
ggcggcagtg agagcgagcg gcgccggccc ttgcgtccgg tgcggagatg ctgaccccgg 120
cgttcgacct cagccaggat ccggacttcc tgactatcgc catccgcgtg ccctacgccc 180
gggtctccga gttcgacgtc tacttcgagg ggtctgactt caagttctac gccaagccat 240
actttctcac attgaccctt cctggaagaa ttgtagaaaa tggaagtgag caagggtcct 300
atgatgcaga taaaggaatt tttaccattc gcctgcccaa aaacccctgg ccagcatttt 360
gaggggctga acatgttaac tgctcttctg gcacccagaa aatcccagga cagcnaaacc 420
acttgtggaa gaaataggtg cttctgagat tcctgaggaa ttagttgacc atgaagagtt 480
tgattgggaa attgagcana caccctntga a 511

<210> 2688
<211> 453
<212> DNA
<213> Homo sapiens

<400> 2688
gtgccgcccg ggagaacagg tcatcggtcg gttcccgtga aaacaaaaac aatcggccgc 60
gccgtcgcag gcacccgaac gtcgcgagcg gggcctgggg acgcggagcc gagtgcagcg 120
agcgaacggg agcagcggcg actcgccggg gggctagggc gccatggggc aggcgggctc 180
cggctgcgcg gggctccccc ggcgccgcgg ctagtgcgcc cgccgcctcg gccgcctcag 240
cctcccgcgc cgcccgcttg gggaacgagg agcaggacgc ggcctcggtg gggcccgggc 300
cgaacggctg cggacacctg ggcgccgagg agccgagcgc cgccgtctcc ggcatggatc 360
agtgcgtgac ggtggagcgc gagctggata aagtgctgca caagttctca ngctacnggc 420
anctgtgcga ncgcggcctg gaagganctc atc 453

<210> 2689
<211> 742
<212> DNA
<213> Homo sapiens

<400> 2689
agaagagaaa gtcaatgaaa ttaaagaaga cagtcattgt ggagaaactt ttaccccagt 60
tccagatgac aggctgaact tccagaagaa gaaagcttct cctgaagtaa aatcatgtga 120
cagctttgtg tgtgaagttg gcctaggtaa ctcatcttct aatatgaaca tcagaggtga 180
cactggacac aaggcatgtg aatgtcagga atatggacca aagccatgga agagtcaaca 240
acctaaaaaa gccttcagat atcacccctc cttgagaaca caagaaaggg atcacactgg 300
aaagaaaccc tatgcttgta aagaatgtgg aaaaaacatt atttaccatt caagcattca 360
aagacacatg gtagtgcaca gtggggatgg accttataaa tgtaagtttt gtgggaaagc 420
attccattgt ctcagtttat atcttatcca tgaaagaact cacactggga gagaaaccgt 480
atgaatgtna acnatgtggt aaatctttta gttattctgc tacccctcga atacatgaaa 540
gaactcncat tggagaaaag ccttatgaat gtccggaatg tgggaaagca ttccatagtc 600
ccagatcctg tcccagacnt gaaaggagtc ccatgggana aaaggttatc catgttagga 660
atgtggaaaa gccttcctgt gtcccgttat gttcgttnac ntgaaaggga cccctctngg 720
aaaaaacttt ntgaatgtta nc 742

US20050202500

0022050.0002

<210> 2690
<211> 724
<212> DNA
<213> Homo sapiens

<400> 2690
gaaaattgca cacttaaaga catcagtgga tgaaatcaca agtgggaaag gaaagctgac 60
tgataaagag agacagagac ttttggagaa aattcgagtc cttgaggctg agaaggagaa 120
gaatgcttat caactcacag agaaggacna agaaatacag cgactgagag accaactgaa 180
ggccagatat agtactaccg cattgcttga acagctggaa gagacaacga gagaaggaga 240
aaggagggag caggtgttga aagccttatc tgaagagaaa gacgtnttga aacaacagtt 300
gtctgctgca acctcacgaa ttgctgaact tgaaagcaaa accaatacac tccgtttatc 360
acagactgtg gctccaaact gcttcaactc atcaataaat aatattcatg aaatggaaat 420
acagctgaaa gatgctctgg agaaaaatca gcagtggctc gtgtatgatc agcagcggga 480
agtctatgtn aaaggacttt tagcaaagat ctttgagttg gaaaagaaaa cggaaacagc 540
tgctcattcn ctcccacagc agacaaaaaa gcctgaatca gaaggttatc ttcnagaaag 600
agaagcagaa atgtttcnac gatctcttgg caagtgcaaa aaaagatctt gangttgaac 660
gacnaaccat aactcnctga attttgaact gagtgatttc caanaaaatt ttgaagaaac 720
cccn 724

<210> 2691
<211> 563
<212> DNA
<213> Homo sapiens

<400> 2691
ctctcgggcc tgggcggcgc anacgaagcc tgaggcggcg gcgcgaggca gttccagcta 60
ttcttcagat gctctggatt ttgagacgga gcacaaattg gaccctgtat ttgattctcc 120
acggatgtcc cgccgtagtt tgcgcctggc cacgacagca tgcaccctgg gggatggtga 180
ggctgtgggt gccgacagcg gcaccagcag cgctgtctcc ctgaagaacc gagcggccag 240
aacaacaaaa cagcgcagaa gcacaaacaa atcagctttt agtatcaacc acgtgtcaag 300
gcaggtcacg tcctctggcg tcagccacgg cggcactgtc agcctgcagg atgctgtgac 360
tcgacggcct cctgtattgg acgaatcttg gattcgtgaa canaccacag tggaccactt 420
ctggggtctt gatgatgatg gtgatcttaa aggtggaaat aaagctgcca ttcanggaaa 480
cngggatttn ggaaccgccg ccgccaccgc gcacaacggc ttctcctgca ncaactgcan 540
catgctgtcc gaacgcaagg act 563

<210> 2692
<211> 754
<212> DNA
<213> Homo sapiens

<400> 2692
gnaactgata tacatttatt tgaataatgt gtaactatta tggatctatt ttaatgaaca 60
atttttacca tttcccaagc tgcctgttta ttataagcat gacatgttta ctataaacct 120
tttgccccca taatttcttt ttttaaagga aattaatatt agtaaaataa acacctcttt 180
aatggaagct gcaaccttct agtgatccaa gtagacaata gatggtggca tcacagactt 240
tatctacaca ctttcgggtc tgaccactac ctcccacaat acctagccat tttggaaggg 300

gaaaacatgc ggtggtctag ctgtatagct cagggcttaa tttcagcttc tgagattgtg 360
atgtcatatt tcactctcaa aacataggct gaaagcacga attactcaaa aagtaagcaa 420
gccaatacct ggtgaatcta tgggacagtc atacacatac atcaggggaa aatgtgtgtg 480
tacaacccaa atttacagta tgattgtcat tctttgactt tgttttgtat agcctgactc 540
tgttgaacat gaaattatta gtactctagg ttttggacag cttganttca tttgaattcc 600
ntccttanga ataagttttt atatacactg ctaaatgtgt gatgagaatc ataaaacact 660
aaccanctga aggtagctgt gattcacttt ccccncccct aatgaaagac taagccagta 720
tttccngttg tgtnantgga ctccgttccc tcca 754

<210> 2693
<211> 653
<212> DNA
<213> Homo sapiens

<400> 2693
gcagccaagc accacattac tattgcagag atctatgaga ctgaacttgt agacattgag 60
aaggctattg cacattatga acaatctgct gattattaca aaggagaaga atccaacagc 120
tcagcaaaca agtgtctgct gaaggtggca gcatatgctg cccagcttga gcagtaccag 180
aaagccattg agatctatga gcaggttggg gcaaacacaa tggataatcc tttgttgaaa 240
tacagtgcaa aggattactt cttcaaagct gccctctgcc acttcatagt anacgagttg 300
aatgccaagc ttgctcttgg gaaatatgag gaaatgtttc cagcatttac tgattcaaga 360
gaatgtaaat tattgaaaaa actcctagaa agctcatgaa gaacagaaca gtgaagctta 420
cactgaagca gtgaangaat ttgactcaat atctcgcttg gatcagtggc tgaccaccat 480
gttgcttcgc atcaaaaagt ccatcccagg ggatggagaa ggagatggag acctanaatg 540
aaatgttttt gtctttgtgg catgcagcta actcctcttt antttttgtct tagggtccag 600
tgatctttat ngggatgcct atttaatggc ttaattttgt tgcntntnaa cca 653

<210> 2694
<211> 710
<212> DNA
<213> Homo sapiens

<400> 2694
gcatttttta tggttttgtt tcaaaagcca ttttcttctg ggaaaactat taccaaacac 60
cagtggatca aaatatttaa acatgcagtt gctgggtgta ttatttcact cttgtggttt 120
tttggcctca ctctttgtgg accactaagg actttgctgc tatttgagca cagtgatatt 180
gttgtcattt cactactcag tgttttgttc accagttctg gaggaggacc agcaaagaca 240
aggggagctg ctttttttcat tattgctgtg atctgtttat tgctttttga caatgatgat 300
ctcatggcta aaatggctga acacccagaa ggacatcatg acagtgctct aactcatatg 360
ctttacacag ccattgcctt cttaggtgtg gcagatcaca agggtggagt attattgcta 420
gtactggctt tgtgttgtaa agttggtttt catacagctt ccagaaagct ctctgtcnac 480
gttggtggan ctaaacgtct tcaancttta tctcatcttg tttctgtgct tctcttgtgc 540
ccatgggtca ttgttctttc tgtgacaact ganantaaag tggantcttg gttttctctc 600
attatgcctt ttgcaacggt tatcttttt gtcatgatcc tggatttcta cnttggattc 660
catttgttca ntcnaaatgg aatttccnaa tgttgcttgt tatggatccn 710

<210> 2695
<211> 506

09/25/2006 15:46:09 - 09/25/2006

<212> DNA
<213> Homo sapiens

<400> 2695
ttgcatttcc ccctcctcag atgggaagcc tggcaaagct gcccaaccgg gtagtgcccc 60
tcacccatcg gatcactgcc ttcttcctcc tcttgcccca ttcacccgct tccttgcact 120
ctgggagtgg ggcagggtaa ggtgggcctt acanacaggc tgaggtttgg gtggtgtgat 180
ctgtcctaat tggcccctca ccaatgcatc tatctgtctg ccaccagccc accccaccct 240
gcccccaccc tcacccacgc ttctgctcat tggtctcaat cccagcctgg aagcagggag 300
taaggctgga ctccaatggc ccattccccc caccccagcc caagacgtgg gaggctgctt 360
cccagtaaga atccaggagc aagctttggt gaatccaatg ggctgaatgg ctctatggat 420
gtggttgttt ggatgtggta aggaatgctt agcaaaatgt gtgtgtatct ctgaagctnt 480
cangggttg gtgggtnttt ttctct 506

<210> 2696
<211> 454
<212> DNA
<213> Homo sapiens

<400> 2696
ccccgcctcc gcccccggct ggcgtgagct gggtgtttcc tgcctctctc agtccgggtt 60
tggagactcc tgcgtcctcc gacttttcgt ggaagagatg tcaggagaaa gtgtggtgag 120
ctcagcggtg ccagcggctg ctacccgcac cacttccttc aagggcacga gccccagctc 180
caaatacgtg aagctgaatg tgggtggagc cctctactat accaccatgc agacgctgac 240
caagcaggac accatgctga aggccatgtt cagcgggcgc atggaagtgc tcaccgacag 300
tgaaggctgg atcctcattg accgctgtgg gaagcacttt ggtacgatac tcaactacct 360
tcgagacggg gcggtgcctt tacccgagag ccgccgggag atcganganc tgctagcana 420
agccaagtnc tacctantcc aaggcctggt ggaa 454

<210> 2697
<211> 729
<212> DNA
<213> Homo sapiens

<400> 2697
tattcaacat ggaggcggag gtcgataagc tggaactgat gttccagaaa gctgagtctg 60
atctggatta cattcaatac aggctggaat atgaaatcaa gactaatcat cctgattcag 120
caagtgagct gtcaccactg actaaagaag agaaaactgc ggcagagcaa ttcaaatttc 180
acatgccaga tttatgaagt aatggacttg gaaaggaaat tctaacagag aagagcttaa 240
ttccggagaa atttaggaag atgtcttgtt aacccttgat gtctanagat tgggggctgg 300
tgaaggggt ttggcttcaa tgactggata atgatatctt tcatgagaga gattataaga 360
agaagggcag ataacatatg aataaagttc agccaaaagg atcaaatgag aataaaacga 420
tttaaatata tgtncacacg catgcacaca cacacttagt cttgtnattt caggccagaa 480
attctcaaca ctattttgca tctgttttct ttttctaagt catgataata tanatgttct 540
ggtctatcat aaaanaatgt ttatgtncnt ttcagtcatt cggtatgtgg ctttgttaat 600
taaantttag gccaaacatt tgtgttatca tgatatataa tttcnttttg ttaatttga 660
ttgcccntgt ngtcncatta ttgttgaaac tgcttttatg ttacctgttn tccccccca 720
aaacctaaa 729

US20050250000

<210> 2698
<211> 631
<212> DNA
<213> Homo sapiens

<400> 2698
aattaaaggt ggaaaagggg gaaacgtccc tgcaaagttc tgagacacat cctcctgaag 60
tggctcttcc tcctgtgggg gagccgcctg ccctggaaaa ttccactgct ctccttgagg 120
gagttaatac agttgtggtg acaacttctg ccccagaggc tttgctggcc tcctgggcga 180
gaatttcagc cagggcgagg acaccagagg cagtggaatc tccacaagag gcctctggta 240
agcgcaacat gaagagctta ttctggtcca atggggaaat aagcttagta gatattaatc 300
actggtacat tttagggtat atcaaaatcc ctttgagggc cggtgattcc tggaccctgc 360
ccacagagtt tctggtgcag gtctagggca ggacctgagc atttatttgc atttcttttt 420
ttttttcctt ttttttttgt tganacagtt tctcccttgt tgcccangct agantgcagt 480
ggcatgatct cagctcaccg caacctccac ctcccaggtt caagcaattc tcctgcctca 540
nccttcctga ntnctgggat tacaggcatt ttnccaccat gcccggctaa tgttgtgttt 600
ttantaaaaa tggggtttct ccatgttggt c 631

<210> 2699
<211> 742
<212> DNA
<213> Homo sapiens

<400> 2699
cggctcctac cctgaaggtg cacctgcagt cctcgccgat aagaggcagc agttcggaag 60
ccggttcctg agagatccgg cgcgcgtctt ccaccacaat gcctgggaca atgtggagtg 120
gtcggaagag caagccgcgg cggcggagag aaaagtccag gagaacagta tccagcgggt 180
gtgccaggag aaacaagttg attatgagat caatgcccac aaatactgga atgacttcta 240
caaaatccac gaaaatgggt ttttcaagga tagacattgg ctttttaccg aattccctga 300
gctggcacct agccaaaatc aaaatcattt gaaggactgg ttcttggaga acaagagtga 360
agtacctgaa tgtanaaaca atgaggatgg acctggttta ataatggaag aacagcacag 420
gtgttcttcg aagagccttg aacataaaac acagacnnct cctgtggagg agaatgttac 480
tcacaaaatt agtgacctgg aaatttgtgc tgatgagttt cctggatcct canccaccta 540
ccgaatactg gaagttggct gtggtgtggg aaacacagtc tttccaattt tacaaacgaa 600
caatgacccg ggactctttg tttattgctg tgatttttct tccacagcta ttagaactgg 660
tccaaacaaa ttcnaaatat gatcctnctc cggtgttttt gcctttgttc cccaacctgt 720
ntnatgaaaa aaaaaattnc cc 742

<210> 2700
<211> 560
<212> DNA
<213> Homo sapiens

<400> 2700
ccganaggag tagcctgatt cccatctccg gacatcgggc ctctcccaat cctgtggcca 60
tggaaacccg aagtgacaac agaccgtctg ttcccgttca gttccaatat tttttgccaa 120
cttacccccc ttctgcatac ccactggcgg cacataccta caccccaatc accagttccg 180

0050305.00000

tgtccactat ccgacagtat ccagtttcag ctcaggctcc aaactctgcc atcacagctc 240
anactggtgt tggggtagcg tctaccgtcc acctaaaccc catgcagttg atgacagtgg 300
atgcatcgca tgctcgacat attcaaggga tccagccagc acccatcagt acccagggta 360
tccagccggc ccccattggg acccagggat acagcctgca ccacttggca cacagggaat 420
tcactcanca accccaatca acacacaagg gcttcagcct gcacctatgg gtactcanca 480
acctcagcct gaaggaaaaa ttcancantg gtgttggcan atggaccaca attgtggcca 540
acctattanc aatccattca 560

<210> 2701
<211> 773
<212> DNA
<213> Homo sapiens

<400> 2701
caagcatgtg atgttcttgt accttcttct gatagtacat ctcaacagtt gactccatat 60
agtcaagtcc atatttgttt gagatctggc aactatcagg aggtaataca gattttcatt 120
gaagacaact taaccttgag tttacctgtc cagttccgac agtcagtcct aagagaactc 180
tttaagaaag ctcaacaggg aaatgaagct ctagatgaaa tctgttttaa agtttgtgcc 240
tgtaatacag tccgtgatat actggaaggc agaacaatta gtgttcaatt taaccagcta 300
tttcttagac caaataaaga gaaaatagac tttcttcttg aggtatgttc aagatcagta 360
aatttagaaa aagcttcaga gtctttgaaa ggaaacatgg ctgcttttct aaagaatgtg 420
tgtctggggt tggaagatct gcagtatgtt ttcatgattt cttcacatga gcttttcatt 480
acattgttga aagatgaaga acgaaagcta cttgttgatc agatgaggaa gagatcccct 540
agagtaaatc tgtgcattaa acctgtaact tcattttatg atatcccagc ttcagcaagt 600
gtcaacattg gtcagttaga gcatcaactt atattgtcag tggatccttg gaagattaga 660
caaattttaa ttgaattaca tggtatgact tcnnaacgcc agttctggac agtgtctaat 720
taagtgggaa gttcccnctg tctatagtgg ggttntcccg gggaatttaa nac 773

<210> 2702
<211> 484
<212> DNA
<213> Homo sapiens

<400> 2702
cttgttggcc tactggctct ttttgacagc ccccagtgcg aaaggctgcc agcatgtcat 60
cagtgagccc catccagatc cccagtcgcc tcccgctgct gctcacccac ganggcgtcc 120
tgctgcccgg ctccaccatg cgcaccagcg tggactcggc ccgcaacctg cagctggtgc 180
ggagccgcct tctgaagggc acgtcgctgc aaagcaccat cctgggcgtc atccccaaca 240
cgcctgaccc cgccagcgac gcgcaggacc tgccgccgct gcacaggatt ggcacagctg 300
cactggccgt tcaggttgtg ggcagtaact ggcccaagcc ccactacact ctgttgatta 360
caggcctatg ccgtttccag attgtacagg tcttaaaaga naaccatatc ccattgctga 420
agtggancag ttggaccgac ttgaggantt tcccaacacc tgtnaaatga gggaggagct 480
anga 484

<210> 2703
<211> 696
<212> DNA
<213> Homo sapiens

0050205.0003-00400

<400> 2703
aaaaatcagt cagcaaaaga agatgtaaca gaaaggcaaa gcaccaaacg atctcctcag 60
caaactgtac catatgttgt tcctctctct cctaagctcc ccaaaacaaa ggagtatgcg 120
tctgaaggag aaccattgtt tgctggggga agtgccattc tcaaagagga gaatctttca 180
gaagattcta agagctcatc actaaattca ggaaattatt tgaatcctgc ctgtagaaat 240
cctatgtata ttcatacttc agtctcccag gatttttctc gaagtgtgcc aggcaccaca 300
agttcaccac tagttgggga catatccccc aagagcagtc cccatgaagt taaattccaa 360
atgcagagga aaagtgaagg aaattgatgg gaaggctctg ttcctactca agantgatgt 420
gatgatgaag tatatggggc tgaagctggg gccagcatta aagctgtgtt actacattga 480
aaagcttaaa gaaggaaaat acagttaaaa aaatgtgtna gtttanattg ggacataatt 540
ctcaggtgtn ctgttaacat tttaatttaa aagtatttct cttaacantt tttgttttgt 600
naacagttcc cataaaaata ttttatcana attgcaaaac tgttntaaca ntttcaatcc 660
actttgtttt ttttcctgga atccccaacc ancttt 696

<210> 2704
<211> 525
<212> DNA
<213> Homo sapiens

<400> 2704
aatcctggaa caaggctaca gcgtcgaaga tccccagcgc tgcgggctcg gagagcagtc 60
ctaacggcgc ctcgtacgct agtgtcctcc cttttcagtc cgcgtccctc cctgggccgg 120
gctggcactc ttgccttccc cgtccctcat ggcgctgctc cgacgcccga cggtgtccag 180
tgatttggan aatattgaca cagganttaa ttctaaagtt aagaatcatg tnactattag 240
gcgaactgtt ttagaagaaa ttggaaatag anttacaacc agancagcac aagtngctaa 300
gaaagctcag aacaccaaag ttccagttca acccaccaaa acaacaaatg tcnacaaaca 360
actgaaacct actgcttctg tcaaaccagt acagatggaa aagttggntc caaagggtcc 420
ttctcccaca cctgaagatg tctccatgaa ngaagaaaat ctctgccaag ctttttctga 480
tgccttgctc tgcaaaatcn anganattga taacnaagat tggga 525

<210> 2705
<211> 780
<212> DNA
<213> Homo sapiens

<400> 2705
ttctacaggg gatctggaca actctcctct gtccccacct tcaccaaggg accaaaagca 60
gaacgcatac tcgggcactc aagaagttaa gtgaggtgaa caagcgcctc caggatctcc 120
gttcctgtct gagccccaag ccacctcagg gtcaagagca acagggccaa gaggatgaag 180
tggtcttggt ggaagggccc accctcccag agacccccgg actcttccca ctcaaaatcc 240
gttgccgggc tgacctggtc agattgcccc tcaggatgtc ggagcccctg cagagtgtgg 300
tggaccacat ggccacccac cttggggtgt ccccaagcag gatccttttg ctttttggag 360
agacagagct atcacctact gccactccca ggaccctaaa gctcggagtg gctgacatca 420
ttgactgtgt ggtactaaca agttctccag aagccacaga gacgtcccaa cagctccagc 480
tccgggtgca gggaaaggan aaacaccana cactggaagt ctcactgtct cnagattccc 540
ctctaaagac ccttatntcc actatgaaga agccatggga ctgtcgggac ggaactctcc 600
ttcttctttg atggggacaa agctttcagg caggggactg cccacttgaa ctgggcatgg 660

0509204.0020600

aatctgggga actcctttna agtctggggg ctgacacccc ctccctgttt gacgggccca 720
ccctggaatt tgggggaaaa tgactttccc ttttttggcc ccctnanggg ttnnccttan 780

<210> 2706
<211> 512
<212> DNA
<213> Homo sapiens

<400> 2706
accaatttct ctgagtttct tgaaatgtct ttaaaacaga cattttctc accaaacagt 60
ttgagtatct ttattaagga aacccttacg aatcctgaaa attatgctag catgattttt 120
ttatatatag aagtttaaaa ataaaccagg tcaggtttgt atatgtaaaa ttgttgacat 180
caatgatgtc tttccatatt cttatctggg cttaagaaat acattctgta tttttccaga 240
ttctttgtag cctttgaaag atttttacag tacatatgtc ttgactgagc tgtcctttct 300
taatacaaaa gcgtgtataa ttttcttaac ttgtacagtt ggtaaacttt tatgagagga 360
attgttattc tgagtctgtc agctttcatt ttattttgct aaggtttttc taatgaattt 420
ttaagtgttt gtgtagtaat taagtcatat ttcttatcca ggtggttaaa gcattcataa 480
aggattataa aatttnnttt nntttttttt nt 512

<210> 2707
<211> 355
<212> DNA
<213> Homo sapiens

<400> 2707
agtgccgaac cttcggctgc tccccgcctc aggacaccaa gatgcctggc gaacagcagg 60
cagaggaaga ggaggaggaa gagatgcagg aggagatggt gctgctggtg aagggtgagg 120
aggatgaggg tgaggagaag tatgaggtgg tgaaactcaa gatccccatg gacaacaagg 180
agagacacga tctcgctttg tcacccaggc tggagtgcag tggcacgtga ttgtagctca 240
ctgcagcctt gaactcttgg gctcaagtga tcctccttcc tcggcctacc aagttgttgg 300
gactacaagt gcaccccacc acacctggct aatttttcac tttttgtnna nacga 355

<210> 2708
<211> 746
<212> DNA
<213> Homo sapiens

<400> 2708
actcccagac tccttgcgga gctcgccgcc tgattctagg ctggtcacta ctccgagcct 60
gtgacgtttg cggcagccag gccgtcgacg atgcccagtg aaactctctg ggaaattgca 120
aaagctgaag tggaaaaaag gggaattaat ggaagtgaag gtgatggagc tgaaattgca 180
gaaaaatttg ttttcttcat tggcagtaaa aatgggggaa agactactat tattctaagg 240
tgtcttgaca gagatgaacc accaaaacca accttagctt tggaatatac atatggaaga 300
agagcaaaag ggcacaacac accaaaagat atcgctcact tttgggaact cggtggagga 360
acctctttat tggacttaat cagcataccc atcacaggtg acaccttacg gacgttttct 420
cttgttctcg ttctggatct ttcaaaacct aatgatctct ggcccaccat gggaaaatct 480
cttgcaagcc acaaaaagcc atgtagacaa agtgataatg aaactgggaa agacaaatgc 540
taaagcagtt tctganatga gacagaagat ctggaataat atgccgaagg atcatcctga 600

US 2005/0042600 A1 2005-02-24

tcatgaatta attgacccat ttccggtacc tctggtcata attgggaaat taattntgat 660
gttttcccgg attttgagtc tgaaaaaaaa aaaggttatt ttgccanaac cttccaattt 720
gtttgcccnt ttattntgga ancctc 746

<210> 2709
<211> 620
<212> DNA
<213> Homo sapiens

<400> 2709
agccgcctcg cgcccggtcc cgcggtcgca gctccagccg cctcctccgc gcagccgccg 60
cctcagctgc tcgctctgtg ggtcggtcct ctccggcact tgggctccag tcgcgccctc 120
caagcccttc aggccgcccc agtgtcctcc tccttctccg gccagaccca gccccgcgaa 180
gatggtggac cgcgagcaac tggtgcagaa agcccggctg gccgagcagg cggagcgctg 240
cgacgacatg gccgcggcca tgaagaacgt gacagagctg aatgagccac tgtcgaatga 300
ggaacgaaac cttctgtctg tggcctacaa gaacgttgtg ggggcacgcc gctcttcctg 360
gagggtcatc agtagcattg agcagaagac atctgcacac ggcaatgaga agaagattga 420
gatggtccgt gcgttccggg agaagataga taaggagttg gaggctgtgt gcccggatgt 480
gctgagcctg ctggataact acctgatcaa gaattgcagc gagacccact acgagagcaa 540
agtgttctac ctgaagatga aaagggacta ctaccnctac ctggctgaaa atggcccccg 600
gaanaaaaaa agggcnacgg 620

<210> 2710
<211> 833
<212> DNA
<213> Homo sapiens

<400> 2710
ttaagctatt ctttagaaaa ttcagttcta aggaaagagt tgatccttat gagggagatt 60
ctgatcatat taaaaatctg ggtaaactaa aacctgctca taacctcata gtatgcaacc 120
aaagaatact aattcatttt atcactttca ttggtaaaac ttttaaattc aacacctgaa 180
aatcatgagg gaaaatgatt acctcttgag atatattatt gatgacattt aaagggaaaa 240
gtcctaaatt taccttaaat aactgaaatg aattaagcct tcatagcgta ttttccttga 300
agcatttaaa tttgctagtg atgaatcaaa taaatttgat atacttaaaa taatttggac 360
agtttttatg tgaccagatt aagtgctttt gtcatttgag ctgacaagtt tttaaaactt 420
cagtgcttcc taaatgttta tactcatcta gtttttctca atttgtagtt ttattatgca 480
gttaaatctg tatcagtgga cttttaaaac ttggtactac tactaaatct actatatcat 540
gaatattcat ttatttttat agtatcagaa cttgggttga tttcaatgtt aataaactag 600
gcnaaacaaa taactgttag aaggtacaat tttcttctct tccctgtaac tgaaagtttt 660
aanaattgtt ccttggggaa aaatttttt aaaattccct ngaatcntag gggcncattt 720
tgttttccta ttgaaaaaca attaccctgg ttacattctc caaaagaatc tcccaaatca 780
atttttataa agttctaatg gcncctgntn aataatttaa aaantatttt nca 833

<210> 2711
<211> 829
<212> DNA
<213> Homo sapiens

0602306 "0 VN2 0800

0950250.0720800

<400> 2711
agatttttat tggactgtgg ctgggatgag cacttttcta tggatattat tgattccctg 60
aggaagcatg ttcaccagat tgatgcagtg ctgttgtctc accctgatcc tctccacctt 120
ggtgccctcc cgtatgctgt cggaaagttg ggtctgaact gtgctatcta tgcaaccatt 180
cctgtttata aaatgggaca gatgttcatg tatgatcttt atcagtctcg acacaataca 240
gaagatttta cactctttac attagatgat gtggatgcag cctttgataa aatacagcag 300
ctaaaattct ctcagattgt gaatttgaaa ggtaaaggac atggcctgtc tatcacacct 360
ctgccagctg gtcatatgat aggtggaaca atatggaaaa tagtcnaaga tggagaagaa 420
gaaattgttt atgcagttga cttcnaccac aaganggaga tccatttaaa tggatgttcc 480
ctggaaatgc taagcaggcc ttccctactt atcacagatt cattcaatgc tacatatgtt 540
cngcctagaa gaaaacagag agatgancag cttctgacaa atgtcctgga aacacttcna 600
agtgatggaa atgtgttaat ancagtggac acagcaggca nanttttgga acttgctcaa 660
cttcttgatc anatttggga ggactaaaga tgcaggattg ggtgtttact cctttggcac 720
tcctaaatta atgtcagttt accaatgntg ggtggaagtt ttcctaagtt ccccngttna 780
aatgggattg aatttaataa atttgatnaa aatnttttg gaaagaacc 829

<210> 2712
<211> 715
<212> DNA
<213> Homo sapiens

<400> 2712
aaaattggat ggaaagaaat tctgtgtgct cccaggattc cagttcctta ccggaggttg 60
gtgccgtctg agtctgaaaa gctgccctct tgccgtgttc atgctttggt agaacacctt 120
cagagccttg gcaagctctc ggtcagagcc agcttgctgt gtgcacattt ggctcatctc 180
cccggcggat ggcagttgca cagtcatccc gctgatcttc anagtgttgg aaggcttcgg 240
ggctgaggtg gaaaaaggta acattgattt atgtatctct ttctctgggc atctctatat 300
ttattttggt ggcattctac tgcatcagca tttatcaggc accagtttgg atccatccaa 360
gggaaagggg aaatctcaca gggcagaana aatgtccggc atttttttgtt tatgaaagaa 420
gatacgaatt aactcattta aaagtttgtt tcttaaaaga caaatacaca tcccaaatgt 480
angaatctag ggataagcta aacagccaan actggagcag tctctcacct tgaccagaaa 540
cantttcgc aagtgatgct ttganaaaca cgttctcctc tctcanggct ctgttaatgt 600
tcctgaacgg gttccgtctc ctgctctanc ttgaacagct tcaaataaaa ttctggttat 660
ctggtttgat gcctgcccta ccaaaaaaac atntcntttn ccncctttg tttgt 715

<210> 2713
<211> 749
<212> DNA
<213> Homo sapiens

<400> 2713
tacacaggac aactccatgt ggttgatttt actggcatgt cttggtgacg aagagttggc 60
caagtgaatg atgcatcttt tacttggagc tctccagcct ttgtcatagt tcccagacct 120
tttttccttg tggtcatcca ggaggtgatc aattacatgt gcacagtgct aggacgggag 180
gcagagccgg ctcagancag gtccaccagc ccacctatag caggaagcgt gtcggtgctt 240
aggaaatcta ggacttccag cttccctcat gtcagataga aaaaaagtca ggaaaccagc 300
tcgtggacag gggctttggt tccaaaactt ggacaaacct gatgccttaa ggaaaaggtt 360
aagatgagag ggggcttcca gagtcaatga acgtcaccct tcagccgacg gataccggga 420

gcgcttgggc aaaacagcag anaaagaaag actgtggtcg gggaagtgga atgcttcgat 480
gcaggccaaa attcaaggct ctggggctgg cctcacaana agcttcttcc acggggcttg 540
acaccaganc agcccccgcg tgaaatgana angcacgctt agcactggga agaaaagctg 600
anttaagaaa attctttatc attgtttgcc ttcccttggg gaaaacattc aggcagtaaa 660
atgacatcca cgtgttcctg ttcgacncan cggcttccng gaacaaattt ancgctgggg 720
gactatctgg ggctcgtctc tctgtnctt 749

<210> 2714
<211> 819
<212> DNA
<213> Homo sapiens

<400> 2714
gcaccagggc tgactgtanc tgggggaaga cattttactc atttgctctt tcctttcata 60
cagtcagctg gtccctcttc tcaggtgtag atcacctatt ataattttac ctaattttga 120
tactctgata aggaaagtcc caggacttat cagctgggat aggcctcact tacaagacag 180
ctctgttcag tatttggaag aaagcctgac aggtttcttc ggaaaagtgg ccatccatgg 240
aatgaatgaa atgttctctt tctattccag ggattgcagt ggcaaagcta ggctaggtct 300
tggaggctgg tgtaaggcga tgtgggtgaa ggcaggaggc tgatggaaag actgggggga 360
agaaaagccg aaatggattc acggtgcctt ggatgaagga cgagagggga actgcaagct 420
ccttcaactg gttctgtccg gtgagaagtg atcaagcttg ggctgacaag aagctcangg 480
agccctcacg ttctttcgct tttttacctg ccaaccaaac tgctacaaga caacaccctg 540
atctggcatg gacatcncgg gtccaagcct gtaaccccaa atcggataat ctctgcagct 600
gataacaagc aaaagaaaac cangcaacac catattaaag aagaaaacaa tcaactctga 660
aatccactta gaaataatgt ttcattcaaa ataaggctct tgctttaaga aattgttacc 720
tggcttgcat cnttcctaaa aactcctatc gtctgttttc caaaccccaa nggaaggaac 780
ccccttttcct nttttaataa ntccccccctc cntttgcca 819

<210> 2715
<211> 736
<212> DNA
<213> Homo sapiens

<400> 2715
tgagtgcccg tcgcgtcgcg ccgcgtcgcc ccccgggccg cctccttgcc gccagtggcg 60
ggctccgttc tccctcgaag cactcccccc agctccatga atggaaatcg gctccgcagg 120
acccgctggg gcccagcccc tactcatggt gcccagaaga cctggctatg gcgccatggg 180
caaacccatt aaactgctgg ctaactgttt tcaagttgaa atcccaaaga ttgatgtcta 240
cctctatgag gtagatatta aaccagacaa gtgtcctagg agagtgaaca gggaggtggt 300
tgactcaatg gttcagcatt ttaaagtaac tatatttgga gaccgtagac cagtttatga 360
tggaaaaaga agtctttaca ccgccaatcc acttcctgtg gcaactacag gggtagattt 420
agacgttact ttacctgggg aaggtggaaa agatcgacct ttcaaggtgt caatcaaatt 480
tgtctctcgg gtgagttggc acctactgca tgaagtactg acaggacgga ctttgcctga 540
gccactggga attagacaag ccaatcagca ctaaccctgt ccatgccgtt gatgtggtgc 600
tacgacatct gccctccatg aaatacacac ctgtggggcg tcatttttct ccgctccaga 660
aangatatta ccaccctctn ggaaggggggc agggaaattt tggtttggat tcatcantct 720
gttcngnctg ccatgt 736

0050504050 = 0050504050

0802045950

<210> 2716
<211> 664
<212> DNA
<213> Homo sapiens

<400> 2716
actcgctcgt ccccggcttc cgggcacagc atggcggtca aggtgcagac aactaagcga 60
ggggatcctc atgagttaag aaacatattt ctacagtatg ccagtactga ggttgatgga 120
gagcgttaca tgaccccaga agactttgtt cagcgctatc ttggactgta taatgatcca 180
aatagtaacc caaagatcgt gcagctcttg gcaggagtag ctgatcaaac caaggatggg 240
ttgatctcct atcaagagtt tttggcattt gaatctgttt tatgtgctcc agattccatg 300
ttcatagtgg ctttccagtt gtttgacaag agtggaaatg gagaggtgac atttgaaaat 360
gtcaaanaaa tttttggaca gactattatt catcatcata tccctttaa ctgggattgt 420
gaatttatcc gactgcattt tgggcataac cggaagaagc atcttaacta cacagaattc 480
acgcagtttc tccagganct gcaattggaa catgcaagac aagcctttgc actcaaagac 540
aaaancaaaa gtggcatgat ttctggtctg gatttcagtg acatcatggt taccattaga 600
tctcacatgc ttactccttt tggtggaaga naacttantt tccccanctg ggaagaantn 660
tctc 664

<210> 2717
<211> 684
<212> DNA
<213> Homo sapiens

<400> 2717
tcctggacag tttggacgtt acagttcgtc aggccgtgat cagtggcctg cagtgggact 60
gctcctttga tatctgaacc tctgttatgg gcttctctga gacaagtaaa tgtcaggtgc 120
aagatctgga tactaacagt ttcagtttgg gaaatccaag aaaaagaatt atcaagtttg 180
atagggaagc tctgtagcct tgactccagc aagaagaaaa ggtcaaaacc acgtgtttcc 240
caaaagtcca gactacaatg attcagctga cttgaggaca aggcctagca tttggctgag 300
canagccctc ttccttgccc tccaacctgg tggcataggc ttggcaaatg gacaacttgg 360
ttgtccagac aggttgagga ttcggttatg atcccctggg gaggtancag ggacctctgc 420
aactatgcat gatttctcaa acttcaagat tcatgtctgg atgtattatg ctgtggatat 480
aantttagta aggcggtcat ttcctactct gagttactgg ttacctaacc agtccatggg 540
tgtgacttgg tccttaagtc aggtcactat ctgcctccca ccctgggggc aggactgaag 600
tatanaaaaa catcntggct gttcaggaag ctgtggtttg aaaactganc cccanaaggc 660
actttcactg ncctccatta atgt 684

<210> 2718
<211> 588
<212> DNA
<213> Homo sapiens

<400> 2718
gantgccgaa ccgcgggaga tttgagccag gcctgttaaa ccaagttctc agcaggatgt 60
gcacagaggg cccagganga gcctcaggag ccggactgcc gttggccaac cgagtcccca 120
ggggagacac ttaagggaaa ttaaactgca gagtgcaaga natgcctcag tcaagtcagc 180
caaaaacacg cgggtcatcc ccaagcccca ganaggcttt gaattgaagg cgantgcctc 240

agaatttgca tccattgttc tgtctttcct gggaagttat tcatcctggt ggccagccca 300
ccgacaaaat ggatttggat ctactggacc tgaatcccac aattattgct gcaattaaga 360
aagccaaact gaaatcggta aaggangttt tacacttttc tggaccagac ttgaaganac 420
tgaccaacct ctccagcccc gangtctggc acttgctgag aacggctcct tacacttgcg 480
gggaaacaac atccttacag cactgcagct gcaccancag aaagaacggt tccccacgca 540
ncaccancgc ctgaacctgg gctgcccngt gctgggacnc gctgctcc 588

<210> 2719
<211> 659
<212> DNA
<213> Homo sapiens

<400> 2719
agtgtcnatc cctcagccag ggcatggagc tctcctgccc cggttcgcgg tgcccggtgc 60
aagagcagcg tgcccgctgg gagcggaaac gcgcctgcac cgcccgggag ctgctagaga 120
ccgagcggcg ctaccaaaaa cagctggggc tggtggccac gtacttttg gggatcctga 180
aagccaaggg gaccctgcga ccacctgagc gccaggccct gtttggctcc tgggagctca 240
tctacggcgc cagccaggag ctgcttccct acctggaaag angatgctgg ggccaagggc 300
tggagggctt ctgccgccac ttggagctct ataaccaatt tgctgccaac tcagagaggt 360
cccanaccac cctgcaggag cagctaaana aaaataaagg tttccggang tttgtacggc 420
ttcaggaagc cgccctgggt ttgggggcct tcactccaag acctgctccc tctgcctctg 480
caacggctcc agcagtatga naatctcgtc ctanctttgg ctgaaaacac aggtcccaac 540
agccctgacc atcaacaagc tcacacctgt ccttccctca tgaanaacta ctgcttatgt 600
tcacanacca agaagaactg tcacnctggt accacantct gacttgggct atcacancc 659

<210> 2720
<211> 590
<212> DNA
<213> Homo sapiens

<400> 2720
ttctttcttt ctttctttct ctttctttct tttgctttcc ttctttcatc tctttttgt 60
aatttgttgt tgcaaatcat tgtgaggcca cttttctttc cccttccttc cttcctttt 120
ttctgttttt ttttttttt tttcccaaag tcttgctctg tcgcccaggt tggagtgcag 180
tggcacgatc tcggctcact gcaccctctg cctcttgggt tcaagcgatt ctcctgcctc 240
agcctcccaa gtagctggga ttacaggcat acaccaccac gccccactaa ttttttgtat 300
ttttggtagg gcggggtttc accatgatgg ccaggttggt tttgaactcc tgacctcaag 360
taatctgccc acctcggcct cccaaagtgc taggattaca ggagtgagcc actgcgcctg 420
gcccactttt ctttctttcc ttcttatttt gttatgctgg cagccatttg cccctgcatg 480
gtatgggatc aaanangana gcctttcctc cctcaccttc tccaaatcta ggtgaaatca 540
cagantacaa ctcgtgagaa tgctgaatgt gtaaagttgc agangggatc 590

<210> 2721
<211> 688
<212> DNA
<213> Homo sapiens

<400> 2721

0502450 : 07/20/2006

agtctccgcg ctgctgaggc gcgcccggcc gctcccacgg cctcccctcc gccctgcggt 60
cccgccgcct ccggggcctc ctgggaccct ggccctcgcc gggcaggacg ccgccagcgc 120
tgaaggcgca gcccggaggc cgcgcggatg cagatctgtg gatccagcgt agcatctgta 180
gcagctggga catcattcca ggttttgggc ccggtgtgtt ggcaacaact ggatctgaag 240
atggcagtca gggtgctttg gggtggtctc agcctgctcc gagtgctgtg gtgtctcctt 300
ccgcagacgg gctatgtgca cccagatgag ttcttccagt cccctgaggt gatggcagag 360
gacatcctgg gcgttcaggc cgcgcggccc tgggagtttt accccagcag ctcctgccgc 420
tcggtgctct tccccctgct gatctctggt tccaccttct ggctgctcag gctctgggag 480
gagctggggc cgtggcctgg cctggtgagc ggctatacgc tgctggtggg gcctccactc 540
ctcctcactg ccctttcctt tgctctggac gggccgtgta ccacctggcc ccgccgatgg 600
gggccggatc ctggaacccc nggccctnct gtcnggttcc caacttcacc tgggtctcct 660
acaacaagga acttctccaa ccaccatt 688

<210> 2722
<211> 894
<212> DNA
<213> Homo sapiens

<400> 2722
attgaagcct acaaccatgc aaagtgcagt gctgagaatg aggaagacaa aaaggtcatc 60
tcattacagt tggataaaga tcaccacgct ttatatgtgg cgttctctag ctgcattatc 120
cgcatccccc tcagtcgctg tgagcgttat ggatcatgta aaaagtcttg tattgcatct 180
cgtgacccgt attgtggctg gttaagccag ggatcctgtg gtggagtgac cccagggatg 240
ctgctgttaa ccgaagactt ctttgctttc cataaccaca gtgctgaagg atatgaacaa 300
gacacagaat tcggcaacac agctcatcta ggggactgcc atggtgtacg atgggaagtc 360
cagtcgggag agtccaacca gatggtccac atgaatgtcc tcatcacctg tgtctttgct 420
gcttttgttt cgggggcatt cattgcaggt gtggcagtat actgctatcg anacatgttt 480
gttcggaaaa acagaaagat ccataaagat gcagagtccg cccagtcatg cacagactcc 540
agtggaagtt ttgccaaact gaatggtctc tttgacagcc ctgtccagga ataccaacag 600
aatattgatt ctccnaaact gtatagtaac ctgctaacca gtcggaaaga actacccacc 660
caatggaaat actaaatccc atgggtaatg gaccatcnaa nggccacccc ccaaaattng 720
gtgctcttcc ctactcccng aattctacac ccggtgcttc caccaaaaaa aaacccggcn 780
gggccatgaa aaaaccccct ccagaaaaan ggcccntggn ccttgggaac ttccaaagga 840
aaaaaaaccc ccccagtttt ttcccgtccn aattcccccc cccccntttc ccca 894

<210> 2723
<211> 618
<212> DNA
<213> Homo sapiens

<400> 2723
gcgcgtaatg gcagcgccgt ggcctcgcgt ccatctttgc cgttctctcg gacctgtcac 60
aaaggagtcg cgccgccgcc gccgcccccc ccctccggtg ggcccgggag gtagagaaag 120
tcagtgccac agcccgaccg cgctgctctg agccctgggc acgcggaacg ggagggagtc 180
tgagggttgg ggacgtctgt gagggagggg aacagccgct cgagcctggg gcgggcggac 240
cggactgggg ccggggtagg ctctggaaag ggcccgggag agaggtggcg ttggtcagaa 300
cctgagaaac agccgagagg ttttccaccg aggcccgcgc ttgagggatc tgaagaggtt 360
cctagaagaa ggtgttccct ctttcggggg tcctcaccaa gaagaggtcc ttgggggtcg 420

0950250 - 0950250

ccctttctgag gaggctgcgg ctaacagggc ccaggtgaga ggcagctatc tatctcctgg 480
ggtggctcct ggtaccgatg gagtcctgac ctactcaggg gtgcccggga tagaaagggt 540
agatgaaggg acgctttagg agggttcttt ttgtggagtt taccgtctag gtggcncgga 600
tgangcntac ctccccca 618

<210> 2724
<211> 647
<212> DNA
<213> Homo sapiens

<400> 2724
ttgagcaaca ataagaaatt gagtgaaaat acgcaaaata cgtcattatg ttctggaact 60
gtagttcatg gtagacgttt tcatcatgct catgcacaga taccagtagt aaaaacagca 120
gcccaaagca gtctggaccg aaaagaaagg aaagaatacc cacctcatgt ccaaaaagtt 180
gaaattaatc ctgtaaggtt aagtcggctc caaggtgttg aacgtataat gaagaaaaca 240
gaagagtccg aatcacaagt ggagcctgaa attaagagga aagtacaaca gaaacggcac 300
tgtagtacct atcagcctac tcctcctcta tctcctgctt caaaaaaatg tttaacccat 360
ttagaggatt tgcaaagaaa ttgcagacaa gctattactt tgaatgagtc tactggacca 420
ttattaagaa cgtcnattca tcagaattct ggaggacaga agtcacaaaa cacaggatta 480
acaaccaana agttttatgg caacaatgtg gaaaaggttc caattgatat tattgtgaat 540
tgtgatgaca gtaaacgcac ttatttacag actaatggaa aantcatttt acctggggcg 600
aaaatacccc naatcncnaa cttgaaagaa aggaaaacna gtttgtc 647

<210> 2725
<211> 570
<212> DNA
<213> Homo sapiens

<400> 2725
atcactcaag atggctgccc ccatcaagat gaccggggtg tgccgggggg aaaggggcag 60
catgatggtc tgagatggtg tagcgtcgga ccatgtggaa gtttctgagg ctggggagcc 120
ggataatggg gggtggggcc cgttgggggg taaaggggca atagcgtcct ttcacaggct 180
aacctcggct cttcccagtc ctctggacta aaatggggaa cacattgggc ctggcaccaa 240
tggggacttt gccccgccgg agcccccgcc gagaggaacc cctgcccaac cctgggaact 300
tcgatgagct gcaccgtcta tgcaaagacg cagcaggcca agttcctgac atggcagttt 360
gatggcgaat atccgggaga tgactacaca gccactctga ccctaggaaa tcctgacctg 420
attggggaat ccgtgatcat ggttgctcac ttcctgcaga acctcactca tcggctggtg 480
ctgggaagga agactagttt atcnccgggc ggccaggcga agangggggcc atcttgaccc 540
tggctgggaa gtactccgct gttcactngg 570

<210> 2726
<211> 623
<212> DNA
<213> Homo sapiens

<400> 2726
atatcanana agatcctgct gcggctactc aagtacccag atgtcattca ggaactcaag 60
tttgacgagc acaataagta ctacgcccgc cattacctgt acacccgaaa taagccggcc 120

0035205.0045900

gactacttca tcctcatcct gcaggggaag gtggaggtgg aggcagggaa nganaacatg 180
aagtttgaga cgggcgcctt ctcctactat gggactatgg ccctgacctc ggtcccctct 240
gaccgttccc cagcacaccc caccccactc agccgctcag cctccctcag ttacccagac 300
cgcacagacg tctcaactgc agcaaccttg gcaggcagca gcaaccagtt tggcagctct 360
gtcctgggcc agtacatctc tgacttcagc gtccgggcac tcgtggactt gcagtacatc 420
aagatcactc ggcagcagta ccagaacggg ctgctggctt ctcgcatgga gaacagccct 480
cagtttccca tagacgggtg caccacccac atggagaact tggccgaaaa tctganctgc 540
ctgtggtgga cnaaaccaca actcttctca acgancgttn ctccttgctg cacaaagcct 600
cccacgaana atgccatctg aca 623

<210> 2727
<211> 649
<212> DNA
<213> Homo sapiens

<400> 2727
cctgtcgccg ccgcctcggg cgggtgggct gactggcggc aggctcgccg cggcgcggag 60
tcccggctgc gggatagacc gagggccatg gccgcctctc ccggacccgc cggcgttggc 120
ggcgccggaa cantctacgg ctccggctct tcgggcttcg ccctcgactc gggactggag 180
atcaaaactc gctcggtgga gcanacncta ctcccgctgg tttctcanat caccacgctt 240
attaatcata aagatnatac caaaaagtct gataaaactc tgcaagcaat tcagcgtgta 300
ngacaagctg tcaacttggc agttggaaga tttgttaaag taggagaagc tatagccaat 360
gaaaactggg atttgaaana agaaataaat attgcttgta ttgaagctaa acaagcagga 420
gaaacaattg cagcacttac agacataacc aacttgaacc atctggaatc tgatgggcag 480
atcacaattt ttacagacaa aacaggagtg atnaaggctg caagattact tctttcttca 540
gtgacaaaag tgttgttgct ggcacaccga gtntcnttaa acagataata acatccaaaa 600
aataaggttc tcgccactat gggaaagact aananaaagt gaatanctt 649

<210> 2728
<211> 756
<212> DNA
<213> Homo sapiens

<400> 2728
tcattgaaga aatagttgag gatggacaac cggaaatttt ctacacattt tggaattcag 60
ttactcaggc actttcttct caatttcata tggcaacaaa ctcttcgatg tttttgaagc 120
aggcatttga aggagaatac cctaaattat tacgtcttta taatgactta tggaagcgtc 180
ttcaacaata cagtcagcat atccaaggga attttaatgc aagtggaact acagacctct 240
atgttgacct acaacacatg gaagatgatg cacaagatat attcatacca naaaagccag 300
attatgatcc agaaaaggct ttgaaagact cactacaacc ctatgaggct gcttatctat 360
caaaatcctt atctcgactc ttcgatccta tcaacttggt ttttcccccg ggtggtcgta 420
atcctccttc ctctgatgaa cttgatggta ttattaaaac tatagcaagt gaactaaatg 480
ttgctgctgt tgatacaaac ctcacattag ctgtgtcaaa aaatgtggca aagaccatcc 540
anttatacag tgtaaaatca gagcagcttc tctccacaca aggagatgca agtcangtga 600
ttgggcctct tactgaagga cagagaanaa atgtggcagt tagtgaattc cttgtataag 660
ttgccccaat cattaacaaa ngttgtttcc antcaganct cattcccact gggcagcttn 720
aacaaactta taattttcag ctcctaangg ctattc 756

0356250 - 0356250 - 0356250

<210> 2729
<211> 590
<212> DNA
<213> Homo sapiens

<400> 2729
tgggaacaga agaagattga caaattgatg atagagacag ttgaccctga caataggtct 60
aaatttggag tgaacattat actgggaatc tcttttgctg tttgtaaggc tggagctgcc 120
gaaaagggat tctccctgct gtcacagaat tgtgaatttg ctggcaattc tgaaggcatc 180
ctgctagttc cagctttcac tgtgaccggc aatggttctc aatctggcaa taagctggca 240
gtataggagt tcataatctt ccccgtcagc aaacttcagg gaagccatgc tcgttagagc 300
caaggcttag cacacttgag ccgtgtcatc aaagagaaat gtgagaaagc tgctgccaat 360
gtgggggatt gtggtangct gcataatgtc tcctaaagat gtccatgtcc taatccctgg 420
aacttgtgaa tatactactt tacttggcca aagggatttg canatatgat taaggttatg 480
aaccttaaaa cggggacatt atcctgtatt atccanaang gtccagtgta atcttatgag 540
tccttaaaan cagaaaaaaa ancctttat gtctgtggtc agaaaagtcn 590

<210> 2730
<211> 679
<212> DNA
<213> Homo sapiens

<400> 2730
gtgaaactct gaaagtccct cccaaaaaga tggaagattt aactaatgta tcaagtctac 60
tgaatatgga aagggcacga gacaaagcta atgaagaagg tctggcatta ctacaggaag 120
aaatagataa aatggtagan accacagagt taatgactgg gaatattcag agcctaaaga 180
acaaaattca gattctggca agtgaggtgg aagaagaaga ggagagagta aaacagatgc 240
atcaaataaa tagtagtgga gtactctctc ttccggaact ttctcanaaa actctcaaag 300
cacccacact tcagaaagaa attttggcgc taattccaaa ccagaatgct cttctaaagg 360
acttggatat tcttcataat tcatcacaga tgaagagcat gtcnaccttc attgaagaac 420
ctataagaaa ctggatgcat cttaaagagt gttttttttt tagattgttc catattaatt 480
taatgttcgt gaatttgtaa aactgttaac ctatgattat atgtacagag gctaaggctt 540
ctgcaggatt tattatctcc tgatatgcct ttaaaattag tctttgtagt tctatcatta 600
acatctaatg tagttctgaa gactgttttt ancanttgnc anatctagga aaactaacgt 660
ttatattgct gtnatctat 679

<210> 2731
<211> 626
<212> DNA
<213> Homo sapiens

<400> 2731
aaccactacc acgtccccaa gtgcaacggg acccacggga actacatgtg tggggcaggg 60
tgagcgtgga aaaagggacg cggatggggg tgcgctttgc aaacgatctg gagactgctg 120
tgtgttgagg gaagatacga agtcgcggga gcagttgggg actcaatgtg tgggcaacaa 180
gggtcctgct gagctcagga gctgcacgga atggtggcag tcaccttgcc agtgcagcag 240
gcatggatca gactgcaagc taggggcacg aggcatcagt tgggaagagg ggacgcacag 300
ctaggcttga ggcctcttca tcgggatgtc cccaggcccc ccagcccagg cccagcataa 360

0956050.0020

aggccgtgtt ggggggcccc cctgacccaa ggggggcttc atgcgccacg tgcaggcgga 420
gccgtctcca tcctcagagc cggaggctgg cccttcacag cctccagtca ggcagggggc 480
cctccagggt ggcctgctca tgggctacag cccagcaggg ggggcgacat cccccggggt 540
ctaccaggcc cctgccccac caagcgaagg ctgcttcctg ctggaaaacc ccanatntct 600
ctctgaagaa aaagggccan cccctc 626

<210> 2732
<211> 675
<212> DNA
<213> Homo sapiens

<400> 2732
aaaagaaaaa agagagtatt aaaatttctc attgtaaaat ctatatttta gaatcactct 60
acaatataag caaataatgt gtttttttact gattacatgc ctttttttttg gggggggggg 120
gttctttttt tttganacag ggtcttgctc tgtcgcccag gctggagtgc agtggcgtga 180
tganacttca atgcagcctt gatctcccgg gctcaagtga ttctcccgcc tcagcctccc 240
aagcaactgg gaccacaagg tgtgtgccac catgcctggg taatttttttg ttttttttgtg 300
ganatgcggg tctcactgtt ttccangctg gtctcaaatt cctgggctca agtgatcctc 360
ccacttcagc ctcacattgt tgggattaca gtcacnaacc actgtnccca tccatatgtc 420
attctttana cacactactt actaaatttc tctttttaaa gggatatact gaatttccgg 480
ttgaagccaa cttaactgct aattttctat tttagcttta aaacattgat aagcaacatg 540
aancaatcta gaacttaacc tttaaatggc tttattaaag aaatccccta tgaaaatcnt 600
gcaaaatgat tatttacnaa cnatcctacc cagcacataa naaattcctc ctcnattctg 660
aaataccatc ttctc 675

<210> 2733
<211> 466
<212> DNA
<213> Homo sapiens

<400> 2733
aagctaaaac ttttatgcac gtaaaattgt cttctccatg gaagacgtaa taattcactc 60
tgttttgtag aaaagttgca ataaaccata gaccctaagt caaattataa acaagaaaga 120
gttaaacgta actgcaattc ttcttatagc actggttccc tattcttcag tactgcagag 180
tgaaagggca gatgaaaact tttacagtcc aactttattt aaaaacctta agtacaaatc 240
agggtgattt gcaaagccat ctcagcagaa gtcaatgtag ccattccctg atggttggct 300
cttttcttcc tgtgtgtgaa attcctatct agtaagcatt gagcacggaa cgaggtctgg 360
ctgggcttgt ccaggancct tgtgagggtg catcacagaa tggggctgtg tgatcatcca 420
antgtganan caagggtcgg tganctgcct gtattgcccg tgcaga 466

<210> 2734
<211> 605
<212> DNA
<213> Homo sapiens

<400> 2734
atcagtgggc cagagctcgc cgggtggccg caagtacgcc ggcccagccc gcagcgcgcc 60
cagccggaag gcggggaatc cggctgacac cgcgccccgg gttcccaggc cacctcctct 120

0038270.0150

gttctgaggc tgggctggga naccgtgggg ctgtgaggag cgcatanaac cgtggtggag 180
ggcgaggctg ggccaccggt tcttcaagct cggaatggag ggggaagagc gcagagggct 240
ggctgggagg aactcgggtg ggcgtgaagg agacgagggc nagaaaagaa acttcccttc 300
ttccaggaag ggtcttcgaa accctctccc cacagcccct ctcgtcatta gcatggcaat 360
gaggagtttc tgtaattcna cttggagggg cggatgatcc cttggaaact cananctcgc 420
cggaaaagcc gggggcggcc gggctcttct tccccacctt ccctctctcg tcgctctccg 480
ccccttttctc tttcccactc agttttgcac cgggganccc tccgggatgc ggaactactc 540
naccgcccga atttttangg gttaggaagc gggggggaaaa aaataacnct ggcngacttg 600
cccac 605

<210> 2735
<211> 738
<212> DNA
<213> Homo sapiens

<400> 2735
aatagaaaac gatccagatc agagagtgac agtgagaaag ttcagccact tccaatttct 60
accattatcc gaggcccaac actgggggca tctgctcctg tgacagtgaa acgggagagc 120
aaaatttctc ttcaacctat agcaactgtt cccaatggag gcacaacacc taaaatcagc 180
aaaactgtac ttttatctac taaaagcatg aaaaagggtc atgaacatgg atccaagaaa 240
tctcactcta aaaccaagcc aggtattctt aaaaaagaca aagcagtaaa ggaaaagatt 300
cctagtcatc attttatgcc aggaagtcct accaagactg tgtncaaaaa accccaggaa 360
aagaaagggt gtnaatgtgg gcgtgctact caaaatccaa gtgttcttac atgccgaggc 420
caacgctgcc cttgctactc taaccgcaaa gcctgcttag attgtatatg tcgtggctgc 480
caaaactcct atatggccaa tgggganaaa aactggaggc atttgccgtg ccanaaaagg 540
cttggagcag accangctca ctttgggcat taacgtgact ancattgctg tgcgtaacgc 600
tagtaccagc accagtgtaa taaatgtcac agggtcccca ntaacgacnt ttttagctgc 660
cagtacacat natgataaaa atttggatga aactatnaca tganatccac tgtttaaatc 720
cgtgggtctt ttaaaacc 738

<210> 2736
<211> 622
<212> DNA
<213> Homo sapiens

<400> 2736
gtcacttttg aagaatggtg ggacagtaga tggtggcagt tgatttttca ttttctaact 60
ttgcagaata aaaattgaat gatcctgtat tggtccccca agtatttcag agctcccgga 120
gtctgggaag tgccatggta aatagtcaca caggccagat gagagactga ggtgtgcatg 180
ttctgtggga ggggaagtgt agcctgcggg tgtggaatgg tctgggtggc cgtgggaaac 240
gtgganagag ccctggaaac agccccgctt tgtgccagtg aggagtcggg gaagcagctg 300
gggagacggg gctggagagc ctggggagag gggaagctct tctggaggga gtgggtgcac 360
cggcgcactg cgcagcctcc tagtaaaggg cctgcagacc cagctggcct catgcctgga 420
ggccttangc gactctgang aaggcagttc cagaacagtg agtcaggacc agatgcagtg 480
ggttgcaagt agaaccagga ncaganactg gatgtggtgt attgtttcan aaccttccan 540
cgtgagtact accatatgga taccttagcg tgggaagcgc ccaggccacc cccggtccgg 600
gtnanaaaaa gcccanaact ca 622

0505204.0045000

<210> 2737
<211> 661
<212> DNA
<213> Homo sapiens

<400> 2737
accgancagg aatccgtatc tgggaacagg tganagatga tgtgtgctgg gccttggagg 60
aaggggccg anaccgggcc ttacttctgt aacgatactg tgaggcatcg gaaggccagc 120
ctgttgtgtc cgttttgaag gtcggtgggc tagactggct ggccttctag gggtgtggag 180
acttcccaac tctgcccttg tgctttcctg gaatccccaa tatgcccgga ccccggttta 240
ctcctttgct gcgagccctt ctctcccgtc cagagttgct ccgagcctat ctgctcagtc 300
ctagcgattc ctgtggggct tgggacgcgc ggttcaagca ccccggacca tatggatgca 360
gcacccatgg gttctcgctc caatgcttct ttcctccttg gggcgtaact cagaccctgg 420
gcacccctct ccactgccca ggggagacct gggttctaga tttggctctg cctctactat 480
cttcctacct cctanaacct cagtttggct tgtgtaaaat angatgactt aagggtcctt 540
tcagccccta atcctggggt actttactct gtaccgcctc cttacccagc cttgtgcacn 600
ccatcttgaa ngcactgaat tctancctgt ttattgtaan tggtgattaa nttgggtctc 660
a 661

<210> 2738
<211> 715
<212> DNA
<213> Homo sapiens

<400> 2738
attggacatt atctcaagat gaatatcacg gtaccagagg gattacatca acgggtttat 60
tcgggccaac aataccttcn ctctatcagc tagtttttga tcccatcaaa aggaaactta 120
ttcctctgaa cgcctatgaa gatgatgttg atcctgaaac actaagctac gctgggcagt 180
atcctttctg aaacagaatg gtagaatttg tgcatttttc ttcaatattt ttatggtgat 240
ttttttgtga ggcatttagt aaaaagcttg cacattattt tttgctctct tttttatagt 300
gaaatctgta tattgttcat ttaaattacc atgctagtga aaattgagaa caacttttg 360
tttataaacc cgaggctcat ccactatgca tcctgattac ttagattgac tgacagaagc 420
atgcacaggg tccgtcactt acggtacaca ttccaaaggt ggctcttgag aggacctcct 480
cgtggcaagc aagctcgact tatcaggaag ancattctgg gcatttgagt gcatcaggag 540
aagatgccct tcccatagcc actggccatg ttcatgcagg ctgatgcaga ncctgantc 600
acttaagtgg tggctaagac tttcccctct gtttccctta agggaaggaa tcagtgatgg 660
gcctgggncc ttgtcaaaaa anaccaactc ctgcggaaga cagatngana ctanc 715

<210> 2739
<211> 755
<212> DNA
<213> Homo sapiens

<400> 2739
atagggaaaa tattgccagc gttttcagtc attctgtgca tgctgcttta agcaagagat 60
ttatatttgt tgagaggaaa tattgctact tcctgcactt ccaccctctg cagccggcac 120
cgtccctact gttgccatta attggagctg tccttaagat ggtcaccata ttcttattca 180
ggctgttgtc attttcccca gagatggttt gtttaacgaa tgataggctc tgtgcctggg 240

0050205-0002

gatgttagca gactctgggg tttgtacagt gatgccttct ccctggccca gagctgaata 300
ttcatctaga attaaagttg gatttgatat aacaaatttc tttctataca ggttttacat 360
aagagagaca gtaataatgt caaggatagc ctgtgtgggc agaaattggt agtcgtgctt 420
ttgaatgtca gctgtagagc caactctgat tatctagcca ttgatcatac aaattgatag 480
aaacattagt cagtaatttt agcttcttgc caaattgttc acaacatcta aatgtaatgg 540
tgatgtgatg aanataagta gtacaaagan accaaaataa tttggggaga attangaatg 600
atgacaattt tttttaacaa cttacctcta ataaggttac ttgggatgaa ccaactcanc 660
ttccttccca tggatangaa aggactctgt gtnttattcc ngtttattgg cacaaaaata 720
cttgttttta aanttccctg aaaaaccctt gatgg 755

<210> 2740
<211> 804
<212> DNA
<213> Homo sapiens

<400> 2740
attcttgcat agcagtgtga aaatggtgca tggaaatatc actcctgaaa atataatttt 60
gaataagagt ggagcctgga aaataatggg ttttgatttt tgtgtatcat caaccaatcc 120
ttctgaacaa gagcctaaat ttccttgtaa agaatgggac ccaaatttac cttcattgtg 180
tcttccaaat cctgaatatt tggctcctga atacatactt tctgtgagct gtgaaacagc 240
cagtgatatg tattctttag gaactgttat gtatgctgta tttaataaag ggaaacctat 300
atttgaagtc aacaagcaag atatttacaa gagtttcagt aggcagttgg atcagttgag 360
tcgtttagga tctagttcac ttacaaatat acctgaggaa gttcgtgaac atgtaaagct 420
actgttaaat gtnactccga ctgtnagacc agacgcagat caaatgacaa agattccctt 480
ctttgatgat gttggtgcag taacactgca atattttgat accttattcc aaagagataa 540
tcttcagaaa tcacagtttt tcaaaggact gctaaaggtt ctaccaaaac tgcccaagcg 600
tgtcattgtg ccagaaaatt ttgccttgtt tgacttcana atttgtnaac cctgacatgg 660
tanctttttgt tttgcccaat gttctactta ttggctgaag gaatgccccc aaanaanaat 720
atgtctaatt taattccttc ctgaactttg ggccccgtgt tttaagcccc aggancccat 780
ccnnaatttg gtttattttt ccca 804

<210> 2741
<211> 652
<212> DNA
<213> Homo sapiens

<400> 2741
ttctatgtaa gagcaagcga gttccacagc gcggggaggc cagtggagag gancgcggcc 60
ttgcctggct catgtcctgt ttccagcttg ccctgaaaac gaattactaa atccatggag 120
gaanagcttg gggcctgcct ggtcctcggc cacggtgggg ctggggcctg tgactgcgtg 180
tgcagagggt ccgcgcccag ggcccgggaa aggggctgcg ctgccccgag cgantccccg 240
ggcgccccca gcctgctgca gccacctcgg gctccacatt tcggcccctt ctcctctccg 300
ctgctctggg ctcanccacc aagctccacg ctgtgggcag aatccactgg ggcgcangaa 360
acctcagctt ccgcagccca cctggcttc gcagtcttcc tctccagggt tttatttcaa 420
catggccttt tctgctgcga ctcaactgtg gtangggcca agtttgggtg tgtgaagcca 480
nggaagtgcg ttgtgttctc ncggaaaaaa aaaacgcanc ganggacccg ggcacacgga 540
ccagctcacc aaccgcagcc aaaccaccaa ttctgtcccg tggcccttgg gtgaacggtg 600
acanggaagg aaagaaacnt ggncagcttc cnccaganca caggcgaaaa ca 652

US 2005/0260200 A1

<210> 2742
<211> 610
<212> DNA
<213> Homo sapiens

<400> 2742
tccggtgctc agtggctagc cgaatagccg tgtttgggac ctgggctcgg gcttcttgcg 60
tccctgctaa naacatgtca cggggccgaa tcgtccgtat tctctcagct tcaagctcct 120
ctacttttca accaggtcac tagcccttga ctcctcttat caaacttccg gaactgccac 180
cccaccagtg actccacagg caccagggca tgcaacaggg ctgggacagg aaggctctct 240
tcttcacctc aagcctgctg ggctaacact tgcgattttt actanagtta actttgtaat 300
gtatgtctct gactctagaa tttcaagaga agttccactt agtgactcct aagtggaagt 360
tctaagatgg cttcccagtg aggtgatgaa naagtttgag ctttanantg cagttgcaaa 420
gctcttctct gacctgaaca atggctgtng ctgtggacca acaaatccag actccttcag 480
tacaagatct ccaaatagtt aaactggaag aagattccca ctgggagcag gaaatttccc 540
ttcnagggaa ttaccctgga ccananacat cctgccagan cttttggcat ttccgttacc 600
aagaancatc 610

<210> 2743
<211> 857
<212> DNA
<213> Homo sapiens

<400> 2743
acacgcagct agccggagcc cggaccaggc gcctgtgcct cctcctcgtc cctcgccgcg 60
tccgcgaagc ctggagccgg cgggagcccc gcgctcgcca tgtcgggcga gctcagcaac 120
aggttccaag gagggaaggc gttcggcttg ctcaaagccc ggcaggagag gaggctggcc 180
gagatcaacc gggagcttct gtgtgaccag aagtacagtg atgaagagaa ccttccagaa 240
aagctcacag ccttcaaaga gaagtacatg gagtttgacc tgaacaatga aggcgagatt 300
gacctgatgt ctttaaagag gatgatggag aagcttggtg tccccaagac ccacctggag 360
atgaagaaga tgatctcaca ggtgacagga ggggtcagtg acactatatc ctaccgagac 420
tttgttgaac atgatgctgg ggaaacggtc ggctgtcctc aanttagtca tgatgtttga 480
agggaaaagc caacganagc agccccnagc cagttggccc ccctccagag anaaacattg 540
ctancctgcc ctgaggaccc gcctggactc cccagccttc ccaccccata cctccctccc 600
gatcttgctg ccttcttgac acactggtga tctctcnctc tctcattttg ttttggtcnt 660
tgaanggttt tgtttgtgtt ttccctcaat gtcttttgtt aaagccccaa atttatctgc 720
ctttaaaagg ggctctgggt tccggggaat cctgaacctt ggggttccct cctctcttct 780
tccctccttc ccccgntccc tgtttcaaaa agggctgaat ttccanccen nnaaccttta 840
aaaggggnca gggcccc 857

<210> 2744
<211> 586
<212> DNA
<213> Homo sapiens

<400> 2744
gtgtgagggg ctcttcacgt ggggaaggaa cagcaggcgc ggaggagggg gcaagcgtgt 60

0352030.02200

gtgagattca gtggtccatg cgtgcgtttg tcgtgtaagg gtcattcctg gggtttggag 120
tgggggaaca aatcaatgtg gctgtttttc cgtggaaaga attcccactg cagtgtcccg 180
gancctgcgt gtggtgggca agctcctcaa atggtatctc acagggaata ggggagtctt 240
gaaaacgcag cttcggcagt aggaacatga acctcttacc taaaagttcc agggantttg 300
gctccgttga ctattgggan aagttcttcc agcagcgagg aaagaaagct ttcgagtggt 360
atggaaccta cctggaactg tgcggggtgc tacataaata tatcaagccc agggaaaagg 420
tgctggtgat tgggtgtggc aactcanaac tgantgagca actgtatgat gtgggctatc 480
gggatatant gaacatccac atcngtgagg ttgtcatcaa gcaaatgaan gaatgttatg 540
ccacccnacc gccccagatg ancttcttga agatggacat gacgca 586

<210> 2745
<211> 633
<212> DNA
<213> Homo sapiens

<400> 2745
gcggcgggat gaggagcttg aggaagcagg caggggaaat gtctgccgcc gccagctctc 60
ggggagcgca acactgcagg tggttctaac tttgatggtt tgagaccaaa tgggaaggga 120
gtgcctatgg accaaagctc caggggtcaa gataaaccan aaagcttgca accaagacag 180
aataaatcca agtccgaaat tactgacatg gttcgctcct ccactatcac agtgtcggac 240
aaggctcata ttttatccat gcagaagttt ggactgcgag atacaattgt gaaatcncat 300
ctactacaga aagaaganga ttacacctat atccanaact tcaggttttt tgcgggaaca 360
tacaatgtna atgggcagtc ccccaaagaa tgcctccggc tgtggctgaa caatggtatc 420
caagccccan atgtctattg tgtanggttc cangaacttg atctgagtaa ggaagctttt 480
ttctttcacg atacccccaa ggaagaanaa tggttcaaag ctgtgtcaga aggtcttcat 540
ccagatgcca aatatgccaa ggtgaagctt atcccactgg gttgggatta tgctgctgtt 600
atatntcaac aggancatgc nncttatatc tcn 633

<210> 2746
<211> 864
<212> DNA
<213> Homo sapiens

<400> 2746
gcgctccaag atggcggcga acgtgttccc gttccgcgac gcccgtgccg caccggaccc 60
agtgctggag gccggcccgg tggcacacgg gccactgccg gtaccgctgg tgctggacaa 120
cgggtcgttc caagtccgcg ctggctgggc gtgtcccggg caggacccag gtcccgagcc 180
gcgcctgcag ttccgcgcgg tgtgcgcccg cggtcgtggc ggggcacggg gcgcgtcggg 240
cccgcaggtg gggaacgctc tgggcagcct ggagccactg cgctggatgc tgcgctcgcc 300
cttcgaccgc aacgtgccgg tcaacctgga gcttcaggag ttgctgctgg actacagctt 360
ccagcacctg ggtgtctcct cacagggctg tgttgatcat cccatagttt tgacagaagc 420
tgtgtgcaac ccactgtatt cacggcaaat gatgtctgag cttctttttg agtgctacgg 480
gattcccaag gttgcctatg gaataaacag cctcttcagc ttctaccaca ataagccaaa 540
gaactcgatg tgcagtgggc taatcatttc atctggatac caatgttacn catgttttac 600
ccatcttaga aaggaanatt agatgctaaa aaacttgcaa gccgcatcca tctttggagg 660
aaaccaanca acttnggttt actcccagcg tctcccccca gcttaaaatt acccctgggg 720
cacctgggca ngccatcacc cctccagccc gccatgggaa gaaaaattct gccttnaaac 780
acaaaccttc cntcccctta aaagaattaa tgttnggaaa aaaatttacc cccaaattgg 840

0950304.0020800

cgggtgttcc ntgaatttnt taat 864

<210> 2747
<211> 553
<212> DNA
<213> Homo sapiens

<400> 2747
agttggcgcc catggagcca gagctgctgg ttcggaaggt gtctgcattg caggcctgcg 60
tccggggctt cttggtccga cgccagttcc agagcctgcg agctgagtat gaggcgattg 120
tacganaggt cgagggcgac ctgggcacgc ttcagtggac cgagggccgc attcccaggc 180
cgcgattcct cccagagaag gcaaaatccc atcagacctg gaaagcagga gacagggtag 240
caaatccaga gcaggggctg tggaaccact tcccatgtga agagtctgag ggagaggcca 300
cctgggagga gatggtgctg aagaagtcag gagagagctc agcaaatcaa ggaagcctct 360
gcagagatca cagctcctgg cttcagatga agcagaacag gaaacccagc caagagaaga 420
ccagagacac gacnaggatg gaaaatccag aagccacnga tcaaagactg ccccacagcc 480
aacctcnnct tcaagagctt cagtaccacc ggcngccact tggccatgga attgctgtng 540
gctgcgaccg gcc 553

<210> 2748
<211> 685
<212> DNA
<213> Homo sapiens

<400> 2748
aaatgaaaaa acatgaaagg acttagcata atgttatttt atcttttcta caactttgtt 60
taaattacct ttccaaagat atttgtgttt atgtaatttt ccacggaata acattaatac 120
tctaggttta taaaccggtt tcacattatt tcatttgatc atcacaagag ctttgtgaag 180
taagccgaga agttgttact ggtatttaat aatagcaata gaggagttaa agactttccc 240
acagcttgca ggtcaagaca agaaattcag gtctcctaat tctcagtgga gctctatttc 300
tgttaaccca aattgctgct ctgttttagg tctcaatttc atctgtaaaa tgatactaat 360
agtacttatc ccattggatt tttgttgaga tttaaataaa tagccaaaag ccaatacata 420
ataaacactc aataaagatt aaccataagg agagtcatga tctggttcca ggaatacatt 480
gttagatgac tgaaaaattg tattacttca atgaaaatac tataaataat aacattttca 540
tatattagtt ggttctcatg catacataat ctaattttat ttgatcctca caactgttta 600
agttttatta aatatacatt atccctgttt ggtttaaatt agaaacntac natnnctggc 660
ctgctttcnt tccacnaaaa ttatc 685

<210> 2749
<211> 556
<212> DNA
<213> Homo sapiens

<400> 2749
atgtagtaat tttgcctgga tggttttgga tataatagcc aattcatcac ttgtgatttg 60
atgactctta gggtctctag tttttcttaa cagcctccaa attgaagttt cagaatcctt 120
actgcaaaaa gcacaaaagt tttcattgcc attttgatag tgatatgtag ctcgtaaata 180
ataattctta cctctgtgtt agataaaaca tccagtaaaa cagcatcaag tttagctttg 240

0502946.0702800

atagaaggga acaattagag ttggtgtaga gacagaccag ttaggatgag ggcatgaaat 300
acagcagaag cagtaggaag agaagagaga ctgaggatct tgaattaggg tctagatgaa 360
aatttaggat gattcctacg tttgggaatg gagggagagc ttaaacaaga tagagaatat 420
agacacagat tttggaggaa atgattttct caagggactg ctgagtccaa ggaatgttta 480
caaatcctcn agaantactc caggctattt gtaanatctg angctcatag gcctttctg 540
gctctcanga tttaaa 556

<210> 2750
<211> 747
<212> DNA
<213> Homo sapiens

<400> 2750
tatgttaaag tctgggacat gttaaaagga ggacaattgc tagtatcttt gaaaaatcat 60
cacaaaaccg tgacatgttt atgtctaagc agctctggac agaggttact ttctggctca 120
ctggatagga aggtgaaagt atacagcaca acttcctaca aagtagtcca cagttttgat 180
tatgcagctt caattttgag tcttgcccct gcacatgaag atgagacaat agttgtagga 240
atgaccaatg gaatactgag tgttaaacat cggaaatctg aagcaaagaa ggaatcactt 300
cccagaagaa gaaggcctgc atatcgaacc tttattaaag gaaaaaatta catgaagcaa 360
cgggatgaca ttttgattaa caggccngca aagaagcacc tanaattgta tgacagggat 420
ctgaaacatt ttcggatctc taaggcactc gatagaattc ttggtcccac ttgtacaata 480
aagacacccg agattacggt gtccatcata aaggagttaa atcgaaaaag atccttgcaa 540
atgcgcttgc angtcgggga tganaangaa atcagtcatg ttcttaattt tttgataagg 600
aatctttctc anccaagatt tgctcctgtt ttaatcaatg ctgctgaaat aattattgat 660
atatatctgc ctgttattgg tcagtcccct gttnnttgat aaaaaatttt tactacttcc 720
angacttgtt naaaaaanaa attgatt 747

<210> 2751
<211> 570
<212> DNA
<213> Homo sapiens

<400> 2751
gtagatgcga tggcgccgat tccaaagact gtggggcgga tcaagctaga ctgctctcta 60
cggcccagct gcccactgga ggtcgctgct gcacccaaac tttgcaagga attcggtcca 120
gaggattacg gcgaagagga catagtggat tttcttcgac ggcttgtgga gagtgatccc 180
cagggcctgc accggatcca tgtggatggg agcagcgggc ggctgcagct gtggcaccat 240
gattacctcc tgggccactt ggatgatgaa gggaaatcaa ctggacagag tgacaggggc 300
aaggggctg agggactggg cacctactgt ggtctccgca agtccttcct gtatcctccc 360
caagagtctg agccctgccc tcaaagcccc tctgcctctg ccaccttccc cagtgtctca 420
gacagcctgc ctcaggtggc catgccccag aactcctggt gacagaagag gaagccaatc 480
gcctggctga agaactggtg gctgaggagg agcgcatgaa acagaaagca gaaaaaaagc 540
gactcnagaa naacntccaa aggaacggaa 570

<210> 2752
<211> 614
<212> DNA
<213> Homo sapiens

US 2005/0250150 A1

<400> 2752
tttaaaatga taaacctggg tcagaggata tttaggaaga ggcattgtca ttaagtccaa 60
gacaagatgg tcagatttgt tatcctagtg ggttacaatc caaaatactc tggagcatgc 120
tgagattaag gtggttgcca agggaacaga aaacagccat gagtaaataa atcaagactt 180
taaaggattt agatcgggtc tatggccagt tgcagagtgg gcaggatctt aagacccgat 240
aggtgcagaa cccatctgga cacggagacc aggaatggag ttccatggag gcctggctgg 300
cactgcaccc gggcatgagg acacatccag taagaagacc tgcctcaaga ggtgcactgc 360
ggtgaccagt ggaggtgact ggttggagcc tggaattgga agcanattcc aagctctggt 420
ggacaaactc tccaggcctg gtgggaatca cagctggggc agacctcatc ctggctgcct 480
ggccacaggc ccccactctc tgccactggt ggtaggacna tgcctgtgtg gaaanctggc 540
ttctctgctc ccgcctggtc caccacttgg ctagaagttc anaaacagga aantgattgg 600
tctaagctta cnca 614

<210> 2753
<211> 592
<212> DNA
<213> Homo sapiens

<400> 2753
naaaaaaaaa aaaaaaaaaa aaaaaaaaag gtttttgaan atggcggccc tcaaggctct 60
ggtgtccggc tgtgggcggc ttctccgtgg gctactagcg ggcccggcag cgaccagctg 120
gtctcggctt ccagctcgcg ggttcaggga antggtggaa acccaagaag ggaaaacaac 180
tataattgaa ggccgtatca cagcgactcc caaggaaagt ccaaatcctc ctaacccctc 240
tggccagtgc cccatctgcc gttggaacct gaagcacaan tataactatg acaatnttct 300
gctgcttagc cagttcatcc ggcctcatgg aggcatgctg ccccnaaana tcacaggcct 360
atgccaggaa aaacaccgca agatcgagga gtgtgtgaaa atggcccacc gagcaggtct 420
attaccaaat cacaggcctc ggcttcctga aaganttgtt ccnaaaaaca aaccccaact 480
caaccggtac ctgacncnct gggctcctgg ctccntcaag cccatctaca aaaaaagccc 540
ccctggaaca aggtncccat tcccctgggg tccccccttct gaagganaat tt 592

<210> 2754
<211> 631
<212> DNA
<213> Homo sapiens

<400> 2754
gnaaatctgt acgaactatt caggctgctt ttagaggcat gaaagttaga caaaaattga 60
aaaatgtatc agaggaaaag atggcagcca ttgttaacca atctgcactc tgctgttaca 120
gaagcaaaac tcagtatgaa gctgttcaaa gtgaaggtgt tatgattcaa gagtggtata 180
aagcttctgg ccttgcttgt tcacaggaag cagagtatca ttctcaaagt agggctgcag 240
taacaattca aaaagctttt tgtagaatgg tcacaagaaa actggaaaca cagaaatgtg 300
ctgccctacg gattcagttc ttccttcaga tggctgtgta tcggagaaga tttgttcagc 360
agaaaagagc tgctatcact ttacagcatt attttaggac gtggcaaacc agaaaacagt 420
ttttactata tagaaaagca gcagtggttt tacaaaatca ctacagagca tttctgtctg 480
caaaacatca aagacaagtc tatttacaga tcagaagcag tgttatcatt attcaagcta 540
gaagtaaagg atttatacag aaacggaagt ttcaggaaat taaaaatanc accataaaaa 600
ttcangctat gtggaggana tatananccc a 631

0060204-0060204

0503503.0503503 - 0503503

<210> 2755
<211> 751
<212> DNA
<213> Homo sapiens

<400> 2755
atataaactc gacagcgagg gcacccccctg cgagtataaa acccccttca ggaggaacac 60
cacgtggcac cgggtgccca ctcctgccct gcagcccctc tctagagctt cccccatccc 120
cggcacgccc gaccggctgc cgtgccaaca gctgctccag caggcccagg ctgccattcc 180
tcgaagcacc tccttcgacc ggaagctgcc cgatggcacg agaagctcac ccagcaacca 240
gtcatcctcc agcgaccctg gacccggcgg gagcggaccc tggagaccac aagtgggcta 300
cgacgggtgc cagtcccctc tactgctcga acaccagggc tcaggccctt tggaatgtga 360
cggagccagg ggagagggaa gacaccatgg aagcaagcag gcacccggaa accaaatggc 420
atggcccacc ttccaaagtc ctgggttcct ataaagaaag agctctgcag aaagatggaa 480
gttgcaaaga ttcccccaat aagctttctc acattgggga taaaagttgc tccagtcact 540
ccancagcaa cacgctctcc agcaacacct ccagcaacag tgaccanaag cactttgggt 600
ctgggganct gatggaaccc naattactgg gggtgaacta catccaaagg ggctccaccg 660
aaantgggat ccaaaccggc cccctgcatt gcttgccnca tcctccggcc tgttcacctt 720
ggcaaggcan canggccccct gattcccanc c 751

<210> 2756
<211> 608
<212> DNA
<213> Homo sapiens

<400> 2756
gtatcccgtg ctgtttccct ggcagacaca caggcgctca cgagtctctc cttgccagcc 60
tgcagggcgg cgacccccaa aacccagccc cgggtcccaa cctaggcaag aagctgcttc 120
tctgccaaca gctcctcttc ggcctccgtc acagccacct ggaccctacc ctttcgcgac 180
tgctgctgct gctgcccgga cgtggaagca gcaagaggcg cttggtcaag acacactgac 240
ggtacctaca gaatactgga catacggatt cagaatccat aaggctttat caccttgaat 300
caaggattta tttgatatca tcctcggtct ttacttccta tcaagtaaca ttgttttgaa 360
aaatagagtt aacacatttg ccataaggga gttttttttt ttttttttta aatacttcgc 420
atactctcca atgcccaaaa atagcaaggt ggtaaaaaga gaattagatg atgatgttac 480
tgagtctgtc aaagaccttc tttccaatga agacgcagct gatgatgctt ttaagacaag 540
tnaactaatt gttgatggcc aggaaagaaa aagatacnga tgttgaanaa ngatctgaan 600
tccaaaat 608

<210> 2757
<211> 773
<212> DNA
<213> Homo sapiens

<400> 2757
tgaaaatgac ctcgggaagg gccctgagcc agagtccgtc atcggttact ccgganaaga 60
tttacccagt gcccctaggc gtttccgagt ccggcagccc aacctggaga caatcaacct 120
ggaatgggat catcctgagc atccaaatgg gatcatgatt ggatacactc tcaaatatgt 180

ggcctttaac gggaccaaag taggaaagca gatagtggaa aacttctctc ccaatcagac 240
caagttcacg gtgcaaagaa cggaccccgt gtcacgctac cgctttaccc tcagcgccag 300
gacgcaggtg ggctctgggg aagccgtcac agaggagtca ccagcacccc cgaatgaggc 360
ttacaccaac aaccaagcag acatcgccac ccagggctgg ttcattgggc ttatgtgcgc 420
catcgccctc ctggtgctga tcctgctcat cgtctgtttc atcaagagga gtcgcggcgg 480
caagtaccca gtacgagaaa agaaggatgt tccccttggc cctgaagacc ccaaggaaga 540
ngatggctca tttgactata gtgatgaaga caacnagccc ctgcagggca ntcagacatc 600
tctggacggc accatcaanc agcagganaa tgaccaaagc ctggttggan tatgggcgaa 660
ggtggcgaaa ggttcatttc aatgaaaaag ggtccttcat cggccaatta cncggtccaa 720
aaagggacaa ggaagaaaac ctaaaggggc aacgaaaaan cttcaaaang ggg 773

<210> 2758
<211> 697
<212> DNA
<213> Homo sapiens

<400> 2758
tagtattaaa cattttcaaa gttacttgcc aacatctaga aagataccag gttttctata 60
aaaaagaaaa ctggatttct ggatgcttct taaaaatcag gaagtctggc agcctgagcc 120
cacatcggct ggagctgagc cgcacctgcg agttgcatct gggatctcca gttcaccggc 180
ccctaagctc ctgagggttg gcctgaccct gaggttgcct gtcaatcacc atttcttccc 240
tccactcctt gtgttacctg cctggtcctg cggggttggc aacaactcag gagcccacct 300
cgggtggttt tggaggtgcc gtgcacactg ctgattggga ggctggacgc tgccagtctg 360
tccggagttt cctttacccc tgagtagccc ccagactgaa ctggcagcga agtggaggcc 420
acgatgcatg gttctcttga agctttgctc ttcctgcccc aaatcaccct gtcccttgcc 480
cacgcccatt tgatctgctc aaatgcacaa ctggagatgt gtgtctttcc ccacaggttt 540
cttggcgatc tcacaacaga aggaataaac aagccaggat tttacaaagg gcccagccgg 600
ctcccaggtt gaccctgaan cagcctgggg gaaccanaca ccaattgctt gctgggaagn 660
aacaaggctc ggcaccntgc tgaacgaanc aaggaac 697

<210> 2759
<211> 751
<212> DNA
<213> Homo sapiens

<400> 2759
ggagctctaa attctcttta ttgtaaaaga gatgtaaagg ttttatattc taaatcctag 60
taaaattgac agtgattttt aaatataatg catcttcctt tgtctgctta gtaaaaaatt 120
tcatttcata attttggcaa gctctgtagt ggatccaaag tatctttgag ttcttgcaaa 180
ctacaagttg tttcctttcc anaaggcttg atttcattag gagacccctc tattgagttc 240
taaatagttt atcttagaaa gccttgggtc attcacaggt atccaaccag ccattgttta 300
gtttgttttt gaaggggttt gataatgctt tttaagttgt acagaatgct taatccatct 360
tattactgtc ctgagccatg taatatgcct gcatcgtgtt ggggaaatgt ttgggaaata 420
taagccagca taacgtgtaa agctcactct ttcaccctgg aacagacaag aggtgggctt 480
aatagangca gagactgggg atataccttt gtttccctag cattttatt tatttatttt 540
tattttattt tatttttga gatgganttt cactcttgtt gcccaggctg ggggtgcaat 600
gggcgccaat ctttgctcac tgcaacccct gccctcccgg ggctcaaacc gaatctcctg 660
gcctcaagcc tctcgaantt acttggggaa ttaacaggcc atgcgttcan ccactcccaa 720

US 2005/0095644 A1 May 5, 2005

nctaaatttt ggtntttttnc agtaaaaaaa a 751

<210> 2760
<211> 412
<212> DNA
<213> Homo sapiens

<400> 2760
ttgcccaata tgggtcagga gaccctcatc catctttggc atgcacgtac tggcatcatg 60
tccaagactg ctgtgtaagg ggaggagata aatgaggaca cacgacaact attaactccc 120
atattctggg aagtgacgtg tatcatttct actcgttggc cagaaatggt cagctggccc 180
taaggtaatg cagaaagatt tggaaaatta ggggagtaaa tgaaatattt ggaacncttt 240
caatccnagc agttcttaat gtttccccca ctatcatgct agcccattcc accacctttg 300
cctgaaatac tgcaagtatc ctaattaatc ttcctnatcc taatcatgct ccaatatgat 360
ctatgccttc tnccattctt gctacctcna acttttttgt ttccatctat ca 412

<210> 2761
<211> 769
<212> DNA
<213> Homo sapiens

<400> 2761
atggtgttca ccccacttca tcagcgtaca taagttatct cttcttttgg acccttattt 60
tatgccataa tgcaacaagc tttagaacta gctttggatc gtgcagagta tgtcattgaa 120
agtgcccgac agagacctcc taaaaggaaa tacctatcaa gtggaagaaa atctgtattt 180
caaaaacttt atgacttgta tattgaagaa tgtgaaaaag aacctgaagt taagaaatta 240
agaagaaatg tgaacttgtt agagaagctt gttatgcaag agactttgtc atgtttagtg 300
gtcaatctat acccaggaaa tgagggatat tctctgatgc tcaggggaaa aaacggatca 360
gattccgaga ccattcgact gccctatgaa gaaggagagt tgcttgaata tttggatgca 420
gaagaattac ctcctatttt ggttgatctc ctagaaaaat ctcaggttaa tatttttcat 480
tgcggatgtg tcatagcaga aatacgtgac tacaggcagt ccagtaacat gaaatctcct 540
ggttaccaaa gtcggnacat tctcttacgt ccaacaatgc agactttaat ttgtgatgtt 600
cattcaataa caaattgata accacaaatg gganccagga aagacaaact tttgctttga 660
aaanccagct catccctagc taccagctga ancactctgt cttgatccct cctatancaa 720
gtcccctggc actggcaaaa cagaactgct cttttnacca agccaaaaa 769

<210> 2762
<211> 649
<212> DNA
<213> Homo sapiens

<400> 2762
ttcacaactt tctgccttta aatctggttc ctctcttcag cttcaccaag ccactgaatg 60
cttttcagtt ttattaaccc tcacattccc catccttctc agcaagagcc tctccttatg 120
ccatcagcat gtatatacat ttcctaggaa atttgatctt tcttgtcatt ctttttggt 180
tccaatcggc cttttcctgg ttctcaaagc tctagtttct tctaatttct ggatcatcgc 240
aagtctggcc ctctttgaac tttaaaacat aatgtctaat tccaccccaa ttttcagcat 300
ttcttcaact aaatcgataa agctgtctcc attatgagaa aggccagaat aatactccgg 360

0507030-070800

gtaagcataa gaaagctggt cattttacaa cttctcccga ctctaggaag taatatgatg 420
ccatttgttg agcatctaca gtgtgccaag cacatggttc atctctgcaa actgctgcta 480
cattctgtaa agcaagtatt atccgcattt tagggattag gaacagcttc ctgatctctt 540
gccaaaagtc acagctagtg agtggtttag gcaagataca aaccctagtt agttaatcct 600
tactcagaag tgtataggac tatgatacat tggtctcaag ctttnnnnn 649

<210> 2763
<211> 745
<212> DNA
<213> Homo sapiens

<400> 2763
caaaaaggaa attcagaaga aaatggataa gaagatgaag aaagctagaa agaaagcaaa 60
attacattct agcaaaggag aggaggaaga tcctgaggtt aatgttgaaa tgagtctgca 120
agatgaaatc cagcgggtga ctaatataaa aacttctgcc aaaatcaagt cctttgactt 180
gattcattca cctcacggag agttaaaggc tgtcttcctg ctgcagaaca acctggtgga 240
attgtattca ctgaatccat ccttgcctac tcctcagcct gtcaggacaa gcagaatcac 300
tattgggggt catcgcagtg atgtgcggac tttgtcattc agctcagaca atattgctgt 360
tctttcagct gcagctgatt ccattaaaat atggaacagg tctacactgc agtgtattcg 420
cacaatgacc tgtgaatatg cactttgctc attctttgta cctggtgata gacaggtagt 480
cataggaaca aagacaggga aagctgcagc tttatgactt ggcttcaggg aatctgctgg 540
agacaatnna tgcccatgat ggagctttgt ggtccatgtc cctctctcca natcancgtg 600
gctttgttga caggtggtgc aaataaatct gtccaaattc tgggggattt tgantttagt 660
tgaaagatga aaaattnttc cccnaaaaaa aactttctgt ttaagccaan ccccaacttt 720
ggcacttaaa tnaaaaattt tctgt 745

<210> 2764
<211> 770
<212> DNA
<213> Homo sapiens

<400> 2764
ctancgattt cgcccgggac acccacttcc tgcacctgcg cagcgccagc ctcggttccc 60
agcagctctt gggcctgccc cgagacccag gggagcancg tcagcggcac ctttggctgc 120
ctgggtggga ggctcagcat ccccggcaca ggggtcagct tgctggtgcc caatggagcc 180
attccccagg gcaagttcta cgagatgtat ctactcatca acaaggcaga aagtaccctc 240
ccgctttcag aagggaccca gacagtattg agcccctcgg tgacctgtgg acccacaggc 300
ctcctgctgt gccgccccgt catcctcacc atgccccact gtgccgaant cagtgcccgt 360
gactggatct ttcagctcaa gacccaggcc caccagggcc actggganga ggtggtgacc 420
ctggatgang agaccctgaa cacaccctgc tactgccanc tggancccaa ggcctgtcac 480
atcctgctgg accagctggg cacctacgtg ttcacgggcg aatcctattc ccgctcagca 540
gtcaagcggc tccaagctgg ccgtcttccg ccccccgncc tcttgcacct cccttggaat 600
tacaagcctc cggggttcta ctgcctggga agaacacgcc ttgttagcnc ttgaaaggaa 660
gtnctgggaa cttgggaacg gactctgggg cgggattact ttggttngga agnaacccca 720
aaaaccgnct tatttttcca agggaacagn ttttaccaca aaccttggcn 770

<210> 2765
<211> 578

09053400.0021

0508050.000800

<212> DNA
<213> Homo sapiens

<400> 2765
atgctcatac tgggttttgg ggtgcccatg atatgtgtat atgtatattt cttttcttca 60
tttttcaaag attatttcac tttgccatag aaagaaatac aaagaacaca attgttggaa 120
agtaataaca aagactggca aagcgcattg tgatttttaa agcaactttg acatgaattt 180
atgtgtttaa tctttccagg anccatatgg cacaaagggt attatttctc ttgttttgca 240
gttgaacaag ggaaggtcag ctcatttccc caacatcaca cagctaatga gtaactgagc 300
cagaacttga attcaggacc tctcacatcc agactctacc acatcaaatt ccctttcccc 360
agtggctcta actttgactc tgttacatcc tanaacatca cctctttacc cgatatgaaa 420
gacaaccttt tcacatagtt tagganttga ctttctctgt tcttaaagct gatctaactt 480
gactanctgc cttgtattac atattttctc ccaaacaccc ctttctctan gacnaatcca 540
aaatttggca atcttgggan ttagctatgt catantcc 578

<210> 2766
<211> 783
<212> DNA
<213> Homo sapiens

<400> 2766
gtttgctgcc ggagcggagt ctccggccgg cgtccagttt gagtctaggt tggagttgga 60
accgtggaga tgcggaagga aaccccaccc cccctagtgc ccccggcggn ccgggagtgg 120
aatcttcccc caaatgcgcc cgcctgcatg gaacggcant tggaggctgc gcggtaccgg 180
tccgatgggg cgcttctcct cggggcctcc agcctgagtg ggcgctgctg ggccggctcc 240
ctctggcttt ttaaggaccc ctgtgccgcc cccaacgaag gcttctgctc cgccggagtc 300
caaacggaag ctggagtggc tgacctcact tgggttgggg agagaggtat tctagtggcc 360
tccgattcng gtgctgttga attgtgggaa ctagatgaga atgagacact tattgtcagc 420
aagttctgca agtatgagca tgatgacatt gtgtctacag tcagtgtctt ganctctggc 480
acacnanctg tcantggtag caaagacatc tgcatcaagg tttgggacct tgctcagcan 540
gtggtactga attcataccg agctcatgct gctcaggtca cttgtgttgc tgcctctcct 600
cacaaggact ctgtttttct ttcctggcag cgaaggaaan atanaatttt actctgggga 660
ataccccccc tgttcccaag cccatcatcc acagaattgg gttggcaang gcgccctggg 720
ctaaccttcc ctaacctccc cttgggnttt gggcntcccc cncccaaant taaaattcct 780
ttg 783

<210> 2767
<211> 685
<212> DNA
<213> Homo sapiens

<400> 2767
acttagtatg cttacccgca gantggagga ctagctgtat gcccagttcc aaaatgaagg 60
agatgagctc gttatttcca gaagactggt accaatttgt tctaaggcag ttggaatgtt 120
atcattcaga ananaaggcc tcaaatgtac tggaagaaat tgccaaggac aaagttttaa 180
aagactttta tgttcataca gtaatgactt gttattttag tttatttgga atagacaata 240
tggctcctag tcctggtcat atattgagag tttacggtgg tgttttgcct tggtctgttg 300
ctttggactg gctcacagaa aagccagaac tgtttcaact agcactgaaa gcattcaggt 360

atactctgaa actaatgatt gataaagcaa gtttaggtcc aatagaagac tttagagaac 420
tgattaagta ccttgaagaa tatgaacgtg actggtacat tggtttggta tctgatgaaa 480
agtggaagga agcaatttta caagaaaagc catacttgtt ttctctgggg tatgattcta 540
atatgggaat ttacactggg agagtgctta nccttcaaga attattgatc caagtgggga 600
aagttaaatc ctgaanctgt tagaagtcag tgggccaatc tttcatggga attactttat 660
gccncnnacg atgatgaana acgtt 685

<210> 2768
<211> 817
<212> DNA
<213> Homo sapiens

<400> 2768
atgttggagc agcggaggcg gcgcagaggc gcgtcttggg tccccgcggc ggcgccggtg 60
ccaagcgctg gtttgcggat acccaggcag atctgcagtg cctaatgcca tgagtgtggt 120
ggttcagcat gtggaggaaa aagctgtgca ctcctggtcg cgcatctcca cggcagggaa 180
gaaggccctg gaagangcac tgcttgtctt taacccaatg agccaggatc tcagtgccac 240
agaggcccag cttgtggcct tcctgcaggg cctgcganat gatggcttcc aacctaccat 300
cctgcgcagt ggtgatgtct atggctatag ttcatgcaca gctaatcccc caagccagac 360
gaaactgcaa gctcgtgccc ctaacccaac tgccacatca cctccagcca gtgctccccg 420
aactgccatg cggttgcctg caggtcgggc cacactgctt cccatgccgc tatctggcag 480
actggccaaa gcatccacac cagcccttgc caagcatgct accaccaacc tgctgctgan 540
ctctctgaaa caatcaagtg ccanccatgc ccggggtgca acaatgggct tccccaccca 600
cctttatcca agtgtctacc ctgccatgcc ggctctctgt tgttcttgaa ggnnctggtt 660
ccacttaaaa atcccctgcc ctgcttgggt ncccaacaca aagggacaat cnctgcaact 720
ctcacttngc aaaatctcct ccnaaaactg cggaaaaatt cnaggggaaa ggttcccggg 780
gaaacctccc ggcccaaact ccccnaaaaa accccna 817

<210> 2769
<211> 533
<212> DNA
<213> Homo sapiens

<400> 2769
attttgagcc gctgccgcca ttggagtggg ccccccccct ttccccctcc gcctcctgac 60
aggaaaggtt taagggggac agagccctgg gaggccgggc cgggctcggg ggccaccccg 120
ggggcccggg ccatggatgt gcgccgtctg aaggtgaacg aacttcgcga ggagctgcan 180
cgccgcggcc tggacactcg aggcctcaag gccgagcttg ctgagcggct gcaggcggcg 240
ttggaggccg aggagcctga cgacgagcgg gagctcgacg ccgacgacga accggggcga 300
cccgggcaca tcaacgagga ggtcgagacc gaggggggct ccgagctgga ggggaccgcg 360
canccaccgc cgcccgggct gcagccgcac gcggagcccg gcggctactc ngggccggac 420
ggacattatg ccatggacaa tattaccang canaaccaat tctacgatac ccaagtcatc 480
aaacaagaaa acgantctgg ctacgaaagg agaccactgg aaatgganca nca 533

<210> 2770
<211> 609
<212> DNA
<213> Homo sapiens

US 2003/0235830 A1

<400> 2770
aagacgcagt cttcagcaag ggaagtgctg ggaacgccct ggagtgaacc caggaagatg 60
cctgcagtgg gtgccagggc ccctctccac cgtccctgct gggcttcggg gccacgcccg 120
actgctgtga acggcctgcg gagcaccacg tgcgacggct ggaggcgaaa ggtctgcctt 180
tgatgtggct gttggtgcag ggcctgtggt gccttccgca gcggaaatgg cgcgccgccc 240
ggggagggcg ggagcagcgt cccgggtgcc cctgtgagga tgagcgacga gatgactgga 300
gggtccctga agacctcact agggtgcccc cagccggtcc gctcccagga agcgacaccc 360
ccacagcccc agggctgcag ctgagggggt cgccactctg gctgggcgag gctgggccct 420
tgggggcagg cgccagaatg gcctcaggct ctacaagatg cctgaaaaca ccaacctctc 480
cagggctcac tagcattgga cgctttcacg ctctgccctg ggccggaagc cccctcaccc 540
cgcgcgatgt gcaaactcct tgcanggctc actcantttc canaacttta attattggaa 600
agttctccc 609

<210> 2771
<211> 622
<212> DNA
<213> Homo sapiens

<400> 2771
ggagacaccg gaaggagccg cggctgctgc gggaagtggc cagttcagga ggcggacccc 60
ccgagggcag cgctgcgggg ccgttttccg gccctcctga cgcgacactg cccctctccg 120
agagctgaga aggaaaanag gagcttgcgg aggtgcggct gcaggccgtt gttggtcgag 180
ctggcgggtc ccgcgggcca ggccgtggag agctcctgaa ggaagcacta aacatggaaa 240
ggaacaaccg gtaccagcca ctgcaaaaac atgccaaatt gtaaagacca tcgatgttag 300
gaanaaactg cctcaactaa tgagcaaaat aaccagctaa catcgtaatg acaggatcaa 360
attcacacat aacgatatta accttaaagg tgttacctca ttttgaaagt cttgggaaac 420
aggaaaaaat tcctaacaaa atgtcagctt ttcnaaatca ttgtccacat ttggattcag 480
ttggtgaaat aacaaaagaa gatttgatac naaaatccct tggtacttgt caggattgta 540
aantccaagg accaaatctt tgggcatgtc tggaaaaata aatgttcata tnttggctgt 600
ggtgaatcnc aattnaatcn ca 622

<210> 2772
<211> 420
<212> DNA
<213> Homo sapiens

<400> 2772
gatttaactt attacttttt ctgcttctgt ttccacccca gctgcctctc ttgtcctgag 60
ggttaggctg gagtgacagt ttccgcccac cccccagccc aagaaagagg ctgccggaaa 120
gaaaatgctg accattggag gtgcccaaca gtagaatggg ctactgtgag gggtagtgag 180
agccccattt ctggaggtat gcaaatcttg actggacagc cagctctgag attttatcag 240
ggcacttcta tacctgtggg acattggact ggatgagccc tgagccagct tccactccta 300
cctgaataga aaactcactg cacccnccca caacacntga taaacacatg tcctcactga 360
atgttactga ttgcggctga aggcctgcct ctggctgtgt ggggaagtgg gtggaaangt 420

<210> 2773
<211> 499

0502034.0702000

<212> DNA
<213> Homo sapiens

<400> 2773
aaaagaagca gcacctgttg agagaagtga cagttgagga aaataatgct tccccacatt 60
ttgagccaga tctccatatt gaggacctga ggaaatccct tggaacaaac cagaccaaag 120
aggtgtcttc ttctctctcc cagagcaagg aggacttata cttggacagc ctgtcctccc 180
acaatgtctg gcacctcctc tctgctgagg gggtagccct ccgtagtgcc aaggagttcc 240
ttgtgcggca gacacgctcc atgcggaggc ggcagacagc tctgaaagct gcccagcagc 300
attggcgcca tgagctggcc agtgcgcagg aggtggccaa agacccacca ggcatcaagg 360
ccctggaaga tatgcgcaag aacctggaga aggagaccag gcacctggat ganatgaant 420
cngccatgcg gaaaggccac aacctgctga anaagaaaga ngagaagctg aatcagttgg 480
agtcctctct ttgggaaga 499

<210> 2774
<211> 668
<212> DNA
<213> Homo sapiens

<400> 2774
gttaaatcat cggaattttt gatgatacct tttctatatg gattacaatt tgatcgctgg 60
gaattctcca ccttaaagaa gtaccctcag gtgactacag atgtgttaac acccagcatg 120
ttccggtagg agactttctg gatggggaag atttccagga attggcaaca agctcatttc 180
actggtgggt ttgctgaagc attatcacaa gacagtcaga atgactgatg agtgctcttc 240
aggtgtgaat catggcaata cagtgaaaga cagtgattta ctgcttttga gggcgtgcat 300
gtatatgatt aacggatgga agtgcaggac tccaagattt acttccttcc ctttccagca 360
gaattacctg agacgagtaa aatctactgg cggagtcact ccattattct tatctgtgga 420
gatctagatc ttgatttgaa agtttctgag aaaatcttca gctcagactt gagggtcaac 480
tttaccagct gaaggatctg catttactgc tcaaccacat ctaatttgat gtcctctgca 540
gatttaaaat gtgtgccttc ttttccgtca ccaagtcatc cctgggttnc tactggaaca 600
tccttctcaa ttccccccga cccatggatg gctgttctcc attgtctgtt tcnccanatg 660
tcctccnn 668

<210> 2775
<211> 810
<212> DNA
<213> Homo sapiens

<400> 2775
gaaggaagcg gtggctgctg cggatgtcgg tgtgagcgag cggcgcctga acacacggcg 60
gctgccgagc gcctgacccg ggcctgcgcc agagcctgca ccgagctccg gggccccaca 120
cccgctacgg tggccctgcg cccgttgcta ctgaggcggc gtgctctgca ttcttcgctg 180
tccaggcctg ccggctctgg tgtctgctgg ctcctccttg ctcgcctgct ccctcctgct 240
tgcctgagtc atcgccgccg ccgccgccac agccatggcc ganagtggtg aaagcggcgg 300
tcctccgggc tcccaggata gcgccgccgg agccgaaggt gctggcgccc ccgcggccgc 360
tgcctccgcg gancccaaaa tcatgaaagt caccgtgaag accccgaagg aaaaggagga 420
attcgccgtg cccgaaaata gctccgtcca gcagtttaag gaagaaatct ctaaacgttt 480
taaatcacat actgaccaac ttgtgttgat atttgctgga aaaattttga aagatcaaga 540

0802704350

taccttgagt cagcatggaa ttcatgatgg acttactgtt caccttgtca ttaaaacaca 600
aaacaggcct caggatcatt canctcanca aacaaataca gctggaaaca atgttactta 660
cntcatccaa ctcctaatat taactctaca tctggttcct gctactaaca acccttttg 720
gtttaagttg gccttggggg gactttgcaa ggtctnaatt ancttggggt ttgaaatact 780
aaccaanctt tctctnaaat taacnaaatt 810

<210> 2776
<211> 813
<212> DNA
<213> Homo sapiens

<400> 2776
ggttttagaa agtagcatta gtattgcagc tagccacaat aatttagttg aaatttaaat 60
cacaatattt agcccctcta aaaatgcaat acttacatcc ctatatataa ctacatatct 120
atattctctc tatatagtat cctgtatgtt atttatccac tatacatctc tatatagcta 180
atatgctata tattactata tacagtgata atataaatat acacacattt tatgcattat 240
atatataact atacggtaat actatatgta tgtaatatat agtaataagt gtgccataaa 300
gtgtcaccta ccttggcttc caatatcaga gacttctact ccagtgtcca tttttatacc 360
atcaagaatg atagcttgat caccaccgcc ttcatcatct tccttctcag agtcttcaag 420
atcaccccag gagttttcta ctccctctcc aatttgggca gttccaggag tccatagcac 480
aggtgtagaa acacttaaca agttaagaaa actgagtaac aaaaatattg ctatttgatg 540
aactgttgaa gatgagaatg aaagttttct tcttgtaaga ttgattcaag tgtgccccaa 600
gttcctangg gaaaaaaaac ttaatatanc tacactntgg atgggtggaa cnatggaaga 660
agaaaaaaaa ctcngggcag attttatggg atgccattaa taagaaatgt tgaaaaaaan 720
agaatccctc aacattttta anttattagt tactaaaatt taaatttggg gccctaaaaa 780
tcctggtttt tttccccgga aaaacttgga ann 813

<210> 2777
<211> 511
<212> DNA
<213> Homo sapiens

<400> 2777
gcatttgcgg ccggcgccag ggtggagagt tgtgcgccgg tccctgggcc tgagctccgg 60
ctccggctgg ggcgcctgcg atgtctcaag atggcggagc tgggcgaatt aaagcacatg 120
gtgatgagtt tccgggtgtc tgagctccag gtgcttcttg gctttgctgg ccggaacaag 180
agtggacgga agcacgagct cctggccaag gctctgcacc tcctgaagtc cagctgtgcc 240
cctagtgtcc agatgaagat caaagagctt taccgacgac actttccccg gaagaccctg 300
gggccctctg atctctccct tctctctttg ccccctggca cctctcctgt aggctccct 360
ggtcctctan ctcccattcc cccaacgctg ttggcccctg ggcaccctgc tgggccccaa 420
gcgtgaggtg gacatgcacc cccctctgcc ccancctgtg caccctgatn tcnccatgaa 480
accattgccc ttctatgaan tctatgggga n 511

<210> 2778
<211> 577
<212> DNA
<213> Homo sapiens

0050-0050-0050

<400> 2778
aagcgcgttc ccggcagctg cgggctccga ggccaganag aaaagactgc gaggtggccg 60
cagctgtggc cggagagcac aaagaatgaa ccagcagtgg aagagaaaat actgtaagct 120
ggctgactgc tggtgaanaa aatgctttat ttttgtggca ggcatctgtg ggatctgtaa 180
tagaaatgat ggctggctgt ggtgaaattg atcattcaat aaacatgctt cctacaaaca 240
ggaaagcgaa cgagtcctgt tctaatactg caccttcttt aaccgtccct gaatgtgcca 300
tttgtctgca aacatgtgtt catccagtca gtctgccctg taagcacgtt ttctgctatc 360
tatgtgtaaa aggagcttca tggcttggaa agcggtgtgc tctttgtcga caagaaattc 420
ccgaggattt ccttgacaag ccaaccttgt tgtcnccaga agaactcaag gcagcaagta 480
gaggaaatgg tgaatatgca tggtattatg aaangaagaa atgggtggtg gcagtacgat 540
gagcgcacta ntananaact gggaanatgc tttttcc 577

<210> 2779
<211> 400
<212> DNA
<213> Homo sapiens

<400> 2779
atttacacaa gtattgttga gggagtgatt ttttcttgat atgcgtctgt tttcatttat 60
tattaatttg aaagatnaac agttgtgatc cataatggat catttcttat gtcttttaca 120
tagctaataa tgttctctgt ttatttctca tgaattccca ttttgtggct aaagaccaga 180
cctttgcact atttcatcaa gattatttta ttgaggtttg gcttacatat agtagaggca 240
atacatatga gatacgcaac tttgtttttg cagctacaat gcactttctc gatctcatat 300
gtttttgtct tgtatagacn gacacaagtt cancatgttg canattggga atagtgagct 360
atacaaaaga gattttgagc ctagatgagc ttaggataga 400

<210> 2780
<211> 823
<212> DNA
<213> Homo sapiens

<400> 2780
aaaaaaaaaa taaaagatgt atatcaacaa anccaatatc tggaatagtg ccttagatgc 60
attcagaaat cgaaacttta atccttcata tgcaattgaa gtagcatatg ttattgaaaa 120
tgataatttt ggaagtgagc atcctggatc aaagcaagaa tttctgagtc tcttaatgca 180
acatcttgag aactcatcat tgtttgaagg gtccttgtca aagaacttgt ctctaaattc 240
tcaagctctg aaaganaatc tttactatga agctggcaaa atgcttgcca tttctttagt 300
tcacggtggt ccttcacctg gtttcttttc taaaaccttg tttaactgcc ttgtttatgg 360
accagaaaat acccagccaa ttttagatga tgtttcagac tttgatgtgg cacagattat 420
aatcaggata aatactgcaa caactgtagc tgacttaaag tcaataataa atgaatgcta 480
taactacctt gagttaattg gatgtctcag acttataacg acattaagtg ataaatatat 540
gttagtaaaa gacatacttg gctaccatgt tnattcagan agtccacaca ccctttgaaa 600
gttttaagca nggtctgaaa acccttggtg ttttggagaa aattcaggct tatccanaaa 660
cattttgtag catcctgtgt cataaanctg aaantctttc tgccaaaatc cttagtgagc 720
ttttttacag tacacacatt acctgatgtt aaaactttgg gggtttggaa canttacttt 780
cnggctgttg aaaaatggtn aatctnccnc aacaatggga aaa 823

<210> 2781

0962046.0720800

<210> 2781
<211> 650
<212> DNA
<213> Homo sapiens

<400> 2781
ggcaaatggg cttgggcggc tcctcggcgg gtggcggtgg tggccgtaac ggttcctcct 60
ggccctgtta atgtcggggc caggccgggg gaggatggcg ccctagaacc cggccttgct 120
ggggtagggg cgggagggga cggggtgggg accggccatg tcggaggtga cccggagtct 180
gctgcagcgc tggggcgcca gttttaggag aggcgccgac ttcgactctt ggggccagct 240
ggtggaggcg atagacgagt atcagatatt agcaagacat ctacaaaagg aggcccaagc 300
tcaacacaat aattctgaat tcacagaaga acaaaagaaa accataggca aaattgcaac 360
atgcttggaa ttgcgaaatg cagctttaca gtccacacag tctcaagaag aatttaaact 420
ggaagacctg aagaagctag aaccaatcct aaagaatatt cttacatata ataaagaatt 480
cccatttgat gttcagcctg tcccattaag aagaattttg gcacctggtg aagaagagaa 540
tttgggattt gaagaagatg aagaagaagg tggtgctgga gcagggtctc ctgattcttt 600
tcctgctaaa ttccccgtac tttattacca angttnccat ccgaaaccan 650

<210> 2782
<211> 627
<212> DNA
<213> Homo sapiens

<400> 2782
ccagtctggg caccggagcc tgtgaccgct tcgttagtgg agaggtagct ggcagtccgc 60
ttcggcgggc ctgtgccccg cgccgttctc ggggcctccc tgctgagctc gcggctcacg 120
ctgagaggga cacgcagtga cgagcggccg aagcagcttt gcggtgagag cacgctgggc 180
cgggggccgg gcgggancct ggtggcgggt aacgccggac tcgagggttt tgtagtgcat 240
ccctgagcat gagcacagaa tgaagcggcg tttggatgac cagnagtcac cggtgtatgc 300
agcccagcag cgtcggatcc ctggcagcac agaggctttt cctcaccagc accgggtgct 360
tgcccctgcc cctcctgtgt atgaagcagt gtctgagacc atgcagtcag ctacgggaat 420
tcagtactct gtaacaccca gctaccaggt ttcagccatg ccacataaac tccggcagtc 480
atgggcccgc tatatcagca nttcatatca gccatcatca cccaacagcg gtgcagcccc 540
acggangcca ngtggtccag aatcatgctc atccagcccc accagttgca ccagtgcang 600
gacagcancc aatttcanaa gctgaaa 627

<210> 2783
<211> 648
<212> DNA
<213> Homo sapiens

<400> 2783
acggcacctg gaaatggaaa gccagtgaag gctgctttgg gccggggcag cgggtgggac 60
cgggcgggag ggattccaaa gagaccgccg ggaaggctag agcttggaat tccggctcct 120
cggagtcctg gccctccccc accgccgcct cggagctcag cacaccttgg atgggggang 180
cgggcagctc ctanccccgc accccaggag gcgcgctcgg agggaagccg ccaccgcgcc 240
gcctctgcct cggcgcggaa caaacggtta aagattttgg gcaccgcctc gcggggggag 300
gagccagggg cccaatccgc aattaaagat naactttggg tgaactaatt gtctgaccaa 360
gcggaggaag ttcctgcaga tgaancgcan gaaatacggc ttcatctaca agacgcatct 420

0050205.0050205

gttcgggcgg cccaccgtac gggtgatggg cgcggacaat gtncggcgca tcttgctcgg 480
anancaccgg ctggtgtcng tccactggcc ancgtcggtg cgcaccattc tgggatctgg 540
ctgcctctct aaccttgcac gactcctcgc acaagcaang gcaanaangt gattattcgg 600
gccttcancc gccaaggcac tccaaatgct acgttcccgg tnatcacc 648

<210> 2784
<211> 462
<212> DNA
<213> Homo sapiens

<400> 2784
gcatgtgcgt gtgtgctggc tgccgggctg ccccgagccg gcgggggagc cggtccgctc 60
caggtggcgg gcggctggag cgaggtgagg ctgcgggtgg ccagggcacg ggcgcgggtc 120
ccgcggtgcg ggctggctgc aggctgcctt ctgggcacgg cgcgcccccg cccggcttcc 180
cgggacgcgg ggactgggcg caggctgcaa gctggtgggg ttggggagga acgagagccc 240
ggcagccgac tgtgccgagg gacccgggga cacctccttc gcccggccgg cacccggtca 300
gcacgtcccc ccttccctcc cgcagggagc ggacntggac tacgactcgt accatcacta 360
tttcnacgac tatgactgcg gggaggattt ctaccgctcc acggcgccca ncgaggacat 420
ctggaacaaa ttcgagctgg tnccatcgcc ccccacgtct cc 462

<210> 2785
<211> 713
<212> DNA
<213> Homo sapiens

<400> 2785
ctcttttagc ggcggcggct tcttccgtgg gacaatatgt tcaagagaat ggccgaattt 60
gggcctgact ccggcgggag agtaaagggt gttactatcg ttaaaccaat agtttacggt 120
aatgttgctc ggtattttgg aaagaaaaga gaagaagatg ggcacactca tcagtggaca 180
gtatatgtga aaccatatag aaatgaggat atgtcagcat atgtgaagaa aatccagttt 240
aaattacatg aaagctatgg caatccttta agagttgtta ctaaacctcc atatgaaatt 300
actgaaacag gatggggtga attcgaaata atcatcaaaa tatttttcat tgaccctaat 360
gaaagacctg taaccctgta tcatttgcta aagctgtttc aatcagacac caatgcaatg 420
ctggggaaaa agacagtggt ttcagagttc tatgatgaaa tgatatttca agacccaaca 480
gcaatgatgc aacaattatt gacaacatct cgtcagctaa cattaggagc ctataagcat 540
gaaacagaat ttgcagagct tgaaagtgaa aaccagagaa aaattanaag ctgctaanaa 600
aaaaacaagc tttganattg cagaacttaa ggganagatt aaaaaccaan ttcgtgaaac 660
tataaattgt ttaaaaaatg aaatcagaaa acttggaana agatgaccna gcc 713

<210> 2786
<211> 576
<212> DNA
<213> Homo sapiens

<400> 2786
ggtgcttcta ggaagtagaa cgccggctcg catgcctgcc cgcccgccag cctgccgggt 60
acggcctttt ccgccggggc ttccaggtca aagaattcgc ctttgccgct accgctttct 120
taccctccgc acccgttaag ttctccggtc gggcggcagt ctctgaacac ttagccgcgc 180

US 2005/0009030 A1 Jan. 13, 2005

catccggggt cacaccgcct ggaaggangt gacgggggcg gcgcggggcg cggacactcc 240
ccgctgagag tccgcctgcc atggactcgg aatattacag cggcgaccag tcagatgatg 300
gtggtgctac cccagtacag gatgaacggg attcagggtc agacggtgag gatgatgtnn 360
atgagcaaca ctccggatca gacactggaa gtgtanaacg tcattcagag aatgaaacta 420
gtgatcgaaa agatggcctc cccaaaggac atcatgtnac agactctgag aacgatgagc 480
ccttaaatct taatgctagt gactctgaaa gtgagganct tcacaggcaa aaggacancg 540
actctgaatc tgaagaacnt gcanaacctc ctgcna 576

<210> 2787
<211> 591
<212> DNA
<213> Homo sapiens

<400> 2787
gctccggcgg cttcgctgct agctcgcggc gacgtcgggc cgattttccc aggatgacag 60
agctgaggca gagggtggcc catgagccgg ttgcgccacc cgaggacaag gagtcagagt 120
cagaagcaaa ggtagatgga gagactgcat cggacagtga gagccgggca gaatccgcac 180
ccctgccagt ctctgcagat gataccccgg aggtcctcaa tagggccctt tccaacttgt 240
cttcaagatg gaanaactgg tgggtgagag gcatcctgac tttggccatg attgcatttt 300
tcttcatcat catttacctg ggaccaatgg ttttgatgat aatcgtgatg tgcgttcana 360
ttaagtgttt ccatgaaata atcnctattg gctacaacgt ctaccactca tntgatctgc 420
cctggttcag gacgctcanc tggtactttc tcctgtgtgt aaactatttc ttctatggtg 480
agacagtgac ggattacttc ttcnccctgg tccaaaaaaa aaacctttgc ggattctcan 540
tnaataccac cggttcattt cctttactct ctatctaata ngattctgcn t 591

<210> 2788
<211> 764
<212> DNA
<213> Homo sapiens

<400> 2788
tcaacatcaa ttattcaggc ccctacagtt gtggtattga ggcccctaaa ggcttctgcc 60
tttcaccaat tagtgctgcc agttactgag gcttctccca aaaggtatca gtccagtctt 120
aaagatattt cattgtgaaa gaagaaacta aactatcagg cctcttttac aaaatgagag 180
attgaattta agcttgtcaa gcacgtactg gaaggtatga attacactac catgtgtttt 240
gtatcttccc tttcaagtga tgatgttaaa tgaaggtaag tttttcatcc ttttttaatt 300
tttgtttttt ataaatcatt tcagcttttt ctggtttata gaggtgtctt atttctaatg 360
caacagaccc ccaactttaa cagatttgat atggatgcat ttattcacaa gcaaccccaa 420
aagtccaaaa atgtaataat tttgacaagg cccaaagttg anatgctatg aagcttgtgt 480
gtgtgaaaag tcagttatga ttgtctggaa aaaactgtgg tgtgtatgct gtaaanttcc 540
acatttcaca tgcagtgtac tccaaaaagc gggtttgggt caccatttcc catctctttt 600
taaaaaatga ctgctgttgg gggccagggg acatcatggg gaagtggggc tgtccaattt 660
agctttgccc ctgcaccttc ngcccangaa aagatttgaa ccnaaaccaa ngcttccaaa 720
aaaggcaaaa tnttttccgg caaaaaaggg acccaggtta cccc 764

<210> 2789
<211> 721
<212> DNA

09/05/2005 15:09:03 PM

<213> Homo sapiens

<400> 2789
gtgcgcccgc cccctctggg gcggagagac tcagcccctg cccctcagcg gataacctgg 60
ggactgaccg ttccctgggg atccgacggg ccccagagga cccacgcctg agccccgtgc 120
gactcgtggc ctttgggcta gaagccatgg acgccttcac ccgcttcacc aaccagaccc 180
agggccggga ccgactcttc agagccactc agtacacatg catgttgctt agatatttgt 240
tagagcccaa agctggcaaa gagaaggtgg taatgaagct caagaaactg gagtccagtg 300
tgagcactgg tcgtaaatgg ttcagactag gcaatgtggt acatgctata caggcaactg 360
agcagagcat tcatgccact gacctggtac ctcgcttatg cttaacatta gccaacctga 420
accgtgtgat ttatttcatc tgtgacacca tcctctgggt gaggagcgta ggtctcacct 480
ctggcatcaa caaagagaaa tggcgaacga aggctgctca ccactactac tattctcttc 540
tgctgagcct ggtcagggat ctgtatgaaa tctccctgca gatgaaacga tttcatgtga 600
cagggcaaag aaagagaatc agcatcccag atccttgttc acntggtgag agaacaaatg 660
gtccatcttc tctcttttcc attctaacac tctcctgtct gaccntgaaa cttgtnattc 720
t 721

<210> 2790
<211> 619
<212> DNA
<213> Homo sapiens

<400> 2790
atttttttca agggatgagc tttgccagct ccacgtggaa gtccctaaag ctcctccttc 60
cacttcgaag cgtgactgat gcctccaggg cctcacagcc gcttctgaag cacttcctga 120
aagccagctc caccctggcg aggccctgac ctcagcggac ccaagcccag gacgatgcct 180
gttgcgttct tctcccccag tagcaagtca ccttccccag cagcctccat gttgtctggg 240
ctctccctgt gggggatgcc aggggagagt gagagagcag aggtggccaa gatggcatgt 300
gctgccttct ctcctggaac atgctgcttc cacagggcag tgccagtgtc tccgtgtgaa 360
ttcattgatt gtggcctgag tgaattcctg ggtttgctgt tccagatgat tctgcagggc 420
ttcaaaacca gcaaggccct gagcaaagct gctccttctt ctcatgggct gaactcatcg 480
tgatgtcact ggctaagggg ggcancatgg ggtccagccc ggcccangca catggaactg 540
cggtcctgtc angctgaatg tggtgtttgc cttctaagat nggccccaag gcaccanttc 600
ccaaaaaagg tctgtcncc 619

<210> 2791
<211> 551
<212> DNA
<213> Homo sapiens

<400> 2791
tttgatgatg cccaacagga ggaccggaag agactggcgg agctgctggt ctccgtcctg 60
gaacagggct tgccaccctc ccaccgtgtc atctggctgc agagtgtccg aatcctgtcc 120
cgggaccgca actgcctgga cccgttcacc agccgccaga gcctgcaggc actagcctgc 180
tatgctgaca tctctgtctc tgaggggtcc gtcccagagt ccgcagacat ggatgttgta 240
ctggagtccc tcaagtgcct gtgcaacctc gtgctcagca gccctgtggc acagatgctg 300
gcagcagagg cccgcctagt ggtgaagctc acagagcgtg tggggctgta ccgtgagagg 360
agcttccccc acgatgtcca gttctttgac ttgcggctcc tcttcctgct aacggcactc 420

US09/513,803

cgcaccgatg tgcgccagca gctgtttcag ganctgaaan gaatgcgcct gctaactgac 480
acactgganc tgacctgggg gtgactcctg aanggaaccc ccaccacgct ccttccttcc 540
caanaaactg a 551

<210> 2792
<211> 697
<212> DNA
<213> Homo sapiens

<400> 2792
atcgctgcgg ttgcgagcgc tgtaaggagc ctgtgctgtg ccgcgcagtt aggcagcagc 60
agccgcggga gcagtagccg ccgtgggagg gagccatgaa gcattacgag gtggagattc 120
tggacgcaaa gacaagggag aagctgtgtt tcttggacaa ggtggagccc cacgccacca 180
ttgcggagat caagaacctc ttcactaaga cccatccgca gtggtacccc gcccgccagt 240
ccctccgcct ggaccccaag ggcaagtccc tgaaggatga ggatgttctg cagaagctgc 300
ccgtgggcac cacggccaca ctgtacttcc gggacctggg ggcccagatc agctgggtga 360
cggtcttcct aacagagtac gcgggggcccc ttttcatcta cctgctcttc tacttccgag 420
tgcccttcat ctatggccgc aaatatgact ttacgtccag tcggcataca gtggtgcacc 480
tcgcctgcat ctgtcactca ttccactaca tcaagcgcct gctggagacg ctcttcgtgc 540
accgcttctc ccatggcact atgcctttgc gcaacatctt caagaactgc acctactact 600
ggggcttccc cgcgtggatg gcctattaca tcaatcacct ctctacactc cccctancta 660
cggaactcaa cangttaaac tggcctcccn tctttgt 697

<210> 2793
<211> 747
<212> DNA
<213> Homo sapiens

<400> 2793
gtgtgtgtat gtgtgtgtaa atttatatac acacacatgg aaacagttcc tggaanagaa 60
ttctgaatgc tttgctagca aaacactgtg gtgtgcaaac ctagaaccca atagaaaaaa 120
aagccattta tctgaaggct gcatagtgga gagagtcttc agtttacctc attctttgta 180
gcanccccttg attttaacag gtttttgtaa taggtacaga taatcccata cctttctagg 240
tgcgatttta agttaagcta aaaattattt gtagggttaa tttatttgta tatgatagta 300
gaaggtaaga tcatgtcaaa ccttataatt tggggaatct gacactattt aaattattgg 360
caactgttgt ctgttgtaca naaattcttt ttctactggc tcagtctgtt acattaataa 420
tgcattttat atgttcaggc acactttaca taaatacaaa gttcgctagt aaatatctgg 480
ctattttggc tatttacaac actaatttca ttatttttat ctgtaagcat tattaataca 540
tctttaccaa aacctgagca atacnatatt tnctttatat gttatatgcc cttgtttgct 600
aaaanctaat atttttgcat ttactttaaa ggggctgttc taaaccccca gctttaattc 660
ctcccctaaa aaaaaacatt gcagctaacc ctngaacncc cngttttaaa atacantatt 720
tctcttcccc aatctccntg cctccgc 747

<210> 2794
<211> 645
<212> DNA
<213> Homo sapiens

0508040.0702

<400> 2794
gcggtgccgg gggcggggcg cggcggctgt canctgactg tggcggcggc ggcctcgang 60
tgacaactgt ctccgtcgca ngctccggcg ggggcgcaag angtcgcccg gcgcgtcact 120
gtcgggtcgg cgagccacgg gggccgccgc agcaccatgg cgaccaccgt cagctggacg 180
cccaggcggc ccagcagctg cagtacggan gcgcantggg caccgtgggc cgactgaaca 240
tcacggtggt acaggcaaag ttggccaana attacggcat gacccgcatg gacccctact 300
gccgactgcg cctgggctac gcggtgtacg aaacgcccac ggcacacaat ggcgccaana 360
atccccgctg gaataaggtc atccactgca cggtgccccc aggcgtggac tctttctatc 420
tcgagatctt cnatgaaana accttctcca tggacgaccg cattgcctgg acccacatca 480
ccatcccgga ntcctgaagc agggcaaggt ggaagacaaa tggtacacct gancgggaag 540
gcaggggggac aacaaggaag gcatgatcaa cctcgtcatt tctacncgct gcttccanct 600
gccatggtna tgccacccan cccgtggtcc tgatgccaac aatnt 645

<210> 2795
<211> 760
<212> DNA
<213> Homo sapiens

<400> 2795
naaggaactt taaattctta tatttacttt tctctcagta aattgttaaa ttttcactca 60
gcaaaagatt ggcatttgtt aagtgttcta tatttagtac taaaatcaca gtcatgaaat 120
catagtcata aaatggtctt cacacagcag tcatccgtgt catttatcat tttgtaatat 180
taaattatgg caattttatt tcaaactaaa gtttgaacac cggaaagtca ttactcagtg 240
atttgtaatt tgggacttgg attatttatc tagagatgtt tgtatatttt gtcagtaact 300
aatactgcgc tgccatcatg gtgactgtca tggttctaca gaaatgccct ccatgtgtcc 360
ctctaatgtt gcatgtttca gtgggttgga agttttgtat atttattgta ttaacacaga 420
gtgtcataaa ataaaatgct gtttactgga tgtttgtttg tataattttg aacactataa 480
tagcaattca gagacagaca ttgttaaagg tttgatgtat atanaaattc catgtttgat 540
tttttaaaat atgtgtataa gtctgtcatg tgctaaacaa aataatatga aagacctagt 600
taaaaattct aaccaatgtt aaaatgacca ttttnctgtt gcattaaaac ctttacaggt 660
taatggaaca tgaacttcnc cccatattaa atattttggg ccctttaagg tcnaaataca 720
natctcctaa aanttanatt ccaaatggaa aaacctattc 760

<210> 2796
<211> 577
<212> DNA
<213> Homo sapiens

<400> 2796
tgggggtcac gtccaggtga tggacccgga gcccgtcccc ccaatccctc acccccccaca 60
cctcagccac tggagactga tgatccaacc acaggatccc tactctttgg ccacgagatc 120
ccagtaccca gatcctggat cctagactcc tatgccccaa ccattgggtc atgggatccc 180
agcacccaga tcctggatcc tagactccta tgccccaacc actgggtcat gcgatcccca 240
cccttcagcc actagatccc agatcccccc gtaaccataa ctgtggatcc cttacttcag 300
caactcaagt ctgctaccct aaccacaaga ttcaagatta tccacacccc agcccttaat 360
ccccatcccc caaatcactg gatcctgcag ccccacatcc taaggtggat cccacgcttc 420
cctgtgcccc ctactggatc ctggacctct acgtcttaac cactggatcc cacacaaatc 480
antgaatgga tcccaacacc ccaaccacag gagcacggat tccctgtncc tcaacaccca 540

0960203.0970303

naccctgcct ccctcangca ccanatccag tgtccta 577

<210> 2797
<211> 737
<212> DNA
<213> Homo sapiens

<400> 2797
naatggcatt gaaacgaatg ggaattgtaa gcgactatga gaaaatccgt acctttgccg 60
tagcaatagt aggtgttggt ggagtaggta gtgtgactgc tgaaatgctg acaagatgtg 120
gcattggtaa gttgctactc tttgattatg acaaggtgga actagccaat atgaatagac 180
ttttcttcca acctcatcaa gcaggattaa gtaaagttca agcagcagaa catactctga 240
ggaacattaa tcctgatgtt ctttttgaag tacacaacta taatataacc acagtggaaa 300
actttcaaca tttcatggat agaataagta atggtgggtt agaagaagga aaacctgttg 360
atctagttct tagctgtgtg gacaattttg aagctcgaat gacaataaat acagcttgta 420
atgaacttgg acaaacatgg atggaatctg gggtcagtga aaatgcagtt tcagggcata 480
tacagcttat aattcctgga gaatctgctt gttttgcgtg tgctccacca cttgtattgc 540
tgcaaatatt gatgaaaaga cctgaaacga naaggtgttt gtgcagccag tcttcctacc 600
actatgggtg tggttgctgg gatcttaata caaaacgtgt taaagtttct gttaaatttt 660
ggtactgtta ntttttacct tggataccat nccatgccgg aatttttcc cactatntcc 720
atnaaaccca atccncc 737

<210> 2798
<211> 492
<212> DNA
<213> Homo sapiens

<400> 2798
aagatcattc ttttacttgt ctatggctgc ttttctgtgg cagagtagct gccacagaaa 60
ctatagccca caaagcctga tatttactgt ctgtctgttt atggaaaaaa tttatcaacc 120
catggtctat agtatagtgt gatatgacta ctgttccaat gtattgaagt gttgggatag 180
ttttttcaaa tgttttcaga tgttcttgtt ttagaatcat tgtcaccttt aagaggaaaa 240
aggtcatcac tagataatct aaacagattg ttgcttctca gtgttagcaa ggaaaataat 300
ctagtttcaa attacattgc agtataatga aaaagatcca tatactgtgg aatgatattc 360
ttttaaaatt atttgctatg gcttggtaaa aatgtacttt ttccagtagc acatatcaca 420
agaacctcac tgtanttgaa agccatctnt ctntagtatt tgtttatccn tttaggagag 480
tcnagcaaag gt 492

<210> 2799
<211> 816
<212> DNA
<213> Homo sapiens

<400> 2799
cagcccacct cttgcatcgt cacctacagg tatctaagca atggatccaa gccctggagg 60
ttggtgagag ccatgtatta cccctagatg aaattggaca agagaccatg accgtaaccc 120
tcctcgatgc caatcactgt cctggttctg tcatgtttct ctttgaagga tattttggaa 180
ccatcctcta cacaggtgat tttcgataca caccatccat gctaaaggag ccagccctga 240

0056294-050200

cactggggaa acagatccat actttatacc tagacaacac caattgcaat ccagccctgg 300
ttcttccttc ccgacaagaa gctgcccacc agattgtcca gctcattcga aaacacccac 360
aacataacat aaagattgga ctctacagcc tgggaaagga atcactgctg gagcagctgg 420
ccctggagtt tcagacctgg gtggtattga gtcctcggcg cctggagttg gtacagctac 480
tgggcctggc agatgtgttc acagtggang agaagctggc cgcatccatg cagtanacca 540
tatggagacc tgccattcca acatgctgcg ttggaaccan acccacccta cgattgctat 600
ccttcccaca aagccgaaaa atccacagct cccaccctga tatccacgtc atcccttact 660
ctgaacattc ctcttactcc gaacttcctg cctttgtccc aacactgaaa ccttgccaag 720
ttggttgccc attgttaatt ccgccggncc ctgttggaaa ggtttccang ganagttctg 780
aaaccccang gattctccng tgccccctga aattcc 816

<210> 2800
<211> 616
<212> DNA
<213> Homo sapiens

<400> 2800
gagatcagaa caatggccta gggtcaggcc cagccccagg cccagtggta ttactgaatt 60
cactgaatgt ggatgcagta tgtgagaagc tgaaacaaat agaagggctg gaccagagta 120
tgctgcctca gtattgtacc acgatcaaaa aggcaaacat aaatggccgt gtgttagctc 180
agtgtaacat tgatgagctg aagaaagaga tgaatatgaa ttttggagac tggcaccttt 240
tcagaagcac agtactagaa atgagaaacg cagaaagcca cgtggtccct gaagacccac 300
gtttcctcag tgagagcagc agtggcccag ccccgcacgg tgagcctgct cgccgcgctt 360
cccacaacga gctgcctcac accgagctct ccagccagac gccctacaca ctcaacttca 420
gcttcgaaga nctgaacacg cttggcctgg atgaangtgc ccctcgtcac agtaatctaa 480
gttggcagtc acaaactcgc agaaccccaa gtctttcgag tctcaattcc caggattcca 540
gtattgaaat ttcaaanctt actgataagg tgcaggccga gtatananat gcctatanag 600
aatacattgc tccnat 616

<210> 2801
<211> 620
<212> DNA
<213> Homo sapiens

<400> 2801
ctcggttcct ctttcctcgc tcaagatggc gctgctcgcg atgcattctt ggcgctgggc 60
ggccgcggcg gctgctttcg aaaagcgccg gcactccgcg attctgatcc ggcctttagt 120
ctctgttagc ggctcaggtc cgcagtggag gccacatcaa ctcggcgcct tgggaaccgc 180
tcgagcctac cagcagattc cagantcatt aaaaagtatc acatggcaga aattgggaaa 240
aggcaattca ggacagttct tagatgctgc aaaggctctc caggtatggc cactgataga 300
aaanaagaca tgttggcatg gtcatgcagg aggaggactc cacacagacc caaaagaagg 360
gttaaaagat gttgatactc ggaaaatcat aaaagcaatg ctttcttatg tgtggcccaa 420
agacaggcca gatctacgan ctaganttgc catttcgctg ggatttttgg gtggtgcaaa 480
ngccatgaat attgtggttc ccttcatgtt taaatatgct gtanacagcc tcaaccanat 540
gtcnggaaac atgctgaacc tgagtgatgc ccccaataca ttgcaaccat ggcaacanca 600
nttctgattg gctatggtgt 620

<210> 2802

0962546 0702800

<210> 604
<211> DNA
<212> Homo sapiens

<400> 2802
aagatggcgg accttgattc gcctccgaag ctgtcagggg tgcagcagcc gtctgagggg 60
gtgggaggtg gccgctgctc cgaaatctcc gctgagctca ttcgctccct gacagagctg 120
caggagctgg aggctgtata cgaacggctc tgcggcgagg agaaagtggt ggagagagag 180
ctggatgctc ttttggaaca gcaaaacacc attgaaagta agatggtcac tctccaccga 240
atgggtccta atctgcagct gattgaggga gatgcaaagc agctggctgg aatgatcacc 300
tttacctgca acctggctga naatgtgtcc agcaaagttc gtcagcttga cctggccaag 360
aaccgcctct atcangccat tcagagagct gatgacatct tggacctgaa nttctgcatg 420
gatggagttc agactgcttt gangaatgaa gattatgagc aggctgcanc acatattcat 480
ccgctacttg tgcctggaca agtcggtcat tgaactcagc cgacagggcc aaggggggan 540
catgattgat gccnacctga aattgctgcn ggaagctgan caacgtctca aanccattgt 600
ggca 604

<210> 2803
<211> 653
<212> DNA
<213> Homo sapiens

<400> 2803
ctccgagcag gacactgcta cttaacaagg tggtttgagc caaactgtgg cacgtttcag 60
gcaggattcc tccttcattc aaactgcatc acccaggant ctgcaaattc cccaaagtag 120
gaggaaaaat gaccacattc aaggaggcag tgaccttcaa ggatgtggct gtggtcttca 180
ctgagganga gctggggctg ctggaccctg cccagaggaa gctgtaccga gatgtgatgc 240
tggagaactt caggaacctg ctctcagtgg ggcatcaacc gttccaccaa gatacttgcc 300
acttcctaag ggaagaaaag ttttggatga tggggacagc aacccaaaga gaagggaatt 360
caggaggcaa gatccaaact gagttggagt ctgttccaga agcaggagca catgaagagt 420
ggtcctgcca gcaaatctgg gaacaaattg caaaagactt aaccaggtct caggactcta 480
tcataaataa ctctcanttc tttgaaaatg gtgatgtccc ctcccaggtt gaagcaggac 540
tacccacaat tcatacaggg acanaaacct tcccaggggt ggggaagtgt aaacagtcct 600
tcantaatgt tcccatcttt gatcttcctc ancagttnta ctcanaaaaa aaa 653

<210> 2804
<211> 761
<212> DNA
<213> Homo sapiens

<400> 2804
ggttatattt tagcacttgt ccattcagac agccattagc acggcctaat acactgacgc 60
tggttcatgt ccgcttacct cctggattct cagcatcttc aaccgtggaa aagccttcaa 120
aagtacatag agctctttat agtaaaggta ttctattgat ggcagcctca gaaaatgagg 180
ataatgatat tttatggtgt gtcaaccatg atacttttcc tttccaaaag ccaatgatgg 240
aaacccagat gacagctggt gttgatggtc attcctgggc tctttctgcg atagatgaat 300
tgaaagtaga taaaataatt acacctttaa acaaagatca tattccaata actgattcac 360
cagttgttgt acagcagcac atgttacctc cgaagaaatt tgttctcctc tcagcacagg 420

0960294 "0760294"

ggagccttat gtttcataaa cttagacctg tagatcaact gaggcatcta cttgtgagta 480
atgtgggagg agatggagaa gagattgaaa gattctttaa attacatcag gaagaccagg 540
cttgtgcaac ttgccttatt cttgcttgct ccactgctgc ctgtgatana aaantatctg 600
cctgggctac tcgggctttc tttaagtatg gtggtgaagc acagatgana tttccaacca 660
ctcttccgcc tccaanttat gttggtccca tcttgggggt ccctgtctaa tccnagttcc 720
cccgttccca atggtantcc caacccaaat ccnncctttt t 761

<210> 2805
<211> 667
<212> DNA
<213> Homo sapiens

<400> 2805
agtgacgtcg cggccaaaac aagcccgggc ttggaggcct gtactgaagc tggcctcaga 60
tgggaaggcc cgactcgctg tctgctgtcg tcggtggtcg cgagaccttg cactctcacc 120
gggtcggcct ccagcccctg tgcccgggat ccgctcgccg cggatgancg agagtttctt 180
cctgggactt ttcgggcaca gctggccggt ggcgacataa cggactttct ttcctgcaag 240
agtctcccct ccagcgggag acagcgggct cctgtctcgg gacgctggga cacctgtcgc 300
ctatttttaa atatccagat tccaagaaca cactggatac tgctcttaca aaaccaagan 360
gaaatcatga agaaatgttt tagttattga aactacagtt gaaatcatgg atacatcaac 420
aaatctggat attggagccc ancttatcgt ggaagaatgt cccagcactt atagcctaac 480
tggcatgcca gacattaaaa tagaacatcc actggaccca aattcanaan aanggtcagc 540
tcanggtgtt gccatgggaa tgaaattcat attgcctaac cgatttgata tgaatgtgtg 600
ttctcnattt gttgaaatcc ttaaatgaan aaaatantaa aaatattcna gatcaggtta 660
actctna 667

<210> 2806
<211> 617
<212> DNA
<213> Homo sapiens

<400> 2806
tgtgctcggt ggcccaggtg ttcatcctgg gcttgccctc ccgcatcgcc tcagtgtggt 60
ttgggcccaa agaggtgtcc acagcttgtg ccaccgccgt gctgggcaat cagcttggaa 120
ctgcagttgg ctttttgcta ccaccagttt tagtacccaa cacacagaat gacacaaatc 180
tcctggcttg taatatcagc accatgtttt atggaacatc agctgttgcc acacttttat 240
ttattttaac agcaattgcc ttcaaagaaa aacctcggta tccaccaagt cnggctcaag 300
cagctcttca agacagtccc cctnaanagt actcctataa gaaatcaata agaaacctgt 360
ttaaaaacat tccttttgtc cttctgttga tcacttatgg tatcatgact ggtgcctttt 420
attcantctc aacgttttta aatcaaatga tattgacata ttatgaggga gaanaaatct 480
atgctggaan gattgggcta acgctagtat tanctggaat ggtgggcnct attctttgtg 540
gcttatggct ggattatact aaaacataca aacagactac tctnatagtt tatattttgt 600
ctnttatngg gaatngt 617

<210> 2807
<211> 670
<212> DNA
<213> Homo sapiens

US 2005/0250150 A1

0562460.0002800

<400> 2807
ccatagaaag gcaatcaagc ttactccctg caatcggagt caatatcaat tcttgctcaa 60
gcaaacatgt tttacagtgt tggcgcaatg gcaggaacta gtcaagggca ctttcagatc 120
tggaaagagg aaagagaaaa tcactctttt gtgtttctta aacatgccaa tcaagcaaga 180
aaatttattc caccccttca tatttgctct aaaatctggg gccagtagtt gaaatgtgat 240
cttgttcttt ctcagccttt tggcaattta atgccaaata ttccaaatgt tagatgaatg 300
gcagtaataa aatgattcaa atgtttgata aatacaagct gagagcaaaa tctggactct 360
gaaaaatcgg aactatttta tcatgttgct aaaatgagag catcattttc ttccctctct 420
gtaagtgcgg tagtttaatt tcctaaaaaa agttgctagt gccttgttta agatgatcat 480
gttatcattt catgtggata ttattggtct aattagaagg agaagattga ttggatttac 540
tttaaagaaa attatctcct atgtctcttt gaactcagga atagaaaatg accaagaagc 600
acatcntctt cagatatgat ttttgccctc nctggggatg ttnaanccga ataggttcna 660
catatgctca 670

<210> 2808
<211> 772
<212> DNA
<213> Homo sapiens

<400> 2808
caactcctcc aaggctcaaa atttcttcag aatctagttc ctcatagatc ttatgtttca 60
accatgatct tggaagtagt gaagaatagc gttcatagct gggaccatgt tactcagggc 120
ctcgtagaac ttggtttcat tttgatggat tcatatgggc caaagaaggt tcttgatgga 180
aaaactattg aaaccagccc aagtctttct agaatgccaa accagcatgc atgtaagctc 240
ggagctaata tcctgttgga aacttttaag atccatgaga tgatcagaca agaaattttg 300
gancaggtcc tcaacagggt tgttaccaga gcatcttctc ccatcagtca tttcttagac 360
ctgctttcaa atatcgtcat gtatgcaccc ttagttcttc aaagttgttc ttctaaagtc 420
acagaagctt ttgactattt gtcctttctg ccccttcaga ctgtncaaag gctgcttaan 480
gcagtgcanc ccttctcaa agtcagcatg tcaatgagag actgcttgat acttgtcctt 540
cggaaactat gtttgccaac cagcttgatg cccgaaaatc tgcanttgct gggtttttgc 600
tgctcctgaa aaaatttaaa gttttaggca gnctgtcatc ctctcantgc agtccagtct 660
ctcaatgtca gtcaggttca tgttggatnt tcacagccat tacaattctg tcccnatgaa 720
aacttttgn cttgaaatca tgggatantt tgaaggaaaa tgcttnaaac ca 772

<210> 2809
<211> 638
<212> DNA
<213> Homo sapiens

<400> 2809
ctcggccgcc gtaggccggc ttggaggctg ggggagggcc cagaagtgga ataattcagg 60
aaagtgcagg ttctgggaag tctcggtggg ttccccgcaa aatcaggctt gagtgcagtg 120
gcgcaatcgt ggctcactgc agcctccatc tcccggggct caggtgattt tcccacctca 180
gctttcccga gtagctggga ctacagagat ggcatctcac tatgttgccc aggctgatct 240
tgaactcctg acctcaagtg atcctctctc cttggcctcc taaagtgctg ggattccagg 300
tgtgagccac ttcacccagc cacatttatc catcttgtaa aatattgctt tgtttttgg 360
tgcatttcaa agaatcactg accctggagg atgtggctgt ggagttcact tgggangagt 420

ggcagctcct cggccctgct cagaaagacc tgtaccgaga cgtgatgttg gagaactata 480
gcaacctcgt gtcagtgggg tatcaagcca ncaaaccaga tgcactcttc aagttggaac 540
aaggagacca tggacagtan aaaatgaaat ccacagccaa atctgtccag aaatcaanaa 600
agttgacaat catctacnna tgccctcnca aaagccaa 638

<210> 2810
<211> 646
<212> DNA
<213> Homo sapiens

<400> 2810
aactgagtgt gacgtcagaa tcaccatggc cagctatcct taccggcagg gctgcccagg 60
agctgcagga caagcaccag gagcccctcc gggtagctac taccctggac cccccaatag 120
tggagggcag tatggtagtg ggctaccccc tggtggtggt tatgggggtc ctgcccctgg 180
agggccttat ggaccaccag ctggtggagg gccctatgga caccccaatc ctgggatgtt 240
cccctctgga actccaggag gaccatatgg cggtgcanct cccgggggcc cctatggtca 300
gccacctcca agttcctacg gtgcccagca gcctgggctt tatggacagg gtggcgcccc 360
tcccaatgtg gatcctgagg cctactcctg gttccagtcg gtggactcag atcacagtgg 420
ctatatctcc atgaagganc taaagcaggc cctggtcaac tgcaattggt cttcattcaa 480
tgatgagacc tgcctcatga tgataaacat gtttgacaag accaagtcag gccgcatcga 540
tgtctacggc ttctcagccc tgtggaaatt catccagcag tggaanaacc tcttccanca 600
antatgaacg ggaacgctcg ggctccatta nctacacana acttca 646

<210> 2811
<211> 422
<212> DNA
<213> Homo sapiens

<400> 2811
agactgctgt gctagcaatc agcgagattc cgtgggcgta ggaccctctg agccaggtgt 60
gggatatagt ctcgtggtgc gccgtttctt aagccggtct gaaaagcgca atattcggat 120
gggagtgacc cgattttcca ggaactgaag ttaaaagatg aagaatgtga gaggctttca 180
aaagtgcgag atcgacttgg acaggaattg gaagaactca cagctagtct atttgaggaa 240
gctcataaaa tggtgagaga agcaaatatc aagcaggcaa cagcagaaaa acagctaaaa 300
gaagcacaag gaaaaattga tgtncttcaa nctgaagtag ctgcattgaa gacacttgta 360
ttgtccagtt ctccancatc acctacgcag gagcctttgc caggtggata gacacctttt 420
aa 422

<210> 2812
<211> 517
<212> DNA
<213> Homo sapiens

<400> 2812
gctcccgggt cagctggtgc tggcgtcagg cgctgggcgg gctcgccagg acctggcaag 60
gcttgtttac tatggccgat gatctggagc agcagtctca aggctggctg agtagctggc 120
tgcccacgtg gcgccccact tccatgtctc aactgaaaaa tgtggaagcc aggatcctcc 180
agtgtctcca gaataagttc ctggccagat atgtatccct cccaaaccag aataagatct 240

US 9,695,249 B2

ggacggtgac tgtgagcccc gagcaaaacg accgcacccc cttggtgatg gtgcatggtt 300
ttgggggcgg cgtgggtctc tggatcctca acatggactc actgagtgcc cgccgcacac 360
tgcacacctt cgatctgctt ggcttcgggc gaagctcaag gccagcattc ccaagggacc 420
cggaaggggc tgangatgan tttgtgacnt ccatnganac atggcgggag accatggggg 480
atccccaaca tgatcctcct ggcggcacag tttggga 517

<210> 2813
<211> 567
<212> DNA
<213> Homo sapiens

<400> 2813
agatggcgcg gagcgggagg cggccctgga gcgaccccgg aggactaagc gggaacggga 60
ccagctgtac tacgagtgct actcggacgt ttcggtccac gaggagatga tcgcggaccg 120
cgtccgcacc gatgcctacc gcctgggtat ccttcggaac tgggcagcac tgcgaggcaa 180
gacggtactg gacgtgggcg cgggcaccgg cattctgagc atcttctgtg cccaggccgg 240
ggcccggcgc gtgtacgcgg tagaggccag cgccatctgg caacaggccc gggaggtggt 300
gcggttcaac gggctggagg accgggtgca cgtcctgccg ggaccagtgg agactgtaga 360
gttgccggaa caggtggatg ccatcgtgag cgagtggatg ggctacggac tcctgcacga 420
gtccatgctg agctccgtcc tccacgcgcg aaccaagtgg ctgaaggagg gcggtcttct 480
cctgccggcc tccgccganc tcttcatanc ccccatcagc gaccanatgc tggaatggcg 540
cctgggcttc tgganccagg ttaanca 567

<210> 2814
<211> 729
<212> DNA
<213> Homo sapiens

<400> 2814
aaaagacgcc gggcgcggcg gcgcgcggag aagtgcggcg gagcggcgcc tgcattagca 60
ggtatgcaaa gaagcctttt caccctgatg tccttagaga taatatggat cagtccagag 120
ttctcctctg ggtgaaagca gaacccttta tagtgggtgc cttgcaggtc ccccctccat 180
ccaagtttag tcttcactat ctcaggaaga tatccaccta tgtgcaaatc cgggccacag 240
aaggagctta cccgcgcctc tactggtcta catggaggca catcgcttgt gggaagctgc 300
agttggccaa ggacctggcg tggctttact tcgaaatatt tgatagtctt tcaatgaaga 360
cacctgagga gcgcctggaa tggtctgagg ttctgtccaa ctgcatgtct gangaggaag 420
ttgaaaagca ganaaatcag ctttcagtgg acacgctaca gtttctgctc ttcttataca 480
ttcaacagtt gaacaaggtc tccctaanga catctttgat tggcgaaaan tggcccagtc 540
ccagaaacaa atctcagtct cctgacctga ctgaaaaatc tnattgtcat aataagaact 600
ggaatgatta cagtccccaa acttttgtct atgaatcatc tgtctgatct cctccaancc 660
cctgctttta aatccaaaac aactcncttg cntcatttca ttcaacccat antantctaa 720
ttgtctcca 729

<210> 2815
<211> 667
<212> DNA
<213> Homo sapiens

US 2003/0235830 A1

<400> 2815
tcttcaccac tgctctccca gaggtccagg tccgggagat gacagtggct cccagaaagc 60
ccaggattca atcgctgaga gagtgcttag gcccgaatgc cggcccaaat cgttctactc 120
accgtgtcgg aggccgagag cgatgagagt acagggaagt gaggaagagg gggtggccgc 180
caggctcctc cgcttccctg ggtccaccgc ggatccctcc cgcttgtcag gaggcggcca 240
gcgggtaagc cgactggcgg aaatgcgaga gaggagaagg gaaaggtgga gggctaaagg 300
ggcaaactga gaggaggcgg atcccgcaac cgacactggg atcgtttccc ctcgcaaagc 360
gaacccaaaa tggcggcggc agcggcggca gcagaatggc cgcggcagct cctccagagg 420
gagggtgcta agggcgccta gcgacacccc caacctccca ctcctccctc ctcgcgttct 480
tccccacggt cccccgcttc gcccgactcc ggccatgtta cgcgcacgtc agcccgcacg 540
cgttcgaatg tctacgggct cctcgctggc tgctcccacc aaccaccacc ttcggccgtc 600
ctgcgaacca gccatcccgt acgcgctcac ccacgggaac ctcctcnccc anttctccct 660
cccctcn 667

<210> 2816
<211> 796
<212> DNA
<213> Homo sapiens

<400> 2816
tacaaatcat tcatgaaaac tgaagctcag tctcccaggg gtaagtcctg ggccacgtgc 60
aaacaatggc aaatccagct cttccatgat agagaaggca aacacaccca ccttcatcct 120
gagcctaaaa ggccacctct gancacttgg gcagccactc ctctgggcct cagagggcca 180
tgagcttggc caggtangca cagcggcggg gaagtcacag ctgtcaggta ccggccatgg 240
tgcaggtggg aataggagat gccagagctg ctttagctga ggaaagcaaa cagtcagcag 300
tgctcaaagg agcaaaactt cgaatgtgca cattgacccc tgacacctgc aagcataaca 360
cagatcctaa gactagagtg aagtaggaag aagaattaga aaatccagtg gatgtcctga 420
gtatagggaa ccanggccgt tgaaaatcag taaaggttga ttacctgggg cgagaccggg 480
tgactgtggc agtgcaggtg aangtaccct ggaccttctc agttcgctgg cacataaggc 540
tccnccaata aagcgtggtt ctctctgtca tacacacaca cacacacaca cacacacaca 600
cacacacaat gattgggang gctatatnat ccancattag cttcctggtn gtgcccaacc 660
atgcttgatc gggaaatttt tttttattat tattattttt ttaacctgtt acctnaaggc 720
atttctccga atgttgaaaa agaaaaaagg gaaatcccaa aaccnantcc nttttgccct 780
gccatatttn ggcttg 796

<210> 2817
<211> 546
<212> DNA
<213> Homo sapiens

<400> 2817
cttccttttc tccatggcta cactgttgag gaccagcttc agtgaccctg gagtgattcc 60
tcgggcgcta ccagatgaag cagctttcat agaaatggag atagaagcta ccaatggtgc 120
ggtgccccag ggccagcgac caccgcctcg tatcaagaat ttccagataa acaaccagat 180
tgtgaaactg aaatactgtt acacatgcaa natcttccgg cctccccggg cctcccattg 240
cagcatctgt gacaactgtg tggagcgctt cgaccatcac tgcccctggg tggggaattg 300
tgttggaaag aggaactacc gctacttcta cctcttcatc ctttctctct ccctcctcac 360
aatctatgtc ttcgccttca acatcgtcta tgtggccctc aaatctttga aaattggctt 420

0950250-0950800

cttgganaca ttgaaaagaa actcctggaa ctgttctana antcctcatt tgcttcttta 480
cactctggtc cgtcgtggga ctgactggat ttcatacttt cctcntggct ctcaaccana 540
caaccn 546

<210> 2818
<211> 488
<212> DNA
<213> Homo sapiens

<400> 2818
ctttcgcgtc ccccaccctc tcggctccgc ctggcagcag ctccgccgcc cagaggcgtc 60
cgagaccctc cgactcgtgg gtacgcatag gcctcgccag cgagccttgc ccaggcaacg 120
agtcgccagc ccgccccctc gccgcgggct aggtctcacc tcgccaccag tacgtcttgg 180
acaagtagtg ccaggtctga tgccgggtgt ggtgagtgcc gccgggaccc aggtgcgccg 240
cctcgatgag gtcccggcgt cgctccggct gcagcaccac ctccagctcc gcgaaggtct 300
tgcggtgccg ctgccgccgc tggtaataca gaatcccgcc gcgcaccacg tagcaggcgg 360
nagcttttcn gattttacgc ttgacattgc cctcggtgcc cggcgcatac agctcgcgct 420
cgttcgtcag gtaacacagg atggcccggt anctttcctc gcttgacatc ncggacgcgg 480
ctccctna 488

<210> 2819
<211> 639
<212> DNA
<213> Homo sapiens

<400> 2819
gtagtagctg ccaggctgtc ccccgccctg cccggcccga gccccgcggg ccgccgccgc 60
caccgccgcc atgaagaagc agttcaaccg catgaagcag ctggctaacc agaccgtggg 120
cagagctgan aaaacagaag tccttagtga agatctatta cagattgaga gacgcctgga 180
cacggtgcgg tcaatatgcc accattccca taagcgcttg gtggcatgtt tccagggcca 240
gcatggcacc gatgccgaga ggagacacaa aaaactgcct ctgacagctc ttgctcaaaa 300
tatgcaagaa gcatcgactc agctggaaga ctctctcctg gggaagatgc tggagacgtg 360
tggagatgct gagaatcagc tggctctcga gctctcccag cacgaagtct ttgttgagaa 420
ngagatcgtg gaccctctgt acggcntagc tgaggtggag attcccaaca tccagaanca 480
gagggagcag cttgcaagat tggtgttnga ctgggattca gtcanagcca ggtggaacca 540
agctcacaaa tcctcnggga accaactttc nggggcttcc atcaaaaata gatctctnaa 600
gggaagaaat ggatgaagct ggaaataaan tanaacagt 639

<210> 2820
<211> 633
<212> DNA
<213> Homo sapiens

<400> 2820
ggcagccctc cccagtggag cccccgagga ccctttttatt tctgcaggtt attgcttgat 60
gacttgggaa tgaattcttg ggacagaagg aagaattttc atctattgaa gaaaaattca 120
aaattattga gagagctgaa aaatttggac tcccgccagt gccgtgagac acacaaaatc 180
gcagtgtttt acattgctga aggtcaagaa nacaagtgtt caatcctctc taatgaaaga 240

0501205.0003

ggaagccaag catatgaaga ctttgttgct ggacttggat gggaggtgga tctctccacc 300
cactgtgggt tcatgggtgg ccttcagcgc aatggcagca ccgggcagac ggccccttac 360
tatgctacct caactgtgga agtgattttc catgtttcca ctcgaatgcc gtcagactca 420
gatgattccc tcaccaaaaa gcttcgtcac ttggggaatg acgaggtcca tatcgtctgg 480
tctgaacact ccanagacta ccgcaggggt attatcccaa ctgcctttgg agatntttca 540
ctcattattt acccnatgaa gaatcncatg ttcttcatcg cgataacgaa aaaacctgan 600
gttccctttt ttgggcctct gtttgatgga ncc 633

<210> 2821
<211> 457
<212> DNA
<213> Homo sapiens

<400> 2821
ggattggaag cagaggaagc tgaagaaaag taatgtagtt tccttaaagg catacaaagg 60
actggcagaa gtcgctgtga agagcttgtg tgagctgttg gtggcactac ctcattttaa 120
ctttcacaac aacatcatcg tattgattgt ccctctcatg aatgacatgt cnaaattgat 180
atctgaaatg tgttgtgaag ctgtgaagaa actctttaag caagataaat taggccaagc 240
ttctcttggt gtaattaaag tgatttctgg ttttgtgaag ggcagaaatt acgaagttag 300
gccaggagat gttaaaaaca tttttatgcc tgagaatcna ggaagtagaa gtgaaaaaag 360
atacagaaga cattgataga ccagnaaaat ttatgacttt caaagaaaag agaaaatctc 420
tntcgagaat gcagagaaag tgggaagaaa gcngaag 457

<210> 2822
<211> 689
<212> DNA
<213> Homo sapiens

<400> 2822
gcagcancat atctccctat tatagaccag aatacaggaa tatcgagcac ttaagtaact 60
tagctgactt tacacaggtt ataataaaga gttgaggttc ataaccaggc tgttgactcc 120
aaaggccata attttactct cagctaccaa catagcctgc gtcttagcta gttcactcag 180
ttacaccaac ccatatctgc atagatgcag tctttttag gagggaaata ctcagtaatt 240
tcttttattc taaccaaagt ctttgcatct tttaatctgg agtctatatt ttacatacac 300
tgtgagtgaa gagatctctc aatattagaa ttgtaaatgt ttgctgatct ttgcattttt 360
atttccataa tccaaatgag tcataatcca tatgggtttt ggttttaaaa tggattagta 420
aatggttaaa ttaatagacc caatttcaaa ataaggtttt ttttgaattc tactctcttg 480
atgttgcacc tgaatacaca agtaaatatg gcctgctatg gcaggctaaa agtgaccaag 540
tttttgaaac taaatccaca ttgggagcag ttttggacag acagacccac ttcaagtgct 600
ggtagaaata acattatcct gaggggatag tccaactana nagtactctg ttaaaattag 660
catccagaaa atctctaaan antangggc 689

<210> 2823
<211> 672
<212> DNA
<213> Homo sapiens

<400> 2823

0960245 0972805

ggaagtcaga tgaaaaaatt gtgattcacc ataagccatt ggagatccac atgggagcca 60
actctctgcg gtgaaaagaa agggattatc tcagacagta agccaggagg aaagaaagag 120
acaagaggct atctttgaag tcatatcctc tgaacattca tatttactca gcttggagat 180
cttgatacga atgtttaaaa attctaaaga actgagtgat acaatgacta aaaccgagag 240
gcaccatctt ttctccaata ttacagatgt ctgtgaggca agcaaaaagt tctttataga 300
gttggaagca agacatcaga ataatatctt catagatgac ataagtgaca ttgtggaaaa 360
acacacagca tccacatttg acccatatgt gaaatactgc acaaatgaag tctaccaaca 420
acgaacacta caaaaattgt tagctaccaa tccttccttt aaggaagtat tgtcnaggat 480
tgagtcccat gaagactgtn ggaacttacc cntgatctct tttctcattc tccccatgca 540
naaggtgacc cgccttcccc tgctgatgga tactatctgt caaaaaacac ctnagggact 600
ctccgaagtn tgaagtctgc caaaagancc ttggaaggaa gttagccnag tttngttcga 660
ctatgccatg ga 672

<210> 2824
<211> 681
<212> DNA
<213> Homo sapiens

<400> 2824
tagcattaaa gccttaatga atgggtgtca ttttctacca gcctaagttt catcaagaac 60
aaatacaagt atattttgaa tttagatacc tcctttaatc catttggcat caactgtttc 120
aaatcatgag aaaaatacta ggaaatttaa gttttagtaa aactctgtca agttaacttt 180
gaattttata tcaagaagaa actattgaga aaaaaacctc atgcttttac acaatagtat 240
actattttct taacagcaaa cagacatttt tctcttacgt accagctcat aatatgtctg 300
tctaaaattg ttgggacgga tgttttgtcc caaagacttt ctcagagttg tgcacttagt 360
gttgagccat aactactgtc tggatgccca gaggaggcac atataatttt attattttaa 420
aatagcatct gttagccagc cacggtggct catgcctgta atcccancac gtggggaggc 480
tgaagcangc ggatcatgan gtcaggagat tgagaccatc ctggctaaca cagtgaaacc 540
ccatctctac taaaaataca aaaaaattag ccaggcatgg tggcgggcgc ctgttctccc 600
ancaactcag ggaggcccta cctcccacct cagtaggana aatggtgntg aaccccgggg 660
aggcggganc ttggcantgg a 681

<210> 2825
<211> 406
<212> DNA
<213> Homo sapiens

<400> 2825
aatgcggaaa aaaaaaaaaa aaaaaaggaa aatccttagc aggttctagc atgcaanagt 60
tcagtaaatg gttatcgtca ttattatctt tggtatagta aanattggca tgttaacata 120
cactgaggat ttagtaaatg tggtgtaagt atggtgcatg ctctttgttt tgtttggcgt 180
aacagcttta ttgagctata caacttaccc atttaaactg tacagttcag taggctttag 240
tgtattccca gggttgtaca tccatcacaa tagtttcagg tagctctgca ttgggcaatg 300
ctgttgggag catcaggaan agcttcccag gaggtcacat taagtggatg ttggcagaca 360
ggacttagaa cagtggggag gagggtggtg tcccaagcan aancaa 406

<210> 2826
<211> 611

US 2005/0260686 A1 Nov. 24, 2005

<212> DNA
<213> Homo sapiens

<400> 2826
gtcaccgtgg tcggcggcgg cggcggcggc ggcacanaac cggtggtgga gccgccgagg 60
ccacctcgtg tatgcagaga ccatgtgtgt ctgatctgct gggatcctag agctggaaca 120
ggagggtcac gcagcacaat gccagctctg cccctggacc aactccagat cacccacaag 180
gacccgaaga caggaaagct gaggacttca ccagcgctga tttgtacctg taactccatg 240
atacaaattt gatttaaatg ggaggggtc ctgcanaccc acatgagagg tggccttgaa 300
gaatccttgt ggtacccaca ggctctacag tttggaaact cgccaccccg agcagaangc 360
agaccggtat tttgtgttat acaaaccgcc ccctaaagac aacattcccg ccctagtgga 420
ngantacctg gaaacgcgcc accttcgtan ccnatgacct cgactggctc ctggccttgc 480
ctcncgataa attctggtgc caggtgatct ttgacgaaac tctacagaan tgcctggact 540
cctacctgcg ctattgtccc cncaaattcc acnaaggggt ngcctccncc ccttgaagtt 600
gtttaacatg c 611

<210> 2827
<211> 598
<212> DNA
<213> Homo sapiens

<400> 2827
aggcctgcgc ttccgctcgc gaggggggagg cgggacccgc gaggagtcgc gcggaggacg 60
gaggccacga tacctgcgtg gctggggctg cgggctccgg ggtcaccacc ctgggcgacc 120
cggangtggc gcctccgccg gccgcagctg gagaggagcg tgtccccaag ccgggggagc 180
aggacttgag caggcacgcg gggtcaccgc cgggcagcgt ggaagagcca tctcctggag 240
gagaaaactc acctggtggc ggaggctccc cttgtttgtc ctcccggagc ctggcgtggg 300
gttcttctgc gggaagagag agtgcgcgcg gagatagcag tgtggaaaca cgcgangagt 360
ctgagggcac gggcggccag cgctcagcct gcgccatggg tggtcccggg accaagagcg 420
gggagccttt gtgtcctccg ttactgtgta atcaggacaa agaaaccttg actctgctca 480
ttcaggtgcc tcggatccag ccgcaaagtc ttcaaggaga tttgaatccc ctctggttac 540
aaattacgct tctccgcaca aanacttant ttattccttc tttttgcaat ttgctccn 598

<210> 2828
<211> 724
<212> DNA
<213> Homo sapiens

<400> 2828
ggtttgccta tccagtatgt actcttcttc cttgctaaca gaatcttgaa tttgcttgag 60
ataatagtaa ataatttaaa atacctccat aaatgcccct ccagctaggg tggtcatcta 120
gtccattggc caataaacta gatcaaaagc tacttcatgg aaagctgttt tttccttgat 180
acctatatct ttctgtaaag gactgctcag ctggcataag ctttctactt ttaacctgtc 240
ttttctcttg tccagattgt gattcagtgt caaagtgggg cagtcattcg taagtgctga 300
gcattgtgga gcaggagggg aaaggggcct gttctctcaa ggaccttcac tatccattca 360
tttcctaccc ccagactctt gttagattgg gctgatccaa actcataata tgaatagatg 420
gacattgacc aaagagacca gcagcagaac aaaagcataa acaaacatga gagtangcta 480
attttaccaa cctgaggtca aaaagttctc atgagatctg gtcgtttgaa ancatgtacc 540

09/22/2005 09:56:56

acttccctct tcgctcactc tctccctccc gctccaccat gttgaagatt gtgcctgttt 600
ctccttcacc ttctgccatg attgtaaatt tcctgaagcc tccccancca tgcctccttg 660
tacaganact gtggaactga agcccctana acctggaaaa acatgtncat ttactttttt 720
ngcc 724

<210> 2829
<211> 486
<212> DNA
<213> Homo sapiens

<400> 2829
aattatacct caagaaagtt gtttttaaa aagacagcgt aaggggtggg gggcagttga 60
gatgaagcag gaaaactgtg atcagaagca aagctcaggg gctgtctggc ctggctgccc 120
caagtcaaag cctgcatttc atacaggcaa tgttagggta ncccccaagc catgattcgg 180
aaagataaat tgaccccana aggaataggg ctgggtccct tctcccttga cagctccctt 240
tctgtgtttt ttctggcaca agaaactctg tcatcttgta taaataggaa aaatttatgg 300
cagttttccc tcttcttctc cctggtgggc tactangaaa ggtctanggg ganganggac 360
ctgaaattcc aaaaatataa atgtggaaag actggaaggg gtcgangaat ctctttgcct 420
gccttactct ggccccanct ctcctttccc tttgcatgtt tgaccatctg ggtnatnaag 480
aaggtn 486

<210> 2830
<211> 267
<212> DNA
<213> Homo sapiens

<400> 2830
agaacgttgt gacagagcgg tggcgggctg agcggtttcg anccggcgtc ggggaacggc 60
ggtaccgggc ggctgcgggg ctggctccac ccagcttgaa gtctcggcgt ccgcgtcctg 120
cggtgccctg ggtctcccg aagaccttgt ncccgcgcgg tttccttggg ctggctttgg 180
acgacncttt ccccttcctg ctgcctaaga tccgccgaca ttaatcccnt cctagtggtc 240
cacggcggcg gaaccggtcc cntctcc 267

<210> 2831
<211> 385
<212> DNA
<213> Homo sapiens

<400> 2831
acctcccgga ngctctgctg gtgcaggccc cgcattggag ggctcgattg gctgcccggc 60
tggcactgac gtccccttgg agctgggtgg caaaagagat aaacagccat gtgcaactct 120
ctacactata tttaacagct gcggcggaaa aggcagggaa gcagccacgg tggcggctct 180
gggggcanct cttgtcttcg gggaaaaagc ccttggaacc gggctggcat ccgccttctc 240
gcggtgagcg aagtcaccat gccagcttcc caaaaccggg cccgtgcccg ggaccgcaac 300
aacgtcctca accgggctga attcctgtcc ctgaaccncc cccccaaggg gggcccngaa 360
ccccccanct cgggcagaaa gcctc 385

<210> 2832

0050250.0002

<211> 484
<212> DNA
<213> Homo sapiens

<400> 2832
accgtcttcc gccgcacgtg gattcagcgc gatgcccaaa tccaagcgcg acaagaaagt 60
ctccttaacc aaaactgcca agaaaggctt ggaattgaaa caaaacctga tagaagagct 120
tcggaaatgt gtggacacct acaagtacct tttcatcttc tctgtggcca acatgaggaa 180
cagcaagctg aaggacatcc ggaacgcctg gaagcacagc cggatgttct ttggcaaaaa 240
caaggtgatg atggtggcct tgggtcggag cccatctnat gaatacaaag acaacctgca 300
ccangtcagc aaaaggttga ggggtgaggt gggtctcctg ttcaccaacc gcacaaagga 360
agangtgaat gagtggttca cgaaatacac agaaatggac tacgcccgan ctggtnacaa 420
agcagctttc actgtgagcc tggatccagg ggccctggaa ncanttcccc cactccatgg 480
ancc 484

<210> 2833
<211> 540
<212> DNA
<213> Homo sapiens

<400> 2833
gctgttatgg ccgcctcctt gaggtagtat ccgcacatgg gaattctagg gccgcangtg 60
tatttacggt aactgtcgcc actagatttc agcgcctttg gactctcctg ttttcacttt 120
cttttgttga ctcccgtgtg gccctcgtgg gagcctgttt tggctgcagc ggtgtctggg 180
gtgatgtgga ccccggagct ggcaattctg aggggattcc ccactgaggc tgagcggcag 240
caatggaaac aggagggggt cntcngttca ganagtggat ctttcctaca attgctgctg 300
gaagggaact atgaagccat attcttaaat tcaatgactc aaaatatttt taattcaaca 360
acaaccgctn aagaaaagat tgatagctac ctggagaagc aggtagtaac attcctggat 420
tactcaacag atttggacac aacggaaaga caacagttga tatttctact tggtgtgagc 480
agtttgcaac tttttgttca nancaactgg gacngggccc cctgttgact tacnccctcn 540

<210> 2834
<211> 546
<212> DNA
<213> Homo sapiens

<400> 2834
cattccatgc agacaagcgt gtccttcatg agacaggatt cagtactgag ctagatcgtg 60
taaagaatct gcctcattgt gaaacggaaa tatttgaagt gagatttgac ccacaggggg 120
ccaatcttcc tgttggaanc aaagaagtca ttctgcccat caaggtggtt ggagggccaa 180
cagttcacat ctgtctccaa gccaaggtga ccattccaac catgactctc tctcgtggaa 240
aagtggactt tgccacaatt cagtgtggac agtgcctggt ggaaactatt cagctttcca 300
atcatctcca agtcccttgt gaatggttcg tccagagcca aaagcctgtt gacaagctgg 360
agaaacacat gccgaagtac ttaagacaga aactacgcgc tgaattaaag ccaaagacac 420
ggatcttcga aatccanccc atttctggag tcttggatcc tggtgagaaa tccnacgtgc 480
aagtnaaatt catgccaaaa naaaaaaaat tctacagccc aaccctggtg tttcanattg 540
cccana 546

<210> 2835
<211> 458
<212> DNA
<213> Homo sapiens

<400> 2835
gcgcatgcnc gcgcccgggc ggcgcgggat ctgggtctgg ggatgtggta ccggctgctg 60
gcggcggccg gcaatanaac ggtggccagg ccgctggcct tgctgtggcg atgtggtggc 120
ccaggangcg gcaggacggc caanaccagc gcgagggccc tgggcaaggc ccgacagtgg 180
ttatggccag tgagaatgtg cggtgttgca ttgcagaaga agctaggaaa gctcatctgg 240
cctcctgttc cagtgcttcc aggggatcca cgttcagaag ctgactctgc aggcaagacc 300
gacgttattt tcctggtggc tgtgttcaaa accacccaaa gggtttgaga aatactttaa 360
gangagtgga aggaacacaa actgagaaac atcnacagca ccaaaaaaag agactggtga 420
actaganaat gctgantctg gaaganacgg aggccgga 458

<210> 2836
<211> 634
<212> DNA
<213> Homo sapiens

<400> 2836
ggataaaanc ctaagagttt gggaatggga tatccctgtg gatttcaagt acatagcaga 60
acccagtatg cactcaatgc ctgcagtgac tttgtctcca aatggaaaat ggctagcatg 120
ccaatcaatg gacaaccaaa tcttaatttt tggagcacag aacagattta gattaaataa 180
gaaaaaaatt tttaagggcc atatggtagc aggctatgct tgtcaggtgg acttttcacc 240
agacatgagt tatgtgattt caggagatgg aaatggaaaa ttaaacattt gggactggaa 300
gaccacaaaa ctctacagtc gatttaaagc tcatgataaa gtgtgtatag gtgcagtgtg 360
gcatcctcat gaaacttcta aggtcataac atgtggttgg gatggtctca ttaaattgtg 420
ggattaatga gattaatcct taaactagct gggatcattt ttgatccatt gtcatattta 480
tatttaatta ttaaatgtat ctgatgataa cttgatttac agataatgtt gatgacattg 540
acccttttgtt taaaaaaaga aactgtaaat ttgacataat ttcatttgca acttcatttt 600
gtttttttata aatgttattt atacagaaag tttg 634

<210> 2837
<211> 644
<212> DNA
<213> Homo sapiens

<400> 2837
ggaggaggcc gcagcagtcg ccgcgcgaac atggcggccg aaatccactc caggccgcag 60
agcagccgcc cggtgctgct gagcaagatc gaggggcacc aggacgccgt cacggccgcg 120
ctgctcatcc ccaaggagga cggcgtgatc acggccagcg aggacagaac catccgggta 180
tggctgaaaa gagacagtgg tcaatactgg cccagcattt accacacaat ggcctctcct 240
tgctctgcta tggcttacca tcatgacagc agacggatat ttgtgggcca ngataatgga 300
gctgtaatgg aatttcacgt ttctgaagat tttaataaaa tgaactttat caagacctac 360
ccngctcatc agaaccgggt gtctgcgatt atcttcagct tggccacaga gtgggtgatc 420
agtaccggcc acgacaagtg tgtgagctgg atntgcacnc ggagcgggaa catgctcggg 480
aggcacttct tcacgtcctg ggcttcgtgt ctgcaatatg actttgacac tcagtatgct 540

US 2005/0260609 A1

ttcgttggtg attattctgg gcngatcacc ctgcttgaaa cttgaacaga aaacgtgttc 600
agtcctcacc naccctcnaa aggaaatgaa agttttgttn cccn 644

<210> 2838
<211> 539
<212> DNA
<213> Homo sapiens

<400> 2838
gctttcccag ctagtcgaat cactggtgca cctccggaat ccgaggttcg cattgctctc 60
ggacagagtt ctgcctcccc agtactccca aactcccagt cctgtgcacc aatgaggtcc 120
agctctgagg cttctttcct ganaaaaaaa tttggaagtc cgtgactgtt tcctggagga 180
gctganaana ggaagctcac ttccggcgta gggaggcttt ctgacccgga atggaggagg 240
cggagganct gctcttggag gggaagaagg cgctgcaact cgcccgcgag ccgcgcctgg 300
gcctggactt angatggaac ccttccggag aaggctgtac gcagggcctc aaanacgtcc 360
cacccgagcc gacccgagac atcctcgctt taaagancct tccccggggc ttggcccttg 420
gcccctcact cgccaaggaa cancgcttgg gggtctggtg tgtcggggac cccctgcagc 480
ccggcctgct gtgggggccg ctggaanaag antctgcctc caagganaag ggcgangga 539

<210> 2839
<211> 764
<212> DNA
<213> Homo sapiens

<400> 2839
gggctccgtt tgaaacatgg cgcgggctgg ccctcggctg gtgctgagcg aggaggcggt 60
tcgggcgaan agcggcttag ggcctcaccg cgacctggct gagcttcagt cattgtctat 120
tcctggaact taccaagana agatcaccca cctgggacat tctctgatga gtttaacagg 180
tctgaaatct ttggatctct cgcgcaactc cttggttagt ctggagggca ttcagtacct 240
gactgcattg gagagtctca atctctacta caactgcatc tcctcgttgg cgaagtgttt 300
cggctccacg ccttaaccga gctcgtggat gtggacttcc ggctgaaccc cgtggtgaag 360
gttgagcctg actaccgcct ttttgttgtg cacctgctcc ccaagctcca gcagctggac 420
gatcgccccg tgagagcaag cgagcggaag gcttcccgac tgcattttgc atcagaggac 480
tcactcgact ccaaagagag cgtcccagct tctttgaaag agggcagacc acaccacccc 540
aganccaagt gcaccgaagc cttggccaag caaaacctgg tcatggatgc ggatgacgaa 600
gcagtcctga acctcattgg cagaatgcga atggggaact cggcaggnct cccgggaaca 660
cgaacttcac cagaaagggn gtnaggccca atctcgttgg ttcccaaaaa tccaaacttc 720
ttnttgaacc ccgccatttg gttacantta ccagttntgg ggga 764

<210> 2840
<211> 572
<212> DNA
<213> Homo sapiens

<400> 2840
ggccccaccc ccggcggcgc agcccgcccg cccgcgcgtc cctcggtcca cctgcagcag 60
ggaggaagac aggcaatccc tccggctgtc cgaccaagag aggccggccg agcccgaggc 120
ttgggctttt gctttctggc ggagggatct gcggcggttt aggaggcggc gctgatcctg 180

0962096495 .0720800

ggaggaagag gcagctacgg cggcggcggc ggtggcggct agggcggcgg caaataaagg 240
ggccgccgcc gggtgatgcg gtgaccgctg cggcaggccc agganctgag tgggccccgg 300
ccctcagccc gtcccgccgg acccgctttc ctcaactctc catcttctcc tgccgaccga 360
gatcgccgag gcggcctcag gctccctagc cccttccccg tcccttcccc gcccccgtcc 420
ccgccccggg ggccgccgcc acccgcctcc caccatggct ctgaagaaaa tccacaanga 480
attgaatgat ctggcacggg acccctccanc acagtgttca ncangtcctg ttggaaatga 540
tatgttccat tggcnactac aataatgggg cc 572

<210> 2841
<211> 592
<212> DNA
<213> Homo sapiens

<400> 2841
ggttaatgtt gctatcttaa gcactggcat ttgggcaaaa cgtgactgtg ttctgtggga 60
naatccaaag gcattattca ctctagttga aatagaattg ggtggctaaa cagggtgtgt 120
ggtacccaaa anattaaatg ttacatgtcc ttttagtcct tgaccaggtc tagccttggc 180
agaagcaagg gagccactaa gccaaactcc ctgtgcanac agaccatgtt tcaaggctgg 240
aagtagtgcc ctggcaacac acaaaaggaa cggtgaaatg gtaggcaaag tgaacttggc 300
tctgctggcc tctttggggt cacanaaatt gctccttgtg gtaatcttat atttctgtca 360
ggcacagggc caagaanctg tgtaacagac attactttgc ttgcatctct ttttcatacc 420
ttttccctct gaagcagctt ttgcttagaa aacagtccct tcactctgcc tttcctccta 480
acttcctgtg cctcttcatg ttctgctcan gctttttaaa gcaacgaagc tgttgganaa 540
cttaaatcct tgcaactgaa aaataagcta cttnaaggcg gtagaaatcn nt 592

<210> 2842
<211> 774
<212> DNA
<213> Homo sapiens

<400> 2842
gtcgggaccg gcaagatggc ggcgcggaca gcgttcggtg ctgtgtgccg gcgcctctgg 60
cagggattag ggaatttttc tgtaaacact tctaagggca atacagccaa aaatggtggc 120
ttgcttctca gtaccaatat gaagtgggta cagttttcaa acctacacgt tgatgttcca 180
aaggatttga ccaaacctgt ggcaacaatc tctgatgaac cagacatatt atataagcgc 240
ctctcggttt tggtgaaagg tcacgataag gctgtattgg acagttatga atattttgct 300
gtgcttgctg ctaaagaact tggtatctct attaaagtac atgaacctcc aaggaaaata 360
gagcgattta ctcttctcca atcagtgcat atttacaaga agcacagagt tcagtatgaa 420
atgagaacac tttacagatg tttagagtta gaacatctaa ctggaagcac agcagatgtc 480
tacttggaat atattcagcg aaacttacct gaaggggttg ccatggaagt aacaaagaca 540
caattagaac agttaccaga acacatcaag gganccnatc tgggaaacac tatcngaaga 600
aaaagaagaa agccngtcct aaagcctcag ggaagccatt tttgcctaaa tttgaaatga 660
aggtgggcca aataaattat gtttaantgg aaaatgcttc ccactnaaaa taattgantc 720
tgtcctaact gcctcccttg aattcccctt gcccncatcc actnaaaggc aggg 774

<210> 2843
<211> 565
<212> DNA

09529450.020800

<213> Homo sapiens

<400> 2843
ctgcctgcgt tagcggcggt ggaggaggag gcagagagga gtggagggcg gagtagacgg 60
aggaggctgc tgcagagaag aaagtgtcag agccggttcg gctttagagt gtggtgaagg 120
gtacttttca tggtgcatgg aaggaaagcc aatgcgcagg tgtaccaaca ttcgaccagg 180
agagactgga atggatgtaa caagccgctg cacccttgga gaccccaaca aactgccaga 240
aggggttccc caacctgccc gcatgcccta tatctcagac aagcaccctc gacaaacctt 300
ggaagtgatt aaccttctga gaaagcaccg ggagctatgt gatgtggtgc tagttgtggg 360
cgccaagaag atatatgccc atcgagtcat tttgtcagcc tgtagtccct acttccgagc 420
tatgtttaca ggagaattgg cagagagccg tcagacagaa gtagtgatcc gagacattga 480
cgagagggct atggaattac tgattgactt tgcgtntacc tcccagatna cagtagaaga 540
aggcaatgtt canactcttc tgcca 565

<210> 2844
<211> 704
<212> DNA
<213> Homo sapiens

<400> 2844
caaacgattc tcctgcctta gcctccccag tagctgggat tacagttgcc tgctgccata 60
cctggctcat ttttttttt tttttaataa anacagggtg atctgtcagg tgatccatcc 120
acctcagcct tccaaagtgt tgggattaca ggcatgagcc acagtgcgtg gcccaagtct 180
attcttttct agtcatactg gcaatgtaga ttgaggagta agacatttac atgattctgc 240
tcccactaca tgtcctttta attttcccca tcagagtagt aaaagccttc attctgatga 300
tctggccagt ttctcatttg gctaatttgt ataaataaac atacggattt gaagcattta 360
gtgaatatat agtcttttta tggtttttg atctaaagga tggttttgtg gcccttacaa 420
ctatttcaga taactgaccc agantccatt tgagaagtgt tcattacttt gatcagaata 480
tggtcctgat tgtgattgtt tggattctag tgtttaatgt antaaaacct acatttattt 540
tatgaaantc ccaanaactt tttcccattt gagtgactga acatgcctcc ttcctctaat 600
gttaaaatat atttttggta aattgtgcca gaanggcatt tgccaaaaaa atttgtgcag 660
caaaaaatnc cttgntncaa cccatttatg ntccccctat gttc 704

<210> 2845
<211> 505
<212> DNA
<213> Homo sapiens

<400> 2845
tttacaatgg gcatagacct tacaaaacca tttgaatacc tttttgctac tgggaatctg 60
cgttctaaaa caggtcttgg cctcctacaa gattctggac tttgtgttgt ggctgacaag 120
ctgaacttca tacgctacct ctcccatttc cgctgcgtgc acagaggggc tgattttgcc 180
aagatgagga ccaccacagt acgcaggctg ctgccagagt cctggggctt cctttgtccc 240
gtgcataccc cagacgggga gccctgtggc ctgatgaacc acctaactgc cgtatgtgag 300
gttgtcacac agtttgtgta tacggcatct attccagctt tactgtgcaa cttgggggtc 360
actcccattg atggagctcc ccaccgatca tacagtgagt gctaccctgt cctgctggac 420
ggtgtcatgg ttggctgggt ggataangat cttgctccan gcatcgcana ttctcttcgt 480
cattttaagg tgttganaaa naaaa 505

0962945 - 0762800

<210> 2846
<211> 637
<212> DNA
<213> Homo sapiens

<400> 2846
tgtacaaagg agaaatacat cattatttaa aagcatcatc ttttttttt atattgtaag 60
ataaatacca ttctgatgta tttctcttgg aaagggatgc tggtatcctg ggaggtttat 120
gatttttgat gtttttactc aggtgattgg cttgtatagc tgaaatgctg atgaaaagga 180
gttttccctt ctccctttt ctttttctttt cctttnnttt tttttttga natggagtct 240
cgcactgttg caggggctgg tgtgcagtgg cacagtctcg gctcactgca acctccgcct 300
ctcgggttca agtgatgctc ctgcctcagc ctcctgaata gctaggatta caggtgccca 360
ccaccacgcc cagctnattt tttgtatttt tagtaaagat ggggtttcac tatgttgggc 420
agtctggtct tgaactcctg acctggtgat cctcctgcct cagcctccca aagtgctggg 480
attataggcg tgagccactg cgcccagcct gtccctttt cttaaatgac ctttttggtg 540
aggaccatta tnggtttgta ccaggataag gttgtaaagt tnatcataat atnctcttat 600
atnaattcta aaaattgatg ttctaagaag anaggta 637

<210> 2847
<211> 801
<212> DNA
<213> Homo sapiens

<400> 2847
acaatgaatg gaggtaattg atttagtctg attccttcct gaaatctaaa tattagcaca 60
atagtttctg aaattttaca atgttaaatt atgatctaat tcatgagaaa ccacgggttt 120
aacataggga ttcaaaaaaa caaaaacaaa agaataggaa taaataaccc ttaattgtat 180
attggactag ttcagccctt aaacagcttt acctttattt aggaatgtac attttaggta 240
ttatcttgat catggagctt agatttaatt tagatagcaa aaataaagat ttgtatttct 300
tttccaatag ctaaaagtta cataacacta atacttataa cctatcaata tcagatatta 360
atgactttgt agtgttgtaa aattttgagg aattttggag tctttatcat aggtnacctg 420
gaccacagtt actatttatt gacaatgtga ttgagtgtat ggaggaaagc acagtggatg 480
ctaggctttg taaatatggg gatgtagaaa agcagatagt tcagtgtcta ccttttttcta 540
gaactacctt gaaaccttaa attttaagtc atgttcattg ctagaaaatt aaatgtnctt 600
attaaaacca atgaaaaagc aatttctgaa atgaaattag anataatctt tgtgtcttat 660
aaaaaagaca ttaataaaaa atctgaaagg ggcngggcgc catnggctca cgcctgttat 720
ccccaacatt ttnggggaag cccaaggtgg ggcggatcat cctaaggcca ggaattccaa 780
aaacagncct gggnccncca t 801

<210> 2848
<211> 506
<212> DNA
<213> Homo sapiens

<400> 2848
ggacgattaa caagaacaat agccaaggac cacaggacat ctcaactggt tcaaaattga 60
agttgagcaa gctttccact cgatgggtgc caaaaccgtt gtgcccagat cagctgcaga 120

0020050250

caagagcaga gctttcaatg gaaattttaa acnagtggna tcnagaccct gaagcatttc 180
cttgaattat aacaggagat ggaacaggac tttaccagtn ccatcctgaa gacaaaccac 240
aatcnaagca atggctacca ngaggtagaa gtggcctagt caaggcnaat gtggacaagt 300
caaagtnagg tcatggcaac agtttcttgg gatgctcaat gcattttgct tgttgacttt 360
ctggaaggcc caagaacatt ttttttttt ttttgaaatg gagtctcgct ctgtcgccag 420
gctgggagtg nngtggccna tctcagctag cttgcgnagc tctgcctccc aggttcacgc 480
cattcncctg cctcagcctt ccgagt 506

<210> 2849
<211> 590
<212> DNA
<213> Homo sapiens

<400> 2849
gcagaccacg ttagaacctc ggctcctgga gtagcanaac ctcggcttca atgggaccct 60
catttcataa atgaagaaac tgagattcaa agaggggaac taccgaaggt tacagagcga 120
gttcgtggat ggggaaactg agcctcacat gtntgaattc cagcatataa gcaacagact 180
ccagatttgg acatgtatat cttattccag gcttcccaga tgaccaccaa ggtggaaggg 240
atgatgatgt ccaggcagaa gggagctagg ccggcccagg cttttcctct aggcacagcg 300
gactccaggt tcagccttcc cggatggtaa tgttgcattc tgaanagcta ctttcccgcc 360
aactcatctc tggacttctc tggggcccaa ctctggtttc ctgcctgcag gaggtcccct 420
ctgacttccg acagtanatg acccttctga ctcacagttc tactgctggg aaatgcctcc 480
agagctgctg cccaccctct ctgcatccct ccaggtcact gggtgttgaa tcangggaag 540
cagggatacn cncgggcggg aaactcaggt ctcctaaatg tcnganctc 590

<210> 2850
<211> 760
<212> DNA
<213> Homo sapiens

<400> 2850
ganagccgga cgttccggcc gcttcgggct ggcggctgga gagcgctcgg gtcatgtctg 60
cccaggggga ctgcgagttc ctggtgcagc gagcccggga gttggtgccg caagacctgt 120
gggcagccaa ggcgtggctg atcacggccc gcagcctcta cccggcagac tttaacatcc 180
agtatgagat gtacaccatc gagcggaatg cagagcggac cgccaccgcc gggaggctgc 240
tgtacgacat gtttgtgaat ttcccanacc agccggtggt gtggagagaa atcagcatta 300
ttacatcagc attaaggaac gattacagga caaacaaacc cnatttttaa gaagtttatt 360
tgaaactctt cctggtcgag tccagtgtga aatgttacta aaggtcacgg aacaatgctt 420
caacacgtta gaaacgatca gaaatgttgc ttctactttt gaggcgcttc cctnaaacgg 480
tggtgcancn tggggttggc cttggggang cactattana agctgaaact attgaagaac 540
aagaatctcc agtgaactgc tttagaaaat tatttgtttg tgatgtcctt cctctnataa 600
ttaacaacca tgattttcga ttacctgccn atttattgta taaagttctt gaacaaagca 660
gcctgaattt tatatcaatt attgtcctag gtctactcca attagaaaat cnccntccag 720
gcgcccagna atacatctga attttaattg ttcccctnnc 760

<210> 2851
<211> 860
<212> DNA

09503405 - 09503805

<213> Homo sapiens

<400> 2851
ctctctctct ctctcctgct gcattgtgaa gaaactgctt gcttccctct caccctctgc 60
agtttcctga ggcctcccca gccatgcgga acgctgtana ccaagacctg gaattaacac 120
atcagaagat tctatgggga aacccattta aaaataggat gcatttttt cttttctgca 180
cagggagaaa gtttaagctc tcctcactat gagttttcaa gtataaaaga ctttttcttc 240
cacgattttg agaacaactg aggactcttg tgaccaggac aacagggaag cttgcagcaa 300
gatagctcca ggttggattc atgcttcgca ccccaagggc tgccagccag agaggaggag 360
aagcaatcac tcctgcagtt tctgaacact acacagacgc caggtnnctt cttcaggaga 420
acagccctct gaggaggcag gaagaggagg cttatctttc agcagccgga gctgctgaga 480
tctctgggca gattaagctc tctctaatgg atgggctcca gcctggcaca ttcagtggag 540
agggatccac tcatccatca tcaacatnat atggtcctcc ctgcacttca cagtgtcctc 600
ttgctattga aaangntttt ttgccttctc aagtttcttt gtcacagtct acanggaaga 660
actcaggccg ccaccggcag aagttaatgc cagctcacgt tttatttctg actgcttaat 720
ccttggcctc gatcctggct ccagctctgg ccttttgttt cccaaanggt tnctttgggg 780
aaaacttcct ttttcctatg ctgaaattta tngggaaggc aaaaattaat tcccttgata 840
ancnaaacct ttaaactccc 860

<210> 2852
<211> 542
<212> DNA
<213> Homo sapiens

<400> 2852
ttaacagaaa gatggaaatt aagcctttgc aatttgaaat tatgattgac agacttgaaa 60
aagccagttc taatcagctt gtaacacttc aagaagcaaa actgctgcta aacgaagatg 120
attaccttat taaagctgta tatgactact gggtgagaaa acgtaaaaac tgcngggggc 180
catccctcat tcctcagatn aaacaagaga aaagagatgg ctctaccaac aatgacccct 240
atgttgcctt tcggagaaga acagagaaaa tgcanactcg aaagaatcgt aagaatgatg 300
aagcctctta tgaaaagatg ttgaaactga gacgagaatt tagtagagcc ntaacaattt 360
tggaaatgat taagagaaga gagaaaacca aacgagaatt attgcactta accttagaag 420
ttgtggagaa aagataccat ttgggagact atggtggtga aatccttaat gaagtttaaa 480
tcnntagatc ngaaaaagag ttntttgcca ctcccgcaac tcttcataat ggaaatcntc 540
cc 542

<210> 2853
<211> 628
<212> DNA
<213> Homo sapiens

<400> 2853
gtcaagatgg cggctgcggc antggcggcg gcggcggcgg cggccgcggc tgcatctctt 60
caggtactgg agatggagag catggnagac ggccgccgcc ggctcggcag gactggccgc 120
cgaggtccga ggcagcggca cggtggactt cgggcctggg ccggggatct ctgcaatgga 180
ggcgagcggg ggcgatccgg gcccagaagc cgaggatttc gagtgcagct ctcactgctc 240
agagctgtcc tggcggcaga acgagcagcg gcgccagggc ctcttctgcg acattaccct 300
gtgcttcggc ggggctggag gccgcgagtt ccgggcccac cgctcggtac tggctgccgc 360

0952-0800

caccgantac ttcacgcccc tgctctcggg ccagttttcc gagtcccgct cgggacgggt 420
ggagatgcgc aagtggagct ccgagccggg gcccgaaccc gacacagtgg aagccgtaat 480
cgantncatg tacaccgggc gcatccgcgt cagcacgggc agcgtgcacn aagtgcttgg 540
aattggccga caggttccta ctcattcctt taaaanaatt tgtgganaat ttctcaagaa 600
aaaaacttcn tctctcaaat tgtgtngc 628

<210> 2854
<211> 816
<212> DNA
<213> Homo sapiens

<400> 2854
ttttaaaata aaaagagtgt ttttaaaatt cttaattctt taaaatacct ctagaaaagt 60
catatagtat gtctctaata gctaaaatga agtagcagtt gattcttcat atcttcttac 120
acacattaaa tgaaacataa tatttttgtg agttttcttg tttaatggaa actatactgt 180
taattgcatt tgtagaaagg tgaggaagat ggaaatgtat cagctgaagg tgactcagtt 240
gaggcaggaa gtaaggaagc ctttccctga gagaaagctt tggttagctt ttgtgcgtgg 300
cttgattggt ccatgttatt gagggatgct tgagtaccat agagaaatcc ttcaacaacg 360
tgaagagaac tttaagccaa ttatatacct naattaaaca ttgacaagaa tgttaattta 420
acagacaaat tttgtctgtt aatgttacag acaaaaactg ttagagaaag anaacacaat 480
tgggactttt tattttaaat tgacatactg taaattcttt tgtattgagc atataaatgc 540
aaccnaaccc agtngtttct aacagttaat ttatgcatgt tttgagtttc naatattaat 600
ttagtaattc cacaactact tgaatttctt tatcatgaat ctctgcattt ctgtgtcttt 660
cctgtgccta tcccctattg ttctcccaaa aacctaagtt ncntgaatat anttttcctc 720
attgggtttt ccttgggttg gggatcattt atttttnaat atacccccct ggtccaatat 780
tccctaatat tccttgaaat ttncnctccn tttnat 816

<210> 2855
<211> 753
<212> DNA
<213> Homo sapiens

<400> 2855
atatcagctt ccagtgtatt gcttggcacc gccaatcaac atgatagagg aaaagagcga 60
catagagact ctggatattc ctgagccacc acccaattct ggatatgaat gtcagcttcg 120
tttgcgcctt tccacaggca aagacctcaa gcttgtggtt cgcagcacag acacagtatt 180
ccacatgaag agacggttgc atgcagcaga gggagtggaa ccaggtagtc agcggtggtt 240
tttttctggc agacctctca ctgacaaaat gaagttcgaa gagctgaaga tcccaaagga 300
ctatgttgta caggttatag tgagccaacc tgtgcagaac ccaacaccag tggagaactg 360
aactgagccc tgttggccag ctcccacatc cctctgctcc tttttatggt tcttgttgtc 420
atttcctact ctgcggcgtg aaatctattt cactgctcta aattccctat gaatggattt 480
agttctgagg aattaccagt gaaaaattcc atctgtgatg gagaccaacn aaaattatta 540
aacacaaaga gccaggcttt ganactcatg ttattaccat ttctaatttg aaaggnngtt 600
tagaaataga ttaccattta ttttagaaca ctccacaact atgttatggc tatatttcag 660
tgacttggac tgttaaatga aacattgcat ccatgaagga cagcccccag ccccttttg 720
aaatacngaa attttttna naaaaatntn tcc 753

<210> 2856

US 2006/0269468 A1

0 9 0 2 0 0 2 . 0 2 0 2 0 0 0

<211> 649
<212> DNA
<213> Homo sapiens

<400> 2856
gttgaaggcg agagcttgct tggcccgtgt cgcttctgtc ccaagaaccg gacggagagt 60
gagggcacga gggtcgctgt cgggggctgt cgtcttccac gtacacgtcg tcgtgaggag 120
cgcagtccgg actcttcccg caacccctcc ggctcccttt ccgcacgcct cgaggcggcg 180
gcggccaccg agacagcagc gcaccttccc ccatcccttc cccttatccc ccagcccaaa 240
agggcccggt ctgcgcccca cccccgcccg tccgcccgct acgccgccgc catgtcggcg 300
caggcccaga tgcgcgcgat gctggaccag ttgatgggca cctcccggga cgganataca 360
actcgtcaac gaatcaaatt cagtgatgac agagtatgca agagtcacct tctcaactgt 420
tgtcctcatg atgtcctttc tggaactaga atggatcttg gagaatgtct gaaagtccat 480
gacctggctt taagagcgga ttatgaaatt gcatccaaag aacaagattt tttctttgaa 540
cttgatgcca tggatcatct gcantcattc attgcanatt gtgatcgtan aacagaaagt 600
ggccnanaaa agattagcag aaactccaga agaaattaat gctgaaatt 649

<210> 2857
<211> 582
<212> DNA
<213> Homo sapiens

<400> 2857
cccgacgcta tctcgcgctc gtgtgcaggc ccggctcggc tcctggtccc cggtgcgagg 60
gttaacgcga ggccccggcc tcggtccccg gactaagccg tgaccccggg tgccatnaag 120
cangagggct cggcgcggcg ccgcggcgcg gacaangcga aaccgccgcc cggcggagga 180
gaacaagaac ccccaccgcc gccggccccc caggatgtgg agatgaaaga ggaggcagcg 240
acnggtggcg ggtcnacggg ggaagcanac ggcaagacng cggcggggtc ggctgaacac 300
tcccatcgag agctggacac attcaccttg ganggactca aggagcacgt gaaacagcta 360
naaaaagcgg tttcaggcaa agaaccnaca ttcgtgctgc gggccctgcg gatnctncct 420
tccacatcac gccgcctcaa ccactatgtt ctgtataang ctgtgcangg cttcttcact 480
tcaaataatg ccactcgana ctttttgctc cccttccttg gaacagccat ggacacanaa 540
gctgatttac anttccgtcc ccgcncggga aaanctgcgt ca 582

<210> 2858
<211> 464
<212> DNA
<213> Homo sapiens

<400> 2858
acactgggct ccggcggcca gagtggggga ctaggtnaag cggcgccggg ccggggctgg 60
ccgggaccag gcccgaggct gagcggcggc gacagcggtg gccgggaggg gggganganag 120
gcgcagccag aggagccgcc gcagtagctc ccccgcctcc cgggctgagg gcggaaagaa 180
aacatgcata tatgattttc ttctgatgaa acctaatgtn ttcaagaaaa agaatcttgc 240
tttttggaag gatggaaaaa ttgggaataa ttttttcccc tttgataatt agaccactca 300
gtactgttgc ttagtttttg gttcagttac tttgatgtgg ttacaanaag aattttggct 360
gtaatggatt tcatacattt ttaatgtcta atttaatagg gatatanaca gttggtttaa 420
accaacattt ttggacgaag anangctatg gaaatnaana aaga 464

<210> 2859
<211> 478
<212> DNA
<213> Homo sapiens

<400> 2859
anagagctac cagctgccct gttggcttcg ctggtcggat cgtcctcctg gccccgccaa 60
acaggcgggg ggagcggccc cgactgtggg gccatggcag tagtctcctc gttctccgcc 120
gccgctagcc tatctgagtc gccggcttct gcgctagggg ctcccaccgc ctccgcaggc 180
taaggagccg ctgccaccaa cgagctgtga gggttactat gctccctctt tgccgccgtc 240
tcctcctctt gcccgcgcag gcacccctct ggctgctcag tcctgcctca gtgtcaaacc 300
agaagagaag taaaattcaa caaaaattta tgtgtggagt tccttcttaa aagaagaaaa 360
aagtgattat ttagactatg gatcggagca aacggaattc aattgcagga tttcctccac 420
gtgtggagcg tcttgaanan tttgaaggan gtggtggang agaangaaat gtgagcca 478

<210> 2860
<211> 762
<212> DNA
<213> Homo sapiens

<400> 2860
ggaaaaatgt gtgcaaagaa atgatggccc ctgaggacag actctgggcg atcacagtca 60
cctgtgaagg ttttatnaag atgaaatctg atgaaaatgc aagccttcag caaaccataa 120
aaccctgtat caaggttaga gagaaggaaa agccttcctt actgaagctc tttcgggaca 180
acacggccat tccaacctct agtgactcta cgtaggtgta aacttttttg tgggcattca 240
aagaaacact cagcatcctt cccataaata tatttattaa cttctacaag caatctaatt 300
tccttaatta caagcctaat ttaatttccc tttaagcctt tttgttaatt ttctttggan 360
atttttcacg tctttcattt atttatttgg agacagagtc tcgctctttt tcatgtcttt 420
aattaattaa ttaatttatt ttgagacgga gtcttcactg tgtcactcan gctggantgc 480
agtggcgcaa tcacggctca ctgcaacctc tgcctcccan gtccaagtga ttcttctgcc 540
tcagcctctc angtngctgg aattacaggc atgtgccacc acgccccgct aaattttgta 600
tatttttan tagaaacagg gtttcaccat attggccagg ctggtctcaa actcctgatc 660
tcaggtgatc ccctgcccca gcctccctga aattgttggg attacaggca tgaacccacc 720
ggngccccga ncttcttgtt nttttnaaaa anttggccca aa 762

<210> 2861
<211> 690
<212> DNA
<213> Homo sapiens

<400> 2861
atctaatgag gagcgaggtg cggtgccccc gaagcgctcg cttcccgcgg tgcgatctan 60
tcctgcagta ggcggcccgg ggccacaccg cggccgccca agccagtgca aggcccaggg 120
gcctgacatc gctcccagcg ctcgangacc gaggcctgct gtggangaca ccgtgctccc 180
tcgggacctg ctctggattc cggcccggac gtccccttgg agctctgcat ctccaacctg 240
gaacccaacc cagaagtctc aagtttgacg catcacgtgg cgtgcggatc cactgagggt 300
ccacagagag gggcgcccat ctcctgcgtc tcagttatcc tggtgttggg aattctgtgc 360

0050-0050-0050-0050-0050-0050-0050-0050

cctaaagaat tccgactcac atccgaacgg ggatctggtg gaatcnaggg tgaaagacca 420
gagggacaat gttctactat cccaacgtgc ttcagcgcca caccggctgc tttgccacca 480
tctggctggc ggcgactcgc ggcagccggg ttggtgaaac gcgaatacct gaaggtgaat 540
gtggtgaaaa cctgcgaaga aatcctcant tacgtgctgg tacgaatngc aaccccgcan 600
cccggccttg ccgcgggccc gcttctccct ctatctctca ncccaacttc anatctgtgt 660
gatccgcgtc tnttctccac caatgccntt 690

<210> 2862
<211> 751
<212> DNA
<213> Homo sapiens

<400> 2862
gtacgccgat tccatatggg cgccggcgcg gagcgccgcg gggcagcgcg gggtcgccat 60
ggctgagctg cagcagctcc gggtgcagga ggcgatggag tccatggtga agagtctgga 120
aagagagaac atccggaaga tgcagggtct catgttccgg tgcagcgcca gctgttgtga 180
ggacagccag gcctccatga agcaggtgca ccagtgcatc gagcgctgcc atgtgcctct 240
ggctcaagcc caggctttgg tcaccagtga gctggagaag ttccaggacc gcctggcccg 300
gtgcaccatg cattgcaatg acaaagccaa agattcaata gatgctggga gtaaggagct 360
tcaggtgaag cagcagctgg acagttgtgt gaccaagtgt gtggatgacc acatgcacct 420
catcccaact atgaccaaga agatgaagga agctctctta tcaattggaa aataaaagta 480
tttgccagtg gccatcaggc tgaaggcaag aatatatttt ttataaggga attgggaatt 540
ttagtctttt aagccnagtt tacgaatgaa naaatgaagg atggccccna gcgtaaggca 600
tatgtccttg ccnctggaca ctggttattt atgtttcagt ccctaaaaaa atgaaatgga 660
aaaaaagtgg tgctnaaatc caantcaaaa atattaacng ggaaaatttt taaaanctta 720
ttantttccc tgtgggccag ttgctttgtt c 751

<210> 2863
<211> 823
<212> DNA
<213> Homo sapiens

<400> 2863
actgcaggct ggggctccgc tccccggcgg gagcccgcgc gtggttccca gcgaagtccc 60
cgcgcggctg ggcccagcgt gagtattctc cgcccgctgt cctccccctg gaggcggcag 120
cgcccgttta tttgaggctt ctaatgtgag gaaaaacacg gaatgacaag tgtgggaaag 180
agcaagcact aaattactgt cagaaaaata aacggagtan cacagtgctg ctcggtgatt 240
tacgggggca attagtcacc accccacggc gctgctgagg acagcacggc agcagacaag 300
tcaggcccgt gaggaagaaa agctttgcac tgctctccag acaacttttc aaacaacaag 360
agaggatatt tgagcacatt aggttttgtg tcttcattct gggtacctac tcttcatatt 420
attctaccaa cttaatacat aaacatattt ttagcacaat atgaacctgt tctatgtgtg 480
tttaaaagcc tccagcagca acttttttct ctcccactgt ccaaaagttn ggttttcccc 540
ntcccttaaa aaacaaaaca aaaaaacctt tcttcactcc aaattgtccc ctggtgtgtg 600
gttttggtct ttctcattac ttcttgcatc ttgctacatg ttctgcattt gctcaaaacc 660
cctgggttgc taaggaattt gggtctgctg ctcctctggg gaaaatttgg taanctgggt 720
acaaggaagt ttaatnaaca aaggctaaaa tgaaaatcat acattaactt ccccattatt 780
ttgtnaacat tttctttaac ataccaaaca nantttccaa tnt 823

0562045.0720

<210> 2864
<211> 727
<212> DNA
<213> Homo sapiens

<400> 2864
gggantccgc gagcgtcgtc ggcaagcggc cgcctttcca cggtactccg agcactatgt 60
cgtccccggc gtcgaccccg agccgccgcg gcagccggcg tggaagggcc acccccgccc 120
agacgcctcg gagtgaggat gccaggtcat ctccctctca gagacgtaga ggcgaggatt 180
ccacctccac gggggagttg cagccgatgc cnacctcgcc tggagtggac ctgcagagcc 240
ctgctgcgca ggacgtgctg ttttccagcc ctccccaaat gcattcttca gctatccctc 300
ttgactttga tgttagttca ccactgacat acggcactcc cagctctcgg gtagagggaa 360
ccccaagaag tggtgttagg ggcacacctg tgagacagaa gcctgacctg ggctctgcac 420
agaanggcct gcaagtggat ctgcagtctg acggggcagc ancanaanat atagtggcaa 480
gtgagcagtc tctaggccaa aaacttgtga tctggggaac anatgtaaat gtggcagcat 540
gcaaagaaaa ctttccagan atttcttcac cgttttattg acccctctgg ctaaagaana 600
anaaaatgtt ggcatagata ttactgaacc tctatacctg caacgacttg ggganattaa 660
tgttattggt ganccatttt ttaaatgttg aacttgttga ncccccttcna nttcattttg 720
acaaaaa 727

<210> 2865
<211> 348
<212> DNA
<213> Homo sapiens

<400> 2865
attttattac agttggtatg gaaatccaca atttgatggt aaatatatac attggaatca 60
tccagtgtta gagcattggg accctagaat agccaagaat tatccacaag ggagacacaa 120
ccctccagat gacattggct ccagctttta tcctgaattg ggaagttaca gttctcggga 180
tccttctgtc atagaaactc acatgagaca aatgcgctca gcttcaattg gtgtactagc 240
cctctcttgg tacccacctg atgtaaatga atgaaaatgg aagaacctac tgataacttg 300
ggtacccnct atttgggaat aaagctcata aantatancc tgaaaggt 348

<210> 2866
<211> 732
<212> DNA
<213> Homo sapiens

<400> 2866
tcgagtcggc aatatacagc ttctgtattt atcaggccca gttctggtga tgatttcact 60
tttgacagaa gctgtccctc aaaagcaaac atgcaatana agaaacagat ctcaatggag 120
tctcactctg tcacccagga tggagtacag tggcgtgatc tcggctcact gcaagctccg 180
cctcctgggt tcatgccatt ctcctgcctt agcctcccga gtagctggga ctacaggcgc 240
ctgccaccac gcccggctaa tttttgtatt tttagtagag acagggtttc accgcattag 300
ccaggatggt ctcgatctcc tgacctcgtg atccgcccgc ctcagcctcc caaagtgctg 360
ggattacagg cgtgagtcac tgtgcccagc caagtttagt atttttgta gagacagagt 420
ttcaccatgt tggccaggct ggtcttgcac tcatggcctc aagtgatcca cctgcctcgg 480
cctccgaaag tgccggggat tacaggcgta agccactgtg cctggcctta aatgggtaaa 540

0956469.0120001

tttcatatgg tatatgaatt atatttcact aaaactttaa gaaaacatta tacagtactg 600
ttcaaatttt aagtggtcca atttaaatgc actattggta tacaantcta tgttaatgtc 660
cntaccaggg tatatgttaa ctataaatat ctatgcccct acccttnant atccaancat 720
atattatatg cc 732

<210> 2867
<211> 678
<212> DNA
<213> Homo sapiens

<400> 2867
tgacctgagg aagaagagca agtaatacat gaagatgatg aaagaccttc tgagaaaaat 60
gaattttcta gacgaaaacg ttctaaatca gaagacatgg acaatgtaca gtctaaacgt 120
cgtcgatata tggaagaaga atatgaggca gaatttcaag taaagattac agccaaagga 180
gacattaacc agaaacttca aaaggttata cagtggttgc tggaagaaaa attgtgtgcg 240
ctgcagtgtg ctgtatttga taagactttg gcagaattga aaacacgagt ggaaaagatt 300
gaatgtaaca agaggcataa aacagttctc actgaactac aggccaagat agccaggtta 360
accaaacgct ttgaagcagc caaagaaggt cttaagaaaa gacatgaaca tccacccaac 420
ccaccagtat caccaggaaa aactgtaaat gatgtcnaca gcaataatna catgtcttac 480
agaaatgcag gcacagtgag acagatgctg gagtccaaaa gaaatgtnag cgagagtgca 540
ccaccntcct ttcaaactcc tgtgaataca gtatcttcaa ccaatcttgt cnctcctcca 600
gcagttgtca gtagtcaacc taaattgcnn actccagtga cttcgggttc cctccacngc 660
aacgtcngtt cttcctgc 678

<210> 2868
<211> 703
<212> DNA
<213> Homo sapiens

<400> 2868
atgctgggcg gcgtcaggtg agcggtggtc gctgggcctc aggtaaccat ggagaaagag 60
ctgcggagca ccattctttt caatgcctac aaaaaggaga tatttaccac caacaatggc 120
tacaaatcca tgcagaaaaa acttcggagt aattggaaga ttcagagctt aaaagatgaa 180
atcacatctg agaagttaaa tggagtaaaa ctgtggatta cagctgggcc aagggaaaaa 240
tttactgcag ctgagtttga aatcctgaag aaatatcttg acactggtgg agatgtcttt 300
gtgatgctag gagaaggtgg agaatccaga tttgacacca atattaactt tttactagaa 360
gaatatggaa tcatggttaa taatgatgct gtggttagaa atgtatatca caaatatttc 420
catcctaaag aagctctagt ttccagtgga gtcttgaaca gggaaattag ccgagctgca 480
ggaaaggctg tgcctgggat cattgatgan gaaagcagtg gaaacaatgc ccaggctctc 540
acctttgtgt atccttttgg tgccacattg agtgtcatga aaccagcagt ggcggttctg 600
tctacaggtt ctgtcngctt ccccacttaa cagacccatt ttgggctttc tatcactcaa 660
aaaancnagg tggggaaact gggccgtgct nggttcatgt ccn 703

<210> 2869
<211> 816
<212> DNA
<213> Homo sapiens

0052004-0052800

0050250 "0 2002 0 50 50 50 50

<400> 2869
gtggctgctg cggatgtcgg tgtgagcgag cggcgcctga acacacggcg gctgccgagc 60
gcctgacccg ggcctgcgcc agagcctgca ccgagctccg gggccccaca cccgctacgg 120
tggccctgcg cccgttgcta ctgaggcggc gtgctctgca ttcttcgctg tccaggcctg 180
ccggctctgg tgtctgctgg ctcctccttg ctcgcctgct ccctcctgct tgcctgagtc 240
accgccgccg ccgccgccac agccatggcc gagagtggtg aaagcggcgg tcctccgggc 300
tcccaagata gcgccgccgg agccgaangt gctggcgccc ccgcggccgc tgcctccgcg 360
gancccaaaa tcnngaaagt caccgtgaag accccgaagg aaaagganga attcgccgtg 420
cccgaaaata actccgtcca gcantttaag gaagaaatct ctaaacgttt taaatcncnt 480
actgaccaac ttntgttgat atttgctgga caaattttga aagatcaaga taccttgagt 540
cagcatggga attcatgatg agacttactg ttcaccttgt cattaaaacn cnaaacangg 600
cctcaggatc nttcagctca gcaaacaaat acagctggaa gccatgttac tacatcatca 660
actcctaata gtaactctac atctggttct gctaactagc aacccttttt gggtttaagt 720
tggccttggg ggggaatttg caaggtctga attanctngg ggtttngaaa tactaacccn 780
ncttcctctg aaatttccga atcccgaatg ccggcg 816

<210> 2870
<211> 717
<212> DNA
<213> Homo sapiens

<400> 2870
gaggaaataa ttaagcttat taaagacaaa aganaggatg ttagttttcg aaacattggc 60
ataataactc attacaaggc ccagaagacg atgattcaga aggatttgga caaagagttc 120
gatagaaaag gaccagcaga agtagacact gtggatgcat tccagggtcg gcagaaggat 180
tgtgttattg ttacgtgtgt cagagcaaat agcatccaag gttcaattgg attcctggca 240
agtttgcaga gattgaatgt caccatcaca cgagccaagt acagcctctt catcctcgga 300
catttgagga ccctgatgga aaaccagcat tggaatcagc tgattcagga tgctcagaag 360
cgtggtgcca ttattaagac ctgtgacaaa aactatagac atgatgcagt gaagattctg 420
aaactcaagc ctgtgctgca ganaagtctc actcaccctc ctaccatagc cccagagggg 480
tccagacccc agggtggttt gcccagcagc aagctagaca gtggatttgc caagacatct 540
gttgctgctt ctctatacca cacaccctct gactccaagg gaaattactc ttactgttac 600
ttcnaaggga ccctgaaaga actcctgttc atgaccnact tccnggaacc ncgaatgctg 660
aaaaagatng ggctttgaag tccaaggaag aatttccttt tggggatccn caacccc 717

<210> 2871
<211> 552
<212> DNA
<213> Homo sapiens

<400> 2871
tctaaaaatg cntcctgaag gttccctaat ttctaaatct gggaaaccac ttccgaacca 60
gctactttta aatttctcag actggctggg ggaaaataga aacttagcca ctctaacatg 120
gtagatggag gcgtgaactg tnataaccct nagatgggta tacagaattt ttctccccna 180
gtagcagtca cattgcaaaa agattatatt gctattgaat tttaaggtgt agattaaatg 240
tctgtnatat gtgcataatc ttccattcct gggatcttag tcttgacatt ttctttttaa 300
gcatanaaca cccctccttt acaaagaang tnatctgtgg aaggaaagac atgctaatat 360
gatggtttta attataattc cctcagaacg gaatatatcc attaagtaca tggcatatat 420

atggctatag aaactgctac ntgtatttaa tttattgcct taatttttt ttatctctct 480
cnggatagac cntttagaaa ctatccagca actcctaact gcagtngtaa agaanatcca 540
ttaatcactg cn 552

<210> 2872
<211> 760
<212> DNA
<213> Homo sapiens

<400> 2872
ctgttccaaa ccacgtggac gcgtctgggc tgctggaggc agcccgagcc gccgccgtcg 60
gtgtcgccgc caccaccacc atcggagtca cgagtcccgc gtctgtccga agtcgccgct 120
ctcgggctgc tcacgtctct tcggagagcg cgcacatggc gactcaggcg tactccctca 180
gctacgcagg gtgcaacttc ttgcgccaac gtctggtcct gtctaccctg agcgggcgcc 240
ccgtcāaaat ccgaaagatt cgggccagag acgacaaccc gggcctccga nattttgaag 300
ccagcttcat aaggctattg gacaaaataa cgaatggttc tcgaattgaa ataaaccaaa 360
caggaacaac cttatattat cagcctggcc tcctgtatgg tggatctgtg gaacatgact 420
gtagcgtcct tcgtggcatt gggtattacc tggagagtct tctttgcttg gctccattta 480
tgaagcaccc gttaaaaata gttctacgaa gagtgaccaa tgatcaggtt gacccttcag 540
ttgatgttct taangcaaca gcactccctt tgttgaaaca atttgggatt gatggtgaat 600
catttgaaac tgaatattgt ggcgaanggg aatgcctccc ggaaagaaga agcgaaatgg 660
ttttctcatg tctgttaagg aangtcttga aancccattc cactcccaga ttcangaaaa 720
aatccaacgt tttaaaaaga aanggcgttc ccngttacgt 760

<210> 2873
<211> 896
<212> DNA
<213> Homo sapiens

<400> 2873
attaatatgt gctcatatct tactcaacat cagagagtct gtacttaata aaaccattat 60
agatgcaact agtgtcaaaa gatctttcag aaaataaaag cctttaaagt gaagaagata 120
attcattctg aagacaaaca ttacaaatat taagagggtt gtagtaccat tacttgcatc 180
acagatctta ttgtacacat tttgtactaa agaaaaccct gaagcagttg ctcaaatact 240
gttcaacatc agaaaattta tattggaaaa aacccctgga aaatgtaata aatttgtaaa 300
aacagttttg aaaaactaca gcttataaaa catgagggtc tataatgctt ggttgatagt 360
acaaagttta ttcnacatca gggaatttat attggagaaa aaccctacaa atgtnatcag 420
tttggaaaaa catttttaaa aaaaccacag catagaaaac accacagggt tcatactaaa 480
atatgttttt gcagatgcag taaaaatgaa aaaaatttaa tccgaaatta agtttatgta 540
aatatctgan aattcacagt agaaatatct aaggcgcgga cacttcagac attacactaa 600
atcagtgcta agtncagaaa acaacncnaa ataaaacttg gtggataaat tatttgtnta 660
tnacattaaa agaagtagaa gattttcagt tataattacc attaaaagtt tacttttatc 720
ttgaaaaaaa ttactgaatt tttaaattaa gtggaataat gatgttattt aaactcccca 780
aataactttt atgctccttt tttccattcc cggctaatan ttccncatgt tgaaaagcat 840
gttgaaccaa ttgntggctg gccccnnaag aatttgaaaa aaattccttt ttattt 896

<210> 2874
<211> 560

09623469 - 072806

<212> DNA
<213> Homo sapiens

<400> 2874
acacgccgcg ctgaggcccg cgggcccgtc atggaggcgc ccaccgtggg agacgccccc 60
ccgacccctc gccccttcg gccccggccc ctgccctggt tccgttgcgc gccccggatg 120
tggcgcggct gcgcgaggag caggaaaagg aagaaggtag ataatgacta taatgccctt 180
cgagaaagac tcagcacctt gcctgataaa ttgtcttata atataatggt accatttggc 240
ccttttgcct tcatgccagg aaaacttgtc catactaatg aagtctctgt tttactgggg 300
gacaactggt ttgcaaagtg ctcaacaaag caggctgtan gtttagttga gcaccggaaa 360
gaacatgtta gaaaaacaat agatgactta aaaaaagtga tgaaaaattt tgaatccaga 420
gttgaattca cagaagattt gcagaaaatg aacgatgctg caggtgatat tgttgacata 480
cganaagaaa ttaaatgtga cttcgaattt aaagcnaaac accgaattgc tcataaaccg 540
cattccnaac caaaaacttc 560

<210> 2875
<211> 602
<212> DNA
<213> Homo sapiens

<400> 2875
tttttatgtc ggaatatgaa gcaacaaatt tattgatccg agctctgtgt cacttttatg 60
atcaagatga ggaggaaggt ctccaatctg atggtgttat tgatgatgca tttgccttgt 120
ggctacagga ctcaacacag acattgcaat gtattacaga actgttcagc cattttcagc 180
gttgtacagc cagtgaagaa acagaccatt cagatctctt gggaaccctg cacaatcttt 240
atttgattac ttttaatcct gtgggaagat cagctgttgg ccatgttttt agtctggaga 300
aaaatctcca aagtcttatt actctaatgg agtactattc caaagaagcc ttgggtgatt 360
ccaaatctaa gaagtcngta gcttataatt acgcatgcat acttattttg gtggtggttc 420
antcttccag tgatgttcaa atgctagaac aacatgcagc atctctcttg aagctttgta 480
aagcagatga aaataatgct aaattgcaag aacttggcna gtggcttgaa cctctgaaaa 540
accttagatt tgaaattaac tgcatcccaa acttaattga gtttgttaag canaatatcn 600
at 602

<210> 2876
<211> 489
<212> DNA
<213> Homo sapiens

<400> 2876
gggggctgct gggaaggccg gcgggatgga ggcggcggga ccggctcgcg ggtgcgggtc 60
cgggtgaagc gggaggcagc cagagtcgga gccgggcccg agcaccaggc gcaggcccgg 120
cgcccgcctg cccgcaccct cgtcctcaca gacgccacag ccatggccat gatggtgtnt 180
ccgcgggagg agaagctgan ccaagatgan atcgtgctgg gcaccaaggc tgtcatccag 240
gggactggag actctgcgtg gggagcatcg tgccctgctg gctcctctgg ttgcacctga 300
ggccggcgaa acctagcctg gctcgcagga tcgctgcatc ctcctgcgtc gctccctgga 360
atccattgag cttgggctgg gggaggccca ngtgatcttg gcattgtcga accacctggg 420
ggctgtagaa tccgagaaac anaagctgcg ggcgcacgtt cggcgtctgg tgcaagaaaa 480
ccantggct 489

0505305.0N0000

<210> 2877
<211> 826
<212> DNA
<213> Homo sapiens

<400> 2877
attaaatgat tataaactaa ggaaaaggaa gacttttgaa gataatataa gaaaaaacag 60
gactgtgatt agtaactgga taaaatacgc acaatgggaa gaaagcctaa aggagattca 120
aagggctcga tccatatacg agcgtgcttt agatgtagac taccgaaata ttacactctg 180
gctgaaatac gcagaaatgg aaatgaagaa tcgccaagtc aaccatgctc gaaatatctg 240
ggaccgggcc ataacaacgc tgcctcgagt taatcagttc tggtacaagt acacgtacat 300
ggaggaaatg ttgggaaacg ttgccggtgc ccggcaggtg tttgagcgct ggatggagtg 360
gcagcctgag gagcaagcct ggcactccta catcaacttt gagctgagat acaaagangt 420
ggatcgggcc cgcaccattt atgagcgatt tgtcctcgtg caccctgatg ttaagaactg 480
gatcaagtat gcccgctttg aaaaaaaaca tgcttatttt gcccatgcac ggaaagtgta 540
tgagaganct gtggaattct ttggagatga acatatggat gagcnccttt atgttgcctt 600
tgccaagttt gaanaaaatc agaaanaatt tgaaagggtt acgantgatt tacaagtttg 660
ccctggacng aatttccaaa ccagatgccc cagaaacctt ttaaaattat tcccctcctt 720
tgaaaaaaaa tttnggtgaa tnggcggggg tttttaaaaa tttctttgtn aagccaaacc 780
ggaaaattcc ccgtttccaa aanaaaaaaa ntttaaaggg cgaaat 826

<210> 2878
<211> 662
<212> DNA
<213> Homo sapiens

<400> 2878
gtgacttcgg gctgtgggct cgctcgcggc tcttcggcca tggttttctc aaacaatgat 60
gaaggcctta ttaacaaaaa gttacccaaa gaacttctgt taagaatatt ttccttcttg 120
gatatagtaa ctttgtgccg atgtgcacag atttccaagg cttggaacat cttagccctg 180
gatggaagca actggcaaag aatanatctt tttaactttc aaacagatgt agagggtcga 240
gtggtggaaa atatctcgaa gcgatgcggt ggattcctga anaagctcag cttgcgaggc 300
tgcattggtg ttggggattc ctccttgaag acctttgcac agaactgccg aaacattgaa 360
catttgaacc tcaatggatg cacaaaaatc actgacagca cgtgttatag ccttagcaga 420
ttctgttcca agctgaaaca tctggatctg acctcctgtg tgtctattac aaacagctcc 480
ttgaaaggga tcagtgaggg ctgccgaaac ctggantacc tgaacctctc ttggtgtgat 540
cagatcacga aggatggcnt ccaagcactg gtgcgangtt gtccaagcct gaaancccctg 600
ctcctgaagg gctgcccnca gttngaaaat gaagctctga aacacattca aattactgcc 660
nt 662

<210> 2879
<211> 557
<212> DNA
<213> Homo sapiens

<400> 2879
aatttagggt tggggtacaa tttgtttcta ttaagcaagt accagtttac caatacatgg 60

0952904B9 "07/28/08

antaactgaa gtgtaactgt taaatgcttg tatactantt tttctttctg attgtcagtg 120
atttataagc tataaatgac caaggtcctc agactgcttt tagcatctgc aacttaaaaa 180
aatgggagtt agaaaaagaa caaatgctaa atagagtaac agttaaatgt atgtgtacac 240
tcttcccaaa tgccaanagt gcagcggtgg ggtgagatnc anatattcat ttatttctaa 300
gtctgtagtt aacatttatg ttccctactc cctacgtaag ccagactttg gcaacagtga 360
tagttgattc caggcttatt tgacttaaag tcactgaant ggaaactaag aantggcagt 420
tagtgtttta cccagcattt ctgccttctc tcttttcttc atgtgttttt gtctctagcc 480
tatgtgtatt tgtgtaaaat aatgtgggat accngaatna tanatttaaa aggaccaant 540
ggtnaaattg ggcccaa 557

<210> 2880
<211> 700
<212> DNA
<213> Homo sapiens

<400> 2880
atgaatgaac acttatcaag cctaattaaa aaaaaacgtn aatgtatgca gcccaaagat 60
tttaatttta aaacaccaga aaatgataag agatttcaga agaaatttga gaaaatggct 120
aaagagctac aaaggcaaaa aacaaatcta gatgatgatg tacctattct cttatttgaa 180
tctaatggtt cattaatata tactcccaca attgaaatta atagtagtca ccacagcgca 240
atggagaaga gattacaaga gatgaaggag aaaagggaaa atctttcccc cacctcttcc 300
caaatgattc agcagtctca tgataatcca agtaactctc tgtgtgaagc acctttgaac 360
atttcacgtg atactttgtg ttcagatgaa tactttgctg gtggcttaca ctcatctttt 420
gatgatcttt gtggaaactc aggatgtgga aatcaggaaa ggaagttgga aggatccatt 480
aatgacatta aaagtgatgt gtgtatttct tcacttgtat tgaaagcaaa taatattcat 540
tcatcaccat ctttcactca cctcgataaa tcaagtcctc agaaatttct gagtaatctt 600
tcaanggaag aaataaactt gcnaagaaat attgcgggtt aagtaatccc cctcaccaaa 660
aaccagctgg canggtntgt ctccnggaaa cgttttgaaa 700

<210> 2881
<211> 640
<212> DNA
<213> Homo sapiens

<400> 2881
aagaagatgc ctggagcagg cagcatcctc aaatggaagg taattgccct caaatcactt 60
aactaggatg acctactttg ctttcctgta tagccaggtc tgttatcana cccttatctt 120
gggaggcatc gtgccagagc ctggggcaag aaagggctgc tatccaggaa tgcaggtgaa 180
attatagcta ttagccctgt cttagagtgt gaggaaaatg tgccccccta cccctggcta 240
agtttgggtt cccatgtcat aaactgcctc cctctctgat agctctgcat aaacatccca 300
ggaactcaaa gtaacatttg atttcccaaa gagaacattt gcatttgtaa ctgtcagaaa 360
taggagagat catcaaagct aaatgaattg ggctataaac agtttgaaat atgtctttaa 420
attttaaaaa acatattttt tgtttgtttt ggggagagan gatcatttan actcaacaac 480
aaaacagaaa actgtgagtg ccattttgag acaagaccta cctggtcctt ccccctcata 540
ctttctgcta ccccgtgacc tccctctctc cttccagtca cagattatcc gcttggtttt 600
ggantttaa atgtgtggtc ctgaanaggg anaagaaaac 640

<210> 2882

0050250800

<210> 696
<211> DNA
<213> Homo sapiens

<400> 2882
cagttatatt ctactctgaa agaaggcaac ccaccctggg aggtgacaga agcggttctc 60
tttatcatgg ctgctatagc aaagagtgtt gatccggaaa acaatccaac acttgtggaa 120
gtcctagaag gagttgtccg cctcccggag accgtacata cggctgtgcg ttacaccagc 180
attgaattgg ttggagagat gagtgaagtc gttgatcgaa atcctcagtt ccttgaccct 240
gtgttgggct atttgatgaa aggcctgtgt gaaaagcccc tggcttctgc tgcagccaaa 300
gccattcata acatttgctc tgtctgccga gatcacatgg ctcagcactt taatggactc 360
ctggagattg cccgctccct cgattccttc ctgttgtctc cagaagctgc tgtgggcttg 420
ctaaaaggga cagcacttgt cctagcccga ttacctttgg ataagattac cgaatgtctt 480
agtgaactat gttctgttca ggttatggca ttgaaaaagc tgttgtctca aganccccagc 540
aatggcatat cctcagatcc cacagtgttc ttagatcgcc ttgcagtgat atttaggcat 600
accaatccca ttgtggaaaa tggacagact catccgtgtc agaaagtcnt acaggaaata 660
tggccngttt tatccgagac tctnaattan cnccga 696

<210> 2883
<211> 625
<212> DNA
<213> Homo sapiens

<400> 2883
tagacatgcc cagagttatg attacaaatt taggaggtag acggctcagg aattccctgg 60
gattgttgtg ctggtggaat ggcagaggga acttcacagg aaccttagtg ctcttttacc 120
tcaaagccac agacaggaaa tagaaagtgg aaaagtaata tctccttttc ttttccataa 180
ggagtttcaa cactgaactt taaaaagtct atcatattcc agcaatattt tttctttgtc 240
ctttatgttg taagttgtgt ggaaaaacta cttcggtaag aaatgttact gagataacaa 300
caactggcta atactgcatg tagattgctt aggttttaaa gtgactgcct gacttcacat 360
gttattgcta cagcctccag tatgttcgca ttatctcaaa ctcagggacc ccacaggaca 420
ggagacaccc tttctgaaac tganttggaa gtgaaagggt ggtgatggtt ttggccaanc 480
ctgcgggang gaaagtattg tattggganc acccttggga ccaggaagaa ggatgcccag 540
gttcacactc tgggacccct aanacattgt cantgggtaa ggtggaaggn cactgccana 600
agctgctgcc antgcctctg gggaa 625

<210> 2884
<211> 556
<212> DNA
<213> Homo sapiens

<400> 2884
tagatgctgc taactgttcc tcggctgatc gttttgtgac ccttctgctg cctacaatcc 60
ttgatcaact tcagttcaca gaacnaaatc tagattaggc tttaacaaga aaaaaatgtg 120
aaaggattgc cnaggccatt gaagttttgt taactctctg tggagatgat acactaaaaa 180
tgcatattgc aaaaatcttg acnactgtca agtgtnccac tcttatagaa cnacaattta 240
catatggcaa gattgacctg ggatttggaa caaaggttgc anattctgaa ttatgcaaac 300
ttgctgctga tgtttttga aaactcttga tttgattaac aaacttaaac cattggttcc 360

US 2003/0082800 A1

tggtatggaa gtaagcttct actaaatact tcacgaccca cgtntgatta ctcctttggc 420
ttttgcttta acgtccgata atagagaaca agtacagtct ggactgagaa tattattgga 480
ggctgctcca ctgccagatt ttcctgcttt ngtacttggg agaaagtata gcancanaca 540
atgcctattn acgacn 556

<210> 2885
<211> 565
<212> DNA
<213> Homo sapiens

<400> 2885
gtgctgggcc gcgggccgaa agatcgccag ggctgcgtat gcttgtggcg cgcccgcgga 60
gaggccgggg ctctgacgcc cgctctgcgg cttcggtgtt tgaacaggcc acagtccagg 120
agcgcttaca ttcaggagct ccgcgtagca cctgcccaac caaactcagc cctccgttaa 180
gatcctggtt ccatgccgca gtaagacagc aggcccaagt ctgcacatcc cagtgatgca 240
ccatgccaat agtggataag ttgaaggagg ccctgaaacc cggccgcaag gactcggctg 300
atgatggaga actggggaag cttcttgcct cctctgccaa gaaggtcctt ttacagaaaa 360
tcganttcga gccagccagc aagaacttct cctaccagct ggaggcctta aagaacaaat 420
atgtgttgct cnaccccaaa acagagggag ctagtcgcca caagaatgga gatgaccccc 480
cngccangag acgggcagtg agcacacgtt tgagaactgt ggtgaccgaa tccccgcccc 540
gcagaaatnc ttttcccacg ggagc 565

<210> 2886
<211> 539
<212> DNA
<213> Homo sapiens

<400> 2886
actgagtttg agggtgcagt catagctctg ttccatttgt tggccaccan gacngacaaa 60
gtccgagctt tacgggaggc tttttatcgg cagaacttac ccaatctcat gaacctcatt 120
gctacagttt ttgtgtttgc tgttgttata tatttccaag gatttcgcgt tgatctgccc 180
attaagtcgg cccgttaccg angacagtac agcagctacc ccatcaaact cttctacacc 240
tccaacatcc ccatcatcct ccagtcggcc ctggtgtcca acctgtatgt tatttcccag 300
atgctgtctg ttcgatttag tggcaacttt ttagtaaatt tactaagaca gtgggccnat 360
ttcagtgggg gaagacccgc acgttcttac ccagttggag gcctttgtta ctatctttct 420
cctcctgagt ccatgggcgc catctttgaa gatcctgtcc atgtcnttgt ttatatcatc 480
ntcatgttgg ggtcatgttc attcntctct aanacatgga ttgaagtgtc tggttccnc 539

<210> 2887
<211> 670
<212> DNA
<213> Homo sapiens

<400> 2887
aaaaaaaaat gaggcccctg cagcagcagc ggcgtggtca gagcgagctt cgganaagca 60
gtggtgggtt ccatgtgatg gtggagtagg aggcaggtct ccgcggttca tctgtgttgc 120
tctaaatgac actgcttcat tattttgatg gctgganaat atttcctagt gtatgtatat 180
ganagtttct tgatctcttt atctgtggat gaacagctac tttgaaacat atggtacatt 240

US 2003/0224000 A1

tgtgttaagg ctagtcaccc tgctgtggaa tagaaggcca gaattgatca gtctcatctg 300
agagtaactt tgtacccatc actgattcct tctgagactg cctccacttc cccagcagcc 360
tctggtttct tcatgtggct gcagatggca ggatttccca aaggtttctg gctgaaacat 420
attccgtggt gtatctgtac agcagtttcc tcatccctgc agctgtgttt gaacaggtca 480
tttaccatgc tgtcctccag gttcaacagt ntggctccaa aggatgaaat ttcattctga 540
ttttctggct gaanactatt ctctttgtgt atgtccacca cagttacttt atcccttcct 600
ctgtggatgg ggcantctcn ctgttttgcc cangctggaa tgcantggca tgatctcanc 660
tcacttgcaa 670

<210> 2888
<211> 589
<212> DNA
<213> Homo sapiens

<400> 2888
ggacgtcacg gtcactgaca gcgtgagccc gcggcggctg ctgccatggt ggctggcggc 60
cgggtaaggg tctgantgga tctcctgcca ggccagaacg ccttcggggg ccgcggcgga 120
aggccangag tttgcancca gggcgccggg tttgtggtct gcantgtcgt gaggctgagg 180
tgcatcatgt ctagactggg agccctgggt ggtgcccgtg ccgggctggg actgttgctg 240
ggtaccgccg ccggccttgg attcctgtgc ctcctttaca gccagcgatg gaaacggacc 300
cancgtcatg gccgcagcca gagcctgccc aactccctgg actatacgca gacttcagat 360
cccggacgcc acgtgatgct cctgcgggct gtcccangtg gggctggana tgcctcagtg 420
ctgcccagcc ttccacgggg aaggacagga caangtgctg gaccgcctgg actttgtgct 480
gaccaccttg tnggcgctgc ggcgggaggt ggagganctg aaaancagcc tgcgaaggct 540
tgcgggggaa attgtttggg gaagtccgat gccacatgga naaaaaccn 589

<210> 2889
<211> 814
<212> DNA
<213> Homo sapiens

<400> 2889
ttttcagtag cgtctcctcc ttattcattc acttttactg tgaanactga aatccaaaag 60
ccaggttccc caaaaaagta tttttaaaaa attttagggg accaaaataa atagaggaag 120
accaatataa aaaaatatgt tcaactattc cattttaaat ttaaagcaga aaaaaaaatt 180
gtgcccctca gacctaaagg cagctttaaa tgtatatagt ttggtgaaac atttgggaaa 240
tattaatttg gaggtttaga agcatacgaa aaacaaattc aaagcacttg aaagtaaaga 300
caatatcatg aggtcgaaaa aaacttcaaa aggatattag gtnaganaaa atgtgaatga 360
aagcagtgaa tttctgcctc tcctcgtatt tagggtactt aaaattacta aaaaatactg 420
tctttttacc atacagctag atggcctgta ttattcttaa tgtggccaaa ggantgaaga 480
ctgattaggg ttttagaatt tggaactgta gtcacataaa ggcatctttt gcatttctta 540
aaccagtaat ctacattttc tcctgggaaa tgggagaaat atgaaantgn tgctgtgcat 600
aagcttttgg gaatagaaan acaaagtttt aaanagaatg ggatatgttt tccttgcnca 660
acttgttaaa attttaattt aaaaaattta cctccatttt ttccaatcca taaagggtgc 720
ttttggcctc caantttttgt tggngaatgt tttggttccc atccccatta aaaaaccccc 780
tttcaccccn naactggtat tttngaaaat attg 814

<210> 2890

0062014050800

<211> 739
<212> DNA
<213> Homo sapiens

<400> 2890
ggattgggcc gccgctgctc atccccatgt atttccagta ccagatcatc atgaccatga 60
tcgtccataa gaactgggtg gacctggcct gggccgtcag ctactacatc cggttcttca 120
tcacctacat ccctttctac ggcatcctgg gagccctcct tttcctcaac ttcatcaggt 180
tcctggagag ccactggttt gtgtgggtca cacagatnaa tcacatcgtc atggagattg 240
accaggaggc ctaccgtgac tggttcagta gccagctgac agccacctgc aacgtggagc 300
agtccttctt caacgactgg ttcagtggac accttaactt ccagattgag caccacctct 360
tccccaccat gccccggcac aacttacaca agatcgcccc gctggtgaag tctctatgtg 420
ccaagcatgg cattgaatac caaganaacc gctactgagg gccctgctgg acatcatcag 480
gtccctgaan aatctgggaa gccgtggctg gacgcctacc ttcacaaatg aagccacagc 540
ccccgggaca ctgtggggaa agggtgcang tngggtgatg gccanaagaa tgatgggctt 600
ttgttctgaa gggtgtccga aaagctggtg tntgcactgc tcacggaccc atgttggatc 660
tttctccctt tctcctctcc nttntctctt caatctcccc catancncct ggccctcttg 720
ggaacttgcc tcctcancc 739

<210> 2891
<211> 464
<212> DNA
<213> Homo sapiens

<400> 2891
tttattaact ggaggcgacg gcggctgcgg cggcggcggg accgcctcct ccggggtatg 60
aaaatcggca gtgggttcct gagtggcggc ggangtaccg gcagtagcgg tggtancggc 120
tccggcggcg gtggtantgg cggcggcggc ggcggcggca ncagcggcag gagggcagan 180
atggaaccca cctttcccca gggtatggtt atgttcaacc accgtcttcc cccggtcacc 240
ancctcaccc ggccggcggg gtcggccgcc cctcccccgc aatgcgtgtt atcctcctct 300
acctccgcag ccccggccgc tgancccccc cctccgccag ccccggacat gactttcaaa 360
aaggagccgg cggcntcagc cgcggccttc ccctcncana ngacctcctg ggggttcttg 420
cagtctttgg ttancatcaa acaggaaaaa cccgcggatc ctga 464

<210> 2892
<211> 575
<212> DNA
<213> Homo sapiens

<400> 2892
gtgccgtgcg tcgccttgga aacagangag catccgcgac acccccgggg agacccaccc 60
cagctgctgc tgccacactc gcgggcgctg cccggtaatg gcctgggggа gtcccgagtc 120
cgacgcgccg ctggcctcag cctggacgcg gacccctccg cgagcgcgtc tgtgacccac 180
ggaaccggca ggcgctctct gcttgtggcg cccagagggc ggcgctgaca cgggcgcgat 240
ccgggaggcg aggcagggca gggcactttc gtcccggggc gatcccaaga gacgccggct 300
ctgggaccct cgccgggtcc tcgtcccgca gcctcttctc ggcctcccgc gatcctgcct 360
gcgccctctg cccaagactc gtctctcacg tcggctcccc gccagtctcg gganctctg 420
cttccctcgg ctcccgctag cccctcccgg gacctctccc cctccacccc ctcccccacc 480

0502502.0002

ccggaggccg ggctggacgc tacccanaac ctccgccacc cgcttctgcc actcnatgga 540
angacggtct tgctggagat cntgaccaan gacgg 575

<210> 2893
<211> 683
<212> DNA
<213> Homo sapiens

<400> 2893
naaaaatgtc tgtgtcttcc tggttgcgac atgcactgac ggcctaccaa ctggaaagtg 60
cagagtggtt ctgcaaatgg ttagaggaag catccattga ttttcgattt ggcaaaactt 120
acctgaaggg tatgagatat gcggtatttg gcctgggaaa ttctgcctat gctaaccact 180
tcaacaaggt tggcagnnat gttgacaagt ggctctggat gcttggcgcg catcgtgtga 240
tgagtcgagg ggagggcgac tgcgacgtgg ttnaaagcaa ncacggcngc attgaggccg 300
acttcagagc atggaagacc aanttcatct cccagctgca ggcacttcag aaaggggaga 360
gaaagaantc ctgtggcggc cactgcaana aaggcaantg ttaatctcac caacntggct 420
canaggagag ggaggaagga tctcatgacc aggatgaatt gcatcttaga cacccgagga 480
aggaanaacc tttgagagct ccaggtgaaa aanatttggt ggtgaggacc atcagaccta 540
aattccattg ttgatgttna anatttgggc caaattatgg atcctgtgta naaagaacag 600
agagaatcga accgcccgga aaaaaantct ggtttgttcc aggaaccntg gggaagaant 660
gaaaattngt gaaaagaaaa act 683

<210> 2894
<211> 701
<212> DNA
<213> Homo sapiens

<400> 2894
ggctggtgta tttgtacatc tctcgggacg tgaaattgac agtgaaaagt atggcagatg 60
agcaagaaat catgtgcaaa ttggaaagca ttaaagagat caggaacaag accctgcaga 120
tggagaagat caaggctcgt ttgaaggctg agtttgaggc acttgagtca gaggaaaggc 180
acctgaagga atacaagcag gagatggacc ttctgctaca ggagaagatg gcccatgtgg 240
aggaactccg actgatccgc gctgacatca atgtgatgga aaacactatc aaacaatctg 300
agaatgacct aaacaagctg ctagagtcta caaggaggct gcatgataag tataagccac 360
tgaaagaaca tgtggatgcc ctgcgcatga ctctgggcct gcagaggctc cctgacttgt 420
gtgaagaaga agagaagctt tccttggatt actttgagaa gcagaaagca gaatggcaga 480
cagaacctcn gggagccccc cntccctgag tccctggccg ctgcagccgc tgccgcccaa 540
cagctccaag tggctnggaa acangatact cggcagacgg nccccttcagg gcagcagccc 600
ccacctatga aggcctgctt gtctgtcccc ngcaaattcc ccgggaatgc cccctntttn 660
ccctctttgc aagggccaag aatcngtccc cggaaccccc n 701

<210> 2895
<211> 500
<212> DNA
<213> Homo sapiens

<400> 2895
acctgaagtc caaggcactg cgggagcgct ggctgctgga ggggacgccg tcctcggcct 60

US 2003/0224358 A1

cagaggggga tgaggacctg aggaggcaga tgcaggacga cgagcagaan acacggctgc 120
tggaggactc ggtgtccang ttggagaagg aaattgaggt gctggagcgt ggagactccg 180
ccccagccgc tgccaaggag aacgcggcgg ccccgagccc agtccgggcc ccancccga 240
gtccagccaa ggangagcgc nagacagagg tggtgatgaa ttcacagcac acgccggtgg 300
gcacgcccaa agacaagcga gtctccaaca cgcccctgag gacggttgac ggctccccca 360
tgatgaangc antggtccat gctgtggacg gcaccgccga aaactggatc cacccctga 420
gctcctccta tgtggacgaa ctcatccacn aagcgnacga agtcncgctt agcgaagcag 480
ggtccacngc cggggcngca 500

<210> 2896
<211> 151
<212> DNA
<213> Homo sapiens

<400> 2896
gataatattg tttccctcgt ccgtctgtct cgatgcctga ttcggacggg caatggtgct 60
tcccccaccc ctccgacgtg tccgtccacc cttccatcaa cgggtctcct cccagcggcc 120
tccggngtct tgcccancag ctcaagaana a 151

<210> 2897
<211> 653
<212> DNA
<213> Homo sapiens

<400> 2897
gataaggaac ngaagacggt naaacaaatg aatcgcaaat ttcaaataat ataaacatgc 60
agagttactc agtagaaatg cctaccgtgt cttccagtgg aggcataatt ggcaccggaa 120
tagatgaact gcagaagagg gtgccaaaat tgatctttaa gaaaggaagc agaaagaata 180
cagataaaaa ctaccttaac tttgtgtcac cattaccaga catagtagga cagaaatcct 240
tgtctggaaa accaagtggc tcacttggca tagtatcaaa taatagtgta gagaccattg 300
gtcttctcca aagtacaagt ggcaaacaag gtcagataag tngtaattat gatgatgcca 360
tgcagttttc aaagaaaaga agatatttac canctgccag cagcaacagt gccttttcta 420
taaacgtagg acacatggtc tcccaacagt ctgtcattca ntctgcangt gtcagtgttt 480
tggacaatga ngcaccattg tcacttattg actcctcagc tctaaatgct gaaattaaat 540
cttgtcatga caagtctgga attcctgatg aagttttaca aagtattttg ggatccatac 600
tcccncaaat cagaaagcca naaagaagat cctttccatn tttgcanaac cnc 653

<210> 2898
<211> 896
<212> DNA
<213> Homo sapiens

<400> 2898
ggctcgtccc ttcccccacc cccagccgcc gccgccgccc gcgcttcgca acaaagccgg 60
ctgcggagcc atggtccacg ccgcccgccc gcgaccccgc cgccccgcat ggtagccgga 120
acgtctctcc cttaccagcc ttcgcttcct ggtgcccagc tcttaggacc gtgtgtgact 180
ctggccttct accgagacaa cagagaaacg cacagcaact cgcatggagg aatcggcgaa 240
atggctccga ccgcggcgct gggggggcggg gccagcgagc ggtgttgaaa gcagcagggg 300

0509503.0509503

cctagaagac attaaaccga taccacagaa atacaangga tcattagaga ctattatgaa 360
caactatatg ccnacaaatt ggaaaccaaa tggaaatgga taaattcctg aacagatacc 420
acttaccaga attggaccaa gaaagaaata gaaaacctga aaagaccaac tatgagtaat 480
gagattaaat cagtaatata gagtctccca tcaaagaaaa gtccaggccc tgatggcttc 540
actgctgaat tctactgaac agttnaagaa gaactcatac cagttctcaa actcatcctg 600
tgagggcagc attaccctga taccaaaact agatttggac acaagaaaaa aaatctatng 660
gccngtatcc cctgatgaac atagatncca gaaatcctcc aacaagaacc aggtttttgg 720
ttggtttcat gccttgttaa tcccanccac ttttggggaa ggcccaaggc caggtnggat 780
caccctnaag gtccgggnaa ttttgaaaaa ccgccctggc ccacattggc aaaacccctg 840
ttttgttctt aaaaattcna aaatttttcc cgggccaagg ttgggcnttn ttccnt 896

<210> 2899
<211> 645
<212> DNA
<213> Homo sapiens

<400> 2899
gtgacgcagc ccgggtctca ggggaacatg gcggcgctgg tgagacccgc gaggtttgtc 60
gtgcgaccgt tgctgcaggt ggtccaggct tgggaccttg acgcgaggcg ctgggtccgg 120
gcgctgcggc ggancccagt gaaagtggtg tttccttccg gagaggtggt ggaacagaag 180
cgcgctcctg ggaagcagcc ccgcaaggca ccatctgagg ccagtgccca ggancaacga 240
gagaaacaac cgctcgagga gtccgcatcc cgcgctccca gcacctggga agagtctggg 300
cttcgctacg ataaagctta tcccggggac aggaggctga gcagtgtaat gacaatngta 360
aagtccaggc catttcggga aaaacaaggg aagatcctgc tggaaggtcg cangctcatt 420
tcanacgctc tcaaggctgg agctgtgcca aaaatgttct tctttagccn tctagaatac 480
ctaaaggagt tgccagtcga taagctgaaa ngtgtcagcc tcattaaggt gaaatttgan 540
gatatcaagg attggtccga cctcgtaacg ccccaaggaa taatggggat ttttgccnag 600
cctgaccatg ttnaaatgac tatccnaaga ctcngcttcn cattc 645

<210> 2900
<211> 485
<212> DNA
<213> Homo sapiens

<400> 2900
gactctggga tcggcggcgc tatnagttct ttcgaggggc agatggccga gtatccaact 60
atctccatag accgcttcga tagggagaac ctgagggccc gcgcctactt cctgtcccac 120
tgccacaaag atcacatgaa aggattaaga gcccctacct tgaaaagaag gttggagtgc 180
agatnaggaa actgaggaac cagagaggtt aaattagttg cccagtgtca cacagccagt 240
aagtggcagg accaggattc cagccagctt gaaggtttat ctatactgtt cacctgtgac 300
taaggagttg ttgttaacga gcccgaaata cagattttgg aagaaacgaa ttagcantca 360
caacagcagg gttgttcctg ttgtctctgg cattcagctt gaagttacta caggtcagcc 420
cggccagcan tcaggaagga aagctggaan anaagtggag gggaacagan acaaactgga 480
angca 485

<210> 2901
<211> 692
<212> DNA

0088205 9450 US

<213> Homo sapiens

<400> 2901
aaacagagta ttgtatggga gtttgaaaaa taccagcgat tactagagaa aaagcagcca 60
ccacatcggc agctgggggc agaggtagca gcagctctgg ccagcctaca gcgggaggca 120
gcggagacca tgcagaaact ggagttgaac catagcgagc tcatccagca gagccaggtc 180
ctgtggagga tgattgcaga gttgaaagag aggtcgcaga ggcctgtccg ctggatgttg 240
caggatattc aggaagtgtt aaacaggagc aaatcttgga gcttgcagca gccagaacca 300
ntctccctgg agttgaagac agattgccgt gtgctggggc taagagagat cctgaagact 360
tatgcagctg atgtgcgctt ggatccagat actgcttacc cccgtctcat cgtgtctgag 420
gacagaaaac gtgtgcacta tggagacacc aaccagaaac tgccagacaa tcctgagaga 480
ttttaccgct ataatatcgt cctgggaagc cagtgcatct cctcaggccg gcactactgg 540
gaggtggagg tgggagacag gtctgagtgg ggcctgggan tatgttngcc aaatgtanac 600
cgggaaggag gtggtctact tatcccccca ctatggattc tgggtgataa ggctgaagaa 660
agggaaatga attccgagcc nggcccnnat na 692

<210> 2902
<211> 541
<212> DNA
<213> Homo sapiens

<400> 2902
aaattgttca gttactgcgt gaaggtgaaa gtcaaccggc agcaactggt caaactggaa 60
atgaacacct tgaacgtcat gctggggacc ctaaacctgg cccttgtagc tgaacaagaa 120
agcaaggaca gtgggggtgc agctgtggct gagcaggtgc ttagcatcat ggagatcatt 180
ctagatgagt ccaatgctga gcccctgagt gaggacaagg gcaacctcct cctgacaggt 240
gacaaggatc aactggtgat gctcttggac cagatcaaca gcacctttgt tcgctccaac 300
cccagtgtgc tccagggcct gcttcgcatc atcccgtacc tttcctttgg agaggtggag 360
aaaatgcana tcttggtgga gcgattcaaa ccatactgca actttgataa atatgatgaa 420
gatcacagtg gtgatgataa agtcttcctg gactgcttct gtnaaatanc tgctggcatc 480
aanaacaaca gcaatgggca ccagctgaan gatctgattc tcccgaangg gatcacccag 540
a 541

<210> 2903
<211> 480
<212> DNA
<213> Homo sapiens

<400> 2903
tgaatagaag gctggtccag cggcggcgga agctggcgct gtcctgagag ggagggctct 60
gtgcggaana aatgaatcgg acaaagggtg atgaggagga gtattggaac agctccnagt 120
tcaaggcttt tacctttgac gataaaaacg atgagctttc acagttaaag gagtccaagc 180
gggcggtgaa cancctccga gacttcgtgg atgatgatga cgatnatgac ctggagcgag 240
tcagctggag tggggaacct gtgggaagta tctcatggtc catcanagag actgctggtn 300
atagcggctc aacccacgag gggcgtgaac agctnaagag ccgaaacagc ttctcctcct 360
atgcacaact acccnagcct acttctacct actccctgan cagcttttt agaggtngaa 420
ctagacctgg aagtttccag tccctttctg atgctctgtc anacacncct gccaaaanct 480

0950350-040800

<210> 2904
<211> 652
<212> DNA
<213> Homo sapiens

<400> 2904
ggccatctct gggcggcggc ggcgggcggt gtctgcgcgg tcggtgagac ccgcgcgggt 60
gagacgctgg ccctccttac agcctagaaa aaatgacaga tctcgtagct gtttgggatg 120
ttgctttaag tgacggagtc cacaagatcg aatttgaaca tgggactaca tcaggcaaac 180
gagtagtata tgtagatgga aaggaagaga taagaaaaga gtggatgttc aaattagtgg 240
gcaaagaaac attctatgtt ggagctgcaa agacaaaagc gaccataaat atagacgcta 300
tcagtggttt tgcttatgaa tatactctgg aaattaatgg gaaaagtctc aagaagtata 360
tggaggacag atcaaaaacc accaatactt gggtattaca catggatggt gagaacttta 420
gaattgtttt ggaaaaagat gctatggacg tatggtgcaa tggtaaaaaa ttggagacag 480
cgggtgagtt tgtagatgat gggactgaaa ctcacttcag tatcgggaac catgactgtt 540
acataaaggc tgtcagtngt gggaancgga aagaanggat tattcatact ctcattgtgg 600
gataatagag aaatcccana gattgcaagt taatgaattt tcntcttaag aa 652

<210> 2905
<211> 600
<212> DNA
<213> Homo sapiens

<400> 2905
gactggcggc aggctcgccg cggcgcggag tcccggctgc gggatagacc gagggccatg 60
gccgcctctc ccggacccgc cggcgttggc ggcgccggan cagtctacgg ctccggctct 120
tcgggcttcg ccctcgactc gggactggan atcaaaactc gctcggtgga ncanacgcta 180
ctcccgctgg tttctcagat caccacgctt attaatcata aagataatac caaaaagtct 240
gataaaactc tgcaagcaat tcagcgtgta ngacaagctg tcaacttggc agttggaaga 300
tttgttaaag tangagaagc tatagccaat gaaaactggg atttgaaaga agaaataaat 360
attgcttgta ttgaagctaa acaagcagga gaaacaattg cagcacttac agacataacc 420
aacttgaacc atctggaatc tgatgggcag atcacaattt ttacagacaa aacaggagtg 480
ataaaggctg caagattact tctttcttca gtgacaaaag tgttgttgct ggcagaccga 540
ntnntcntta aacagataat aacatcaaga aatanggttc tcgcaactat ggaaagacta 600

<210> 2906
<211> 788
<212> DNA
<213> Homo sapiens

<400> 2906
tttgtgttcc ctcaaatggc ggtgtgaaga gagttcgcct gagccagatc ccaggtttca 60
ctgaagaaac ttcttagagg ttcattgcac ttctgagatt taatgtttac aacttggagt 120
tgtcgacctt cttataagat acattttgga agtcaaaatg aaagttttct gtgaagtttt 180
agaagagtta tacaagaagg tacttcttgg agccacactt gaaaatgaca gccatgatta 240
catcttttat ctcaacccag cagtttcaga tcaagattgt tctacagcca cctccttaga 300
atgggcaaac acctgtggta tccagggcag gcatcagccc atctctgttg gtgtggctcc 360
cattgctgta gcacctgtgt gtttgaagac caactctcag atgagcggtt ccagagaagt 420

05052450.0N2000

aatgctcctt cagttaacag tgatcaaagt gatgacaacc cggatattgt ctgtcaaaac 480
cgagttccat gcaaaggagc agtacagaga tgtaattaaa attctcttag aatcagccaa 540
agtcgattct aaattaatct gcatgttcca aaattcagat aaattgttat ctcacatggc 600
tgcacagtgc cttgcattgc ttctatattt ccnattgaag anaaaaagat aaccttaagt 660
aattcctggg attgcttttt ggcccagaaa aatctttctg aatactctga aaatttataa 720
agcnatattc tggctctngg aaccctacng gcaatnataa aaaaaaatct tttaaagaat 780
ccnggttc 788

<210> 2907
<211> 622
<212> DNA
<213> Homo sapiens

<400> 2907
cccggatgtg gagaagctgg ggagaaggcg tgggaggaag atggactcgg tggagaaggg 60
ggccgccacc tccgtctcca acccgcgggg gcgaccgtcc cggggccggc cgccgaagct 120
gcagcgcaac tctcgcggcg gccagggccg angtgtggaa aancccccgc acctggcagc 180
cctaattctg gcccggggag gcagcaaagg catccccctn aanaacatta agcacctggc 240
gggggtcccg ctcattggct gggtcctgcg tgcggccctg gattcagggg ccttccagag 300
tgtatgggtt tcgacagacc atgatgaaat tgagaatgtg gccaaacaat ttggtgcaca 360
agttcatcga agaagttctg aagtttcaaa agacagctct acctcactag atgccatcat 420
anaatttctt aattatcata atgaggttga cattgttang aaatattcaa gctacttctc 480
catgtttaca tcctactgat cttcaaaaag ttgcagaaat gattcgagaa gaangatatg 540
attctgtttt ctctgttgtg agacccntcn gtttcgatgg gagtgaaatt cagaaangaa 600
ttcgtgaagt gaccnaacct ct 622

<210> 2908
<211> 475
<212> DNA
<213> Homo sapiens

<400> 2908
ggatgtttaa tggggatgtg gagattcatt gtactgtttc tatatttttg tggatgttga 60
aaaatatttt cttctttttt ttttttgaga tggagtctcc ctctattgcc caggctggag 120
tgcagttgtg caatctctgt tcactgcaac ctccgcctcc cgggttcaag tggttctcct 180
gcctcagcct cccaagtagc tgggactaca ggcatgtgcc accatgcctg gctaactttt 240
gcatctttag tagagatggg gttttaccat gttggccagg ctggtatcga actcctgacc 300
ttgtgacccg cccaccttgg cttcccaaag tactggaatt acaggcataa gccaccacac 360
ccggccgaaa aatatattta aaaaagtang aaacacacaa gacangcagc ttggacttat 420
cttctccatg atacctaccc nggtatccct gtgagcagct gacattcctt tctcc 475

<210> 2909
<211> 746
<212> DNA
<213> Homo sapiens

<400> 2909
gtattcctac tgtgctctct gaggatgtgg atgctgttga tctgcggacc acactttgag 60

0507050-0507800

aaatacacag gtgacagctg tggtggaaag aactcccatc caggaatcaa aacatgtctt 120
cacattttgg ccatggaact tgggggtctt gctttgttgc tcaggatgga gtacagtggt 180
gcaatcttgt ctcactgcag catcgacctc tggggcttaa gccatccttg cacttcagcc 240
tcccaagtag ctggtactac aggggatgca acaacaaggc gccntcttgg aantagacac 300
caggccctca ccanacacca aacctgctgg tgcctcgatc ttcaatttcc agcctccaga 360
gtgtcatggt ttctggaaaa aaagactcaa gatgttctca gtagctgctg ttttcagaca 420
tcatgaaagt cttctcctac cctctataaa aacaaacaat aaaactctac aaaggaaaag 480
cccacaaaaa catgctgact ttagaanaat ccatgattta gaatattttt ataaatatct 540
nanaaaacag gantcctttc catatatatg gtccttggga aatactttcc atatatatgg 600
tccttggaaa atccagtttt tatganaaan gtgatttccc aaatctctta cactttacaa 660
tttcaatttt ggcctganca tatctctccn attgatctac ctactacata ctgatctntc 720
ttgggataaa cactggacna aanggt 746

<210> 2910
<211> 801
<212> DNA
<213> Homo sapiens

<400> 2910
atttcttaag gtggagtctc gcactgtcac ctgggctgga gtgcagtggc atgatctcgg 60
ctcactacaa cctttgcctc ttgggttcaa gtgagtctcc tgtctcagcc tcccaagtag 120
ctgggattac aagtgcccac caccacgccc agctnatttt ttgtattttt agtagagaca 180
gggtttcacc atgttggcca ggctggtctc aaactcctga ccttgtgatt tgcctgactt 240
ggcctcccaa agtgctggga ttacaggctt gagccaccat gcccggccaa gactattttt 300
tagaaccata accacaatac agttaccaca cttttgaaag tcgatgggaa ttccttaata 360
tttaaatttc tcaataggct aatttttatt tttagggatg ggggcttgct gtattgacga 420
nactggagtg cagtggctat tcctgagtat tgtcatagtg actacacctc aaacacctgg 480
gctcacatga tcctcctgcc tcagtgtccc gagtaatant gcagggactg tangcactta 540
ccgctgtgat ctgcttanct catacatttt aaaaaaataa ttggttcaaa tcaggatcca 600
aaaaagttac ataaattgtg tttgattaat gcgtacttgg gtccttttaa atctaaaaat 660
gtctctcatc ttttttaaaa aacattattt gttgaaaaaa aatgaattta ttccggttta 720
attcccccat tccaaaactt tactgaatgt ttccccatga attcctctgn ccccttttgtn 780
ttttcctgtt nactaatnng t 801

<210> 2911
<211> 730
<212> DNA
<213> Homo sapiens

<400> 2911
gtactctgat tggtgacggg tgaggcggcc cgaaatcgta ngacttccga aagcagcggt 60
ggcgtttgct tcactgcttg gaagtgtgag tgcgcgaaaa tgcgaaaggt ggttttgatc 120
accggggcta gcantggcat tggcctggcc ctctgcaagc ggctgctggc ggaanatgat 180
gagcttcatc tgtgtttggc gtgcaggaac atgagcaagg cagaagctgt ctgtgctgct 240
ctgctggcct ctcaccccac tgctgaggtc accattgtcc aggtggatgt cagcaacctg 300
cagtcggtct tccgggcctc caaggaactt aagcaaaggt ttcagagatt agactgtata 360
tatctaaatg ctgggatcat gcctaatcca caactaaata tcaaagcact tttctttggc 420
ctcttttcaa gaaaagtgat tcatatgttc tccacagctg aaggcctgct gacccagggt 480

US 2003/0190600 A1

gataagatca ctgctgatgg acttcangaa gtgtttgana ccaatgtctt tggccatttt 540
atcctggtaa anaagctgtg ggcttaataa gctaatattt cgtgtgataa tttctgtaaa 600
gctctgggca canggcattt attatagttg aacaccngtt nactgaattt aatctcatgt 660
ttgaattttc cttgattgca ntttgccctt ggtttattgt naaacatgga atacttctgg 720
naaaccttcc 730

<210> 2912
<211> 528
<212> DNA
<213> Homo sapiens

<400> 2912
ggaggggggcg tcgggaaagc ccccgacttc gcagccttac actcttcgtg ggcggcgacc 60
gcggccccac tgacatcatt cctcatgagg gaggaggcac aaacagttct gggccgacca 120
gaaaaaggac gactgggact tgactctgaa tcgcaggatt tgaagagatt tctcctggct 180
tcccaacgag gctggtggga agcggtcctc ctcccataca cgacctccca ccctcgcgag 240
gcgtaaaaac cagttctgac tgtacagtaa agcgagggcc agggctgagg tctggaanct 300
aatgaaagca cagaaagtgt cnaaactgga tgagcaggaa gcgagtggcc tcccctgtca 360
tctgacgttt tcccagggat gtaatttgcc tgactggaaa cagatcagga ccaacagggg 420
agagttttcg atttagtgtg aggaaaagan cactanattg tagcaaaaga ccttattgct 480
caaggcccag tcagaanatt tcataaggga agctgtnnaa agtcttaa 528

<210> 2913
<211> 565
<212> DNA
<213> Homo sapiens

<400> 2913
tcatcccagt tcatnatgat ctcttgatcc atgcaaacct taccacgctg accttctggg 60
gaaccacgaa agtagaaatc acagccagtc agcccaccag caccatcatc ctgcatagtc 120
accacctgca gatatctagg gccaccctca ggaagggagc tggggagagg ctatcggaag 180
aacccctgca ggtcctggaa caccccccctc aggagcaaat tgcactgctg gctcccgagc 240
ccctccttgt cgggctcccg tacacagttg tcattcacta tgctggcaat ctttcggaga 300
ctttccacgg attttacaaa agcacctaca gaaccaagga aggggaactg aggatactag 360
catcaacaca atttgaaccc actgcagcta gaatggcctt tccctgcttt gatgaacctg 420
ccttcaaagc aagtttctca atcaaaatta gaagagagcc aaggcaccta gccatctcca 480
atatgccatt ggtgaaatct gtgactgttg ctgaaggact catanaanac cattttgatg 540
tcnctgtgaa gatnancacc tatct 565

<210> 2914
<211> 773
<212> DNA
<213> Homo sapiens

<400> 2914
aagatgcaca agtaccttta accaaccata agaaatcaga aaagcaagat aaagttcagc 60
acacagtatg tatggattgc agtagctaca gtacatactg ttatcgctgt gatgattttg 120
tggttaatga caccaagctg ggactggtac agaaagtcag agaacactta cagaacttgg 180

09/29/2005 10:50:40

aaaactcagc tttcacagct gacaggcata agaaaagaaa acttttggaa aactcaacac 240
taaacagcaa gttattaaaa gtaaatggaa gcaccactgc catttgtgcc acaggccttc 300
ggaatttggg gaacacatgt ttcatgaatg ccatccttca gtcactcagt aacattgagc 360
agttttgctg ttatttcaaa gaactgcccg ccgtggagtt naggaatggg aaaacagcag 420
gaaggcggac ataccacacc aggagccaag gggataacaa tgtgtctttg gtagaagagt 480
ttagaaagac actctgtgct ttatggcaag gcanccagac tgcatttagc ccagagtcct 540
tattttatgt tgtntggaan attatgccaa actttagggg ctatcaacag cagggacgcc 600
catgaattcn tgcgctacct tttgggacca cctncacttg gaacttcngg ggcgggtttc 660
acggtgtttc ccgctcanca attctgcagg aaaattctac tctgtctgcc aattaccaag 720
ttnttgcata aattgaacat ctactgttng tcncggctat tttccngaaa ggc 773

<210> 2915
<211> 715
<212> DNA
<213> Homo sapiens

<400> 2915
agcttctttg tctctggctg ccgctggaac tccgggtctc gtcttcactg ctctgtgtcc 60
tctgctccta gaggcccagc ctctggtcct gtgacctgca ggtattggga atccacagct 120
aagacgccgg gacaccctgg aagcctagaa atggacaacc tgaggtatgg agtgtatcct 180
gtcaaggggg caagtggata ccctggggct gagaggaatc ttctggagta ctcttatttt 240
gaaaaggggc cgttgacatt tagggatgtg gtcatagaat tctctcagga ggagtggcaa 300
tgcctggaca ctgctcagca agatttgtat aggaaagtga tgttagagaa cttcanaaac 360
ctggtgttct tgggtattga tgtctctaag ccagatctga tcacctgtct ggagcaagga 420
aaagatccct gggaatatga agagacacag tatggtagcc acacccccag atggagtttc 480
actgttgttc cccaggccgg antgaaatgg cgcgatttca cctcgctgtg tcccaggttc 540
aagcanttct cctacctcag cctcccgagt atctgggatt acgggcatat gccaccacac 600
ccagcttaat ttgtattttt antagaaaca nggtttctcc atgttggtca ggctagtctc 660
gatctcctga actcaggtna ttcaccacct cngcttccca aagtgccngg attac 715

<210> 2916
<211> 654
<212> DNA
<213> Homo sapiens

<400> 2916
accagaagca ttnaatgtta tcgtaaggct aattgaacaa gccccaattc aaatgggana 60
agaggcagtg aggtgggcaa aactggtcat acctttagtg gttcattcag cacaaaaggt 120
acatttgcgg ggagcaactg ctctggagat gggaatgcca ttattgcttc agaaacagca 180
agaaatagca tctattacgg agcagcttat gactactaaa ttaatctcag aacttcagaa 240
gctatttatg agtaaaaatg agacttacgt gttaaaatta tggcctttgt ttgtcaaact 300
acttggaagg accttgcatc gaagtgggag tttcatcaat tctctcttgc aactagaaga 360
acttggattt cgtagtggag cacccatgat taaaaagata gcttttattg cttggaagan 420
tttaatagat nattttgctt taaatccaga tatactatgt agtgcaaaaa gactcaagtt 480
gttaatgcag cctttgagtt ccatccatgt tgagaacaga aactctagca ttaacaaaac 540
tagaantctg gtggtattta ctgatganac ttggacctca tcttcctgct aattttgaac 600
aggtttgtng tgcctctgat tcnaaagtac aatnagcatt gattctnatg cctc 654

US20050009000A1

<210> 2917
<211> 675
<212> DNA
<213> Homo sapiens

<400> 2917
gtgcagcttg gtggcggctg anccggcagc gggccgcctc aggcagcccc ggccgggccg 60
cccgggtccc cggcagcggg gtangatggc gctaaagcgg atccanaagg aattaaccga 120
cttgcagagg gatcctcctg cccagtgttc tgcangacct gtcggtgatg acttgttcca 180
ctggcaggcc accatcatgg gcccgaatga cagtccttac caaggangtg ttttcttcct 240
gaccatccac tttcctacag attacccgtt caagccccca aaggttgctt tcacaaccaa 300
aatttatcac cctaatatca acagcaatgg cagcatctgc cttgatatcc tgcggtctca 360
gtggtctcca gcgttgactg tgtcaaaagt tctcttgtcc atctgctcgc tgctctgcga 420
ccccaacccc gatgaccccc tggtgccaga aatagcacac acctacnagg ccgacagaga 480
gaagtacaac agactagcaa ganaatggac acaaaaatat gctatgtaag tgccttggaa 540
gttttacatg aaacactgtc caagaaaanc tggcagaaaa gtcttccctt aaaactttgg 600
gctgttggct gaaccattca aanaacatca tctgttcttc aaacaaatnt tngtcaccac 660
tctctccanc tngca 675

<210> 2918
<211> 708
<212> DNA
<213> Homo sapiens

<400> 2918
ggagcccctc agcggcggcg gggtctgtga gttggtcgcg gggtcttggc ggggaatgga 60
ggtagaataa acgtgggacc cggagtgcac caaggtgaga aaaaaaaaat tactaaaaat 120
gacaagtaga anacttgagg agtccatggg ggctgttcan atgggattgg tcaatatgtt 180
caaaggattt caaagcaagg ttttgccacc cctgagtcca aaggtggtta cagaanaaga 240
agtaaaccga atgcttacac cctcagagtt cctgaaggaa atgtccctga ccaccgagca 300
gagactggca aaaacacgtt tgatgtgccg accacagatc atcgaactct tagatatggg 360
ggaaacaaca catcagaagt tttcaggaat tgacctggat caggcattat tccagcccct 420
tccatcagaa attatatttc agaactacac tccctgtgaa gtctatgaag ttccactgat 480
tttgaggaac aatgaccaaa ttccaaggtt ggtgaaagtt gtgnaaaaaa nttcgcctta 540
ctttaaagta atcagcccca aagatattgg ccacaaagtg gctcctggna gtgccttcca 600
tattccgaat cctctttact ccanaagaaa aacaaggatt acgcccatac cttnaacctt 660
gtgttactga aanaaaaaat ttattgtncc catccaagct ngaagggc 708

<210> 2919
<211> 707
<212> DNA
<213> Homo sapiens

<400> 2919
acaagaagga cgaggagtct ggtagtggct ccaatccttt ccagcatctg gagaagagtg 60
ctgttttaca ggaggctcgt atattcaatg aaactccaat caatccaaga agatgtttgc 120
atattcttac aaagattctt tacttactga accagggtga acactttgga acaacggaag 180
ctacagaagc cttctttgca atgacgcgat tgtttcaatc taatgatcaa acattgagga 240

0050250-0050350

gaatgtgcta ccttaccatc aaagaaatgg ctaccatctc tgaggatgtg ataattgtca 300
caagcagtct gactaaagac atgactggaa aagaagatgt ataccgaggc ccggccatca 360
gagctctctg caggatcacc gatggaacna tgttgcaagc cattgaaaga tacatgaagc 420
aggccattgt ggataaagtt tccagtgtat ccagttcagc actggtatct tccctgcaca 480
tgatgaagat nagctatgat gtggttaagc gctggatcaa tgaagcccaa gaagctgcat 540
caagtgataa tattatggtc cagtaccatg cattggggag tcctgtttcc cttagaaaga 600
atgatcgact tgctgtttcc acatgttgaa taagtttact aaggtctggt cccaagtcac 660
agtttgctta ctgcatgctg atccgaattg ccngtcnctt actnaaa 707

<210> 2920
<211> 634
<212> DNA
<213> Homo sapiens

<400> 2920
gctgcgatgg cggaggccgt ggagcgcact gacgagctgg tccgggagta cctgctcttc 60
cgcgggttca cgcacacact gcggcagctg gacgccgaga tcaaggcgga caaggagaag 120
gggttccggg tggataanat tgtggaccag ctgcancagt taatgcaggt gtatgacttg 180
gctgcccttc gggattattg gagctacttg gagcgtcggc tcttcagccg cttggaggat 240
atatacagac ccacaatcca caagctgaaa accagcctgt ttcgatttta tcttgtctac 300
acaatccaga caaacagaaa tgacaaggct caggagttct ttgcaaagca ggccacggaa 360
ctccagaacc aggctgantg gaangattgg tttgtcctgc ccttcctgcc atccccggac 420
accaacccca cctttgctac ctacttttct cgacagtggg ctgacacctt cattgtgtcc 480
ctgcacaact tcctgagcgt cctgtttcag tgcatgccan tccctgtgat cctgaacttt 540
gatgcggant gtcagangac taaccaggtt caagaanaaa atgaattctg cgtcagaanc 600
tttttgcatt gcaagctgaa atccnccgac tgaa 634

<210> 2921
<211> 551
<212> DNA
<213> Homo sapiens

<400> 2921
ttcacatgat caaggaagtt tatggatgcg tttgtggaaa tcttactcta tgaacttgtt 60
ggattagatg ctgttttatt ctctactaag tgaaaagtgc tttatttcag tgctttccca 120
tggttgggag agagtagctg ttaactattc tgggtaatgg gggtgagtat gttgaggaag 180
agatttagaa ccagaagagt gaagagactc aaactgttcc ataacaagga aagctttaaa 240
gaccttgtat ttcacagtct ggagaactag agggatctga ctcttggtca gttcatgtaa 300
caaattattt attgagtact tgctgggctc tcaagattca tgctttgagc acaggcagtc 360
attcagtttc cngtccacct gattacatca gcatgcactt agttttcttt cttgttcaca 420
aggacttttg atcatgcaag acctggccna gtcttctata atccanatgg gtttcctggg 480
gctgttactt gantttttcct gtcaaaatat tttcgtgaac cctgcctctc ttancaaaca 540
ctacttcnta n 551

<210> 2922
<211> 494
<212> DNA
<213> Homo sapiens

US 2003/0224360 A1

<400> 2922
aacttttttcc catccgtagc cttaaattcc cgagctgccc gggcggatcg tantgttgat 60
tggagggatg agaatacccg ccgggtccga ttggccactg tctccgcctg cgttctcgga 120
gtagcttccc tgcgggtggg ctggagttcg gcggccggcg tagggcgcgg ccctgcaggg 180
cggtgggagc ctccccgggg ctgctcgtgt tgcagcttgg gatgatactg gcggaacgca 240
ggaccccaac tcccaaacct gcggaccttg accacggacg ancctgtcc canctcccca 300
cgtgccccag ggggaccaga gcaggcagga cgccttccaa ntattcaagg gccgctggtt 360
gcctacgctt cgtccccttg tttcttgaac aaccgttagg gaccaggggt nccctcagg 420
gangccacag tccggggctg gggcgctcat tgatgcantg atcacacaac angccgcccg 480
cctgaagaaa ctnc 494

<210> 2923
<211> 484
<212> DNA
<213> Homo sapiens

<400> 2923
aaaaaaatcg ctgggcgact gatttcgant ttccggtcag gttaagccgg gggggtgcgg 60
tcctggtcgg aangangtgg anagtcgggg gtcaccaggc ctatccttgg cgccacagtc 120
ggccaccggg gctcgccgcc gtcatggana gcggagggcg gccctcgctg tgccagttca 180
tcctcctggg caccacctct gtggtcaccg ccgccctgta ctccgtgtac cggcagaagg 240
cccgggtctc ccaagagctc aagggagcta aaaaagttca tttgggtnaa natttaaaga 300
ntattctttc agaagctcca ngaaaatgcg tgccttatgc tgttatanaa agaactgtgc 360
ggtctgttaa aaaaacgctt aacagccant ttgtggaaaa ctgcaanggg gttattcacg 420
gctgacactt cangaacaca agattgtgtn gaatcnaacc acccaccttt gggaatgatt 480
gctc 484

<210> 2924
<211> 741
<212> DNA
<213> Homo sapiens

<400> 2924
aaaaatctat gattcagctt ttcatcctga cactggtgag aagatgattt tgataggaag 60
aatgtcagcc caggttccca tgaacatgac catccacagg ttgtatgatg acgttttaca 120
ggactacgcc ggctgtgctg ttctggcagt ggattaacca gtccttcaat gccgtcgtca 180
attacaccaa cagaagtgga gacgcacccc tcactgtcaa tgagttggga acagcttacg 240
tttctgcaac aactggtgcc gtagcaacag ctctaggact caatgcattg accaagcatg 300
tctcaccact gataggacgt tttgttccct ttgctgccgt anctgctgct aattgcatta 360
atattccatt aatgaggcaa agggaactca aagttggcat tcccgtcacg gatgagaatg 420
ggaaccgctt gggggantcg gcgaacgctg cgaaacaagc catcacgcaa gttgtcgtgt 480
ccangattct catggcagcc cctggcatgg ccatccctcc attcattatg aacactttgg 540
aaaanaaagc ctttttgaan angttcccat gggatgaatg ccccattcaa gttgggttag 600
ttggcttctg tttggtgttt gctacacccc tgtgttgtgc cctgtttcct canaaaattc 660
cattgtctgt tacaancttg gaagccgaat tgcancttag atccaagaaa accctcctga 720
attgngacnc tgttcttcca t 741

US 2005/0059005 A1

<210> 2925
<211> 774
<212> DNA
<213> Homo sapiens

<400> 2925
gttgcctgag cagtgggctg cttangaaga gaaggtcaga gttcgcgggg gcagaggcat 60
tcttgccgct ggcccagtca ctatgtagtg gaggggcaga caccctcccg caaattctgg 120
aaggttctta ntctcgacta gggcagtagc cccaggactc ctagtcgccg gcttcaggtc 180
actgccggct gaacggagct gccgtcgcca tgtttggctg cttggtggcg gggaggctgg 240
tgcaaacagc tgcacagcaa gtggcagang ataaatttgt ttttgactta cctgattatg 300
aaagtatcaa ccatgttgtg gtttttatgc tgggaacaat cccatttcct gagggaatgg 360
gaggatctgt ctacttttct tatcctgatt caaatggaat gccagtatgg caactcctag 420
gatttgtcac gaatgggaag ccaagtgcca tcttcaaaat ttcaggtctt aaatctggag 480
aangaaccaa catccttttg gagccatgaa tattgtccga actccatctg ttgctcagat 540
tggaatttca gtggaattat tanacagtat ggctcancan actcctgtag gttatgctgc 600
tgtatcctca gttgactcat tcactcagtt cacacaaaaa natgttggac aatttctaca 660
attttgcttt catcatttgc tgtctctcag gcccaaaata acnccnagcc catcttaaaa 720
tgttccattc cnggcaaatt ttggttctna aaattgggtt ttnaaaaaaa aaaa 774

<210> 2926
<211> 655
<212> DNA
<213> Homo sapiens

<400> 2926
actcttggcg ccttcgcgga aggtgcgtcc gagccatggc cgctgccaac ccgtgggacc 60
cggcgtccgc gcctaacggc gctgggctag tgctaggcca cttcatagct tcggggatgg 120
tcaatcagaa aaacctggaa attgaactcc tgaaactaga aaaagataca gcagatgttg 180
ttcatccttt ctttttggag atgaagtctt gctatgttgc ccaggctggt ctcgaactca 240
tggcctcaat tctcccgttt cagtctccca aaacactgcg attacagctc agaagtgtca 300
tactctgcaa agcatgaata atcatttgga agcagtgctg aaaganaaga natcccttag 360
gcaaagactg ttgaaaccca tgtgccagga aaacttacct attgaagctg tttatcacag 420
atatatggta catttgctgg agttggctgt gactttcatt gagagattag aaacccacct 480
tgaaacaatt agaaatattc ctcatttagc tgcaaatcta aagaaaatga accaggcttt 540
ancaaagatg gatatattgg tgactgagac agaagaactg gcagaaaaat atnctccnag 600
tggcgttaac aacaaaaacg aaantttccg tcttgtttcc cccaaaatnt tanct 655

<210> 2927
<211> 665
<212> DNA
<213> Homo sapiens

<400> 2927
gagttgaaag aggccatcaa gatcctggag agcctcaaga acatgactgt ggagcagctg 60
ctgacgggct cgcccacctc tccgactgtg gagcctgaga agccaactcg ggagaagaag 120
tttctggatg acatcaagaa gctacaggaa aacctcaaga agaccctgga caatgtggcc 180
attgtagagg aggagaagat ggaagcagtg cccgacgtag agcgcaagga ggacaagccc 240

US 2003/0170650 A1

gaggggcagt cacctgtgaa ggctgagtgg cccagcgaaa ccccggtgct gtgccagcag 300
tgtggcggca agcctggcgt caccttcacc agcgccaagg gcgaggtctt ctccgtactg 360
gagtttgcac cctcaaatca ttcttttaag aaaattgagt tccagcctcc agaagccaag 420
aagttcttca gcacagtgcg gaaggagatg gcgctgctgg ctacctcact gcctgagggc 480
atcatggtcc agacttttga agatagaatg gacctcttct cagctctcat caggggcccc 540
actcgaaccc cctacgaaga tggcctctac ttgtttgaca tccagctccc caacatctac 600
ccagccgtgc ccccccactt ctgctactct cccaatgcan tggncgcctg aancccccacc 660
tgttt 665

<210> 2928
<211> 513
<212> DNA
<213> Homo sapiens

<400> 2928
gctgcgggcc cgggccatgg ccgccgccga tgccgagaga cacctatggc tgccgatgaa 60
ggctcagcag agaaacaggc aggagaggcc cacatggctg cggacggtga gaccaatggg 120
tcttgtgaaa acagcgatgc cagcagtcat gcaaatgctg caaagcacac tcaggacagc 180
gcaagggtca acccccagga tggcaccaac acactaactc ggatagcgga aaatggggtt 240
tcagaaagag actcagaagc ggcgaagcaa aaccacgtca ctgccgacga ctttgtgcag 300
acttctgtca tcggcagcaa cggatacatc ttaaataagc cggccctaca ggcacagccc 360
ttgaggacta ccagcactct ggcctcttcg ctgcctggcc atgctgcaaa aacccttcct 420
ggangggctg gcaaaggcag gactccaagc gcttttcccc agacgccagc cgccccacca 480
nccacccttg gggganggga nttctgacac ana 513

<210> 2929
<211> 668
<212> DNA
<213> Homo sapiens

<400> 2929
gctgggtccc ttctcccttg acagctccct ttctgtgttt tttctggcac aagaaactct 60
gtcatcttgt ataaatanga naaatttatg gcagttttcc ctcttcttct ccctggtggg 120
ctactaggaa gggtctaggg ggangaggga gcctgaaatt ccaaaaatat aaatgtggaa 180
agactggagg gggtcganga gtctctttgc ctgccttagc tctggcccca gctctccttt 240
ccctttgcat gtttgaccat ctgggtgatg aggagggtan agaactggtg cagcccgtcc 300
tctctgcaag cccaaaagag atgggtccca aagcagatat ccgacaggag gggcacaagg 360
gaaatcaagg aaataggctt ggctgtccca tgaaataatt gganganaca cagaccactg 420
ccctccttcc tggatttggc tatttttgta cttccctgtt tgttgangca gcctgataca 480
gcggggaana naactcgtcc tcgatttana aagattgaca ganaaactaa gtgtgtgacc 540
ttaagcaagt catatcttgt ctccgggcct cacctgtaaa aaganggaag ggactgaatt 600
tatcnnnggt tttcaaatga ttttaactct ggggtccttc cttcaaataa aaccgtntgc 660
nctgaccc 668

<210> 2930
<211> 837
<212> DNA
<213> Homo sapiens

0502450 "0502450

0050450-040000

<400> 2930
ctaatacatc taatgacagt aggcatcaaa agctaaaaga gatttcacaa tactacatac 60
catggagaca gggctgataa attatggccc atgctgtctg gttttgtacg taaagtttta 120
ttggaacaca cctgtgtcca ttctttcatg tattgtctat ggctgctgtc atgttacaac 180
tacagagttg agtagttgca acaganacta tatggccctt gaccaaaaaa agcctgccaa 240
cccctgccat gggacatatt cttcagggtc cctttcttaa aaatatgtat aacaactctt 300
aataatttat tggctcagtg attcccaaat tatgttttat agaatattaa tattctctaa 360
gttaataaat gttttgagaa aatgattgat gctaatattg gtttttcttt atggttgatt 420
ttaatatgtt tatttaaata tgagattaag actgctaaac tcatttctat agcttttatt 480
tttatgtgat aatctacctt taagaaaagg tgtaccatac ctgagancac caggaagtcg 540
catgaganat cacctgatac atgaacgtat gatgttccat ctgcgcattg atgaatangc 600
agcatttaca aattaactga tgtgttgctg tatatcatct ctttgangan tgccctcctc 660
ttgtatcccg tcttaataat ttcacacatt tgcgatactc aatgtctatc ctaaattaac 720
catgttttgt acccaaactc nttggcccat gggatctgtt gctgaaacaa aggaaatctt 780
aaacaaaaaa atngaaactt ccggttanca aaattggtgt ctgaatccaa ntgatcn 837

<210> 2931
<211> 520
<212> DNA
<213> Homo sapiens

<400> 2931
ggacatatac tgagtgctac tttatgccag accctgggct ggcagctgtt tggaggcaaa 60
gatgtatgag gccatctcag gaganactac ttgttaggat tcttgagttt tgaccaacag 120
aaatgaactt ggaccaactt aagcaaggaa aaagcgttca tgggaaggat gctgggatag 180
ctcacaaaac caaaagaata nctgaacaat taattggcct tgggaagggt gggagctggg 240
gcaactacga ngcttgcctc ccagganctg ctgcggttgg canatcaaca ccaacttgcc 300
attggttcta gtgggtcccc ttccactcaa gattcaaatt ccaagtgaaa gaacctggcc 360
tggagctcag ggcttcatag agtgggaggg gggcantctt ccaaaagatg cggactcttg 420
ccacatggaa tggtgganta cggaagggtg gaaagggttt ggtangtnaa ccctgaanat 480
gcttctaaca cacgtnctgt tctcccatct cacgtatgac 520

<210> 2932
<211> 876
<212> DNA
<213> Homo sapiens

<400> 2932
agcgaataaa tgctcagaaa ggcgttttgt ttcaagagga tcagattttg gactggtttg 60
tacagatatg tttggccctg aaacatgtac atgatagaaa aattcttcat cgagacatta 120
aatctcagaa catattttta actaaagatg gaacagtaca acttggagat tttggaattg 180
ctagagttct taatagtact gtagagctgg ctcgaacttg catagggacc ccatactact 240
tgtcacctga aatctgtgaa aacaaacctt acaataataa aagtgacatt tgggctctgg 300
ggtgtgtcct ttatgagctg tgtacactta aacatgcttt tgaagctggc agtatgaaaa 360
acctggtact gaagataata tctggatctt ttccacctgt gtctttgcat tattcctatg 420
atctccgcag tttggtgtct cagttattta aaagaaatcc tagggataga ccatcagtca 480
actccatatt ggagaaaggt tttatagcca aacgcattga aaagtttctc tctcctcagc 540

ttattgcaga agaattttgt ctaaaaacat tttcgaagtt tggatcacag cctataccag 600
ctaaaaaacc agcttcanga caaaactcna tttctgttat gcctgctcaa aaaattacaa 660
gcctgccgct aaatatggaa tacctttagc atattaagaa atatgganat taaaaaatta 720
cccnaaaaag aaaccactgc caaaacntaa accnggccct ccaactccca aaaaaaaaaa 780
ttgaattctg gganaaaaaa agggaggaaa atttctgaag naacccccca gaaaanaaaa 840
aaggggggaa ntttttgaaa aagggaaaan aaaccc 876

<210> 2933
<211> 585
<212> DNA
<213> Homo sapiens

<400> 2933
gttgtttctg aggagttcag gaatcagatt gtacgtgaac ttgtgacttt gcctgcaaat 60
cgttggaggg agcagttaga ctattacgct cgctgcagcc aggctcctgg ctgtggggaa 120
ctcctctttg acactgacac ttggagcttg cagataagga agacaggggc tcagacagct 180
actgactttc ctcatgctat caggatatgg tacaaaacta aacctgaagg gcgatcggtt 240
acatggacct cagaccagag tggcaggcca tgtgtttata ctgtgggatc tcccataaac 300
aacagggccc tttttccatg ccaggagcca cccgttgcca tgtcaacatg gcaggctaca 360
gttcgagcag ctgcatcttt tgttgtttta atgagtgggg aaaattctgc caaaccaacg 420
cagctttggg aagaatgctc aagctggtat tactatgtaa ctatgccaat gccagcctcc 480
accttcacaa ttgcantggg atgctggacn gaaatnaana tggagacatg gtcctcaaat 540
gatttggcaa cngagaaacc ttctcacctt ctgaagccaa cttca 585

<210> 2934
<211> 538
<212> DNA
<213> Homo sapiens

<400> 2934
aatcgcagcg ctggcgcggg cggaggctaa aacacggggg tcctgagact gaggaaaacg 60
cgccaagttc ccctcggtgg cggagtgcta aagaccctan cggttcatgc gttcggcgag 120
cggggccgct gcttgttgcg ctcctggctc tcccggggcg ggcgcagatg ggcgccgctc 180
ccgggatgta tttggtgttg gtgcaaggcg ggagcgagcg gcggtcgggg ttcccgctct 240
tgggagcgga tggtcactcc cccgcgggga gggcgagccg accanatttt cctggggccg 300
gggacccggc gggctcgggg cagggactca cctgtcgcac ccacactcat tcgggttgga 360
cttgccggcg tcaccgccgc ggacttcgct ttgggccatg accanatata attggtgatt 420
acaactttcc tctataaatt aactcttgac actccttggg atttgaanaa aaaaatgcct 480
ggtgtcatac ctagtgaaan taatggactt tcaagangtn gcccttcaaa naaaaaca 538

<210> 2935
<211> 610
<212> DNA
<213> Homo sapiens

<400> 2935
tcactgggga aatacaaaaa tagcccctcc tgaagataaa atcattcaga aacagagcaa 60
taattctgac tcattaactt ctacctactc aaaaaagtct gccatgatga tggaccgaag 120

09/28/2005 09:45:50

tgaggctttt taacccacaa gtaacctttt atttttttg agacagtctt gctctgtctg 180
tcacccaggc tggagtacag tggcatgatc ttggctcact gcagcctcga cttcctgggc 240
tcaaatgatc ctcccacctc agcctcccat gtggctggaa ccacaggcac gtgccaccat 300
gcctggctat ttttttgttg agctgggctc tcgctttgtt gcccaggctg gtcttgaact 360
cctcggctca agcaatcctt cccactcagc ctcctgtagt gtcganaata taggcgtggg 420
ctactacacc tgcttcagcc gcttctataa aaccgctgac ctgtgtgtgg angacagcca 480
ngtgtgtgct cactgcgctg cgaaaatgtt ttgtcacgtg actttccccg gatttccatt 540
tctttttttc tgcttccctc cnaaactaat anaaanactg ggtgcggggg ctcacgcctc 600
taatcncanc 610

<210> 2936
<211> 783
<212> DNA
<213> Homo sapiens

<400> 2936
gaattcagtg gccaaaggag tatttttgga gtgccttgag ccatatattt taagtgataa 60
attggtggga atcacacccc aagtaatgaa agacttgatt gttcatttcc aagataaaaa 120
attaatggaa aatgtggaag cgctcattgt acatatggat atcaccagcc tagatattca 180
gcaggtagtt ctcatgtgtt gggaaaatcg tttatatgat gctatgatct atgtctacaa 240
cagaggcatg aatgaattta ttagtccaat ggagaaactt ttcagagtca ttgctcctcc 300
tctgaatgca ggaaaaacac taacagatga acaagttgtt atgggcaata agctccttgt 360
atatattagc tgttgtctag caggtcgtgc ctatcccctt ggtgacatcc ctgaagatct 420
ggttcccttg gttaaaaacc aggtttttga atttctaatt cgcctgcatt catcagangc 480
ttctcctgaa ggaaaaaatc tatccttaca ttcggacttt gctacatttt gacacaagan 540
aatttctcaa tgtnttggca ctgacttttg aagattttaa aaatgacaag caagctgtgg 600
gaatatccac agccgaattg tggatatttt gttgaaagtt atgggtggan aattcagact 660
ttacccccctc acaagttnga tgtctcttta ccttccttgn tccgcagctt gcaaaacctg 720
acaacacctt gtttgttaaa canaaacctt tttgatccng gtccntgaaa tcccttgntg 780
tcc 783

<210> 2937
<211> 720
<212> DNA
<213> Homo sapiens

<400> 2937
aggaagagga taaaagccag atctcctttg ataacctcac tccaagtggg acgctgggga 60
aagactacca taagtcagtg gaggtttttc ccttaaaggc aagaaaatct atggaaagag 120
aaggctacga gtcctcgggc aatgatgact acaggggtag ttacaacacc gtgctctcac 180
agcctttatt tgaaaagcag gacagagaag gtccagcctc cacgggaagc aaactcacca 240
ttcaggaaca tctgtacccc gcgccttcat cacctgagaa agaacagctg ctggaccgca 300
gacccactga atgtatgatg tcgcgatcag tagatcacct cgagagacct acgtccttcc 360
cacggcccgg ccagttaatc tgctgcagtt ctgtcgacca ggtcaatgac agcgtttaca 420
ggaaagtact gcctgccttg gtcatcccgg ctcattatat gaaactcccc ggggaccact 480
cctatgtcag ccagcccctc gtcgtcccgg ctgatcagca gcttgagata aaaagactac 540
aggctgagct gtccaatccc catgccggga tcttcccaca cccgtcctca cagatccagc 600
cccagcccct gtcttcccag gccatctctc ancancacct gcaggatgcg ggcacccggg 660

0953f69.0970201

aatggaaccc tcanaacgca tccatgtcgg antctctctc catcccanct tccctgaaac 720

<210> 2938
<211> 544
<212> DNA
<213> Homo sapiens

<400> 2938
aaaaatggag attctccagg gacccttccg tatctgccta ggcattttgc tgtctcctcc 60
taatacgctg ttgctgtact ggacacttgc tcccatctac tctcttctct ggaatccacg 120
ggggattcct aaggatgtca ccacagtgtt ggccagatgc acaggtcaca ggggactgaa 180
cctcatcacc ccacaaacat accattcagg ttttgccaag aatgacactg taaatgtaac 240
aaagcttctg tgcttgttag tgaacaccaa ctcagctcct ctcctgtatt cagaaatcag 300
gatgagatga aaacaacaag caggccaggc acggtggctc atgcctgtaa tcccancact 360
ttgggangcc gaggcgggcg gatcacctga ggtcgggagc tcgagaccac cctgatcaaa 420
acaganaaac cccatctcta ctgaaaatac aaaattagcc aggcgtggtg gcaaatgcct 480
gtnataccan ctactcagga nctgaggcag gaaaattgct tgaacccggg angtggangc 540
tgca 544

<210> 2939
<211> 821
<212> DNA
<213> Homo sapiens

<400> 2939
tctatttttt ggctattata aacaatgctg ccgtgnaaca tttgtgtcca acttttgtg 60
tggacacgtt ttcatttctc ttggatacac actagcagtg gaattgctgg gtcatacagt 120
aactctatgt tacttttga agaaatgcca gacagtttc caaagtggct gcaccatttt 180
acattcccac cagcatatat gagggttcta gtttctccac atcatctcta atacttgttg 240
ttgtttatct ttttgattat agccatccta gtaagtttga agangtatct cactgtggtt 300
ttgatttgca atttcctaac catttgatga caaatgatgt taagcatctt ttcatgcaca 360
tattttcttt ggaggtttgc ctattcaggt cttttgccca ttttaaaatt gggtttatct 420
ttttttttt ttganatgga ntctcgctct gtcacccaag cangantgca atggtgcaat 480
ctcggctcac tgcaacctcc gcctcccagg ttcaagtgat tctcctgccc cancctcctg 540
antanctgga ttacaggtgc ccaccactac actggctaat ttttgtattt ttagtaaana 600
cgggtcttan catgttggcc aagctggtct tgaactcctg aactcaggtg atccacccac 660
cttggccttt ccaaantgtt gggattacag gcatnaacca ctgccccggg tggggttatg 720
tttttatatt gaattgtagg aatactttaa tcntttaac taaaaattct ttatcctttn 780
agcttaccan ctncattnat ttggcaaaaa tttcctcccc a 821

<210> 2940
<211> 768
<212> DNA
<213> Homo sapiens

<400> 2940
gtctttctct gtctcggctg aggcanccat ctttctcttg ccgcgtgctg gtgttggagg 60
accctccctg cttcagggta cagctcgcag aaagaagaag gtggtacata gaacagccac 120

0356345.0372000

agctgatgac aaaaagcttc agagttctct aaaaaaactg gctgtgaata atatagctgg 180
tattgaagag gtgaacatga ttaaagatga tgggacagtt attcatttca acaatcccaa 240
agtccaagct tccctttctg ctaatacctt tgcaattact ggtcatgcag aagccaaacc 300
aatcacagaa atgcttcctg gaatattaag tcagcttggt gctgacagtt taacaagcct 360
taggaagtta gctgaacagt tcccacggca agtcttggac agtaaagcac caaaaccaga 420
agacattgat gaggaagatg atgatgttcc agatcttgta naaaattttg atgaggcatc 480
aaagaatgaa gctaactaaa agtttggttt ttggaagctg gcatggacta natttaacaa 540
atcagctatg tggttccnaa gttttacaga catggagaac atcacctgtt actaattcag 600
taatataaat attttgtata ttaataatgc tgtttgttca ncatttttcg gtcatttgat 660
tttgcatttt gcacttcctc ccangatatt tttttggtcc aaatatnaaa tattggtgca 720
ttttgaaggg tgttttgggt tttgaattcc cgggttttnn tggttttn 768

<210> 2941
<211> 678
<212> DNA
<213> Homo sapiens

<400> 2941
aagccttcag ggatttgcct gtggttgcta ctcaagttaa aaagactggg agcctgcatt 60
gtttggtcct ggagctcaag gttttcagtg aaggcttgtc ctggcacctc tgggcattcc 120
ttttcattac tggttgagca tccttccttc tgctctgtca attggcaaaa tatgctggag 180
cacattctgg actagcagtt gccttggggt agtcaggctg ggtatttgtt tggtatctct 240
tggtgtagca gaccccagaa tctcatggca attaggattt ggtggctaaa cgaaagagtt 300
agtgcaagga aaagcctagt tggaatttct gagtctgggc catccttaag ctgctgtcta 360
ctgcctgaat gggaagtaat gtcgaattgg aaaattagct caccattttt gttctagctt 420
tgcagacatt tattcctctg atgataggct gagaaatgcc taggccggct taaaaggcac 480
acagcatgac agaagtactc cttcaaagca gctgtgtcta gaaagaagaa ctggaaaagt 540
ggatttgctg gggaattaaa tgcatttagt tttccactta cgcacaactg ccttctccan 600
tatatcatac caaggttttt taagcctttg tngcttaccc tgcaagaaca tactgttntc 660
ctgttgttct ggactgtt 678

<210> 2942
<211> 609
<212> DNA
<213> Homo sapiens

<400> 2942
attcagttct cgagctccag ccctcagcgc atgcgcaaga cgagtcgcct gagggaactg 60
atctcagctc gggcccgcgt tacatcctcc tcctcttctt ccttcggccc agctttcctt 120
aggggctgca acccggacgc cgaggccggt ttcggagtgg ggagtgccca ttttctctcc 180
ttcccacgtt cctggccccc agacgccatt tgcaggcggg tggcttgggt cagcctcccc 240
gcccccaccc gactcccgtc acgggagagc gcacaccgcg ccccgagaac caatcagcag 300
ccgcgttagg taaccatgtc tgagtctgga cacagtcagc ctggactcta tgggatagag 360
cggcggcgac ggtggaagga ncctggctct ggtggccccc anaatctctc tgggcctggt 420
ggtcgggana gggactacat tgcaccatgg gaaagagaga gaagggatgc cagcgaagan 480
acaagcactt ccgtcatgca gaaaacccca tcatcctctc aaaacctcca ncanaacggt 540
caaaacagcc nccacctcca acancccctg ctgccccgcc tgctccaccc ctctgggaaa 600
aacccatcn 609

0956453-030000

0050350 .0050800

<210> 2943
<211> 648
<212> DNA
<213> Homo sapiens

<400> 2943
actcaatgga gccctcaagg tagaactcct cggaaccaag acccagctca tccagacaag 60
cccaagaaac attctcccaa aaggaggctg cagcatgccc tggaggacca gatctataga 120
atcttccgga agagtcgtgt cttgactaat cagagcatca actgcctctt tactgtgcct 180
gccaaccaag ctttcgtgta catagtaccg ggaagccagg aggaggaccc agtaggtatg 240
ttgctggacc aacttaggag tcattgtact gtgaaggacc cggaatcttt gctggtgcct 300
gcacccctt ctgggcctag gcgataccag gtgatgaggc agcacagccg acaacaactt 360
tcctttcaca ttgacagcag cagttccagt tcttcaggcc agctagtgga tttcactctt 420
cgggaattcc tatggcagca tgtggagcta gttctaagca agaaaggttt cgatgacagt 480
gtgggcagga acccacagcc ttcccatttt gaacttccta cttatcagaa gtggatctca 540
gcagcttcaa aactgtatga ggtggctatt gatggggaaa gaanaagact tggggtcccc 600
actggananc taacatctaa nattttaagc agtattaaan tcttggaa 648

<210> 2944
<211> 528
<212> DNA
<213> Homo sapiens

<400> 2944
taaagaacga acttttgatc cggagagagt ggagagagag agacgcttaa tacggaagga 60
aaaagtggaa aaggacaaaa ctgacaagca gaaacgcaaa ggaaaggttc actcccctag 120
ttctcagtct tcagaaacgg accaagaaaa tgagcgagag caaagccctg aaaagcccag 180
gagttgtaat aaactgagca gagagaaagc tgacaaagag ggaatagcga aaaaccgcct 240
ggaactcatg ccttgcgtgg ttttgactcg agtgaaagag aaagagggaa aggtcnttga 300
ccacactcct gtggaaaagt tgaaagccaa gcttgataat gacactgtca aatcttctgc 360
cctggaccag aaacttcagg tctctcagac ggagcctgca aaatctgact tgtctaaact 420
ggaatcagtt agaatgaaag tnccaaagga aaaggggctt tcaagccatg ttgaagtggt 480
ggagaaggaa gacaggcttn aagccaggaa gctcctcaag cctganca 528

<210> 2945
<211> 679
<212> DNA
<213> Homo sapiens

<400> 2945
aaaaaggaat gggatcgcgc cgcggcggtt cctgtcctta cagttgcgct gcccagggga 60
ccgatgttgc gcgaggaaaa tgcgggacgc ccaggtcggt gctcggccca gacttatgcc 120
cgtgttttca cagcccacac tcgtgcccga agccccttac cccgccccgg gctgtggtct 180
gtgggctgtg ggacgagctg cggcgcgggc catttctgan cagtggangt ttcaagtaat 240
ccactaacaa ccagttccaa attctgtcat caaatcctgt gctgctgttc ctcgtggtaa 300
tanatgcata ttatttcttt tatttaaaag aaatgaatgt gactantatt gcattaagan 360
ctggaacttg gcttttanct gcatggcatg ttaaagtacc tccgatgtgg ctggaagctt 420

gttttaactg gattcnagaa gaaaataata atgttaactt gantccggcc caaatgaata 480
aacaagtgtt tgaacagtgg ctccttactg atctgaagga tttggaacat cctcttttac 540
ccgatggcnt tttaaaaatt ccaaaaggaa aaattaaatg gattttatgc tctgcnaatt 600
aattccttgg ttgatgttag tcacctgcat actccccaaa attcngaant tgaaaaggaa 660
agaattccnc cnatgatct 679

<210> 2946
<211> 528
<212> DNA
<213> Homo sapiens

<400> 2946
gacctttnag cgtcacgggt ggggctgcag cttctggacc taggactttg aacatgtcgc 60
gcctgaagcg gatagcgggg caggatctcc gcgctggttt caaagcaggt ggaagagact 120
gcggtacctc ggtaccccaa gggctgttga aggcagcgag gaagancggc cagttaaacc 180
tgtcgggtag aaacctcagt gaagtgccgc antgtgtctg gagaataaat gtggatatcc 240
ctgaggaagc taatcaaaat ctttcgtttg gtgctactga aagatggtgg gagcagacan 300
atttgaccaa actaatgntn tcaaacaata aacttcagtc acttacagat gacctgcgac 360
tcttgcctgc actgactgtt cttgatatac atgataatca gttgacatcc cttccttctg 420
ctataagaga gctanaaaat cttcagaaac ttaatgtcng ccataataaa ctgaaaatac 480
tccctgaaga aattacnaac ctganaaacc tgaantgcct gtatctcc 528

<210> 2947
<211> 745
<212> DNA
<213> Homo sapiens

<400> 2947
gtgaggcgga agctgtgtat ggcgggaggc tgtggcggtc ccttggtggg gaagctgttg 60
ctgttgctan acgacgggaa ctagctctcg tcacttcctc agcccgccgt ctgcccactc 120
ctctagccgg aacctggggg cccggagccg gggtangcac ananttgtcc tcggaggtcc 180
aggacagcgg ccagcccggc ggcgggagtc agggccacgc cacctgcagg gaagaacccg 240
agtcgaagcg ggaagatggc tgcagacaag cctgcagatc agggagcaga gaaacatgaa 300
ggcacaggtc agtcctctgg gatcactgat caagagaagg agttatccac caatgctttc 360
caagctttca catctggaaa ttatgatgcc tgtctacaac accttgcctg tctacaagat 420
ataaacaaag atgattatna aataattttg aatacagcag tagctgagtt ttttaaaagt 480
aaccaaacna caacagatta tttgagacaa acacttaacc agctnaagaa tcaggtccac 540
tcngctgttg aaagaaatgg atggattaga tgatgttgaa aacagcatgt tgttctataa 600
tcaagcnagt cattctttat catctgcggc agtatacana agccatatcn gttggtgaaa 660
aactttatca gttcntagaa ccttttgaaa aaaaatttgc cccaaccatt gtnttttttg 720
ctttgttaaa cctgttntnt tttta 745

<210> 2948
<211> 565
<212> DNA
<213> Homo sapiens

<400> 2948

0050350 - 0050800

attttggggg tggttggagg cggtggcggc ggcggcgaga gggaatttcc ttgtgcctcc 60
attcccggga ggggggagcg gcgttggagg ccaccgtttc cagcatcaac aacagcaact 120
tgtgattggc ggtgaccgga tattcagttg cacatcccca catcaatgca ctgccaatgg 180
gttatatcct gtgttgtgac ctcatggttt aagtgggaat aaagatgagt ataagcagtg 240
atgaagtcaa cttcttggta tatagatact tgcaagagtc aggattttct cattcagcat 300
ttacctttgg tatagaaagc catatcagtc agtccaatat aaatggtgcc ctcgtcccac 360
ccgctgcatt gatttctatc atccagaaag gtctacagca tgtagaagca gaagttagta 420
ttaatgagga tggtaccttg tttgatggtc gaccaataga atctctgtcc ctgataaatg 480
ccgtaatgcc tgatttagtt caaacaagac aacaagctta taaagataac ttgcacagca 540
acaggcanca nctgctgcan ctgcc 565

<210> 2949
<211> 559
<212> DNA
<213> Homo sapiens

<400> 2949
taaacagcaa tatgatattg agataacaag aataaaaatt gaattggagg aagccctagt 60
caatgtgaaa agctcccagt ttaagttaga aactgctgaa aaggaaaacc agatattggg 120
gataacatta cgtcagcgtg atgctgaggt gactcgacta agagaattaa ccagaacttt 180
acagactagc atggcaaagc ttctctccga tcttagtgtg gacagtgctc gctgcaagcc 240
tgggaataac cttaccaaat cactcttgaa cattcatgat aaacaacttc aacatgaccc 300
agctcctgct cacacttcca taatgagcta tctnaataag ttagaaacaa attacagttt 360
tacacattca gagccacttt ctacaattaa aaatgaggaa accatagagc cngacaaaac 420
ctatgaaaat gttctgtcct ccagangccc tcaaaatatt aacactaggg gcatggagga 480
aagcatctgc ccctggaatt atttctgccc tttcnaancn ggattctgat gaagggagtg 540
aactatggct ttantanaa 559

<210> 2950
<211> 557
<212> DNA
<213> Homo sapiens

<400> 2950
gctcgggcgc ggggcgttct tggtgcgccg ggccgtggtg agtccgggct cccgtggccg 60
cgtgctggga ggagactgga gcccggttag gaagaatgga gttggcgact cgctaccaga 120
tccctaaaga agtggctgac atctttaacg cccccagtga tgataaagag tttgttggct 180
tccgagatga tgttcccatg gaaaccctct cgtcagagga gagctgcgat agttttgact 240
cactagagtc agggaaacag caggatgtgc gctttcattc caaatacttc acagaagagc 300
taagaagaat ttttatagag gacactgact cagagactga ggattttgca ggatttacgc 360
agagtgatct gaatggaaag actaacccag aagtaatggt cgtggagtca gatttgagtg 420
atgatggcaa agcatctttg gtgagcgagg aagaggaaga tgaagaagaa gatgggctgc 480
ccctagaaga agcggtctag aagaagtagt atggtcttcg agtaccttcc ttccccncca 540
naactggcca cnaacca 557

<210> 2951
<211> 557
<212> DNA

0560135.0002000

<213> Homo sapiens

<400> 2951
actgagggtg gtggagcagg tagatggaaa gaatctcttc ccaaagacaa gccgcagaac 60
gcatcccttc cccagcccct gtgttaggcc gtgaggcatc ttcctgccag cctgcaccag 120
ggctttcagg ttttgttgct tagcacatcc agggtcatgc acttcaggac aagccacctg 180
atgcccctcg gccccccagt cctgcagcct cgctggagct ctccctgcag caggaagggc 240
tgaggccaac cacaaagggg cttggggcca catcaaggga tggcagaacg agagggaagt 300
gcagggagcc tggcccaaaa aaccaaccct gccgccgcct cctggaaggg gcacacctcc 360
tgagctaagc ccaggatacc gcccaagcct cggggcctcc caaggtgtcc cccatgccag 420
aatgtgtggc ctctgccaga cccaggtggc tccaggtggt ttgactccca tttcctctcc 480
ccttcccagg tctttcccaa gcccagaccc cctgttttta attttccccc gttggggana 540
aaagaaaatn tgccnca 557

<210> 2952
<211> 710
<212> DNA
<213> Homo sapiens

<400> 2952
ggaaagagtg ganattggag aattggaaga ggctagatgt caatcaggct gatattgcac 60
cattgatgac ttcccttatt ggagttccct ttcctcttaa ctcagtggga atccttcctg 120
tggattatct taacaacact gatctcttca aagcagagag catgtttaca aatgcagtac 180
agattcttga acagttcaag gtgaaaatga ctcagaagaa agaagttact ttaccatttt 240
tgtttacacc atttaaactg ctttctgatt ccaaacagtt caacatttta agaaaagcaa 300
gatcttatat aaaacacaga aagtttgatg aagtggtctc cctttgcaag gagctaattc 360
ntcttgcatt gaaaggattg tcctattatc acacatatga cagattcttt ttgggcgtca 420
atgttgttat tggttttgtg ggatggatat cttatgcctc tttattgatc atcaagtctc 480
attccaacct tataaaaggt gttngtaaag aagtgaagaa accaagccat ctcctgcctt 540
gtagttttgt acctattggc attttantan catttttct gctgattcca gcctgtccct 600
ggacatatta tgtatatggt ttgttgccnc tgcccatatg gtttgcngtt ctaaaaaaat 660
tcangttntt ccggaacttg ttgtttcagt gttgaactat cctctgancc 710

<210> 2953
<211> 519
<212> DNA
<213> Homo sapiens

<400> 2953
aggcgcagtt tgccggccgc catcgcgcac tggggctccg ggcggctggg acggcctggg 60
gtagctgcgc agcaggtctg tgggttctgg caccacctga gcccactggg catctggtca 120
tccctggcac ctctcctttg gagccacctt gtccctggct agacagtcac attttccagt 180
gccgttttgg aaagatgttg cctttggana aggcgtttgc ctcccccaag anctccccag 240
ccccgccgga tctgcccacg ccggggtcag cagccggant ccagcaggaa gaacccgana 300
ccatccctga aaagacccct gctgacctgg anttctcccg cctgcgtttc cgggaatttg 360
tctaccaaga agctgccggg ccccaccaaa ccctggcccg gctgcntgaa ctgtgccgcc 420
agtggctgat gcctgaagcg cgctccaang aacanatnct ggaactgctg gtgctggaac 480
anttcctggg catcctgcct gataangtcc ggcctgggt 519

0962945 0970000

0956305-0020000

<210> 2954
<211> 684
<212> DNA
<213> Homo sapiens

<400> 2954
gactgcgcca cntctgaggc ggctgtggcc acgtctgaag cggctgtggc cgcgtcggtg 60
tccgcgtcga ggagccgggg cagggcacga tggcggactg ggctcgggct cagagcccgg 120
gcgctgtgga agagattcta gaccgggaga acaagcgaat ggctgacagc ctggcctcca 180
aagtcaccag gctcaaatcg ctcgccctgg acatcgatag ggatgcagag gatcagaacc 240
ggtacctgga tggcatggac tcggatttca caagcatgac cagcctgctt acagggagcg 300
tgaagcgctt ttccacaatg gcaaggtccg gacaagacaa ccggaagctt ctatgtggca 360
tggccgtggg tctaattgtg gccttcttca tcctctccta cttcttgtcc agggcaagga 420
cgtgagccan tgggagctgg tgtctgtggg tgccaanggc agccagggtc ttccctgcct 480
ggtgttttgg gctccanaag acttacctac aaaatactcc tttgcaatta taattgtggg 540
tcaggaatct tcttcctgtg tggcangaag ctgcngctgc ctgtgacctg atnanctcat 600
gttggctggt cccatgtgtg aaagggacct ctcggggaaa ccaaggccca nccccctccc 660
cctcccccaa gtnctanaaa acca 684

<210> 2955
<211> 780
<212> DNA
<213> Homo sapiens

<400> 2955
tttagcccag cccatgaagc aagcttgggc aacagatgat gtagctcaga tttatgataa 60
gtgtattaca gaactggagc aacatctaca tgccatccca ccaactttgg ccatgaaccc 120
tcaagctcag gctcttcgaa gtctcttgga ggttgtagtt ttatctcgaa actctcggga 180
tgccatagct gctcttggat tgctccaaaa ggctgtagag ggcttactan atgccacaag 240
tggtgctgat gctgaccttc tgctgcgcta cagggaatgc cacctcttgg tcctaaaagc 300
tctgcaggat gggcgggcat atgggtctcc atggtgcaac aaacagatca caaggtgcct 360
aattgaatgt cgagatgaat ataaatataa tgtggangct gtggagctgc taattcgcaa 420
tcatttggtt aatatgcagc agtatgatct tcacctagcg cagtcaatgg anaatggctt 480
aaactacatg gctgtggcat ttgctatgca nttagtaaaa atcctgctgg tggatgaaaa 540
gantgttgct catgttactg angcagatct gttccacacc attgaaaccc tcatgaagat 600
taatgctcat tccaaaagca atgctccaaa angattgccc cactgatgga antantgcna 660
tccaactatg aagcaatgat tgatcgtgct catggaagcc caaactttat gaatgcattc 720
ctggggatct ctccancccc caaaatttna ttaaccnccc aagncctgaa nggaaaaaag 780

<210> 2956
<211> 659
<212> DNA
<213> Homo sapiens

<400> 2956
cttccccgct tgagttcaac aagaactccc tcaccttctc cattccacca aagaacaagg 60
cccggctcaa gaagatcaag gatgacactg gaccagtggc caaaaagccc tcttctggca 120

aaaaggggggc tacgacacag aactctgaga tttgctcagg ccaggccccc actcccgacc 180
agccagacac ctccaagcgt tcaaagtgaa ggccgtgcag agctggtcac tgaaatgagc 240
ctgataggat aggctggagc ataaaactct gcaagggctc ctctatcctg tggtcctgag 300
ctgtgtgccc ttctcagtct gaggggccta acctagagca ggtttcatag tgagaaaatt 360
caatgtagca gactactgaa aaactactgt gttgctcagg ctttgtttga ggtcctgtat 420
atacagcact gaaaagagag ataaagtccc tgcctgcatg cattctggcg gaagagacaa 480
gcaagcaatg aacaaattag cagaaaacct aattttagtg aaaaatgctg taaagaaaat 540
agaaatgcga tagagttgct ggcaggctaa tgtaaataag tggtctgaaa aggtgtctct 600
gaaccgaagg catgtgagct tggggcctaa acaacttana aanggaaaaa aacccentt 659

<210> 2957
<211> 659
<212> DNA
<213> Homo sapiens

<400> 2957
ttttgtnttc tgaanattca acaaagctct ttgtagcatc aaatcaagga gctctgcata 60
ttgttcagct gtcaggagga agcttcaagc acctgcatgc tttccagcct cagtcaggaa 120
cagtggaggc catgtgtctt ttggcagtca gtccagatgg gaattggcta gctgcatcag 180
gtaccagtgc tggagtccat gtctacaacg taaaacagct aaagcttcac tgcacggtgc 240
ctgcttacaa tttcccantg actgctatgg ctattgcccc caataccaac aaccttgtca 300
tcgctcattc ggaccagcag gtatttgagt acagcatccc anacaaacag tatacagatt 360
ggagccggac tgtccanaan cagggctttc accacctttg gctccaaagg gatactccta 420
tcacacacat cagttttcat cccaagagac cgatgcacat ccttctccat gatgcctaca 480
tgttctgcat cattgacaag tcattggtga gttcttcact gctacctccc aaatcttctt 540
ctgaatctta aagttctaaa agcaacaagt acnatnaggt tagaagacag agactcagaa 600
tnaaggttgc tagtaaatca naatacaggt tggctantac tttcttggaa gaaaagggc 659

<210> 2958
<211> 593
<212> DNA
<213> Homo sapiens

<400> 2958
tcaaatgtat ctttaccagg acccggcctc tcagttccaa gacccctaca gcctgaatat 60
gtagcccttc ccagtgaaga gtcacatgtc caccaggaac caagtaagag aattccttct 120
tggagtggtc gcccaatctg gatggaaaag atggtaatgt gcagagtgaa agttccacac 180
acatttgctg ttcactctta cacccgtccc acgatatgtc agtactgcaa gcggttactg 240
aaaggcctct ttcgccaagg aatgcagtgt aaagattgca aattcaactg ccataaacgc 300
tgtgcatcaa aagtaccaag agactgcctt ggagaggtta ctttcaatgg agaaccttcc 360
agtctgggaa cagatacaga tataccaatg gatattgaca ataatgacat aaatngtgat 420
agtagtcggg gtttggatga cacagaagag ccatcacccc cagaagataa gatgttcttc 480
ttggatccat ctgatctcga tgtgganaga gatgaagaag ccgttnaaac aatcagtcca 540
tcaacaagca ataatattcc gctnatgagg gttgttcaat ccatcnngca cac 593

<210> 2959
<211> 510
<212> DNA

0509435.0509800

<213> Homo sapiens

<400> 2959
tgagccctgc agccagccct ctggggacag atccctccaa accaccagtc ccccagtcgt 60
ggcccctgga aatgagaacg gcctggcagt gcctgtgccc ctgcggaagt cccgacccgt 120
gtcaatggat gccagaattc aggtagccca ggagaagcaa gttgctgagc agggtgggga 180
cctcagccca gcagccaaca gatctcaaaa ggccagccag agccggccca acagcagcgc 240
cctggagacc ttgggtgggg agaagctggc caatggcagc ctggagccac ctgcccaggc 300
agctccaggg ccttccaaga gggactcgga ctgcagcagc ctctgcacct ctgagagcat 360
ggactatggt accaatctct ccactgacct gtcgctgaac aaagagatgg gctctctgtc 420
catcaaggac ccgaaactgt tcnaaanaac cctcaagcgg acacgcaaat ttgtggtgga 480
tggtgtggag gtgaacatca ccacctccna 510

<210> 2960
<211> 626
<212> DNA
<213> Homo sapiens

<400> 2960
gaaagaacca aagcaaacat taaaagaagt tcagactgtt acctctattc aaaaagcaag 60
aaaagtatat tggtttgaga aatttctgtg gctcattagc tcagagaact atctaattat 120
aggtggacga gatcagcaac agaatgaaat aattgtgaaa agatacttga caccaggaga 180
catttatgta catgctgatc ttcatggagc tactagctgt gtaattaaga atccaacagg 240
agaacccatc cccccacgga ccttgactga agctggcaca atggcacttt gctacagtgc 300
tgcttgggat gcacgagtta tcactagtgc ttggtgggtg taccatcatc aggtatctaa 360
aacagcacca actggagaat atttgacaac aggaagcttc atgatnagag gaaaaaagaa 420
ttttcttcct ccctcatatc tnatgatggg gtttagcttc ctttttaagg tagatgagtc 480
ttgtgtttgg agacatcagg gtgaacgaaa agtcagagta caggatgaag acatggagac 540
actggcaagt tgtacnagtg aactcatatc agaagaaatg gaacaattag atggaggtga 600
cncgagcagt gatnangatn aagaaa 626

<210> 2961
<211> 516
<212> DNA
<213> Homo sapiens

<400> 2961
tagacnaagg aaaatgcaaa aagcgaggcg acggcttaaa gatggagaac gacccccagg 60
gaggcggagt ctgaaatggc cctggatgct gagttcctgg acgtgtacaa gaactgcaac 120
ggggtggtca tgatgttcga cattaccaag cagtggacct tcaattacat tctccgggag 180
cttccaaaag tgcccaccca cgtgccagtg tgcgtgctgg gaaactaccg ggacatgggc 240
gagcaccgag tcatcctgcc ggacgacgtg cgtgacttca tcgacaacct ggacagacct 300
ccaggttcct cctacttccg ctatgctgag tcttccatga agaacagctt cggcctaaag 360
taccttcata agttcttcaa tatcccattt ttgcagcttc agagggagac gctgttgcgg 420
cagctggaga cgaaccanct ggacatggac gccacgctgg gangagctgt cggtgcanca 480
ngagacggan gaccagaact acggcatctt cctgga 516

<210> 2962

US 2005/0059030 A1

<210> 581
<211> DNA
<213> Homo sapiens

<400> 2962
agtgcggcgg cgccgcctct gctctcagtg ccccggatcg gaggccgtcc atcgcccctc 60
gggccgacgc catgaagatc aaagatgcca agaaaccctc tttcccatgg tttggcatgg 120
acattggggg aactctagta aagctctcgt actttgaacc tattgatatc acagcagagg 180
aagagcaaga agaagttgag agtttaaaaa gtattcggaa atatttgact tctaacgtgg 240
catatggatc caccggcatt cgggatgtnc accttgaact gaaagattta acacttttg 300
gccgaagagg gaacttgcac tttatcaggt ttccaaccca ggacctgcct acttttatcc 360
aaatgggaag agataaaaac ttctcaacat tgcagacggt gctatgtgct acaggaggtg 420
gtgcttacaa gtttgaaaaa gattttcgca caattggaaa cctccacctg cacaaactgg 480
atnaacttga ctgccttgta aagggcttgc tgtatataga ctctgtcagt ttcnatggac 540
aagccnagtg ctattatttt gctnatgcct canaacctga a 581

<210> 2963
<211> 740
<212> DNA
<213> Homo sapiens

<400> 2963
agccctccct tgcacgttcc ggctcctcct ctatcttcac gcccacgcta ggccctgagc 60
ccacctctac gtctcgccgc caactccaca tcctggctcc tatctctgcc ttccaggcat 120
ctcccagctg cacgctcggg cccggctcan ancectaagc cctgcctccc ggtcctggcc 180
gggtttccca naactgcacg gcgcctctcc gcccaggccc aagcgcgagc ccctcctcca 240
cacccgagtc ccagccccgc gtcccggatt cggacccgcc tgcctggggc ggtgctgcac 300
caggtgcggg tgtggcaggc gtctcggaac gccaggtgca gcttcctgat caanatggtc 360
gccgcctgcc gctcggtagc cgggctcctg ccacgccgcc gccgctgctt tcccgcccgg 420
gccccgctgc tgcgcgtcgc cctctgcctc ctgtgctgga ccccggcggc tgtgcgcgcg 480
gtccctganc tcgggctctg gttananaca gtcaacgaca aatcaggacc tttgatattt 540
angaaaacta tgtttaactc tacagatatc aagttatctg ttaagtcatt ccattgttct 600
gggcctgtta aantttacat agtgtggcat ttgaaatatc atacctgtta naatgaacat 660
tcttatctgg aanaaatgtt ccaaaaaaca taaacttant tgtttgaaga aaaantttgt 720
tnattatttg aaaaaatgaa 740

<210> 2964
<211> 464
<212> DNA
<213> Homo sapiens

<400> 2964
ggcttcaggt ttaaaggcgc gagcgccacc cacgcaggca caagggctcc tagtcgtttt 60
atttttagcg taaggtcttc ctctttaaca aggaagtaaa aaaaaaagtt gtgcaataaa 120
tattaatcgt ccttatatgt actcgggaac gttcgtcctt taggtttttt cctggcgcat 180
gggcgccgcc aatcatttcg gggcttattt tggttctaaa gcccggggca gccaggcctc 240
cctgcctggc ctcggcgggg acgcgggacc tggggccccg gaccgggcct aaccgccctg 300
gccggtcccc actgatggtg gcggtcggtc ctgatcgtcc tgatggcagc gaccaagctg 360

US 2005/0059030 A1

gactcgggct gtgcacgggc gaagggacaa ggcggggtga ccccggaaaa cgcctggaaa 420
acgcgtgctt canaaagcgt gggcaccctg tcccctttnc anat 464

<210> 2965
<211> 735
<212> DNA
<213> Homo sapiens

<400> 2965
ttttttaagc aacatcatga attttatcta ctccagaagt ctctacaata gaaaaaaaag 60
tgcagtgctt ctaggatata aaattcacat tacttttgaa agccaagaag ttggtcttat 120
ccagttaggt cttcttatga agagttttca tccaggggat ataactcctt ggtcagtgat 180
tttattgttt acatcctgag actgttctac agtttctttg actcctggca tttgccttaa 240
ggacctatag caagctgttt ctaggatcag aaactcaaga gaggcatttc tctgcttttt 300
cactaaaggt cagttgtttt aatttgaaac ctgaaatgcc tctttagcaa aagcctgtgg 360
tatggggtna agccatgtaa gaaganaata gtctcagtca catatgaaga ggaaaatttg 420
cagctgccag tgctttcctt gtggccctgc caaccagctc ttccaggacg aactcagtcc 480
agcatggttt tgatgtaacc atccatgctt ttatttttgt taagtctttt gtgactggga 540
cagttaattt tagtagctga anaacgtcta gttgtttgct tgatatttgt gaacatttac 600
tgcatggatc acaaaacaat ataccctggt ntttcttacn cnccacttat atgcncaagg 660
gagtaaatgt gttactaaaa ttcgggtagt gcattttgtc cctgaatctg aacctggaaa 720
aatgttacnt taant 735

<210> 2966
<211> 682
<212> DNA
<213> Homo sapiens

<400> 2966
gggaattacc gactctaagt gaaggtcact gacacagaga agcagtatgt gtctggggct 60
tccaggacct gcaggcccac tagcgtgcac ttaccggaat ggcatacaca ggacctgatc 120
atgaggaaga ccaggtttcc agtgtaaact actcttgttc ccaccacctc tggagcactc 180
agggagcccc atacagtact tacaatgtct ttaatggact tgattctgtt taatttttg 240
ttttatatta ggcacactgt attaattttc caaaatgtta taccacacta tgttcttggt 300
cctgacctat tgctctggag gaaagagttg tataagaacg tggctcatgt gaacttttgc 360
tagcttcatt tgaggacctg agaatcatgg ggaaagggaa ggtnatgttt tcattgaaat 420
catcacagtg atttttattc cctgggaaca cagcgtgtac taaaaataca tgagaaaata 480
gcatgtatat gaaagctatt ctcaaaagtc acctgagctc accatcttca tagccaaccc 540
taccagttat aaagatggca gctctatcac ttgattaagt gggangtggt caaatattct 600
gggtgcctca ttttcttcat ctgtganatg ggaactgtta tgcctggctt actaanaatc 660
ttgtngagan actgaaaaat tt 682

<210> 2967
<211> 640
<212> DNA
<213> Homo sapiens

<400> 2967

09/02/2005 09:56:05 PM

gatgtcatct taaaaatcta aaatataaca tggcacataa agccaaaaaa aaatttttt 60
tttttgagac ggaatcttgc tttgtcgccc aggctatagt gcagtggcac gatctgagct 120
cactgcaacc ttaacctcct gggttcgggc gattctcctg tctcagcctc ccgagtagct 180
ggtacgacag gtgcatgcca ccatgcctgg ctaatttttg tgtttttact agagacggca 240
tttcactatg ttggtcaggc tggtctcaaa ctcctgacct caggtgatcc acctacctca 300
gcctcctaaa gtgctgggat tacaggcatg agccactgtg cccggccaaa gcaaaaaatt 360
ttaagaaaca cccgattcag taacaatagc tcttaattta gtttatatca ttaaatgttt 420
tgatcttcat ccttgtttta ggaaacacaa aaaagcntgc acaaanaggc ttataatttt 480
tatataattt aaaatatttc ttcatttaaa cagaaatgtt ctactctccn nctttтcatg 540
tgtncatact taccatttct gtgggtgtgt gcataaaatg ttngcatcat ttgatcaatt 600
ttctgttgtt gccttgtttt atatcantct tcctcnntta 640

<210> 2968
<211> 604
<212> DNA
<213> Homo sapiens

<400> 2968
gcaagatttg ttgcaatgaa atatattaaa tccaattcta aaaattcttc tcatcatttt 60
gtagagacat ttaacataaa accacaggac ttgcacaaat gcattgccag atgccatttc 120
gcacgtngca gatttttaca aattttgcaa agacaagatt gtgttaccca aaaatatcag 180
gaaaatgcac aattatcagt taagcaggtn cgaaacttga gatctgaatg tataggattg 240
gaaaaccaaa taaagaaaat ggaaccctat gatgaccaca gtaatatgga agaaaaaatt 300
caaaaggttc ggtctttgtg ggcttcagtg aatgaaacgc tcatgttttt ggaaaaagag 360
agagaagttg ttagttcggt ccttagtctt gttaaccnat atgctttaga tggaactaat 420
gttgctatta atattccaag gctcttactt gacaaaattg agaaacaaat gtttcanttg 480
cacataggaa atgtttatga ngctggaaaa ctgaacctct taacagttat tcnnttatta 540
aatgaaatct tgaaagtgat gaaatatgaa cgttgtcngc tgatctagcc agattgacng 600
tnga 604

<210> 2969
<211> 618
<212> DNA
<213> Homo sapiens

<400> 2969
cagacgctct gtactagaaa agaatcttat aaaagtaact gttgcaccat ttaatccaac 60
agtttgtgat gctctgcttg ataaggacga gactgattcg tccaaagata ctgaaaaact 120
ctcttccctt ggagaagaga tgagagaaga tggtcttagc ccaaatgaaa gcaaactttg 180
tactgaatct gaagggatca gccccaataa ctctgcctgg aatgggcccc agctctcttc 240
ttcaaacaat aactttcaac agactgtctc tgataaaaat atgcctgaca gtgagaaccc 300
tacgtctgtn ttctctcgga tctcagacca ttcagagact cctaatatgg agttatcctg 360
cagaaatggt ggttcacaca agtcaagttg tgaaatgaga tctctggttg tttccacctc 420
atcaaacaaa caggatgttc ttaacaagga ttctgggaag atgaaaggcc atgagagaag 480
actaggccaa gtcnttcctg ttctacnaac taagaccagg actaatgttc cgacgttttc 540
acagtccaat ctagaacagc anaagcagct ttatctcagg gagtctcatt gctcatatng 600
aaanacccng aagacnct 618

0963450.0702800

<210> 2970
<211> 489
<212> DNA
<213> Homo sapiens

<400> 2970
tatgaactct ctggagattc tgatctagac ctgcttggtg attgtagaaa tcccagactg 60
gatttggagg attcttatac tttaagaggt agttacacca ggaaaaaaga tgttcccaca 120
gatggctatg agtcgtcgtt gaacttccac aacaacaacc aagaggactg gggctgctct 180
agctgggttc caggcatgga gacgancctc cctcccgggc actggactgc tgcggtaaag 240
aaagaagaga agtgtgtgcc gccttacgtc caaatccgag atctccacgg gatcctcagg 300
acttacgcca acttctctat nacnaaagaa ctcnaagata ccatgagaac ttcacacggc 360
ctgaggaggc acccgagttt cagtgcaaac tgtggcctgc ccagctcctg gacaagcact 420
tggcaggtgg canacgacct ctcccanaac actttagacc tggagtatct gcgttttgca 480
catnaacta 489

<210> 2971
<211> 571
<212> DNA
<213> Homo sapiens

<400> 2971
ggatattgct gtccatatga cttacaatac tggtcagaca gttgtggcat ttcatagtcc 60
ttattggatg gtcaataaaa ctggccgcat gttacagtac aaagcagacg gaattcatcg 120
aaagcatcca cctaattata aaaagccagt tctcttttct tttcagccaa atcacttttt 180
taataacaat aaggttcaac ttatggtaac tgatagtgag ttgtccaatc agttttcaat 240
tgatactgtt ggtagtcatg aagctgttaa atgtaaaggc ctgaaaatgg actatcaagt 300
tggtgtcact atagacctga gcagttttaa cattactaga attgtgacat ttaccccttt 360
ttatatnatt aaaaacaaaa gcaaatacca tatatcagtg gctgaagaan gaaatgataa 420
atggctctct cttgatttgg agcagtgtat ccccttttgg cctgagtatg cttctagtaa 480
acttcttatt cnagtcgaan ggagtgaana tcctcccena aggatatatt ttaacaagca 540
ggaaaattgt attctattgc gtctaaatna c 571

<210> 2972
<211> 493
<212> DNA
<213> Homo sapiens

<400> 2972
ttcaagactt cccagctgtg aagttttggg ggcaggaatg aagatggacc agcaagctgt 60
ctgtgagctg ttgaaagtgg agatgcctac aagactgcca gaccggtcag tggcctggcc 120
ttgccctgac agacatctcc gggagaaacc ttccttagaa aaggtcactt tccagattgg 180
aagctttgca tctccagagt ctgactttga aagccgcatg aaaaaaatgg aggaacgggt 240
gaaggcctgt ggcccctcct tggaggccag tgaggctgct gatgtggctc aggacccgca 300
ggtttctagg agccctttta aacctggctt tcaggagaat gtttgctgtc ctcagaatcg 360
gctttcagag ggggatgaag gcgagtctga caagggtttt gcagaagaca gaagcagcag 420
aaacgacatg gcancanata ttgctgggcn gctcagccac gctgctgact tgggcacagc 480
ctcccacggt gca 493

0050450.0002

<210> 2973
<211> 754
<212> DNA
<213> Homo sapiens

<400> 2973
cacagctaac atggcggcgc cctgtgtgtc ctacggcgga gcagtttcgt accggcttct 60
tctctggggt aggggtagcc tcgcccggaa gcaaggcctc tggaaaaccg cggcccctga 120
gttgcaaaca aatgtcagat cccagatatt aaggctaaga catactgcat ttgtaatacc 180
aaagaaaaac gttcctacct caaaacgtga aacttacaca gaggatttta ttaaaaagca 240
gattgaagag ttcaacatag gaaagagaca tttagccaac atgatgggag aagatccaga 300
aactttcact caagaagata ttgacagagc tattgcttac cttttcccaa gtggtttgtt 360
tganaaacga gccaggccag taatgaagca tcctgaacag atttttccaa gacaaagagc 420
aatccagtgg gganaagatg gccgtccatt tcactatctc ttctatactg gcaaacagtc 480
atactattca ttaatgatta ccagctttac ttcccgatca cacaggacag anaacagctg 540
atgttccctt tccactttgt tgaccggctg ggaaagcacg acgtgacctg cacantctca 600
ngggggcggg aagtcnccca ngctggaaca atacgactgg caatggccaa agccttgtgc 660
actttgtccc cccaagacaa agtccaattg gatnaaaaca agctgggact acttactact 720
gatccncntt tttaagggaa cggnaaaaaa cccn 754

<210> 2974
<211> 577
<212> DNA
<213> Homo sapiens

<400> 2974
ggagaagtta gagtccttag aaaaaaatat ggccattctt gatccaccag atgctgacca 60
cttatacagt gcaaaggtaa tgctgatggc tagccctagt atggaagatt tatatcataa 120
gtcatgtgct cttgctgagg acccacaaga acttcgagat ggattccaac atcctgctag 180
acttgttaag tttttagtgg gcatgaaagg caaggatgaa gctatggcca ttggaggcca 240
ctggtctcct tcgttggatg gaccagaccc agaaaaagat ccctctgtgt tgattaagac 300
tgctattcgt tgttgtaagg ctctgacagg cattgatcta agtgtgtgca cacaatggta 360
ccgttttgca gagattcgct accatcgccc tgaggagacc cacaaggggc gtacagttcc 420
agctcatgtg gagacagtgg ttttattttt cccggatgtt tggcattgcc ttcccacccg 480
ctcagagtgg gaaaccctct cccgaggata caagcagcag ctggtcgana ancttcaggg 540
tgaacgcaag gaggctgatg gagaacnnga tgaanaa 577

<210> 2975
<211> 903
<212> DNA
<213> Homo sapiens

<400> 2975
tatttctcag aaagattgcc aggaagatga tacaacagtg gaaggagcag aatttcctgt 60
ataaagagac ccaggaaact gaaaaaaagc tcctgtttat ttcagagccc atcccccacc 120
cttcaaatga attgagaggg cttaatgaga aaatgagtaa taaatgttcc atgttaagta 180
cagctgaaga tgacataaga cagaatttta cacagctacc tctacataaa aacaaacagg 240

US 2003/0224360 A1

aatgcattct tgacatttcc gaacacacat taagtgaaaa tgacttagaa gaactanggg 300
tagatcacta taaatgtaac atacaggcat ctgtacatgt ttctgatttc agtacagata 360
atagtggatc tcaaccaaaa cagaagtcag atactgtgct ttttccagca aaggatctca 420
aggaaaagga ccttcattca atatttactc atgattctgg tctgataaca ataaacagtt 480
cacaagagca cctaactgtt caggcnaagg ctccattcca tactcctcct gaggaaccca 540
atgaatgtga cttcaagaat atggatagtt taccctctgg tnaaatacat cgaaaagtga 600
aaataatatt agggacgaaa tagaaaagaa aatctggaac caaatgctga atttgataaa 660
agaactgaat ttattncccc agaagaaaac ngaatttgtt ttcaccggta cagtctttac 720
tanactgttt cagactagtg gaaaaaaaat cngaattttt gggtttcnca agctacccag 780
aaaaagaatt ggtatatgcc atgtttttaa natattgggg aaaaagaaaa attccnaata 840
atctggttaa cagcgttttt tcccngtccc ttccaacttc ttccntttac tngggctttt 900
aaa 903

<210> 2976
<211> 746
<212> DNA
<213> Homo sapiens

<400> 2976
ggatgccgag cccaggccgg ttccggcgaa gttaaaccct cggagctggc ctcggactgc 60
tggggcgtta ccccttcggc cacccccgct gaccatggca gtgtttcatg acgaggtgga 120
aatcgaggac ttccaatatg acgaggactc ggagacgtat ttctatccct gcccatgtgg 180
agataacttc tccatcacca aggatcagtt tgtgtgtgga gaaacagtcc cagccccttc 240
agccaacaaa gaattagtta aatgctgaag aagccttcag gaatccaaat cctgaacatt 300
tggaatgagc ccagatagaa atatcgaatg caaagctact ggcttcacag agacaaccat 360
ttatgatttg ctgttctgta agagtgtgga ttctttctat caactgctga tatcatcttc 420
aggaagcaag tccataacat gacatatctg gattttgtgc ttagaacctt aaattggaag 480
cattcttaat tatgcatcta aatttaaaag aagataattt caaaacagtg ctttctttcc 540
cttggtttca tcattttcat atcttaaacc aaattacttc ngtatctgac aacagcatca 600
tctacctcag tcattangat ttcttaataa aaaagaaatt gtatttttga cttggttatt 660
aanattatta anattagccc ttcctttgaa atatgacatc agctttgctg ttctaaattt 720
aaaattantt gcttcatcng tancac 746

<210> 2977
<211> 474
<212> DNA
<213> Homo sapiens

<400> 2977
atatataggg tcttatatgt ttcttaataa attgatccca ttactttata gtcacagctc 60
ctattagaag ttttaatgaa gactctccat gagcttaggc ttcaaattac ttgttttgga 120
aaaggtcatc ttgtccttta taaactgtaa attcatatat tatttagctt taatatgcaa 180
atacaatatc cttgagttca tcctattaat ttagaaactc ccaggaggta agatgggtgg 240
ttggagcgca ttctttggtt attttcatta gcattaagtc cttattcttt ataggtggat 300
ttaattcttg aaaatattca aaagtaattc agagtctagg tgttggggat ggagagaaag 360
gaggaacaga gaggaaaaaa attagcattt gttgagtgtt gacgatttgt agancatttt 420
gacaagcact taatatacat cntcattcat tttgatcctc ttaattncct tgca 474

US 2005/0048500 A1

<210> 2978
<211> 715
<212> DNA
<213> Homo sapiens

<400> 2978
gcttccggct ttcgctcgct tccatatccg ctcctctagt cgccctccgc tggccccgcc 60
ttcgtccccg gaagattggg tcctctggcg agccactgtt tgccgtttga tcgggcacca 120
aataaagttt ctttattcaa aagcactttt tttttaaagc cacaccaccc ccattctcag 180
ctcctccttc gcggcggtac cgcctctgtt tctgcggcga ttgaacagcc gagctttgcg 240
gccgggatcg cggaaagtga tggctgtcgt cccggcgtct ctctcaggac aggacgtggg 300
atcatttgca tatcttacaa ttaaagacag aataccacag atcttaacta aggttattga 360
tacattgcat cgacataaaa gtgaattttt tgagaaacac ggagaggaag gcgtggaagc 420
tgaaaagaaa gctatctctc tcctttctaa attacggaat gaattgcaaa cagataaacc 480
atttatcccc ttggttgana aatttgttga tactgatata tggaatcagt acctanaata 540
tcaacagaat cttttaaatg aaagtgatgg aaaatcaaga tggttctact caccgtggtt 600
gttggtaaaa tgttacatgt tntcgaaaaa ttcatgaaag caattatcca gantccacca 660
atcgaatact ttgatgtttt tnaagaatcc naaanaacca aattctatgg gtcca 715

<210> 2979
<211> 671
<212> DNA
<213> Homo sapiens

<400> 2979
ggtggctggt tctgcgccgg atccgggaga ggggcgggcg ccattgtgct tcgctgccga 60
ctgcatttcc tcagtcacgg gcctagaact ccaaggagaa aggcggcgaa aaatctttaa 120
gaatggagtc taaaccttca aggattccaa gaagaatttc tgttcaacct tccagctcct 180
taagtgctag gatgatgtct ggaagcagag gaagtagttt aaatgatacc tatcactcaa 240
ganactcttc atttagattg gattctgaat atcagtctac atcagcatca gcatctgcgt 300
caccatttca atctgcatgg tatagtgaat ctgaaataac tcagggagca cgctcaagat 360
cgcagaacca gcaacgggat catgattcaa aaagacctaa actttcctgt acaaactgta 420
ctacctcagc tggganaaat gttggaaatg gtttaaacac attatcanat tcatcttgga 480
ggcatagtca agttcctaga tcttcatcaa tggtacttgg atcatttgga acagacttaa 540
tgagagagaa gagagatttg gagagaagaa canattcctc tattagtaat cttatggatt 600
atagtccccc gaanttggtg atttcacaac ttcntcctta tgtttcaana cagaattccc 660
ttcntattcc c 671

<210> 2980
<211> 508
<212> DNA
<213> Homo sapiens

<400> 2980
cctttgcgcg gcacctggcg gtggcgggag ccgttgggct gagtcgggat cggggacgtc 60
gcccgagagc ggggacgagg aggtgtcggg cgcgggttcg agcccggtgt cgggcggcgt 120
gaacttgttc gccaacgacg gcagcttcct ggagctgttc aagcggaaga tggaggagga 180
gcagcggcag cggcaggagg agccgccccc gggtccgcag cgacccgacc agtcggccgc 240

0956456.0N2000

cgccgctggc cccggggatc cgaanaggaa gggcggtccg ggctccacac ttagcttcgt 300
gggcaaacgc agaggcggga acaaactagc cctcaagacg ggaatagtag ccaagaagca 360
gaagacggag gatgaggtat taacaagtaa aggtgacgcg tgggccaagt acatggcaga 420
agtgaaaaag tacnaagctc accagtgcgg tgacgatnat naaactcggc ccctggtgaa 480
atgacgcccc tcccccacct gcccatgg 508

<210> 2981
<211> 464
<212> DNA
<213> Homo sapiens

<400> 2981
agtctngttt cgggttccgg ctgcgttggg cttgcgtgcg gctcgctaaa actatggcgt 60
ccgggcctca ttcgacanct actgctgccg cagccgcctc atcggccgcc ccaaacgcgg 120
gcggctccag ctccgggacg acnaccacga cnactaccac gacgggaggg atcctgatcg 180
gcgatcgcct gtactcggaa gtttcactta ccatcgacca ctctctgatt ccggaggaga 240
ggctctcgcc caccccatcc atgcnggatg ggctcgacct gcccattgag acngacttac 300
gcatcctggg ctgcganctc atccaggccg cctgcattct cctccggctg ccgcatgtgg 360
cgatggcnac ggggcaggtg ttgtttcatc ntttttttcta ctccaaatct ttcgtcgnac 420
acagtttcga nattgtnggc tatggcttgt attaatcttg catc 464

<210> 2982
<211> 497
<212> DNA
<213> Homo sapiens

<400> 2982
aggatgcctg gtggggcana agtccctggg tctcgttccc gtcaggggcg agtgaacctt 60
cacaacctcc cggggctttg gaatttgact taatgatgaa gggcaacatg gaccactgga 120
caaagacctg gagttcccac tacctgcacc gctctggcca atcccatttg gaaatcagtc 180
agcaagatcc actctcctct ggactctgag cccccgggag gagaggatgg gagaggtcaa 240
gcgtgtgcaa ttctgttgca ncctcacaac caacaagcag ccgtgttccg acggctctgc 300
gggaanccca gagggactcc cgcggctcaa acgggggcag atacgtgcag ggccccgggg 360
aacgtgaagg tgagagacag aacataccgt gaagaaacca ctgagaatgg gagacagang 420
caggaacagg gatgacactg gangacagca ngcctgcctg gangccanca ttctctacaa 480
ccttccacaa accaaca 497

<210> 2983
<211> 896
<212> DNA
<213> Homo sapiens

<400> 2983
gataaaagtg cactaggggg acagttgatt tcaatctaag aaaagttaac acttgggaat 60
tacaagaagt aaaacaagtg caactaaatc atttattagt tgtttttga aagcagtttt 120
atgtataaat aacaaatgtt tatatttaac taaatgtaag gtacgaatta ttacatatta 180
aacttttctt ccccttccta gttctgaagt agatatatat atatatatat ctactgtcac 240
attccatata ttttgaatat ttaactcatc tagttaataa tgtttttatt ccatgcgaat 300

US 2005/0260650 A1

gatttgatat tttcatcctt atttctcttt ggctacaatt tatattgagt tatatctgta 360
cattctggta atctaaaatc cttaaaaata ctctaatagc cttgagtgac caacttttt 420
tttaaagcac agatntaatt gtctaatgtt ctgatgggaa cgtaacactt atttttatat 480
aaaaagagac tgagtaaaca aacattatag aaaaaaagtg aagtttttta gttgtttttt 540
gtggtattca accagcaagt tgttttcttt cagagtttcc tccttcaaaa agttatattg 600
catttacaaa tgttttacaa ggcagaaagt ttgactggga tagttagtgt taaaagcttc 660
atgttgaana tcttcacgtt tcattctgct aaacccanaa tatgttccag ctggtgttac 720
taatttttcc agcttaatcc ctcagtggct tattatttac ataacaataa ctttttatca 780
gttacatttt atttttattt aaacctgggc caaaaccaaa ttattttatg ttaaaatgnt 840
gtgccaaact atcccaggaa aagtttttaa anccaaccnt tggtaaatna aanttt 896

<210> 2984
<211> 745
<212> DNA
<213> Homo sapiens

<400> 2984
actcttcgct gccttttctg cattcctgac ttctaaaaga tgccttaagg cttaagggat 60
gccatatttt tgataaggcc tctggtaggt accacagcca agaggaccag agatcatggc 120
ccttccagta tgggggcgat agagacatcg gggacctggg atatttgttt tgtgcagaga 180
tctcctgcct gctgtcacca tgagaaacag tggagtggag tggatggatg gcctgacttg 240
aagaaagggc cctggaaagt tttctacttt gctattttga aatttttttcc cttcttatag 300
agactttgaa atacttttgt aaatgtgtgt agttgttaat ggaactttgc cttttgcaaa 360
gtcggaaaga gtccgctttt ccatgtgagg ctcgcagagc tgaaagggga gctacgtcca 420
ccagcctgtg ggtctttggg ttttnntttt gttgttgttg ttgtttttttt aagatggagt 480
tcactcttgt tgcccaggct ggagtgcaat ggttcaatct ccgctcactg caacctccgc 540
ctctcgggtt caggtgattc tcctgcctca gcctcctgag tactgggatt acagggcgcc 600
caccaccact cccgggtaat ttttgttttt tttaataaaa aacagggttt ccctcctgtt 660
tttccaaaac tggtctccaa acccccctgat gtttgggtta acccgcagac cctcgggcct 720
ccttnaaaat ncctgggnat ttacc 745

<210> 2985
<211> 700
<212> DNA
<213> Homo sapiens

<400> 2985
gatgcaaaat gtcngacaca ggtagtccag gtatgcagag aaggagaaga aaaatcttag 60
atacgtcagt ggcatatgtg cggggagaag agaacttagc aggctggcgg ccccgtggag 120
acagcctcat ccttgagcac cagtgggagc tggagaagct ggagctccta catgaggtgg 180
aaaaaacccg ccacttttg ctgctgcgtg agagacttgg tgacagcatc cccaaatccc 240
tgagcgactc gttatccccc agcctcagca gtgggaccct cagcacctcc accagtatct 300
cctctcagat ctcaaccact acctttgaaa gcgccntcac acctgagcga gagcagtggc 360
tatgattcag gagacatcga nngcctggtg gaccgagaga aagagctggc taccaagtgc 420
ctgcaacttc tcacccacac tttcaacaga gaattcngcc aggtgcacgg cngcgtcagt 480
gactgtnagt tgtctgatat ctctccaatt ggacgggatc cctctgagtc cagtntcagc 540
agtgccnccc tcactccctc ctccacctgt ccctctctgg gtagactcta gggagcacct 600
ctctgggatc ngaagacccc aaaaagccct tcccgggcct ctantccctg cccanaattt 660

0509203.0004000

gaaacaggtt tccanattgt tccccgcttg tgggaaaacn 700

<210> 2986
<211> 746
<212> DNA
<213> Homo sapiens

<400> 2986
acgggcggcc ggatttgccc ggaggccgca cccgcctccg gcggggctct cagtgaaaaa 60
tgtactctga cctgaatcct gaattttcct tgatggtcaa aagattaaga aatcatgagt 120
ggaggatctc aagtccacat tttttggggt gctccaattg ctccactgaa aatcacagta 180
tcagaagaca cagcttcttt aatgtctgtt gctgacccct ggaaaaaaat tcagctttta 240
tacagtcaac attctttata tctgaaggat gaaaaacagc acaaaaatct tgaaaactat 300
aaagtcccag aatctattgg ttctccagat cttagtggtc atttcttagc aaactgtatg 360
aatagacatg ttcatgtnaa agatgacttt gtacgttctg tttctgaaac acagaatata 420
gaatcccaga agattcactc ctctagactg agtgatataa ctagctctaa tatgcaaata 480
tgtggattta aaagcacagt tccgcatttc accgaanaag aaaagtatca aaagcttctc 540
agtgaaaata aaattagaga tgaacagcct aaacatcagc cagatatatg tggtaagaac 600
tttaacacaa atttgtttca gttggggcca taaatgtnca gctgtgttgg atttggtttg 660
ttattactga aaaaattaat ntaggggnct gaaagttggt acaaaaaaaa ttttgtgccc 720
acccnaaatt tcctggaaan tacnaa 746

<210> 2987
<211> 646
<212> DNA
<213> Homo sapiens

<400> 2987
tccggaagtg gcttctgcga caacatgctt gcggacctcg gcttaatcgg aaccataggc 60
gaggatgacg aggtgccggt ggagcccgag tctgactccg gggacgagga agaggagggg 120
cccattgtgc tgggcagacn acaaaaagct ttggggaaga accgcagtgc tgatttcaac 180
cctgatttcg ttttcactga gaaggagggg acgtacgatg gcagctgggc cctggctgat 240
gtcatgagcc aactcaagaa gaagagggca gccactacat tagatgagaa gattgagaaa 300
gttcgaaaga aaaggaaaac agaggataaa gaagccnagt ctgggaagtt ggaaaaggag 360
aaagaagcaa aggaaggctc tgaaccaaag gagcaggaag accttcaaga gaatgatgag 420
gaaggctcag aagatgaagc ctcggagact gactactcat cagctgatga gaacatcctc 480
accaaagcag atacactcca agtanaggat cggaagaaga agaagaagaa aggaccggga 540
agcagganga ttttttgaag atgcntctca ntacgatgaa aacctctcgt tccaggacat 600
gaacctttcc cgccctcttc tgaaggccat tncagccntg ggcttc 646

<210> 2988
<211> 766
<212> DNA
<213> Homo sapiens

<400> 2988
attaaaaagg aagctcaagg ccaggcgcgg tggctcacgc ctgtaatccc aacactttgg 60
gaggccgagg ccgacgtatc acgagattag gaggtcgaga ccagcctggc caacatggtg 120

0050450-0072806

aaaccctgtc tttactaaaa atacaaaaac tagccgggcg tggcggcgcg cgcctgtnac 180
ccatgctact cggaaggctg aggcaggaga atcgcttgaa cccgggaggc ggaggttgca 240
gtgagccgag atcgcgcctc tgcactccag cctgggacag agcgagcctc cgtctccaaa 300
aaaaaataag gaagctcaag atgaanagtc agaagtggta acttgtttgt tgcacaagaa 360
acaaatttag cattctattt nggggatcca gattaccaaa aaaaaaanag aagtgaagtt 420
atttctgcat taantatatt aataaaactt tatcactaaa aacaattctg ttagangaac 480
gcccaggaaa aaaatatttg agtttttaga gaagtcattt tttaaacttt tagaggttgt 540
gacatttaan ttacataatt ttatttanta cctagtatgc aaagacattg ttctggggca 600
tggcancaaa taaaaagctt ttgtnaatcg cantgtcccc tcttattaac cccgcattcc 660
tancaggttg gttttttttt gctggaccgc accacantcc gggttacacc aaaaaatatc 720
ncctnatgtt atttttttaa gttgaatttt ttttnggaat cccttn 766

<210> 2989
<211> 527
<212> DNA
<213> Homo sapiens

<400> 2989
tcatgatnaa acatctgttt ccactcatac tcgaagtggt aatctaaagc ggccaaagat 60
tggaaagcgg tttcaggatt ctgaatttag cagttctcan ggtgaagatg aaaagacctc 120
ccagacttca cttacagctt caataaacaa attggagtct actgcacgcc catcagagag 180
ctcagaagaa ttcctggaag aagaacctga acagagaggg attgaatttg aggatgaaag 240
cagtgatnga gatgcacggc cagcactgga aacccagcca cagcaagaga agcaagatgg 300
tgaaaaggaa tctgaattag agcctatgaa tggtgagatn atggacgatt ctcttaagac 360
ctcacttatn acagaagagg aagactccac tngtgaagtt ttagatgaag aattaaaatt 420
gcagcctttt aattccagtg aagactctac naatcttgtt ccactggtgg tngaatcttc 480
aaaaccccct ngaggttgat ncaccagatt agaccccacg tntacct 527

<210> 2990
<211> 704
<212> DNA
<213> Homo sapiens

<400> 2990
ggacggctta gccgcggtgc agactgcggc ggcggtggtc tgaggaagtt ctatcttggc 60
gctaaagcgg agacgcatcc cccgacccga ggctacgatg agcacaccgg ccgtgcccca 120
ggacctgcag ctgcccccga gtcagagggc gcagtccgca ttcaaagagc aaagaagaca 180
aaaactcaag gaacatctgt tgagaagaaa aacgcttttt gcatacaagc aggaaaatga 240
gatgttatcc agtagagatc agagagttgt gacatctgag gaccaagttc aagaagggac 300
taaagtgctg aaacttaaaa caaaaatggc tgataaagaa aacatgaaga gacctgcaga 360
gagcaaaaat aatacagtgg tggggaaaca ttgtattcct ttaaaacctt caaatgaact 420
aaccaattca actgtngtaa ttgacacacn taaacctaag gatagtaatc naactccgca 480
tttgttacta actgaagatg atccccaaag tcaacatatg acattaagcc aggcatttca 540
ccttaaaaac tatagttaaa agaaacanat gactacngaa aaacaaaagc aagatgctta 600
catgcccaag aaacctgtgc ttggatctta tcgtgggcca gattgttcca tctaagatta 660
attcntttag aaaacctcta cnantcaaan atganaattt ctgc 704

<210> 2991

09/529,469 - 05 NOV 2000

<211> 663
<212> DNA
<213> Homo sapiens

<400> 2991
agccaacacc gcctttctca gcatgggaga cctttgagcc catcagccaa gagcccctca 60
gccaagccag ctatgacaaa gccccagacc cagttcctga gctccaagac tcgttctatg 120
cagaactgca acgtgcagag agcctccaag agaagagcat aaaagaggcc aagaccaaat 180
gcaggacaat tgcatccctg ctcactgcag cccccaaccc ccactccaaa ggggtactta 240
tgtttaagaa acggcggcag agagccaaga agtacaccct ggtgagcttc ggggctgctg 300
ctgggacagg cgctgaggan gaggacggcg ttcccccccnc gagtgagtcc gagctggacg 360
aanaagcctt ctctgacgcc cgcagcctca ccaatcaatc tgactgggac agtccctatc 420
tggacatgga gcttgccagg gcgggctcaa naacatcana aggccagggc tctgggctgg 480
ganggcagct gagtgaggtc tctgggcgaa gggtgcagct ctttgaacag cancgcccgc 540
gcgcagactc cagcacccaa ggaactggca cgggtcgaac cagcagccat gctcaacggg 600
gaaggctgca ntcnccacct cggggccana atgctcccca gaagcagctn ttgctccccn 660
ccc 663

<210> 2992
<211> 818
<212> DNA
<213> Homo sapiens

<400> 2992
gacagatgtt tgggagctct tactctgaca tgaagttata attggtaatg gagactcaga 60
caatgttgta gattacagag tgaactatgc tttttagtgt taaatgcaat agcttgagat 120
acaatgtttt acttggtaca taaatgctgg ttttctttca gatttaagga catacacttt 180
ttttttttt ttttaagag acagggtctt ctatgttgcc caggctgtct ttgaactcct 240
gggatcaagt gatcctcctg cctcagcctt cgaagtagtt gggactacag gcccacgcca 300
ccgtgcctgg ctggacatgt aaatttgaag tgaatggtta aacatccagc tagctnaaag 360
catggcagac cctaacagaa aagctacagt gtgtttttgc agctatgaag tgaatggttt 420
cctggggaaa attgtgactt tgtataactg ttgttgaaac cagaataaat tatatttcac 480
ttgcatatgc ataaattatt aaaattttca gaagtcagtg atacagaagt actattttgc 540
aatgttaatc tgtttgagtc tttgganaaa gtggtttcat tgttaggtac atagtgcact 600
gttaatattt taaacaagtt gttcactctt ccatttaagg gatagcagtt ccttggtata 660
aaatgactgg gatgaattat aaaggaatta tgtttgtcat gttgcccttt aacccagctt 720
tagtaattac tataatctca tatttatgaa tanttcctgt taggttacag gaacaaatga 780
aaaatatttt atgttttccn cnnccctttn aaatttaa 818

<210> 2993
<211> 630
<212> DNA
<213> Homo sapiens

<400> 2993
cagaagaagc acaaatgctc agtgtattac agtaaacaca aaaccagcac agctgcggcc 60
agcagcacca gcacgactac tgaggaaaaa cagacttcac ccctgggcag ctcactgcct 120
gctgctaaag aggacatttg cactgatgcc atgcgtgaga actggatcag cctcagatat 180

05529450.0020800

gcaagtggca taaatgtcaa cctgcagaag aatttaaccc ttcccaaaaa cttactgaat 240
aaagaagaaa acacactgaa aaacacaatt gttttcagta atccttcttc agaatgtant 300
atgaaggagg gagtacagac atgtatgttt cctaaggaaa ctgacattaa aacttcagag 360
aacacagccg agttcaagga acgggagctc tgtccactga agacctccaa gaaaactacc 420
tgaaaaccat ttaccaagaa actcacctca gtaccaccag ccagacttgc cagaaaattt 480
ccaggaaaaa tnatgggaat aaccagcaag ttcctgtcna gaatgaagta aatcattgtg 540
aaaatttgaa gaaaggtgga ccnaagcctt cttccgaaaa gaagattccc naacctctgn 600
agaaaacttg ttttctgana aacgggacnt 630

<210> 2994
<211> 523
<212> DNA
<213> Homo sapiens

<400> 2994
attgcccgcg cggtgaggga gcgtggtctc gcgcaagccg gcgtgcggtc cggcggcgct 60
gcagttgtgt ccagccggtc acggggcggc tatggcggcc acgttcttcg gagaggtggt 120
gaaggcgccg tgccgagctg ggactgagga cgaagaggag gaggaggagg ggcggaggga 180
gacgcccgag gacagggagg tgcgtctgca gctggcgcgg aagagggaag tgcggctcct 240
tcgaagacaa acaaaaacat ctttggaagt ttctttgcta gaaaaatatc cgtgctccaa 300
gtttataatt gctataggaa ataatgcagt agcatttctg tcatcatttg ttatgaattc 360
aggagtctgg gaggaagttg gttgtgctaa actctggaat gaatggtgta gaacaacaga 420
cactacacat ctgtcctcca cagaggcttt ttgtgtgttt tatcatctaa aatccaatcc 480
ctcggttttt ctctgtcggt gcanttncta tgttcanaaa atc 523

<210> 2995
<211> 728
<212> DNA
<213> Homo sapiens

<400> 2995
agatactatg tccctgcttt ctaagatcat tagccctggt tcctcaacac ccagcagtac 60
aagatcacca ccccctggga gagatgaaag ctacccccga gagctctcca attctgtatc 120
tacatatcga ccctttggtc tgggcagtga atctccctat aagcagcctt ctgatggaat 180
ggagagacca tcttccctga tggactcttc acaggaaaag ttctacccag atacttcttt 240
ccaagaagat gaggattacc gagattttga gtattcaggg cctccaccct ctgccatgat 300
gaacctagag aagaaaccag ccaaatctat cctgaaatca agcaagctgt ctgataccac 360
cgagtaccag ccaattctgt ccagttatag ccacagagcc caagaatttg gggtaaagtc 420
tgccttccct ccatctgtaa gggccctcct ggactctagt gagaactgtg accgtctctc 480
atcttccct gggctatttg gtgccttcag cgtaagaggg aatgaacctg ggtctgaccg 540
gtcaccatca ccgaagtaag aatgattcat ttttcacccc tnactccaac cacaatagct 600
tgtctcaatc taccactggg catctcagtt tgccncagaa gcagtaccca gaatctcctc 660
ncccagtccc acatcgttcc ttttctctcc cgcaaaaaac ccttgccgct cccncgggtt 720
ncccnccc 728

<210> 2996
<211> 461
<212> DNA

US20050250120A1

<213> Homo sapiens

<400> 2996
cacccattct gtcttccaga cagttctctt ccttctctgt actgcgtact gggtcaccac 60
atcccagagc cttgctcagt tatagcaact gctgcgggcg tgcacatggc ataggcccag 120
taacttacat acatcggctc acttaggcct cagacagcag cacgaggcag gcacttttac 180
ttcttttacc attagaaagc caaggcctan agtggtgggc tttgaccaca gccacacaat 240
tttgaagtgg cagaaccagg actggagctt agccctgctc accctagacc tatgcgcttg 300
acaagtgcgt gactgtgaca ggcccatggg cccggactgc ccataggggt cactgtacca 360
tggcaaaggc tgaggtgcac caagangctg tggcgtcntc acctgcctta tttgctggan 420
aactgtngca aagaaccaca gactgggcga cttagacnat a 461

<210> 2997
<211> 675
<212> DNA
<213> Homo sapiens

<400> 2997
attgactgca gccctcataa aactgtcaag aagactgcga atgaatttcc ctgtttgcca 60
aagcaagtgg cttggattct ggccacaagc aaggttttca tgtatccaga gttacttcca 120
gtgtgttccc tgaaggcaaa gaatccccag gataagatcg tcttcaccaa ggctgaggac 180
aatttgttag ctttaggact gaagcatttt gaaggaactg agtttcctaa tcctctaatc 240
agcaagtacc ttctaacctg caaaactgcc caccaactga cagtgagaat caagaacctc 300
aacatgaaca gagctcctga caacatcatt aaattttata agaagaccaa acagctgcca 360
gtcctaggaa aatgctgtga agagatccag ccacatcagt ggaagccacc tatagagaga 420
gaagaacacc ggctcccatt ctggttaaag gccagtctgc catccatcca ggaagaactg 480
cggcacatgg ctnatggtgc tagaaaggta ggaaatatga ctggaaccac agagatccac 540
tcagatcgaa gcctanaaaa agacaatttg ggagttgggg antgaatctc ggtaccactg 600
gctattgnct aagggtgtat cctgaaaact gaagccngtt tgccccccgt ttccccnggg 660
aaagnttggg aaaca 675

<210> 2998
<211> 702
<212> DNA
<213> Homo sapiens

<400> 2998
ggagaatggc tcaactctcc aaatagagag aatttctatc agttgcaagt acgaaaattt 60
cctgccgatt atataaaata ctgggagttt gcagtttatc tggaagaatg tgaactggct 120
aaacagcttt atccaaagga aaacgatttg gtgtttttag ctcctgagag aataaatgaa 180
gagaagaaag atacagagag aaatgacata caagatctcc acgaatatca ttctggttat 240
gttcataaat ttcgccgcac gtcagtcatg cgtaatggga aaactgagtg ttacctttcc 300
atccagactc aagagaactt tccggccaat ttaaacgaac ttgtgaattg tattgtaatc 360
agttctctgg taactacaca aaggaagttg aaagccatgt ctctgttggg tngtcggaac 420
caactggcta gagctgttct gaatccaaac cctatggact tctgtacaaa agatttactg 480
actacnacat ctgagagaat tattgcgtnc ttnagagatt tcaatgaaga tcaaaagaaa 540
gcaatagaaa ctgcatatgc tatggtgaaa cactcaccat cagttgccaa aatctgcttg 600
attcatggac cacctggaac nggaaaatcc aaaactattg ttgggctcct ctttcgtctn 660

09/02/2005 - 09:50:50

ctgncngaaa accnaagaag gggcttcaaa caaaactcca tg 702

<210> 2999
<211> 605
<212> DNA
<213> Homo sapiens

<400> 2999
atgtgacctg ttgactttgt atctgcacgt gggcacgagt gatgttcagt ttgctaggca 60
ctagtcatag tgttatggac gtggtggagt gtaaggtctt gatgaattac ggcagtatgc 120
agaaaaggaa ccaaggccag agagacaaat aatgcctcat gtcccactgc tttaaaatta 180
cattaattta taaaatggcc actatgggct ctttttgact gtttctcgga gtaggaacaa 240
aataagacat taaatggtgg cttgaagaaa aagatacnca ttttcagaaa aaagaaaggg 300
gagggctgca gggatcctgt cttggcggga gctctccagt ctgttggatt agcacaggga 360
cacgcttatg gtgccatgac gccgaaacta gtcntccccc atctccagca taggcaacgg 420
cctgcagggg tgagtgtcag aaaagactta ctttggaaga aaagggtttt tttttgtttg 480
tttgtttttt gttttttttt gtttgtttgt tttgggtttt tttcctgaaa tttcctgata 540
ccttttcag aatgtcnccc ttgtaaatan gcacctaaag ccaagttggt cancaaaact 600
cctga 605

<210> 3000
<211> 642
<212> DNA
<213> Homo sapiens

<400> 3000
ggtaagtatg tttgttcgag ctaccagtcc agaatctacc agtaggagtt ctagtaaaac 60
tggacgagat actccagaaa atggagaaac tgcaattggt gctgaaaatt cagaaaaaat 120
agatgagaat tcagataaag agatggaagt agaagaatct ccagagaaaa taaaagtaca 180
gacaacacca aaagtagaag aagaacagga tttgaaattt cagattggag aactggcaaa 240
taccctgaca agtaaattcg agtttctagg cattaataga caatccatct ccaactttca 300
tgtgctgctc ttacagactg agactcgaat tgcagactgg cgggaagggg ctcttaatgg 360
aaactacctt aaacgaaaac ttcaggatgc agcagaacaa ctaaaacagt atgaaataaa 420
cgccactcct aaaggctggt cctgccactg ggacagggat catagacggt atttctatgt 480
aaacgaacag tcgggcgagt ctcagtggga gtttccagat ggtgaagagg aagaagaaga 540
aagccccgcn cnagaaaata ganatgagac tcttgccaaa cagaccttga aagacaaaac 600
tggcnctgat tcnaattcca cagaatcctc tgaaacttcc cc 642

<210> 3001
<211> 579
<212> DNA
<213> Homo sapiens

<400> 3001
tatagggaag tgatttaaaa agaaaaaaca aacaacaaca aaaaaaactc ttcggaataa 60
agagggctgt aaattttgaa ttccagtgtc ggatcctttc aagcactgag aaattctttc 120
tcaggtttct ttttttgggg gagacagggt cttgctctgt cacccagact ggaacacagt 180
ggcacgatct tggctcactg caacctctgc gggctcacgc aatcctcctg ccacagcttc 240

WO 2005/045033 PCT/US2004/036450

ccaagtagct gggaccacag gcgcgagcca ccactgctgg ccagtttttg tatttttttt 300
ttttttgtan anacagggtc tcgccatgtt gcccaggctg gtttaaaact cctgagctca 360
agcagttctc ccacctgggc ctcccaaagt gctaggatta cagacatgan ccactacncc 420
tggccnggtt tctgttggaa acccanattg tgacaagaca tttgttttct tccgaatcac 480
cagatttgca gcttactgtg ccnaaagtgg actggctgcc ggggcccntc aaatgccctc 540
tggcccatgg cacactcanc agaangccaa acccntgct 579

<210> 3002
<211> 784
<212> DNA
<213> Homo sapiens

<400> 3002
tgctaatnaa ggtagganag tacatttgtt ggaataacag aaatggtgat ttcagcctaa 60
aagtttctga gggtaaagga tcacatgacc ttcaggaaac tctctgcctc ctgtaggtgc 120
tttcctatct cccccatcct tccctacccc ttttcccttt tccttcctct ctttttctct 180
cactgtcact ctgtctacac acactggcat cttttgaaca ctaaaagtaa gcactgtttt 240
ttaaaaaagt aattatttgt tggatcagat acttttatcc caagtgaata ccttcactga 300
gatgtggcca atgcaatagt ttcacagtaa aaacagtgcc tataagaaaa tagatcacat 360
actatttttc aatgatatta agtgtatttt gtaactattt tcatttggtc cttggtaaca 420
tgaaataata catggaactt acctttataa taaaaatgga gtgccctggt tcatcataga 480
ngtgcatcta gtttgccctt aatgggaagt atacttgctg tgtggattga tagcaccttc 540
ttgaaatgga ngaactcagc tggcctcatg gatgtgcaat ttttgcagtc ccacagggcc 600
ttgcatacag aaacacccga gctcagttga atgtctgttt gantttttcc tatttatttt 660
ttgaaaacca gttccccttt gtctttttg tcncccnagg antggaattc cattggcnca 720
aaacatgggt ccctgttacc ctccaacccc ctggctgaaa ggggatcctc cccacctcca 780
ncct 784

<210> 3003
<211> 579
<212> DNA
<213> Homo sapiens

<400> 3003
ttactgtgtg tttctctacc tacctctcat tctcaccttc ttttcctaag ctttttttt 60
ctctttaatt tntccccta ggaatcctcc ctcaatttca aagccctcct tcccttctcc 120
tggctcttcc cctctaattc ccttctcctt ccaactttgg tttctggctc cttttcctca 180
actttccttt cacctcctta attccttctt tctggcccaa tatttggtct ccaaattttc 240
atatagttct gcctctttct tccccccgtc tctgctggcc ccctaagctt cccctgttaa 300
atcccctctt ccctgctata tccacctgtc ccctctctgg catccccaga tcccagttct 360
ccccaagctg tggttctccc tgtgctctcc ttgtcactgg ntgcccctct tgctctccca 420
gcaaccatgc tgctctgtct gccctggctc caaatccctc cttctctcnc caactctcca 480
tcttnaagan cctccccttt tctgacccnc tccctatctt gggtgaaatt ttatctctcg 540
tagaaaacca ntttttctct aaaatttctc tagntggct 579

<210> 3004
<211> 698
<212> DNA

US 2003/0224000 A1

<213> Homo sapiens

<400> 3004
tgattttgga gttgctggtc agctgacaga tacacagatt aaaagaaata cctttgtggg 60
aactccattt tggatggctc ctgaagttat tcaacagtca gcttatgact caaaagctga 120
catttggtca ttgggaatta ctgctattga actagccaag ggagagccac ctaactccga 180
tatgcatcca atgagagttc tgtttcttat tcccaaaaac aatcctccaa ctcttgttgg 240
agactttact aagtctttta aggagtttat tgatgcttgc ctgaacaaag atccatcatt 300
tcgtcctaca gcaaaagaac ttctgaaaca caaattcatt gtnnaaaatt caaagaagac 360
ttcttatctg actgaactga tagatcgttt taagagatgg aaggcagaag gacacagtga 420
tgatgaatct gattccgagg gctctgattc ggaatctacc agcagggaaa acaatactca 480
tcctgaatgg agctttacca ccgtacgaaa gaacctgatc caaagaaagt acagaatggg 540
gcagagcaag atcttgtgcc aaccctgagt tgtttgtcta tgataatcac cctgcatttg 600
ctgaacttaa accgcaggac aagaataacg ctngcaggaa tcaggcgatt gaagaactcc 660
aaaaaaattt tgctgtggct gaanccncct gtcccggc 698

<210> 3005
<211> 756
<212> DNA
<213> Homo sapiens

<400> 3005
tttagtttaa aaanaaaaaa tgcagggtga tttcttatta ttatatgtta gcctgcatgg 60
ttaaattcga caacttgtaa ctctatgaac ttagagttta ctattttagc agctaaaaat 120
gcatcacata ttcatattgt tcaataatgt cctttcattt gtttctgatt gttttcatcc 180
tgatactgta gttcactgta naaatgtggc tgctgaaact catttgattg tcatttttat 240
ctatcctatg ttaaatggtt tgtttttaca aaataatacc ttattttaat tgaaacgttt 300
atgcttttgc caacacatct tgtaacttaa tatactagat gttaaggttg ttaatgtaca 360
aaaaaaaaac ccttatactc acctgcgttt tcatttgttt gacatttgtc tattattgga 420
tttcattatc atatgaactt gtcagtggga aacaaactgt ctaaaaattt ttctcttacg 480
tttaacatac aatcatgtga aatttangca ganttcgata aattactggc aaaaacaaaa 540
ctcttttata aagattttct aatgttgact ttaatactct aacatggtac aaaccaaatg 600
gtaaaatccc aagtcatttc ttttttcact ctattcagca acagaattaa gtggatgaag 660
atattctact gtgcattaaa tcttgaactt ttataaaaca tgttcaaaaa ttgtacaaaa 720
naaattccnc ctggntaaan tctttccccn aataca 756

<210> 3006
<211> 706
<212> DNA
<213> Homo sapiens

<400> 3006
gattgcaaag gaaaaattag atcaattaaa gcaggagttt gaattctggt atcctgttga 60
tcttcgcgtc tctggcaagg atcttgttcc aaatcatctt tcatattacc tttataatca 120
tgtggctatg tggccggaac aaagtgacaa atggcctaca gctgtgagag caaatggaca 180
tctcctcctg aactctgaga agatgtcaaa atccacaggc aacttcctca ctttgaccca 240
agctattgac aaattttcag canatggaat gcgtttggct ctggctgatg ttggtgacac 300
tgtanaanat gccaactttg tggaagccat ggcagatgca ggtnttctcc gtctgtacac 360

0090-0205-0402-0

ctgggtagag tgggtgaaag aaatggttgc caactgggac agcctaanaa gtggtcctgc 420
cagcactttc aatgatagag tttttgccag tgaattgaat gcnggaatta taaaaacaga 480
tcaaactatg aaaagatgat gtttaaagaa gctttgaaaa cagggttttt tgaatttcag 540
gccgcaaaaa ataantaccg tgaaattggc tgtggaaggg atgcacanaa aacttgtgtt 600
ccggtttatt gaanttcaaa cacttctcct ccctccattc tgtccacatt tgtgtnaaca 660
catctggacn ccctgggaaa acccgaccna ttatgaatgc tcntgg 706

<210> 3007
<211> 665
<212> DNA
<213> Homo sapiens

<400> 3007
gggacggggt ccgactcaga aatggcggcc tccatgttct acggcaggct agtggccgtg 60
gccacccttc ggaaaccacc ggcctcggac ggcccagcaa cagcaaagga atctctcact 120
acatgaatac atgagtatgg aattattgca agaagctggt gtctccgttc ccaaaggata 180
tgtggcaaag tcaccagatg aagcttatgc aattgccaaa aaattaggtt caaaagatgt 240
cgtgataaag gcacaggttt tagctggtgg tagangaaaa ggaacatttg aaagtggcct 300
caaagganga gtgaagatag ttttctctcc agaanaanca aaagctgttt cttcacaaat 360
gattgggaaa aaattgttta ccaagcaaac gggagaaaag ggcagaatat gcaatcaagt 420
nttggtctgt gagcgaaaat atcccaggan agaatactac tttgcaataa caatggaaag 480
gtcatttcaa ggtcctgtat taatangaaa ttcacntggt ggtgtcacat tgaagatgtt 540
gctgctgaga ctcctgaagc aataattaaa gaacctattg atattgaaga aagcatcaaa 600
aangaacaag ctctcccnct tgcacagaan attggatttc cccttatatt gtggaatcng 660
canca 665

<210> 3008
<211> 497
<212> DNA
<213> Homo sapiens

<400> 3008
agtagacctt tctgcgagta cgagccaacc ggcagacccg actgaatgct cggattggga 60
aaatgaaacg gaggaagcaa gatgaagggc agagggaagg ctcctgcatg gctgaggatg 120
atgctgtgga catcgagcat gagaacaaca accgctttga ggagtatgag tggtgtggac 180
agaagcggat acgggccacc actctcctgg aaggtggctt ccgaggctct ggcttcatca 240
tgtgcagcgg caaagagaac ccggacagtg atgctgactt ggatgtggat ggggatgaca 300
ctctggagta tgggaagcca caatacacag aggctgatgt catcccctgc gcaggcgaag 360
agcctggtga agcccaggag agagaggcac ttcggggcgc agtcctaaat ggcggccctc 420
ccagcacgcg catcacacct gaattctcta aatgggccag tgatgaaatg ccatccncca 480
acnntggtga aagcagc 497

<210> 3009
<211> 495
<212> DNA
<213> Homo sapiens

<400> 3009

WO 2004/050683 PCT/US2003/038000

agttctcctg agggaagagg agtgtagtag gggggacgcg gcggcggcgt tgacaatgta 60
gttttcttgg aggctttttt ggtccaattt gtgagatcga tattgttctt aatgatgggg 120
aaaccaggaa aatggcagaa atgaaaactg aagatggcaa agtagaaaaa cactatctct 180
tctatgacgg agaatccgtt tcaggaaagg taaacctagc ctttaagcaa cctggaaaga 240
ggctagaaca ccaaggaatt acaattgaat ttgtacgtcg aattgaactt ttcaatgaca 300
agagtaatac tcntgaattt gtaaacctag tgaaagaact agccttacct ggagaactga 360
ctcagagcag aagttatgac tttgaattta tgcaagttga naagccatat gaatcttacn 420
tcggtgccaa tgtccgcttg aggtattttc ttaaagtgac aatgntgaga agactgacag 480
atttggtaaa agaat 495

<210> 3010
<211> 612
<212> DNA
<213> Homo sapiens

<400> 3010
acttttccng atctaggagc accatggaca cctcgtcaga gatgctggta cggtttggac 60
ggcgctgtgg acgggcgaag gaaagtacag tcttaggtat gtctttatca gcagtgtgaa 120
aacggactaa tacagtaaat tggtaccagc agagtggggc attgctgaaa agataactga 180
aaatgtggaa gcgactttgg cactgggtaa caggcagaga ttggaacagt ttgaagagct 240
cagaagaana caggaaaatg tgggaaagtt tggaacttcc tagagacttg ttgaatgcct 300
ttgaccaaaa tgctgattgc gacatggaca ataaaatgca ggctgagatg gtctcagatg 360
gagatgagga actttctgga aactggagta aaggtgattc ttgctatgtt ttagcaaaaa 420
gactagcgtc attttacctc tgccctagag atttgtggaa ctttgagaaa gatgatttag 480
ggtacctcgc anaanaaatt tctaagcagc aaagcattcc agaagtgagt tggatactgt 540
taagggcant cagttttaaa agggaaacag agcatntaaa ttcanaaaat ttgttancct 600
gatctggcan aa 612

<210> 3011
<211> 473
<212> DNA
<213> Homo sapiens

<400> 3011
tcgctcagga tgtcactctc tttgatgaga ttgtcggcaa aatctgccaa gccggggtgt 60
gggtatttcc cgggagaatg ctcttggagt cctgcctgcc ctcagccgtg gggcagccgc 120
tgctctgggt gccgctgctc aagctgccct cgtcagagtc cagcaaggtt cccttgccag 180
tctcaccggt ccactcgttg ctggaggaat tcttcaggac ttttaaagac ctggatgaag 240
ctacagtgag aaaaacacat ttcgctgtga tacagaaaca ggttacacaa tgtgtaatgt 300
ttgcctcaaa gcttgtgtaa gatttaacat taagatttta ttttatgata tgacttcagt 360
tagcaactat cctggtaatt aggcaaaaat gtagcttctg aaaacatgga cattttgac 420
ttaggtttac agttgtaagt taggcnattc acatttttag attaccanan ctc 473

<210> 3012
<211> 727
<212> DNA
<213> Homo sapiens

09653450.030200

0002700-6452050

<400> 3012
gatttcatgc attgcccttc agctgccatg ttatgaggac acttggagaa agctacagga 60
gaggaactga ggtctcctgc catcagccac ttgagtgagc atgggagtgg attctccaaa 120
ctccagttaa gacttgagat gtccacagtg gcagccacta gcttgactgc aacttacgag 180
agaccctgag ccagaggcac tcagttaagt catacacagt ttcctgaccc gtaaaacctg 240
tgacacaatg aaggtttgtt gttttggggg taatccgtta ttcagcaata gataacgaat 300
acagaaggct tgtaattgta taaccaacgt gagtttataa gcggatatct gacctcattt 360
gttttctcct gaaaaagtta tagaaaaatc acaagactgc aagtcactct ctctctttct 420
tttgtgggga ataaacaagt ntaattacaa tttctaaacc tattgtttta ttctcaaata 480
tnattacnat ttaaacagga tattgtanag ctccatcata gggattaaca ctnattagaa 540
ttaaagaacg tttttgtgaa tgtcagcttt ttttttttta aataaacact cntcccttga 600
taatgttttt ctttttcata aaattaaaaa aaaaatgtgg gttgtantan gtgtatatat 660
ttatgttggt acatgaaaat nttttgatac agggcntgac gtgttntaac cccctcctgg 720
gaaaaat 727

<210> 3013
<211> 539
<212> DNA
<213> Homo sapiens

<400> 3013
attctccggg ctgcggaggg taaagagcgg gctcgggccg aggctggagg gctgggtggg 60
gccagagcgg cgcttcgggg gcccgcggag gacgagggag ggagagaatc tgaggagctg 120
ggttgccatt aggggactcc tgaggtccta tctccaggct gcggtgactg cactttccct 180
ggagtggaag ctgctggaag gcggaccggc cgccatgtcc acgttcaggc aggaagacgt 240
ggaggaccat tatgagatgg gggaggagct gggcancggc cagtttgcga tcgtgcggaa 300
gtgccggcag aagggcacgg gcaaggagta cgcanccaag ttcatcaaga ancgccgcct 360
gtcatccanc cggcgtgggg tgagccggga ngaaatcgag cgggaagtga acatcctgcg 420
ggagatccgg caccccaaca tcatcaccct gcacgacatc ttccanaaca agacggacgt 480
ggtcctcatc ctgnaactgg tctctggcgg gganctcttt tgacttcctg nnggaaaaa 539

<210> 3014
<211> 383
<212> DNA
<213> Homo sapiens

<400> 3014
gtggcccgga tgttcggtgc agctgccaga tccgctgatc tagcgcttct cgaaaaaaac 60
cttcaggcgg cccatggctg tcgatattca accagcatgc cttggacttt attgtgggaa 120
gaccctatta tttaaaaatg gctcaactga aatatatgga gaatgtgggg tatgcccaag 180
aggacagaga acgaatgcac agaaatattg tcagccttgc acagaatctc ctgaacttta 240
tgattggctc tatcttggat ttatggcaat gcttcctctg gttttacatg ggtcctccat 300
ngaatggtac tcggggaaaa aagattccag cgcacttttc caacacatca ctgcattatt 360
tgaattgcnc atnggcacct ata 383

<210> 3015
<211> 767
<212> DNA

0956450.0012000

<213> Homo sapiens

<400> 3015
gttattaatc aaaatgcaaa gcagttggaa ataaggagc atctctggga aaatgtggag 60
tgttatagtc accccattaa ctgaattgat taatcagacc aatgaagtaa atcanggtga 120
tgccttagaa cataatttta gtgccatcta tggtgcattg actttaccag taaaccacat 180
tttttcagaa cagagatttc cagtgcccac catgaagact ttgcttagaa cttggtcaga 240
attatataga gcatttgctc gttgtgctgc tttggtggca acagcagaag anaacttgtg 300
ctgtgaggaa ctttcttcca agatnatgtc cagtttggaa gatgaaggct tttctaattt 360
gttgttcgtg gatagaatta tttatattat tactgtaatg gttgattgca ttgacttctc 420
accatataat attaaatatc agcccaaagt taaatcacca cagagacctt cagattggtc 480
caaaaagaan aatgagcccc tagggaaatt gacttcttta tttaaactta ttgtgaaagt 540
gatctattct ttccacacac tgagcttcaa gggaagcaca ttctgatncc ctcttcccta 600
ttggcaactc natccccggc attatttccc gtgttcttgg gcatatttct tttgccttct 660
atgatccgaa aaatatttgc aactttaacn agacctctgg ctttttttat gaaaactcca 720
agcttgatna aattcccaaa gtttnttgtt ttctgaaaca cnanttt 767

<210> 3016
<211> 585
<212> DNA
<213> Homo sapiens

<400> 3016
gactcaccct gggccggggg tgaggcttgg actgtttctt tttccaaaag aggagctcaa 60
aagagaaagt tcatctagaa atctcaaagc catgtctcag gatgaactan agtatgccct 120
tacaggggat cagtgtcatt caaggatgtg actgtggact tcacccagga ggagtggcag 180
caactagacc ctgctcagaa ggcgctttac agggatgtga tgttggaaaa ctattgccac 240
ttcgtatctg tggggttnca catggctaac cctgatatga tccgcaattt ggancaagga 300
aaaaaagcta tggacccaaa aanttttccc aagttacagc tacctagaag aagatgggaa 360
aactgaanat gtcttagtga agttcaaaga ataccaagac aggcattcta gacccctcat 420
attcatcaac cacaaaaaac taattaagga gagaagtaat atttatggta aaacatttac 480
tctaggcaag aaccgtatta caatactatg ttaatatnaa cctgatggaa aagttttgaa 540
aaatatttca gaactagtcn ttagaaatat aagcccccta aaana 585

<210> 3017
<211> 755
<212> DNA
<213> Homo sapiens

<400> 3017
attatgatgg aagattaaag tgtggtgaca tgattgtggc cgtaaatggg ctgtcaaccg 60
tgggcatgag ccactctgca ctagttccca tgttgaagga gcagaggaac aaagtcactc 120
tgaccgttat ttgttggcct ggcagccttg tatagatttt ggaaattggt ttcaaatctt 180
gcatcttcct tttttagatt tttgaaagaa aacccttttg tttcattgtg tttgtggttt 240
aggagctgct gacactgctg gtatacacag ggccaaaacc cactaagatt gtccgtttat 300
gtttatttaa atggtttcct aagttagtta catttctttt agcttggaaa cagtcttcca 360
ctaacctttg tgagtttata ttttcagaat tcagacttag ttgttaaaat gttacctatg 420
gtaatgagca aagctcaccc aaactgtgcc ccanatggag taaagacctt ctggtgggtc 480

tttgttttca gtaactgaat catanaacga attctgtatc cctcaggcct gatgtcagca 540
aagccagtaa caacagcgtg tactgccact gtcataacca ataccatgaa atgaatatac 600
tttaaatttt ggtgataact gttccccatt ttttttgaa ccacagtctc actctcaccc 660
angctggaat gcantggcac aatctcanct cactgcaanc tccgcctcct ggggttcacg 720
ccattctccc acctcancct ccccaattac ttgga 755

<210> 3018
<211> 469
<212> DNA
<213> Homo sapiens

<400> 3018
cgtctatttc catccccttc ctcatcacaa aaagaaacgt agaatctatg gcacagccta 60
gtattttacc caatactgtt agtgtataat aatttacaga atgaatttta tttacttgtg 120
gtttttttct taatgtaaca tttcaaggag cactatatat atacacacat atatatacac 180
cttggcttat gactgaaata atggagcaaa ttattaaata cagacagact tgagagataa 240
ctgaaaatta aaagaactcc tctgagagaa aaaaaaatat gacactgtta tgatgtttaa 300
taaagttgca tgatcatttt tcacatatct acttgaggct aaaatacatt tgcatcactt 360
atgttttaca aatatntttc tttaagggnt aatattcccc catcccnaaa cagatnctag 420
gatnaaaatt ccctaagaaa cacttattgg accctgaatt ttaaaaatt 469

<210> 3019
<211> 439
<212> DNA
<213> Homo sapiens

<400> 3019
agtcgtggct gcagcgctga ggcgagaggt tggtgggtgt ctccggccat aatgacccag 60
gctgagaagg gtgatacgga gaacggaaag gagaagggcg gcgagaagga gaaggagcag 120
cgcggcgtga agcggcccat cgtgcccgcg ctggtgccgg agtcgctgca agagcaaatc 180
cagagcaact tcatcattgt catacatcca ggttcaacaa ctttaaggat tggtcgagcc 240
acagacactc ttcctgccag cattcctcac gtcattgccc gaagacacaa acaacaaggg 300
cagcccctat acaaggacag ttggctccta agggagggac taaataaacc agaaagtant 360
tgaaccaaag acaaattggc cttaaantgg tggatcaagc aatatggtct aaaaagatgt 420
ccattgttac aagacgcnt 439

<210> 3020
<211> 803
<212> DNA
<213> Homo sapiens

<400> 3020
ttgttggttg aaatgtaagt cttttcctaa agttttaatc agaggtagcc atcactaaga 60
cttaagccac ctgtggttct cttaagtttc actgaagcca gaagaaggaa attaccacaa 120
cttgtattat actaattatc ttcattatta acgatcatat tagagccact gacatgtccc 180
aaattatatt aaaataaaaa cctgcattgc tctgacatga agctcaattc aatgtaataa 240
acaaattagg tattaaacgt tataatttaa aaaacttcta cgatatcacc agaaatcctg 300
gtgaaattta atttttccc ttttttangt cagtggccgg tgggataaat ttttctaaac 360

US005750800

ttttcctgc tatgattttg aaggcgaata catagagcac agttcagtaa aagagttcca 420
agccttttca ctgggagcat ttacattttg attctgttgt catttgaaat aaaacatctg 480
cnagggagat aatgagctta agttacaatt gactttggga aaaaataaca gacttttgtg 540
tttcctccat catgttatcc atanggaatc tccagttatg tgaacaatcc cagtctttta 600
agacaatact tanatctaaa tgcaaaatct ancatgcana agcttttaa ggattttaga 660
ctgtccccaa gaacttggct cgagatggga ttacccgaat tacaatgcng ttttccactg 720
gttactccaa ctgatcttat ctcattcntg ttactcactg tgcccntnga accccaaaag 780
tggaatattt tgtctcntta ttt 803

<210> 3021
<211> 639
<212> DNA
<213> Homo sapiens

<400> 3021
ttttctattt tgtacataca ttattttgta tatactgtat atgatgactt cagtgagcag 60
tgaccattgt cgaggtgctc gggaaaaacc acagatttca gcagcacaat caacgcaacc 120
acagaaacaa gtggtacagg caacagctga acagatgcgt ctcgctcaag tgatctttga 180
taagaatgat tcagattttg aagctaaagt taagcagctt atggaagtga cagggaaaaa 240
tcaggatgaa tgcatagtgg ccctacatga ttgtaatgga gatgtgaaca aagctatcaa 300
tatattgctg gaagggaatt cagacacaac ttcatgggag actgtagggt gtaagaaaaa 360
gaattttgca aaagaaaatt cagaaaacaa agagaataga gagaagaana gcgagaaaga 420
atcgagtcgt ggacgtggaa acnacaaccg gaaaggaaga ngcggcaatc gtggcagana 480
atttagaggt gaaaaaaatg gaattgattg caatcaagtg gacnaacctt cagatcgtgg 540
caagcgagcc cggggttnaa gatttggacn tggcanaagg anaagggcag gaaggttctc 600
aacccaaggc atggggacat ttaatcctgc anactattc 639

<210> 3022
<211> 585
<212> DNA
<213> Homo sapiens

<400> 3022
ttcaaaggga gacagacttt ctcaagtgtg cccactgcct tgcccccggg ccatcanatc 60
cctttgctcg cttctgtcaa gaatgtggct ctcctgtccc acccatattt ggctgtcgtc 120
tcccaccccc agaaggagct cagatgggct tgtgtgcaga atgcanaagc ttggtaccca 180
tgaacactcc catctgcgtg gtgtgtgagg cccctcttgc tctacagctg cagccacagg 240
caagcctcca cttgaangaa aaggtaattt gccgggcctg tggtacagga aatcctgctc 300
acctnaaata ctgtgtcacc tgtgaggggg ccctgccttc atcacaagan tcnatgtgca 360
gtggggataa agcccctcct ccgcccactc anaaaggggg gaccatttcc tgctacanat 420
gtggtcnctg gaatctctgg gaagcgtcct tctgcggctg gtgtggaacc atgctcggca 480
ttcctgctgg ctgttctgtt tgccctanat ntggggccan caatcacctg tctgcccgat 540
tctgtggctc ctgtggtatt tgtgtnaant ccctagtgaa actta 585

<210> 3023
<211> 464
<212> DNA
<213> Homo sapiens

0050345 "0 "0 "0 "0

<400> 3023
aattgcttcc ggggagttgc ganggagcga gggggaataa aggacccgcg agggaaaggc 60
ccgcggatgg cgcgtccctg agggtcgtgg cgagttcgcg gagcgtggga aggagcggac 120
cctgctctcc ccgggctgcg ggccatggcc acggcggaac ggaaagccct cggcatcggc 180
ttccagtggc tctcacggcc actctggtgc tcatctgcgc cgggcaaggg ggacgcaggg 240
aggatggggg tccancctgc tacggcggat ttgacctgtn cttcattttg gacaaatcag 300
gaagtgtgct gcnccactgg aatgaaatct attactttgt ggaacagttg gctcacnaat 360
tcatcaaccc acagttgaaa atgtccttta ttgttttctc caccccaaga acaaccttta 420
tgaanctgac ggaanacaga aaaccantcc ctccnggcct anaa 464

<210> 3024
<211> 840
<212> DNA
<213> Homo sapiens

<400> 3024
aaaccatgta cctcaaattg tagaattaat acttcgagaa cagtgccaat agaaacagaa 60
acatgaagtc tggggttcaa accagaacta catttgtaac acagaccctg aaactgatgg 120
cctttcacct tctgttgcct ctccaagtcc caaagaagtc aattttgttt caaggggagc 180
ttcaagtcac cagcccagag ttccactttt tcctgaaaat ggtttacacc agcagccaga 240
acccttgctt ccaaataata tgaaatctgc ctgtgaaaaa cgtttagaat gttgtagttc 300
tcctcattct aagccaaatt gctcaaccct ttctccacca atgccactgc cccagctgtt 360
accttcggtt actgatgcaa ggtcggcagg accttctgat catattgatt cctcagttac 420
tggggttcaa aggtttcgag atactctaaa aataccctac aagctggaat taaaaaatga 480
accaggggag aacggatttg aaacacattg ttatagatgg gagcaatgtt tcaattaccc 540
atggtctgaa aaagttcttt tcttgtcgtg gaattgcaat tgcagttnaa tatttttgga 600
ancttggcaa caaaaacatc nctgtatttg tccctcagtg ganaacaagg cgtgatccta 660
atgtcacaga acagcacttc ttaacccanc tccagganct cggaaatatt atctttaact 720
cctgccccgg atggtctttg ggaaaaaaaa attgcttcct catgaatgaa cagggtttct 780
actacacttn nccggaaaaa aatgggtggg nnttanttgt ttacaaaatg aataatttcc 840

<210> 3025
<211> 622
<212> DNA
<213> Homo sapiens

<400> 3025
gcggttcctc taggaaaaat tcctttgtgc agatcagggc ccgtggattg gtgagtgaat 60
cctaaccacg tcttccctgg cctgtcttca ctcttctccc cagaatcacc acttctgcac 120
tggtgtctga aggtgtattg agtgattttg tggagggcag aagtaggaag tctttgggac 180
aaaactgtat ttaccttggg atctgtgaac aagaggaacc tcagcagcca ggacaggcag 240
gagcagtgga atagctacta tggcttctgg aatcctggtt aatgtaaagg angaggtgac 300
ctgccccatc tgcctggaac tcctgacaca acccctgagc ctggactgcg gccacagctt 360
ctgccaagca tgcctcactg caaaccacaa gaagtccatg ctagacaaag gaganagtan 420
ctgccctgtg tgccggatca gttaccagcc tgagaacata cggcctaatc ggcatgtanc 480
caacttagtg gaaaactcag ggaggtcaag ttgagcccag aagggcanaa agttgatcat 540
tgtgcaccca tggaaanaaa cttctactct tctgtcanga ngacgggaag gtcatttgct 600

US 2003/0224454 A1

ggctttgtga gcggtctcan ga 622

<210> 3026
<211> 631
<212> DNA
<213> Homo sapiens

<400> 3026
gtgggggcgg ggaggaaagg cggcggcggc agtgtccaag ctacgccact cgggctgggg 60
cgttgggagc gggagtgcag aacgtggtcg tggcggcggc ggtgagaaga gcgaggcgga 120
ggagggggtg ccatggccgg gcagcagttc cagtacgatg acagtgggaa caccttcttc 180
tacttcctca cctccttcgt ggggctcatc gtgatcccgg cgacatacta cctctggccc 240
cgagatcaga atgccgagca aattccatta aagaatatca gaaaagtata tggaaggtgt 300
atgtggtatc gtttacggtt attaaaaccc cagccaaata ttattcctac agtaaagaaa 360
atagttctgc ttgcaggatg ggcattgttc ttattccttg catataaagt ttccagaaca 420
gaccgagaat accaagaata ccatccttat gaagtattaa atttggatcc tggagccaca 480
gtagcacaaa ttaaaaaaca atatcgtttg ctgtcactta aatatcatcc agataaagga 540
ggtgatgagg ttatgtcatg aggatacaaa acttatnctg ctttaaccga tnaaaatccc 600
gaaaaatttg gaaaattgga atccaatngg c 631

<210> 3027
<211> 491
<212> DNA
<213> Homo sapiens

<400> 3027
gctcagctgg tagtttgacc tccgttggtg caatgccaga natgggattg tcagccacca 60
cactgccacc accctgcaca cagtctgggt ccctccgaaa gaagcacgcc aaccttaaca 120
tcccctacag catcttggtg cttcacacac catttaggag gccaccctaa cgaggcaaga 180
ngacatgggg gtgtgcanaa nttctgttct tagtgagaat ggctggcctg agaatccagc 240
tcacctcctc tgcccacagt ctggactgct tgtgggaagg ccatctcctc ctgtctggtg 300
gtacctccac tctgggcagg ganggcctgt ctgtgactcg ctctggaccc cacttcccgc 360
tctggccaag ggctgtcttc tgtgcacata gctcaaganc ctgcagcant tccctgtatg 420
ggtggatgtc ctcaggggcc aanaanaaaa naatggggac aacagaaacc tgctttgtag 480
gggattatgt t 491

<210> 3028
<211> 711
<212> DNA
<213> Homo sapiens

<400> 3028
taatagactt tttcttatca tatccctcat ttctttccct gaaataaaaa tacacacaag 60
caaaaaaaaa tgatagtttc acatctctta gttcccttgc ccaaacaaga atattcttag 120
ttccactggc caggattttc ctacatagtc agaacttaca cattactaga ggcacaccca 180
ccaaggagta ttgtgtctac ttttatctgt gcaccagcca caaataccca cattggaaag 240
acccatttgt gatgggtaaa catcccttcc tgtctcccac aacccctgtg actgccctgc 300
atgtgttcat gacctccgaa ggcccaaatt catgaagcag caaacccagc aaatctccac 360

US 2003/0215800 A1

ccccctgcct caggacctct gctgaagang gggatgaagt gggtctccan ggaagcantg 420
ggggccttgt tggcaactct gcanttggga agggcaccgt ccggaagaaa cagncctcta 480
cacacccccc actctactta tcatccctgc tcacacaccc ttgtccaagg ctttatgcct 540
cggatttatt tttcccaatc cagaagnaca gtgatanatg cnttttcccc aggctgtctc 600
aaaaaggtcg ctcaatgtnt actgttgtca aaattgctga aatctccccc ccctttggt 660
ttttgcagca nttaaaaatc tntccactgt nacttatttc ctctctcang c 711

<210> 3029
<211> 666
<212> DNA
<213> Homo sapiens

<400> 3029
gtggcttgtg gagtggcgac cgttagtgag gcggttgctg agacagacgc tggaggcggg 60
taggaggagc ccgagccgta agggaagccg tgatgagggc cgtgttgacg tggagagata 120
aagccgagca ctgtataaat gacatcgcat ttaagcctga tggaactcaa ctgattttgg 180
ctgccggaan cagattactg gtttatgaca cctctgatgg caccttactt cagcccctca 240
agggacacaa agacactgtg tactgtgtgg catatgcgaa ggatggcaag cgctttgctt 300
ctggatcagc tgacaaaagc gttattatct ggacatcaaa actggaaggc attctgaagt 360
acacgcacaa tgatgctata caatgtgtct cctacaatcc tattactcat caactggcat 420
cttgttcctc cagtgacttt gggttgtggt ctcctgaaca gaantctgtc tccaaacaca 480
aatcaagcan caagatcatc tgctgcagct ggacaaatga tggtcagtac ctgactgggg 540
acagaaagtt tccttctacc agctgaatgg aaaacagatt ggaaaggatc gggcacagaa 600
ctttgaccct gctgcatcan ctactttact aaangcnaat tcnttttgct ggggggtcaa 660
acaanc 666

<210> 3030
<211> 669
<212> DNA
<213> Homo sapiens

<400> 3030
tattccaaca gtcatgagta caaacaggcc gtccatgagc ttgtgcgttg cgtagcactg 60
acaagaattt gctatggaga ctcacattgg aaactagcag aggcacatgt taatctggct 120
caaggctacc tccagctgaa aggactgtca ctgcaagcaa aacaacatgc agaaaaagcc 180
agacaaatcc tcgccaactc cattgtgcct ccctatagtg agaatacaga tgttttcaag 240
ttttccattg agcttttcca taccatgggc agagctttac tctcccttca aaagtatcct 300
tttgcctcta acttttacaa atagaaatac tattcacgta acacttacac gccaagtaaa 360
aagctgatgc tgatggatga cttaggaagt gtgattggaa gtatgggagc caaggaagtt 420
caggacatgg ggtgtagaat ctagaaccaa gtggaaaatt tcctgaacac aattcagatt 480
taaggaagct gcagagaatt tgacaaaagc agagagactt tcaaaggagc tgctacaatg 540
tggaagaatt atgaaggaag aatggataga aattgaagca cggatcagat tatcatttgc 600
acaggtgtat caaggtcaga agaagtcaaa agaactttgt cccnctntcc ancactttgg 660
gaatatgtt 669

<210> 3031
<211> 568
<212> DNA

0050250-0050600

<213> Homo sapiens

<400> 3031
agatttgaag gcggcgcgcg gactaagtgc gcacttcagt tctcggagag aagagcggga 60
gtggacctgg tcagccctac cccactgacc ccaccggacc caggcgcggc ctccgccaca 120
gccacagccc ctgcccctgc tgcggcgcgg cgaggcgagg cgatggccaa ggtgtcggtg 180
ctgaacgtgg cggtcctgga gaacccgagc cctttccaca gccccttccg gttcgagatc 240
agcttcgagt gcagtgaaac cctggcggac gacctggagt ggaaaatcat ttatgttggc 300
tcggctgaga gtgaggaatt tgatcagatc ctagactcgg tgctggtggg ccctgtgcca 360
gcagggaaac acatgtttgt ctttcaggcc gacgccccca acccatccct catcccagaa 420
actgatgccg tgggtgtgac tgtggtcctc atcacctgca cctaccatgg acaggaattc 480
ctcccagtgg gctactacgt ctaccacgag tttactccac cctgaactgc gtttagaaac 540
cccgccccat naaacccnna tttctccc 568

<210> 3032
<211> 671
<212> DNA
<213> Homo sapiens

<400> 3032
actcactggg gcttccttcc gtctcgctcg gagtttccct ctgcgttcgc tccgcgctgc 60
tggaggctgt cgtcccaatg ctccccaaac ggcggcgagc gcgggtcggg tcccctagcg 120
gcgatgccgc ttcctccacg ccgccctcga cgcgcttccc gggagtcgcc atctacctgg 180
tcgagcctcg catgggtcgc agccgccggg ccttcctcac aggcctggcg cgctccaaag 240
gcttccgcgt ccttgacgcc tgcagctccg aagcgacaca tgttgtgatg gaagagacct 300
cagcagagga ggccgtcagc tggcaggagc gcaggatggc agctgctccc ccgggttgca 360
ccccccccagc tctgctggac ataagctggt taacagagag cctgggagct gggcagcctg 420
tacctgtgga gtgccggcac cgcctggagg tggctgggcc aaggaagggg cctctgagcc 480
cagcatggat gcctgcctat gcctgccaac gccctacgcc cctcacacac cacaacactg 540
gcctctccga ggctctggag atactggncg aggnaacaag ctttgaaggc agtgagggcc 600
gcctcctcaa cttctgcaaa ncaacctcng tgctcaaagg ccttccagcc ctgtcacaan 660
cctgaagcaa n 671

<210> 3033
<211> 366
<212> DNA
<213> Homo sapiens

<400> 3033
aaaaagggag agaggacaag ggtgacaagt gggggtgaga gatcaaagat ggggcgggag 60
tgtgcctagg gttgtctctc catgagtgct ctccttccct actcttcctg ttccaggtgt 120
agcgtcggac catgtggaag tttctgaggc tggggagccg gataatgggg ggtggggccc 180
gttgggggt aaaggggcaa tagcttcctt tcacaagcta acctccgctc ttcccagtcc 240
tcttgactaa aatgggggaa cacattgggc ctggcaccaa tggggacttt gccccgccgg 300
agcccccgcc gagaggaacc cctgcccaac cctagggagc ttctatgagc tgcaccntct 360
ntgcnc 366

<210> 3034

0050150.0002000

<210> 495
<211> 495
<212> DNA
<213> Homo sapiens

<400> 3034
ctggaatgag gagctgcaga cgacgaggga gctgcctcgc aagaacctgc ctgagcggct 60
gctccgagaa agggccatat tcaaggtgca cagcgacttc accgcggcag ccaccagggg 120
cgccatggcc gtcattgacg gcaacgtgat ggccatcaac cccagcgagg agaccaagat 180
gcagatgttc atctggaaca acatcttctt cagcctgggc ttcgacgtcc gagaccacta 240
caaggacttc gggggggacg tggcggccta cgtggcgccc accaacgacc tgaatggcgt 300
ccgcacgtac aacgcggtgg acgtggaggg gctgtacacn ctgggcacgg tggtggtgga 360
ttaccgcggn taccgggtca cggcccagtc catcatcccc ggnatcctgn ancgggacca 420
ggagcagagc gtcatctacg gntccatcga cttcggcaag accgtggtgt cacacccgcg 480
gtacctggan ctgct 495

<210> 3035
<211> 395
<212> DNA
<213> Homo sapiens

<400> 3035
taagtaacgt cagcctgaga actgagtagc tgtactgtgt ggcgccttat tctaggcact 60
tgttgggcag aatgtcacac ctgccgatga aactcctgcg taagaagatc gagaagcgga 120
acctcaaatt gcggcagcgg aacctaaagt ttcaggggc ctcaaatctg accctatcgg 180
aaactcaaaa tggagatgta tctgaagaaa caatgggaag tagaaaggtt aaaaaatcaa 240
aacaaaagcc catgaatgtg ggcttatcag aaactcaaaa tggaggcatg tctcaagaag 300
cagtgggaaa tataaaagtt acaaagtctc cccagaaatc cactgtttta accaatggag 360
aagcagcaat gcagtcttcc cattcggaat cgnnn 395

<210> 3036
<211> 568
<212> DNA
<213> Homo sapiens

<400> 3036
ggggctggac tggcggagca ggtggggtcc gcggccgccg gagcgttccg gtcggcgtct 60
gggcatctcg gcctcggcag aaagcgcgac cgccctgctg cgcggggccc gcggcgatgc 120
cgttcctgca cggcttccgg aggatcatct tcgagtacca gccgctggtg gatgcgattc 180
tgggctccct ggggatccag gaccccgagc ggcaggagtc tctggaccgg cccagttatg 240
tcgccagcga ggagagccga atccttgttc tcactgagct gctggagagg aaagcccact 300
ctccctttta ccaggaaggc gtcagcaacg ccctgctcaa gatggctgag ctggggctga 360
cgcgggcggc cgacgttctc ttgcggcatg gggccaatct caactttgaa gacccagtca 420
cctactacac ggccttgcac atcgccgtcc tgcggaacca gccggacatg gtggagctgc 480
tggtggcatc acggggccga cgttaatcgg agggaccgga tccacgagag tagccccttg 540
gacctggcca ncnaagacct taacncct 568

<210> 3037
<211> 538

US 2005/0059005 A1

<212> DNA
<213> Homo sapiens

<400> 3037
gtaagtccag agagtttagt gtccacacct agactggaat tgaaagacac cagcagaagt 60
gatgaaagtc caaaaccagg aaaattccaa agaactcgtg tccctcgagc tgaatctggt 120
gatagccttg gttctgaaga tcgtgatctt ctttacagca ttgatgcata tagatctcaa 180
agattcaaag aaacagaacg tccatcaata aagcaggtga ttgttcggaa ggaagatgtt 240
acttcaaaac tggatgaaaa aaataatgcc tttccttgtc aagttaatat caaacagaaa 300
atgcaggaac tcaataacga aataaatatg caacagacag tgatctatca agctagccag 360
gctcttaact gctgtgttga tgaagaacat ggaaaagggt ccctagaaga actgaagcag 420
aaagacttct tctaattgca actgggaaga gaacactttt gattgatgaa ttgaataaat 480
tgaagaacga aggacctcng aggaagaata nggctagtcc cccnagtgaa tttatgcc 538

<210> 3038
<211> 483
<212> DNA
<213> Homo sapiens

<400> 3038
acgcggcggc gtgccagcct anccactcta gcgacggcgg ggaanagtgt gtacgtggtg 60
ggggcttcct cggtggcggg catggaggct tcgcgctgcc ggctcagtcc cagcggcgac 120
agtgtcttcc atgaagaaat gatgaatatg cgacaggcta ngctggatta tcagaggcta 180
ctacttgaga agaggcaaag gaaaaagcgc cttganccat ttatggtgca gcccaatcca 240
naagccangc tacgtcgggc aaagccaagg gccagtgatg agcacactcc cttggtgaac 300
tgtcatactc cccacagcaa tgtcatctta catggtattg atggtccaac tgctgtcctg 360
aaaccagacg aagttcatgc tccatcagta ngctcctctg ttntggaaga agatnctgaa 420
aacaccgtgg atnctgcttc caagccagga cttcnggagc gtctccaaaa gcatgatatc 480
tct 483

<210> 3039
<211> 534
<212> DNA
<213> Homo sapiens

<400> 3039
gatgaatgcn naggaaaagc agcttggcaa attgttatta tcaaccctta ctttgctaag 60
caagaaaact gaactgttac aagattaccc ttgaaatgtc taccacaaaa tgttggtttc 120
tataaaaagt ttggatatac tgtatctgaa gaaaactaca tgtgtcggan gtttctaaag 180
taaaaatctt gtacgaaaat tgtcaaaggg gctaatgcta caangctaca ctcttcctaa 240
anttgaaata ttttgttgct gcagccgant gacctccata aatactggac tgaaaaaacn 300
ttgtaatact acnagtataa tgacntttaa aaaattactt tgggctggtg ggacatgctg 360
tgaatttaga ttacnaatga atattataaa ggggatgatt tttaaccnaa ggaatatatt 420
tttaacttga atcttttcct gcattgtatt tttctaaaan tttggcttcc tttcttggta 480
atccanaatt tgggttataa nganttatat gtctgctatc tgtgttgctc nttt 534

<210> 3040
<211> 593

0503703.0703800

<212> DNA
<213> Homo sapiens

<400> 3040
gcgaggcccg gtccctgcag cgggcgaaag gagcccgggc ctggaggttt gcgtaccggt 60
cgcctggtcc cggcaccagc gccgcccagt gtggtttccc ataaggaagc tcttcttcct 120
gcttggcttc cacctttaac ccttccacct ggggancgtc ctctaacaca ttcagactac 180
aagtccagac ccagganagc aaggcccana aagaagtcaa aatggggttt atattttcaa 240
aatctatgaa tgaaagcatg aaaaatcaaa agganttcat gcttatgaat gctcgacttc 300
agctggaaag gcagctcatc atgcanagtg aaatgaggga aagacaaatg gccatgcana 360
ttgcgtggtc tcgggaattc ctcaaatatt ttggaacttt ttttggcctt gcaccatctc 420
tttaacagct ggagcgatta aaaaaaagaa nccagccttc ctggtcccga ttgttccatt 480
aagctttatc ctcccctacc antatgactt gggctatgga acccttttan aaagaatgaa 540
aggtgaanct gaagacattc tggaaacaga aaanaattta ttgcngctgc caa 593

<210> 3041
<211> 689
<212> DNA
<213> Homo sapiens

<400> 3041
gaaaagctag tgaggggcgg ggcaggcggc gcggtggggg cgggccgagc ccggaggcca 60
gatgagcgga cacagcccca cgcgcggggc catgcaggtg gccatgaacg gtaaggcccg 120
caaagaggcg gtgcagactg cggctaagga actcctcaag ttcgtgaacc ggagtccctc 180
tcctttccat gctgtggctg aatgccgcaa ccgccttctc caggctggct tcagtgaact 240
caaggagact gagaaatgga atattaagcc cgagagcaag tacttcatga ccaggaactc 300
ctccaccatc atagcttttg ctgtaggggg ccagtacgtt cctggcaatg gcttcagcct 360
catcggggcc cacacggaca gcccctgcct ccgggtgaaa cgtcggtctc gccgcagcca 420
ggtgggcttc cagcaagtcg gtgtggagac ctatggtggt gggatctgga gcacctggtt 480
tgaccgtgac ctgactctgg ctggacgcgt cantgtcaag tgccctacct caggtcngct 540
ggagcagcaa ctggttgcac gtggagcggc ccattcttcg catcccacaa cctgggcatc 600
catccngcag cnanatatca acnaagaaat ttggggccaa cacagagatg catctaagtc 660
ccaattcctt gccnaaaagc atccaagga 689

<210> 3042
<211> 657
<212> DNA
<213> Homo sapiens

<400> 3042
agagagagag gaatcggacg tgggcgaggg gcggggtgtc tggactggaa cctctgggcc 60
cacatgccat ggacaatatt accaggcaga accaattcta cgatacccaa gtcatcaaac 120
aagaaaacga gtcaggctac gagaggagac cactggaaat ggagcagcag caggcctatc 180
gtccagaaat gaagacagag atgaagcaag gagcacccac cagcttcctc ccgcctgaag 240
cttctcaact caagccagac aggcagcaat tccagagtcg aaagaggcct tatgaagaaa 300
accggggacg ggggtacttt gagcaccgag aggataagag gggccgctct cctcagcctc 360
ctgctgaaga ggatgaagat gactttgatg ataccettgt tgctattgac acctataact 420
gcgacctcca cttcaaggtg gcccgagatc ggagtagtgg ctatccgctc acaattgagg 480

0956f69 · 07/22/09

gctttgcata cctgtggtca ggagcccgtg ccagctatgg ggtcagaang ggccgtgtat 540
gcttcgagat gaagatcaat gaggaaatct ccgtgaagca cttccgtcta cagagcctga 600
cccccacgtg gtccgtatcg gctggtccct ggactcctgc aacacccann cttnggc 657

<210> 3043
<211> 526
<212> DNA
<213> Homo sapiens

<400> 3043
gtacgtggcg cgcgggtccg gcgggcggtt ggcttgagcg ggaccggagc tgaggcagga 60
agagccggcg ccatggtgga gaaggaggag gctggcggcg gcattagcga ggaggaggcg 120
gcacagtatg accggcagat ccgcctgtgg ggactggagg cccagaaacg gctgcgggcc 180
tctcgggtgc ttcttgtcgg cttgaaaaga cttggggctg aaattgccaa gaatctcatc 240
ttggcaggag tgaaaggact gaccatgctg gatcacgaac aggtaactcc agaagatccc 300
ggagctcagt tcttgattcg tactgggtct gttggccgaa atagggctga agcctctttg 360
gagcgagctc agaatctcaa ccccatggtg gatgtgaagg tggacactga ggatatagag 420
aagaaaccag agtcattttt cactcaattc aatgctgtgt gtctgacttg ctgctccann 480
gatgtcatag ttnaagtgga ccagatctgt cacaaaaata gcatca 526

<210> 3044
<211> 510
<212> DNA
<213> Homo sapiens

<400> 3044
gtgctttccc aagcctggaa naatcgtcat gctctttgta gcgtggtgct tctgttgctc 60
acagangtgc ctgcttcccc ttctgccatg attggaagtt tcctgaggcc tccccagcca 120
tgtggaactg acaacttgcc tttgatgatt ttcaaganag ttgtgctatg atgtggcaaa 180
agtatgcagg aagcaggcgg tcaatgcctc tgggaacaag gatccttttc cacggtgtgt 240
tctatgccgg gggctttgcc attgtgtntt acctcattca aaagtttcat tccagggntt 300
tatattacaa gttggcagtg gancagctgc agaaccatcc cgangcacag gaagctctgg 360
gccctcctct caacatccat tatctcaagc tcatcgacag ggaaaacttc gtggacattg 420
ttgatgccna gttgaaaatt cctgtctctg gatccaaatc agaaggcctt ctctacntcc 480
actcatccan aagtggcccc tttcnnaagt 510

<210> 3045
<211> 602
<212> DNA
<213> Homo sapiens

<400> 3045
aaaaaaaaaa aaaaaaagag cctggggccc aggactgcag cggcttcgga aggtgggctc 60
tgccagcggg accatgctgc tccgagccgc ttggaggcgg gcggcagtgg cggtgacagc 120
ggctccaggg ccgaagcccg cggcgcccac tcgggggctg cgcctgcgcg ttggagaccg 180
tgctcctcag tctgcggttc ccgcagatac agccgctgcc ccggaggtgg ggccagtgct 240
gcgacctctc tatatggatg tgcaagctac aactcctctg gaccccggg tgcttgatgc 300
catgctccct tacctaatca actactatgg gaacccacac tcccggacac atgcttatgg 360

0050050-0050050

ctgggagagt gaggcagcca tggaacgtgc tcgtcagcaa gtagcatctc tgattggagc 420
tgatcctcgt gagatcattt ttactagtgg tgctactgaa tccgacaaca tagcaattaa 480
gggggtggcc cgattctaca ggtcacggaa aaagcacttg atcaccaccc agacagaaca 540
cnaatttttc ttggactcct gccgttccct ggaaacttaa ggctttcang tccctncctc 600
cc 602

<210> 3046
<211> 607
<212> DNA
<213> Homo sapiens

<400> 3046
ttatgtatac tcaacattgt cttttctcca ttcgtgttgg tcatcatagt tttttctaca 60
ctactctctt ctcccttact ccctcttttc acccttcctg tgttcttggt ggggtttccc 120
cgacctattc agagttggcc aggagcagca ggcaccacag cctgtgtgtg tgcagataca 180
gtgtactact accaaatggt gcccaggttg actgctgtac tgcagactgc aatggcagct 240
ggaagtttag gtctcctcct acctggatct cattacttgg gccgttttca ggatcgttta 300
atgtggataa tgattctgga atgtggctat acttactgct ctattaacat taaggggtta 360
gaattgcagg aaacatcctg tcatactgca gaagctcgca nagttgatga agtttttgaa 420
gatgctttg aacaanaata cacaagagta tgttccctta atgaacactt tggaaatgtc 480
ttgacaccct gtactgtttt gcctgtgaaa ttgtattctg atgccaggaa tgttctatca 540
ggcataattg atctcatgaa aactttaaaa naatttaaag gtgaactcat taaantacnt 600
gtgtgga 607

<210> 3047
<211> 495
<212> DNA
<213> Homo sapiens

<400> 3047
gcgggggctg aggggctgcc atggcggcgg cgggccggct cccgagctcc tgggccctct 60
tctcgccgct cctcgcaggg cttgcactac tgggagtcgg gccggtccca gcgcgggcgc 120
tgcacaacgt cacggccgag ctctttgggg ccgangcctg gggcaccctt gcggctttcg 180
gggacctcaa ctccgacaag cagacggatc tcttcgtgct gcgggaaaaa aatgacttaa 240
tcntcttttt ggcagaccan aatgcaccct attttaaacc caaagtaaag gtatctttca 300
agaatcacag tgcattgata acaagtgtan tccctgggga ttatgatgga aattctcaaa 360
tggatgtcct tctgacatat cttcccaaaa attatgccaa naatgaatta ngaactgtta 420
tcttctgggg acaaaatcaa acattatatc ctaacaatat gaccatactc nataagactt 480
ttcaanatna ccact 495

<210> 3048
<211> 659
<212> DNA
<213> Homo sapiens

<400> 3048
cattactana aagaatctta caaacaaagt tgaaggatat agtttctttg gtcccacgcc 60
tgcggcacat catcactgtt gatggaaagc caccgacctg gtccgagttc cccaagggca 120

US 2002/0150909 A1 OCT 17 2002

tcattgtgca taccatggct gcagtggagg ccctgggagc caaggccagc atggaaaacc 180
aacctcatag caaaccattg ccctcagata ttgcagtaat catgtacaca agtggatcca 240
caggacttcc aaagggagtc atgatctcac atagtaacat tattgctggt ataactggga 300
tggcagaaag gattccanaa ctaggagagg aagatgtcta cattggatat ttgcctctgg 360
cccatgttct anaattaagt gctgagcttg tctgtctttc tcacggatgc cgcattggtt 420
actcttcacc acagacttta gcagatcagt cttcaaaaat taaaaaagga agcaaanggg 480
atacatccat gttnaaacca acactgatgg cagcagttcc ggaaatcatg gatcgggatc 540
tncaaaaatg tcatgaataa agtccgtgaa atgaatantt ttcaccgtaa tctgtttatt 600
ctgggcctat nattaccaaa tggaacanat ttcaaaanga agttntactc cactgttgc 659

<210> 3049
<211> 728
<212> DNA
<213> Homo sapiens

<400> 3049
ttcaaatgtg atgagtgcgg aaaggccttc agtcagagta cgagcctctg catccaccag 60
agagtccaca caaaggagag aaaccatctc aaaatatcag ttatataaaa cgttttgcta 120
agagtttaaa atcttaaaac ccataagtgc cactaggaag gaaaccctgt atatacctac 180
attgacccaa gaaatattta cgcaatccct agcagaacat tgtttctgag gaggcatatg 240
tgagattgat ttgttggttc atgccaagtg tgttccacag gttgactttg aatgtggacc 300
tctgagcatc cacgcaggat ggctctcagg tcccagtcac agacgtcgct tcctgggatt 360
ccagcacgat gcctccatag ttgaaagact acacaaaaag ccacaatcat tgcccggcct 420
cctgagtcac cttctatcta tactttgctt aaaagctatc ccagatactc ccccttgggg 480
agctcatgcc cttccttcct ctttattcga gcatactggc aatgcattgg gaaaacagac 540
agctcccact aagatcacgt tctggtattt ctgaagttaa cacttgattt agcccctaca 600
tatctttcca tatatcctat tatttctgaa tatatgtcct ccaaatcccc ataaatatcc 660
ntcccttcct anatnggctt taactttcat tttaaatttt aggtgactcn taattcccat 720
tcccttng 728

<210> 3050
<211> 602
<212> DNA
<213> Homo sapiens

<400> 3050
tttacaagga tctaaaagga acaggattaa agatgactga atactgggtt ccagaaattt 60
aaaacaatca gcttagcaaa tcatatattc ttctgtggag ctgagaattg atgtccgctc 120
ttccccgtga tttggaactt tccaatccca gagaaaagtt gacaaaggga ctgcccagga 180
ctgagtccat atggaagaag aacttcctct tttctctgga gacagtggca agccagtaca 240
ggctactctg tcatctttga agaagttaga tgtgggaaag tggccaattt tttccctttg 300
ttctgaagaa aaactacagt taattcgtca ggcttgtgtc tttggcagtg ctggcaatga 360
agttttatac actacagtna atgatnagat ttttgtgctt ggcacaaact gctgtggctg 420
tttggggtta ggtnacctcc agagcaccat tgaacctcgg anactggatt ctttanatgg 480
caaaaaaata ccctgcctca gctatgggan tggtccacat attgtccttg cacaacagaa 540
ngaaaatctt tacctggggt cctaatgctt atacccgctt ggccatggng acaactantc 600
nt 602

09/25/2006 09:56:56 AM

<210> 3051
<211> 670
<212> DNA
<213> Homo sapiens

<400> 3051
acttgtaaac attcctatga ttgttactaa aatgtatttt catgtttaaa atgtttttgg 60
atattttggg ttaataacta ctacattgaa ttgcatgtta aggtgcanaa ataatacatt 120
aaaagatttt cactttaaat taattagtaa tattgagcgc tcaccctgtg cgtggccttg 180
tgctaaccat tagcactgca tcatttcaat tcttttataa gggcattcaa tactacaaaa 240
tcaacatgat ttcataaggt gcaaataaaa gttggtgaca gatttaatat aattttgatc 300
acaatttaca aatgatcttt gcaaatagtg gtcagacggc attagttttt cccttagtta 360
agctaaatta aagggactcc ctcctgttat gattatatta ttattattat tattattatt 420
tttgaggtgg agtttcactc ttgttgccca agctggagtg caatggcgcg atctcggctc 480
accacaacat ccgcctcctg ggttcaagcg attctcctgc ctcagcctcc tgagtatctg 540
ggaatacang catgcgccac tacacctggc taatttttgt atttttagtt ganatngggt 600
tttccacntt ggtcaggctg gtctccaaac tcctgacctc aggtgatncc gtccacctca 660
ncctcccaaa 670

<210> 3052
<211> 626
<212> DNA
<213> Homo sapiens

<400> 3052
tgtgaagtca actttatccc agacagttcc atccaagggg agaattaagt agagaaattt 60
gtctgcaatc tcaatctaaa gacaaatcta cgacaccagg aggaacagga attaagcctt 120
tcctggaacg ctttggagag cgttgtcaag aacatagcaa agaaagtcca gctcgtagca 180
caccccacag aacccccatt attactccaa atacaaaggc catccaagaa agattattca 240
agcaagacac atcttcatct actacccatt tagcacaaca gctcaagcag gaacgtcaaa 300
aagaactagc atgtcttcgt ggccgatttg acaagggcaa tatatggagt gcagaaaaag 360
gcggaaactc aaaaagcaaa caactagaaa ccaaacagga aactcactgt cagagcactc 420
ccctcaaaaa acaccanggt gtttcaaaaa ctcagtcact tccagtaaca gaaaaggtga 480
ccgaaaacca gataccagcc naaaattctn gtacagaacc taaagaagtg atacgtgaaa 540
ttgagatgaa tgtggatgat gatgatatcc atagttcgaa agttattnat gaactcttcn 600
gtgatgttct anangaangt gaactt 626

<210> 3053
<211> 483
<212> DNA
<213> Homo sapiens

<400> 3053
aggaatggaa gtgaggagag aggagaggag aaggggacca gctctccgga ctatcggcac 60
taccttcgaa tgtgggccaa ggagaaagag gctcagaagg agacgattaa ggatcttccc 120
aagatgaacc aggagcagtt catttgagct gtgcaagacg ctttacaaca tgttcagtga 180
agaccccatg gagcaggacc tgtnccacgc catcgccacc gtggccagcc tcctgctccg 240
catcggagag gtggggaaga agttctcagc ccgcacaggc aggaagccca gggactgtgc 300

US 2003/0224361 A1 Dec. 4, 2003

cactgaggag gacgagccac cagcacccga actgcatcag gacgcancca ggggagcttc 360
nnccccccagc tgcaggagac ccccaagcca aagcaggcgg agacacaccc ctcggaacag 420
ccccacagga aaaccangtt gtggtggaag ggggcancng cnaaggacan ggctcaccct 480
ccc 483

<210> 3054
<211> 411
<212> DNA
<213> Homo sapiens

<400> 3054
gactgcagag ccggggctgg gctangcgcg cgcttggaga gcattgcgcg cggctgggcc 60
cgcggccggc ggctcctcct cccactctgc tcctcctctt ttttctcctc ctccgcctcc 120
tcctccgcct cctcctcctc ctcttcctcc tcctcttcaa ttctcccggt ggctcgactc 180
ggctcgcagg cttcggagaa acccctactc cagtcgccga ctcagcgccc aagagggtcg 240
ccttgggctg ggggcgcacc ccagggaggg gaggggtcca ggcagctggg ccgccgcgga 300
cacctagcgg cttcagggtt aatcccgacc gcagccgtcg ccgcctcggg canattttgc 360
gcccttgctt tgcgccccgg gcgctgaagc cgggcgggcg attttnactg n 411

<210> 3055
<211> 514
<212> DNA
<213> Homo sapiens

<400> 3055
ttttacaaaa cgctctcctt gttgaagaag aaggaccccc gcatttatca gaaagatgcc 60
accttctata acagaacagc atcgtcatca gacagtgagg aggacccaga agccttggag 120
aagcagaaga aagtgcggcc catgtacctn aaggactacg agaggaaggt tatcttggag 180
aaggcaggca aatatgttga tgaggagaac tcagacgggg agacttccaa tcacagactc 240
caggagacat cgtcgcaaag ttatgtggag gaacagaaac agctcaagga aagcttccgg 300
gcatttgtgg aggacagtga ggacgaggac ggcgctgggg agggcggctc cagtttgctg 360
canaaacgtg ccaaaaccag gcaggagaag cccaggagga ggccgactac atcgagtggc 420
tgaagggaca gaaagagatt cggaacccan attccctgaa ggaactgacg cntctcaagg 480
aatactggaa cgaccctnaa ttggatnaan ggga 514

<210> 3056
<211> 527
<212> DNA
<213> Homo sapiens

<400> 3056
caatgttccc gagcctgatg gacatatcat atcaccactg ttggcaggat tttatatgtt 60
ttggaccatg atcattttgt tacaggtctt gattcctatt tctctctatg tttccatcga 120
aattgtgaag cttggacaaa tatatttcat tcaaagtgat gtggatttct acaatgaaaa 180
aatggattct attgttcagt gccgagccct gaacatcgcc gaggatctgg gacagattca 240
gtacctcttt tccgatnaga caggaaccct cactgagaat aagatggttt ttcgaagatg 300
tngtgtggca ggatttgatt actgccatga anaaaatgcc aggaggttgg agtcctatca 360
ggaagctgtc tctgaagatg aagattttat agacacagtc ngtggttccc tcagcaatat 420

US 2005/0260666 A1

ggcaaaaccg anagccccca gctgcaggac agttcataat gggcctttgg ggaaataagc 480
cctcnaatca tcttgctggg anctctttta ctctnggaag tgganaa 527

<210> 3057
<211> 572
<212> DNA
<213> Homo sapiens

<400> 3057
aataaagcta agctgcgtgg gtaacttctt tttagttata taacagagtg ttatatgatt 60
ttttatgttc acctgctaag aacatatacg tttgaaatgt gtgatattgt taacgtttnn 120
ccttgagaag atatatggaa tagatcttac gatcccattt tgatctgttt cttgcagaat 180
gcagttcttc atgttcagtt caattaaaag atgtttgaaa tggtctaatc tggctggcct 240
ctttggagca atgagcgttt gttttgttga atgagggact gaatgatgat ttagttactc 300
agctaatcta gtgtcctgag aaaaatgtga gttgttattg cctctgaaga gtaaacggtt 360
cactactgct gttccagaat gtttggactt aagacagttt gttgagagag atagaagatt 420
tggttaggtt tagactttcc acctgccggc tcgcattaac agcagtgagg gtggcgagga 480
ctgccttatt tggcgcgctc ccnatgttcc aggcacactg ctttggtgct ttaanangct 540
gcttcacgta atctccccng cagcctcaga na 572

<210> 3058
<211> 487
<212> DNA
<213> Homo sapiens

<400> 3058
ggactgagca ccttcgactt ccgcacgggc aagatgctta tgagcaagat naacaagagc 60
cgccagcgcg tgcgctacga ctcctccaac caggtcaagg gcaagcccga cctgaacacg 120
gcgctgcccg tgcgccagac ggcgtccatc ttcaagcagc cggtgaccaa gattaccaac 180
caccccagcn acaaggtcna gagcgacccg cagaaggcgg tggaccagcc gcgccagctc 240
ttctgggana agaagctgag cggcctgaac gccttcgaca ttgctgagga gctggtcaag 300
accatggacc tccccnnggg cctgcagggg gtgggacctg gctgcacgga tganacgctt 360
ctgtcggcca tcgccagcgc cctgcacact agcaccatgc ccatcacggg acagctctcg 420
gccgccgtgg aaaanaaccc cggcgtatgg ctcaacacca cgcancccct gtgcnaagct 480
tcatggt 487

<210> 3059
<211> 530
<212> DNA
<213> Homo sapiens

<400> 3059
agcgaccgaa ctctggcggt ggtggttaag acggcnaagg cggcagcggc ggcnacagct 60
ctggggtttg cgtctcgggg tgtgtcggcc gccgctgctg cttgggcctg gtatgtacag 120
atggctggtt aggattctcg gcaccatttt ccgtttctgc gaccggtcgg tgccccctgc 180
ccgggccctc ctgaagaggc ggcgctcaca cagcactctg ttttctacag tggacactga 240
tnaaatacca gccaaaagac caagattaga ttgctttatt caccaagtga aaaacagtct 300
ctacaatgct gccagcttat ttggattccc attccagctg accacaaagc ccatggtaac 360

0956203.0720000

ttctgcttgt aatggaacac ggaatgtggc cccttcagga naggtatttt cgaactcttc 420
atcttgtgaa ctgacaggtt ctggatcctg gaaacaacat gctnaaactg ggttataaat 480
ctcctaatgg aataagtgac tatccnaaga tcagagtgac agttncccca 530

<210> 3060
<211> 575
<212> DNA
<213> Homo sapiens

<400> 3060
gatccggaag tcggagccta gctgcgcgag agtttctgct cgctcaaccg agttgtcgtg 60
ttgccctcgc ttctcagatc cccgccggaa gtgaagagag caagcagatt tgaacctatc 120
tgctttcaag ctggtcatca tgatgaaact tagacacaaa aataaaaagc caggtgaagg 180
ttccaagggc cacaagaaga taagttggcc ctaccctcag cctgcaaagc aaaatgggaa 240
gaaagcaacc tccaaagtgc cctctgcacc tcattttgtt caccccaatg atcatgccaa 300
tcgagaggct gaattaaaga agaagtgggt tgaggagatg agggagaagc agcaagccgc 360
ccgggagcaa gaaagacaaa aacgcaggac cattgagagc tactgtcagg atgtcctaag 420
acgccaggag gagtttgagc ataaggagga agttttgcag gaattaaata tgtttcctca 480
gctggatgac gaggccacga ggaaggctta ttacaaggag ttccgtaagg tggtggaata 540
ctctgatgtg attctggaag tcctggatgc ccnnn 575

<210> 3061
<211> 704
<212> DNA
<213> Homo sapiens

<400> 3061
aattttcacn tatttccttc aacgtccaca gctgaatcct caccagctgc taatgtttct 60
gtaatggatg gaaagatgca accaaacagc tttccgtggc agtccccttt accatgcagc 120
aatagcctcc ctgcaacgtg cacaactggc cagagtaaag tggcagcctg gttacaggac 180
tcggaagaga tggacaggtg tgcagaagat cttgcacatt gccagtcaaa ccttgtggaa 240
cttagcaaac tcctgcaaaa tttggaaata cttcaganaa ctcagtcagc acctaacttt 300
actgacatgc aggctaactg tgtanatatt tcaaagaaag acaagcgggt cacaagacga 360
tggagaacaa aaggtgtcag caaagataca aaaatacaac tgcaggttcc tttcagtgct 420
accatgtcac cagttcgctt gcattcctcc aaccccaacc tttgtgcaga tattgaattt 480
cagactcccc ctagccacct cactgaccct ctggaaagtt caacagatta tacaaagctg 540
caagaanaat tttgtctaat ccgcacagaa aagtttggnc cnatttttc cctccttttt 600
ttggaaaagt tctgccattt aaataagcca tangctatta gaaaaaggag aagctgaaag 660
ccaanatggt ttccgaagca ggatcacant taaaanggcc acan 704

<210> 3062
<211> 465
<212> DNA
<213> Homo sapiens

<400> 3062
ctctggcngg tggcggtgtt gaaggcgaaa gcttgcttgg cccgtgtcgc ttctgtccca 60
agaaccggac ggagagtgag ggcacgaggg tcgctgtcgg gggctgtcgt cttccacgta 120

cacgtcgtcg tgaggagcgc agtccggact cttcccgcaa cccctccggc tccctttccg 180
cacgcctcga ggcggcggcg gccaccgaga cagcagcgca ccttccccca tcccttcccc 240
ttatccccca gcccaaaagg gcccggtctg cgccccaccc ccgcccgtcc gcccgctacg 300
ccgccgccat gtcggcgcan gcccanatgc gcgcgatgct ggaccagttg atgggcacct 360
cccgggacag anatacaact cgtcaacgaa tcnaattcag tgatgacaga gtatgcaana 420
ntcaccttct caactgttgt cctcatnatg tcctttctgg aacta 465

<210> 3063
<211> 684
<212> DNA
<213> Homo sapiens

<400> 3063
cttccgggga ccaggcccgc ttttggctgc atcagccggg gattgccggc gccaggcatc 60
tgcatctggg accgacctcc tgggctggct gatcaaagag gaagcagcag caatgtctgc 120
tgtgggggct gcaactccat acctgcatca tcctggtgat agtcacagtg gccgagtgag 180
tttcttgggg gcccagcttc ctccagaggt ggcagcaatg gcccggctac taggggacct 240
agacaggagc acgttcagaa agttgctgaa gtttgtggtc agcagcctgc agggggagga 300
ctgccgagag gctgtgcagc gtcttggggt cagcgccaac ctgccggagg agcagctggg 360
tgccctgctg gcaggcatgc acacactgct ccagcaggcc ctccgtctgc cccccaccag 420
cctgaagcct gacatcttca gggaccagct ccaggagctc tgcatccccc aagacctggt 480
cggggacttg gccagcgtgg tatttgggag ccagcggccc ctccttgatt ctgtggccca 540
ncagcagggg gcctggctgc cgcatgttgc tgactttcgg tggcgggtgg atgtacaatc 600
tccaccagtg ccctggctcg ctccctgcan ccgagcgtcc tgatgcactg aaactttcag 660
atgggtccnc atnccgcttt tgaa 684

<210> 3064
<211> 693
<212> DNA
<213> Homo sapiens

<400> 3064
ggaaaaaaat gagagacctc tgcctacaaa acctcaaacc agtcactttt gtcaattgct 60
aatacccagt tacttatgat ttaaaaacaa ccaacagaaa acatcccact gactgtatgg 120
cactctatag tcaaaaaagg aaacttcctt attgggactt ttctttctta gtccagttgt 180
gttgacacat atgaacacag acaaagtgct atgcgganga aagcaagtgt tggtcagtag 240
tttcatgttt tagggagtgg ttcctgtgga natcagaaag tgacatttgc tttcggtact 300
gtaatacgtg caccaaactg cctcaatcct aggtaacgag ggcaacaggg agcacctgtc 360
tggattgttt ttaaacctcc atactcaagc tgtctcttcg gcagggangt gaatactctt 420
gaaaggccaa cancaagtgt ttgtgggaca caacacagat aatttttttct taagtcggcc 480
aanatgtact tctctgtgtg cacacccatg cacactcatg cacacagata catangtctg 540
tatggctgta tttgctgttg attcanactt tcacaccatt aatggggaaa agcgtggnca 600
caaaaacana tgctaggaan cttggcttcc tcttcttgtt gacctttttt gaaccaacct 660
ctttttttatt atattcanaa tatgttttta ant 693

<210> 3065
<211> 516
<212> DNA

0956304.0937300

<213> Homo sapiens

<400> 3065
gtccggcgcg cagagganga ngagaaagct gaccgcttag gcccgggtag tggtcgtcgt 60
ggttttcctt gtagttcgtg gtctgagacc aggcctcaag tggaaacggc gtcaccatga 120
tcgcacggcg gaacccagaa cccttacggt ttctgccgga tgaggcccgg agcctgcccc 180
cgcccnagct gaccgacccg cggctcctct acatcggctt tcttgggcta ctgctccggc 240
ctgaattgaa taacttgatc cggcggaagg ccaatcccna acgggtggtt tgcatcccca 300
gcttctatat atttacnggc ctttttttt ggctgggaat attatccttg ttaaaacttt 360
aaaaactaac ctgttttgct ttgaagggaa ccgtgaaatt tttgggaata ttttgaaatt 420
tccttcccan aaggaatttc cctgaaaaaa aaataanaaa acctttttgtt gaaatttttt 480
aaaaattccc nnccattcct ttaaattntc caaatt 516

<210> 3066
<211> 882
<212> DNA
<213> Homo sapiens

<400> 3066
tacaccacat gcagtttaca tctgtcttaa ctactccttc ccaggtaaat tccaattata 60
tttgacatcc agctaagang gcccatctct tctcacctct ttcctagtca gtatattcag 120
caaatattta ttgagccctt actgtgggca aatcattgta ctggataatt gagaaaaata 180
gataattccc ttattcagta aatgtctact gagcacaatc tagtgaatca ttacagtatg 240
gcctcattgt tttgtttgag gtgtgttatt cataacaata ttttacacca ttcgtatcaa 300
tgtaattata gaacacaata tacgatcaag gataagtaat tgtgtggtta tctgccattt 360
aaaagtatcc agtatttgat cacattatta tatataatga aaaaatgatt taatctgtaa 420
taaactggtt tattgtgcag tgactgtaat atactaaagt tataataaat tgtttactct 480
gcctcaccaa acacatgcta ggatataacc cccaaaataa gtatttaact ttgcattagg 540
tataaagnga nactgggtgc tataattaaa ttattttgag gcagacagaa anctgttatc 600
ctaactgatt taatatgttc tgtaattgaa aaaatgttca ccaaattata ctttttagtg 660
atttacatgt tacattttat aggggacatg ttctgtttnt anccaataaa taacttttat 720
agtatcacaa aatgtttttg gatccctaat ttcttattaa gaatatgaag tttcttacct 780
ataccttgat tnctcccatt tgaatttgtc nctttttgcc acatacttaa acnttccatt 840
ttaaaattaa ctaaaaatcc tggaaattga anttnaacct tt 882

<210> 3067
<211> 482
<212> DNA
<213> Homo sapiens

<400> 3067
ggaagggcgg cgcgcttagg caggcggtgg cgcggctgga gtgccgcggg gagggctgtg 60
ccggttgctt tctgcagccg catctcggcc agctctcctc gccgtccccg gggcgctgtg 120
cgtctccagt ccgggaccga agccgcctgc cgtagcgggc ggccanatcc gcgtcccgcc 180
tcagcggccg gaggacatgc gggagagaga atgagccaga gggacacgct ggtgcatctg 240
tttgccggan gatgtggtgg tacagtggga gctattctga catgtccact ggaagttgta 300
aaaacacgac tgcagtcatc ttctgtgacg ctttatattt ctgaagttca gctgaacacc 360
atggctggag ccagtgtcaa ccgagtnntg tctcccggac ctcttcattg cctaaaggtg 420

0956469.0702800

atcttggaaa aagaagggcc tcgttccttg tttanangac tangccccaa tttagtgggg 480
gt 482

<210> 3068
<211> 664
<212> DNA
<213> Homo sapiens

<400> 3068
gtataaatcc cagctgatcc gcggcttatt agagaacaac ctgggagaac ccatagagga 60
atttatgcgg ccttatgatt tacaagatcc aagaattcat actgtcctga gtggagaagt 120
gtacacctgt atgtgcttcc tcattgatat ggtgaatgta agtctggagc ttaaagatcc 180
aaaaagaaaa gaaggtgctg ggtccctagc cagatttgac ttcaagaaat gcaaactgct 240
ctatgaaagt ttttccaacc aaaccaagtc cattaacttg gtttcccatt ccatgatggc 300
ttttgacacc cgttatgctg ggcagaagac cagccctggc atgacgaatg tgttcagctg 360
tatctttcag cccgctaaga acagcagcac cacccaaggg tccattcaga ttgaactaca 420
tttcagatct accaaggatt cctcctgctt tacagtagtt ctcaacaatc tccgtgtgtt 480
tctcatattt gactggctac tgttagtcca tgattttctc cacactccca gtgatattaa 540
gaaacaaaat catgttactc cttctcgcca ccgtaactct agcagcgaat ctgctatagt 600
tcccaaaact gtgaagantg gantanttac caagcggtct cccttcctgt gttcaatgaa 660
aggc 664

<210> 3069
<211> 744
<212> DNA
<213> Homo sapiens

<400> 3069
aaagctagtt gagagagcat actctggttt ttcatctctc acagtagtca aagaagttac 60
atatacaatt agaatttgtt gtttctgttg ccagaaactc aatacaattt gtcacatcag 120
gaaaggtttt ttgttgttat tgttgttgtt tttgagacgg aatttcactt cactcttgtt 180
gcccaggctg gagtgcaatg gcgcgatctc ggctcaccac aacccccacc tcccaggttc 240
aagcgattct cctgcctcag cctcccaagt anctggaatt acaggctttg tcactacgcc 300
tggctaattt tgtattttta gtagagatgg ggtttctcca tgttggtcct gctggtgtcc 360
aactcccaac ctcangtgat ccgcctgcct cagcctccca aagtgctgcg attacaggcg 420
tgagccactg cacctggccc aggaaaagtt ttttacatac gaattaaaga tgcttcttta 480
tgcaaatttt taaaccccag gtttgaagta ggataaaagg taacattaaa tctganatca 540
tttctagctc tggaattctg tgattgtaat gantttttgat ttctaaatgt tttttccttt 600
cataatttca gggttagtca gcaacataaa ntccncctaa tgacagcaga naacttatcc 660
atctgttttt gggccacctt tgaagaaaac tgattttgaa aaatcganan tttctgtcta 720
ctactaaaaa tcctcnntct gttg 744

<210> 3070
<211> 740
<212> DNA
<213> Homo sapiens

<400> 3070

WO 2005/003300 PCT/US2004/020913

gtgcgtacgt gcgtcgtctc tatggtggcg gcggatttgg agggacccta cgaaccagga 60
gtcaggcgag ccgatctggg gctgcaggat gttccgctgg gagcgctcca ttcccctgcg 120
aggctcggcc gccgccctgt gcaacaacct cagtgtgctg cagctgccgg ctcgcaacct 180
cacgtatttt ggcgtggttc atggaccaag cgcccagctt ctcagcgctg ctcctgaggg 240
tgtgcccttg gcccagcgcc agctccacgc taaggagggt gctggagtga gtcccccact 300
tatcactcag gtccactggt gtgtcctccc cttccgagtg ctgctggtac tcacctcaca 360
tcgaggaata cagatgtncg agtccaatgg ctacaccatg gtctactggc atgcactgga 420
ctctggagat gcctccccag tacaggctgt gtttgcccgg ggaattgctg ccagtggcca 480
cttcatctgt gtgggaacgt ggtcaggccg ggtgctggtg tttgacatcc cagcaaaggg 540
tcccaacatt gtactgaacg angaactggc tgggcaccan atgccaatca cagacattgc 600
caccgaacct gccccaagga acaggattgt gtggctgaca tggtgacngc aaataactcc 660
aggcttgctt ttgtttctgg cggtccaggg ncaaaaattc ncanttattg aaccccattn 720
ccaagaattt gggaatttcc 740

<210> 3071
<211> 725
<212> DNA
<213> Homo sapiens

<400> 3071
gaacaaggga aatgagcaaa gtaagaagac accaattgag aaatctgatt ttgctgctgc 60
tacacatcct cgtgcttttt acctcagtaa accagatgaa actccaaatg cttggatgtc 120
tgattcagga acaggattga cttactggaa actagaggaa aaggatatgc accactcttt 180
gcctgaaact ttagagaaga cgttcatatc attgtcttcc acagatgtgt caccaaacca 240
gtctaatact agtaatgaga tgaagctacc gtcactgaag gatatttatt ataaaaaaca 300
aagggaaaac aagcagttac ctgagaggaa tctcacttct gcttccaacc caaatcatcc 360
accagaggtc ctgactctag atcctacgtt acacatgaag ccaaagcagc agatttcagg 420
gattcaacct cacggccttc cgaatgccct tgatgacaga atatcctttt ccccggactc 480
tgttctagag cctagtatgt ctagtccctc tgacatagac tcattttcac aagcaagtta 540
tgtcacttct cagttacctg gatttccaaa atatccctca cacacaaaag cttctccggt 600
gggactcttg ggaaaaatcc gacttccnaa acgaaagttg gaacagttcc nccttccgt 660
ccgtttntnc ccttactagt tatgatatct cccgtccacc ctgttaatta aaaaaacact 720
gtcnt 725

<210> 3072
<211> 633
<212> DNA
<213> Homo sapiens

<400> 3072
agagcggccg cggctccccc gcacctgcgg ccatggatga ggagcgcgcc ctctacatcg 60
tccgggccgg cgaagcaggg gctatcgagc gggtcctgag ggattacagc gacaagcata 120
gggctacttt caaatttgaa tcaacagatg aagataaaag aaagaaactc tgtgaaggca 180
tatttaaagt ccttataaag gacatcccaa caacatgtca agtgtcctgc ctggaagtac 240
tccgcattct ctccagagac aaaaaggttt tagttcctgt gacaactaag gaaaatatgc 300
agatactgct gcgactagcc aagctaaatg agttagatga ttctttggag aaagtatcag 360
agttcccagt tattgtggag tcattaaaat gtctgtgtaa tatagtgttc aacagtcaga 420
tggcacagca gctcagcctg gaacttaatc ttgctgcaaa gctctgtaac ctcctgagaa 480

US 2005/0048500 A1

agtgcaagga ccggaaattt atcaatgaca ttaagtgctt tgacttgcgc ttgctcttcc 540
ttctgtcact tttgcacacc gacatcaggt cacaattgcg ctatgagctc cagggactac 600
cgctgctaac gcgaatcttg gaaantnnct tta 633

<210> 3073
<211> 717
<212> DNA
<213> Homo sapiens

<400> 3073
cgatgaattc agccgaatcc caagaaccat atcgagccct gctgctaccc aagccagtgt 60
ccccgacgac agcagttccc ggaggtgcag cgcgcctggg gcgagcccga aggagaggca 120
tcctgacagc cgccagcggg agagaggtgg aggccccaag aagccgtgga aatgcgggga 180
ctgcgggaag gccttcagct actgttccgc gttcatctta caccagagaa tccacaccgg 240
ggagaagcca tttgcgtgcc ccgagtgcgg caaggccttc agccagagcg tgcacctgac 300
cctgcaccag cgcacgcaca cgggcgagaa gccctacgcc tgccacgagt gcggcaaggc 360
cttcagccag ggctcgtacc tggcgtccca ctggcgcacg cacacgggcg anaagccgca 420
ccgctgcgcc gactgcggca aggccttcac gcgcgtcacg cncctgaccc agcaccggcg 480
cgttgcacac gggcgancgg gcctacgcgt gcgcccagtg cgccaaggcg ttccgcaacc 540
gctcgtccct gatagancac cancgcatcc acaccggtga gaaccctacc aattgctccg 600
cgtgcgccaa ggccttccgc ttctcctcag cgctcatccg cccaccancg catccacacg 660
gaaggaaaaa ccctaccgcc tncggccaat gcgccnaggg cttccncgca aaattnc 717

<210> 3074
<211> 508
<212> DNA
<213> Homo sapiens

<400> 3074
tctcagaaat aatctcatcc atatccgatg taaaattcag tcatagtggg cggtacatga 60
tgaccagaga ctacctgtcg gtgaaggtgt gggacctcaa catggagagc aggccggtgg 120
agacccacca ggtccacgag tacctgcgca gcaagctctg ctctctctat ganaacgact 180
gcatctttga caagtttgag tgttgctgga acggttcgga tagcgccatc atgaccgggt 240
cctataacaa cttcttcang atgtttgata gagacacgcg gagggatgtg accctggagg 300
cctcgagaga gagcagcaaa ccgcgcgcca gcctcnaacc ccggaaagtg tgtncggggg 360
gtaagcggaa gaaagacgaa atcngtgtgg acagtctgga cttcaacaan aagatcctgc 420
acacagcctg ggcaccccgt ggacaatgtc attgccgtgg ctgccaccan taacttgtac 480
atattccagg acaaaatcng ctananac 508

<210> 3075
<211> 486
<212> DNA
<213> Homo sapiens

<400> 3075
agcggggctg aagccctggg cccggcagag gaaggtcgag atggaccatg ttgggcccct 60
tctctccccg cccccaggcc gcagttcggg ggccacgccc cggcgtgctc gggtcaccgc 120
gggaagccct tgaaccccct ggcgcccggc acccacgtgc ggtaaccgcg gctcctcgag 180

US 2005/0059030 A1

agctccaggg gatgcggatc tacagtaagg gctgtggcca gatgaatgaa tgcacatttt 240
ttagtgggca gaaagatgtt agaattcatg aattagaata agcacaaagg anggtgagag 300
gggangccgt ggaanccgca ttcctcccct tgacttgggc gcccaccccc gaaggggcgc 360
gtcccctccc tgctccactg cacgtgggtg tttaaccagg ggatatccag tgcctcaagc 420
accacgaccc ggganaaaac tgggttgana aagtcttcta acaanccttt tgcacacctg 480
ccatgt 486

<210> 3076
<211> 598
<212> DNA
<213> Homo sapiens

<400> 3076
aggtcgcgcg ccccttccgg cgcggggagg gcgctgaaga tcggggccgc tcggccgcag 60
gccgcctcca gcgccgcggg atgtagcgcg ggggaccgcg gcccccagca gagcccgcct 120
gcccagcttg tctaccatca gagggagatc tctgcccccc tggggctgaga gaccccaacc 180
tttccccaag ctgaagctgc agggtattga ggtaccagcc agatgtcttc ccacaaagga 240
tctgtggtgg cacaggggaa tggggctcct gccagtaaca gggaagctga cacggtggaa 300
ctggctgaac tgggacccct gctagaagag aagggcaaac gggtaatcgc caacccaccc 360
aaagctgaag aagagcaaac atgcccagtg ccccaggaag aagaggagga ggtgcgggta 420
ctgacacttc ccctgcaagc ccaccacgcc atggagaaga tggaagagtt tgtgtacaag 480
gtctgggagg gacnttggag ggtcatccca tatgatgtgc tccctgactg gctaaaggac 540
aacgactatc tgctacattg tcatanaccn cccattccct cctttcgggc ttcttcna 598

<210> 3077
<211> 719
<212> DNA
<213> Homo sapiens

<400> 3077
gggggctgta gggaggggga ccantggcag anggacctta ggtgatcctt anaaataaag 60
gctagtttct gttcgacctt ggagtagggc gaagangtgt agacaggtct ggagaagcga 120
ggtaaaaccc tgagtaaaag caagaagttg gagaatatga gatacatctc atctctagta 180
aatacttaaa tgacttcccc tcctcccgga gtcaancaca attcggggat gcagtgacgg 240
acgtangtga agacactgcg agaacttaca gacaaaactg gtttgtggcc tgtttgattc 300
ctgtcagagg tttgctgacc caagacagta tcgaaaatgc atattaagtc nattattcta 360
nanggattca agtcctatgc tcagaagacc gaagtcnatg gttttgaccc cctcttcaat 420
gctatcactg gcttaaatgg tngtgggaaa tccaacatat tggactccat ctgcttttg 480
ctgggcatct ccaacctgtc tcaggttcgg gcttctaatt tacaanattt antttacaaa 540
aatgggcagg ctggtattac caaancctct gtgtcaatca cttttgataa ttctgacaaa 600
aancaaantc ctttaagatt tgaagttcat gatnaaatcc antaaccaag gcaggttgtt 660
attggtggta aaaataaatt tttaatccat tggaatccat gccnccnacc ccnaatttc 719

<210> 3078
<211> 554
<212> DNA
<213> Homo sapiens

0952469.0702800

<400> 3078
aggtctggac ctgaaccgag acaaggaggt accacactat tcactgctgc gtcgcanagc 60
gggctgggcg gctgtctgga cctcgagagg cctgaggcaa ggatcgcgtc agaccccgaa 120
agctggtttg ttgattagtg atctaagacc gccggaagcg cttcttctca atcaagctat 180
gcaacaggaa gtcattacga tcccgttgta acctctaaat atgtccccgt tctgcacagc 240
atcccgataa ccgttttgtt tttctcatat tatgaccttc tcatgttagc accacttcgc 300
aacgctccag gtcgtgaagg agcaacttca ccatcgccgc ctacagacgc cactgggagc 360
ttgggagagt gggacgtgga caggaacgta aagaccgaag ggtgggtttc gaaagagcgg 420
atttcgaaat tgcaccggtt gaggatggct gacattctct ctcagtcaga gaccctggcg 480
tcncaagacc tcagtgggga cttcaagaaa ccagctctgc cggtgtccca ncggggcgga 540
gtnnggnccg gcca 554

<210> 3079
<211> 550
<212> DNA
<213> Homo sapiens

<400> 3079
gtcctccggg gattagagcc ggtgggctcg ttgtgggcgc catttctcgg cgtctcccga 60
nggagccgcc cctttctcag ccttgctcgg ctcttccccg ctctggtcgc cggggctgcg 120
ccgtccccag ctcagtgaca aaaatgctga gtttcttccg taaaacacta gggcgtcggt 180
ctatgcgtaa acatgcagag aaggaacgac tccgagaagc acaacgcgcc gccacacata 240
ttcctgcagc tggagattct aagtccatca tcacgtgtcg ggtgtccctt ctggatggta 300
ctgatgttag tgtggacttg ccaaaaaaag ccaaaggaca agagttgttt gatcagatta 360
tgtaccacct ggacctgatt gaaagcgact attttggtct gagatttatg gattcagcac 420
aagtngcaca ttggttggat ggtacaaaaa gcatcaaaaa gcaagtnaaa attggttcac 480
cctattgtct gcatcttcna nttaagtttt attcctcaaa aaccaaatna ccttcgtgag 540
ganctaaccc 550

<210> 3080
<211> 747
<212> DNA
<213> Homo sapiens

<400> 3080
tatcacagaa agaaattcgt gtctatagct tttaaggact tgattacatc attttcaagc 60
ctgatagttt tggaatcacc attagagctt aagacacacc tgccttcatt tcaaccacct 120
gtcttcatac cctgacgaag tgcacctttt aacactcctt tgtccttgga ttacttaaga 180
gttcccagaa atacatttgc caccaacaga gtagccaaat ttataaggaa aaatgattcc 240
caatggatat ttgatgtttg aggatgaaaa ttttattgag tcttctgttg ccaaattaaa 300
tgccctgagg aaaagtggcc agttctgtga tgttcgactt caggtctgtg gccatgaaat 360
gttagcacac agagcagtgc tagcttgctg cagtccctat ttatttgaaa tctttaatag 420
tgatagtgat cctcatggaa tttctcacgt taaatttgat gatctcaatc cagaagctgt 480
tgaagtcttg ttgaattatg cctacactgc tcagttgaaa gcagataang gaattggtaa 540
aagatgttta ttctgcagca aaaaagctga agatggatcg antnaagcag gtttgtggtg 600
attatttact gtctagaatg gatgttacaa gctgcatctc ttancgaaat tttgcaantt 660
gtatgggaaa cccccgttgg ttgaataaag gttgaatgct tatnttcngg ancattttgt 720
tacaaatttc tgaaaaagga ggaantt 747

0080-5450-0200

0020030450

<210> 3081
<211> 618
<212> DNA
<213> Homo sapiens

<400> 3081
taagtcagct gcagacttga ttagcctgcc taccactgta gagggacttc agaagagtgt 60
agcttccatt ggcaatactt taaacagcgt ccatcttgct gtggaagcac tacagaaaac 120
tgtggatgaa cacaagaaaa cgatggaatt actgcagagt gatatgaatc agcacttctt 180
gaaggagact cctggaagca accagatcat tccgtcacct tcagccacat cagaacttga 240
caataaaacc cacagtgaga atttgaaaca ggatatcctg taccttcaca actctttaga 300
ggaggtaaac agtgccctag tggggtacca gagacagaat gatcttaaac tcgagggaat 360
gaacgagaca gtcagtnatc ttacccagag agtcaacctg atagaaagcg atgtggttgc 420
tatgagcaag gtagaaaaga aagcaaacct gcccttcagc atgatgggtg atagatctgc 480
cactctgaaa agacagtctt tggatcaagt cccaacagaa cagatacagt naaaatccna 540
agcataaaga aagaagatag ttcaaattct caggtntcca agctaanaan agaaactcca 600
gctgatcagt gctcttac 618

<210> 3082
<211> 609
<212> DNA
<213> Homo sapiens

<400> 3082
gctgtacggt gcgcgtgacg gctgcgtgcg gcgggaacca tggctgctcg cagagctctg 60
cacttcgtat tcaaagtggg aaaccgcttc cagacggcgc gtttctatcg ggacgtcctg 120
gggatgaagg ttctgcggca tgaggaattt gaagaaggct gcaaagctgc ctgtaatggg 180
ccttatgatg ggaaatggag taaaacaatg gtgggatttg ggcctgagga tgatcatttt 240
gtcgcagaac tgacttacaa ttatggcgtc ggagactaca agcttggcaa tgactttatg 300
ggaatcacgc tcgcttctag ccaggctgtc agcaacgcca ggaagctgga gtggccactg 360
acggaagttg cagaatgtgt ttttgaaacc gaggccccgg gaggatataa gttctatttg 420
cagaatcgca gtctgcctca gtcagatcct gtattaaaag taactctagc agtgtctgat 480
cttcaaaagt ccttgaacta ctggtgtaat ctactgggaa tgaaaattta tgaaaaagat 540
gaagaaaagc ccagggcttt gctgggctat gccnataacc angtngagca atcttggaga 600
agaataacc 609

<210> 3083
<211> 705
<212> DNA
<213> Homo sapiens

<400> 3083
caaaataatg tttataaatt tatttgtcta tactagtaga agtgatcagt gacatactat 60
aaataatcct aaatggttat atttgataga attcataaca cattaaagag aaaatttcac 120
attaaaggaa ggtttaaaaa tctattttca gattataaaa ggtgtcttta ctggttttca 180
ttccttttat ctacatgtaa ttggacatgt aaacttgtta aaaatcaaaa tcttactgat 240
tgtacaggga naaattaagc attctgtttt aaaaattagg cttattgcta gactgtaagt 300

ttaaaaacaa ttcatgttca aaggagcttt tcaaattacc cagtccacca cagaatcagc 360
taatgtgaca gaagtaaata tagtgcgtca taattgctaa aaacagggtg aatttctttc 420
acttaagttg gaaaaccanc ctctaaaaaa ttaggtgctg gtaatganan cttaatacca 480
tggttccctg caggtctcaa aaacattaat anttcctttc ttggccctca ctgtccttcc 540
agtgttgggc tctggcctct tccctcacat ttatgttcat tctccgggct tatattcatt 600
ctctgctgct ttctcccttc accgtgggan tctcaccctc ttgctcattc tccancaccc 660
attcctactt taatctcttg aaatcttttt ngganatttc cctcn 705

<210> 3084
<211> 631
<212> DNA
<213> Homo sapiens

<400> 3084
gcagcggcgg cccacacagc agcgnagagg cgagaggagg ctgcctcgag ggatgaagtg 60
caaacccaac cagacgcgga cctacgaccc cgaggggttc aagaagcggg cggcgtgcct 120
gtgcttccgg agcgaacgcg aggacgaggt cctgttagtg agtagcaacc ggtacccgga 180
ccgctggatc gtgccgggcg ggggcatgga gcccgaggag ganccgggcg gtgcggcggt 240
ccgagaggtg tncgaagaag cgggagtcaa ggggaagtta ggccggctcc tgggcgtctt 300
cgaacagaac caggatcgca agcacagaac gtacgtgtat gtnctgactg tcacggagct 360
gctggaggat tgggaaaatt cggttagcat tgggaggaan cgagagtggt tcaaagtcna 420
aaatnccatc naggttctcc agtgccacaa gcccgtgcac gccgaatatc tggagaaact 480
aaagctgggc ggttccccaa ccaatggaaa ctccatggcc ccatcctcgc cagatagcga 540
tccctaatga acagcanana tgttcagtat tgtgctgaaa naaacattga tgttaacccc 600
agtgatcant ggaattgtcn agtacaggtg a 631

<210> 3085
<211> 545
<212> DNA
<213> Homo sapiens

<400> 3085
tgttgcaagt aaagaagggg aaatccgagc gttctcgcgt tggatttcct ccacgtgtga 60
agtgggaatg gtagtgatat ctcgtgctat ctctgtcaag ggcaagaagg agaaggaatt 120
tatttgaggc cctacgacgt ggtaggttca ccctcagcct ttgttcttat ttcatcttat 180
ttgtggagaa ggtcttttcg ttcctatttt acaggtgaga aaaggggccc aatatatagt 240
tatttgcggc cataaaatag aagccagttg cctgatactg aagattcaat gaaatcttgt 300
gattgacttc cctctttaaa ttttgtactt tgggtaacat cggatccggt agaaacgctc 360
gtcagaaaga gtttttaatg tgcattctac aatttccaga catagtttcc ttcttgaaaa 420
attgggttaa tactacccta tagggatctt gtgatgcacc acgtaaacgt tgtaagttgt 480
gaaccactat acaaacgtat ganactcttc atgttcttga ntggaactgt angttaagaa 540
nanaa 545

<210> 3086
<211> 654
<212> DNA
<213> Homo sapiens

0305345.00800

<400> 3086
ccccccactgc ccacacccag agctttaatg gacagtccgt accaagcaga gccgaggagg 60
agggaagcca ggggtcccag cccgtctacc tccccatccc acccaggccc ccagctcccc 120
gcgggggcca ccgcagggcc tgtgggctgg gtcacgtggg tctcgctggg acctggtccc 180
tttgttgcag gcggcttgga gaaagggcag tgggacgctg gccacggcca gggtggtgtc 240
gggagcaggc ctcaccccgc tggccgtgtc tgtgtgtgtg cacgtgtgct tgtgtctgtg 300
cgggcgcgtg cancctggt tctgcaggga aaaggtgctg ggggtgcana tccctccctc 360
cttgagccag ggtggcactg ttcactggcg ctgggacagt canggtgacc ccaccgccta 420
cctctctaca actaaanacc ctctgggcct gtgttgctgt tactcctact gatctgttcc 480
tctgtttttc tttttgattt ttgtttttta aaccaaaaca gacaatanct tattttcttt 540
ccgccccctc cggggctgaa ccagggtctg aaaactgaat gtaacagggg ccgctggcac 600
tcctgcncgt ccccggctct ggcnctgcan gggtttcggc ccccacctct ccaa 654

<210> 3087
<211> 562
<212> DNA
<213> Homo sapiens

<400> 3087
gtcgaatggt ttgttggcag ggtgtcctgg tggattggtt tctgtaagtt cagattctca 60
taaatcgtgt gagcgtcgcc gacacctctg agataaaagg gccccttttcg actagcctct 120
gctgaaagga cctaaaanaa tcccttagga tgaagctgag tcttaccaag gtagttaatg 180
gctgtcgcct angaaaaata aaaaacctgg gcaaaacagg ggaccacacc atggatattc 240
caggctgcct tctgtatacc aagactggct ccgccccaca cctcacccat cacacgctgc 300
ataatatcca cggggttcct gccatggctc agcttacgct gtcatcccta gcagaacatc 360
atgaagtctt gacagaatat aaagaaggag ttggaaagtt tataggcatg ccagaatcac 420
tcttgtactg ctccctgcac gatccantca gcccctgccc ggctggttat gtaacaaaca 480
antctgtgtc tgtgtggant gttgcangac gantggaaat gactgtttcc aagttcatgg 540
caattcanaa ggccttcagc ca 562

<210> 3088
<211> 587
<212> DNA
<213> Homo sapiens

<400> 3088
gctccaaagg aggaaatgac cattcaggga tcttactcca gcttgattac ggagactgaa 60
ccttcatagg gtgcgcactt accaaggaca ggaaggtttc tctgtttgaa gggctttaaa 120
cttataacaa agaaaataaa aatgacgact tcgtctatca gacggcagat gaaaaacatc 180
gtgaacaatt actcagaggc agaaatcaaa gtccgggaag ccacctccaa tgacccgtgg 240
ggcccgtcca gttctctgat gaccgagatt gccgacctga cctacaacgt ggtggccttc 300
tcggagatca tgagcatggt gtggaagcgg ctgaatgacc atggcaagaa ctggcggcat 360
gtgttcaagg cgctgaccct gctggactac ctcatcaaga caggctccga acgtgtggcc 420
cagcagtgcc gggagaacat cttcgccatc cagaccctga aggacttcca gtacattgac 480
cgagatggca aggagcaggg catcaatgtg cgtgagaagt caaagcaact ggtggctctc 540
ctcaaggaca aagaacgttn aangctgaaa aggcccangc tctcaaa 587

<210> 3089

09529480.070800

<211> 570
<212> DNA
<213> Homo sapiens

<400> 3089
gtgctaggag atgatcgggg gaaagcatag tcccctgtct gtggcaccag acactcccga 60
ctgtgcgctg actctccccg cccagccagc agccttttcc agagaggctg tggtccatag 120
cctctgttcg ttttcactgc aggaccaggc acgaaagtta aaacaaaatg aagatttttt 180
ctgaatctca taaaacagtg tttgttgtgg atcactgccc ttatatggca gaatcttgca 240
ggcagcatgt cgagtttgat atgctggtga agaatanaac ccaaggaatc attcctttgg 300
cccccatatc taaatcattg tggacttgct cagtanaatc ttccatggaa tattgtanaa 360
taatgtatga tatatttcct ttcaaaaagc tggtgaattt tattgtgagt gactctggag 420
cacatgtttt aaattcttgg actcnagaan accaaaattt acaggagcta atggcagcat 480
tanccgctgt tgggcctcct aatcctcggg cagatccaaa ntgctgcatn ttctgcatgg 540
ccttgttgcn ccantggaaa ctctctgcca 570

<210> 3090
<211> 499
<212> DNA
<213> Homo sapiens

<400> 3090
actacctcgc tgggacctgg tcttgctgtc ccccgctggc ctcctgccca agcgactgcg 60
gccaggatgg gccggaaggt gaccgtggcc acctgcgcac tcaaccagtg ggccctggac 120
ttcgagggca atttgcaaag aattttaaag agtattgaaa ttgccaaaaa cagaggagca 180
agatacaggc ttggaccaga gctggaaata tgcggctacg gatgttggga tcattattac 240
gantcggaca ccctcttgca ctcgtttcaa gtcctagcgg cccttctgga gtctcccgtc 300
actcaggaca tcatctgcga cgtggggatg cctgtaatgc accgaaacgt ccgctacaac 360
tgcagagtga tattcctcaa caggaagatc ctgctcatca nacccaagat ggccttggcc 420
aatgaangca actaccgcga gctgcgctgg ttcaccccgt ggtcnaagaa tccgcacaca 480
nangaatact ttctgcctc 499

<210> 3091
<211> 598
<212> DNA
<213> Homo sapiens

<400> 3091
aaaccatggc caattctgcc ctatccccat tctctacccc tttccatatt tttcttctcc 60
catattattt tgaagcaaat cccaggcatc acataagatc aaaattttaa catgttttta 120
cctctacttc aggttattgt tgaaatgacc tgaaatttta aggaagtagc tgaaaatagc 180
attaagattg gaaagaaagg cagacagatt atgagaggcc tataatgcca gccttgtgga 240
ggagccccag agttgtttca gtagacagac aaaatctggt ctgtgcttta gcaactttgt 300
ttcatgaatg aataattaac ctagtgagag agagagtttc agaaagttgt aatgaaagga 360
atggtaatgt gaaagaggcc ctgaagcagc anaattttta tcactggatg attaattaaa 420
tgaggggatg agggangctt tgctaacctg aatttcaagc ctgaatgagg ttgatgatga 480
cattaactaa gacagcagac atggaaaagt tatgtgtgga acttanggtt cttggattcc 540
naancaattg aaagggactt tgtctanctt aagccagaag gaatttatta aaatntta 598

US 9,353,408 B2

0508050-070000

<210> 3092
<211> 569
<212> DNA
<213> Homo sapiens

<400> 3092
gtgctcgctt cggcagcaca tatactaaaa ttggaacgat acagagaaga ttagcatggc 60
ccctgcgcaa ggatgacacg caaattcgtg aagcgttcca tatttttcc ccaaccagga 120
tttgaacaga gacgtgaatg tctaaccttt tgattctatt ccttttattc cagcgagtcc 180
caccactgtc acccagatga gcttgtccaa cccgaccatg ctgaggactc acagcctctc 240
caatgctgat gggcagtatg atccatacac tgacagccgc ttccggaata gctccatgtc 300
cctggatgag aagagcagaa ccatgagccg ttcaggctca ttccgggatg ggtttgaaga 360
agttcatgga tcctcactct ccttggtttc cagcacatcg tcagtttatt ctacaccaga 420
agaaaaatgc cagtcagaga ttcgcaagct gcggcgggaa ctggatgcct cccaggagaa 480
agtttcagct ttgaccaccc agctgacagc aaatgctcac cttgtggctg ccttngaacn 540
aatcttggtg acntgacatc aggctccaa 569

<210> 3093
<211> 675
<212> DNA
<213> Homo sapiens

<400> 3093
atatgttaca gtttatctgg tacttcattt ttcttaacta aaattacttt ttactttaag 60
cttgaataaa aatcttcatt ggtaactgta tgtaattaag tggcaacttc tctttacctc 120
agtatagtta aaaaccattc atattttaag tgattcatgt ataccctgaa gccgttaata 180
caccccagtc tctatggtaa catcactaaa tgtgggcata gaaactccac agctgtttac 240
aaatttggtt acagtgtgct atggtgcatt tgtaacactc agatttgtgc ccattcaggg 300
gcaatttggc actcanattc tactctactt cacctaacca cccctagatc tgagttttca 360
gagtgcttct gaagtacagt ttaaaaacac tttttaaaaa gtggantaaa agtgaggcac 420
attttacaag aacataactc ctattaaaac ggantaacaa ctatgcaaag gtttctatag 480
canctaagtg antttgtttt ccgggtctgt cttaactggc ancttcctgt acatactggt 540
acttatttgc tgtaaacgtc tgtttcatac ntttgccatg cantgactgt gctcnaaaag 600
ttaaatccat ggtaaaaaaa cctaagattt tatggtatga aaaactgatc gcgggatttc 660
cgattcataa annnc 675

<210> 3094
<211> 159
<212> DNA
<213> Homo sapiens

<400> 3094
gaatggaagc ggcggcggcg gcgggagcgg cctgagctgg gcgccggggc cagggccggg 60
ggctgcccag ggcccgcgcc gctgcattgg ggcggtccgc gggccctgag aggaanggca 120
tacaggcggg ccgatatann aggggcgggg tctggcgga 159

<210> 3095

<211> 501
<212> DNA
<213> Homo sapiens

<400> 3095
aggccggaac catggcagtg accaaggagc tcttacagat ggacctgtac gcgctgctag 60
gcattgagga gaaggcagcg gacaaagagg taaagaaggc gtataggcag aaggccctct 120
cctgccaccc agacaaaaat ccagataatc ccagagcagc tgaactcttc caccagcttt 180
ctcaggcctt ggaggtgctg accgatgctg cagccagggc tgcatatgac aaggtcagga 240
aagccaagaa gcaagcagca gagaggaccc agaaacttga tgagaaaagg aagaaagtga 300
agcttgacct ggaggcccgg gagcggcagg cccaggccca ggagagtgag gaggaagagg 360
agagccggag caccaggaca ctagagcaag agatcgaacg cctgagagaa gagggtcccc 420
ggcagctgga ggaacagcag aggctcatcc gggagcagat acgccaggaa ccntnaccaa 480
aggttnaaaa aggaaaaggg c 501

<210> 3096
<211> 523
<212> DNA
<213> Homo sapiens

<400> 3096
gcggatggat ccaacatggc ggcgccgagc ctgagccgag agaagagacc tgggaaatta 60
agtttcttgc ggagtacggt ggggattgca gctgctgagc agggattctg gaaagcattg 120
cgtacctgag cccccagcat ggcgggccta aagcggcggg caagccaggt gtggccagaa 180
gagcatggtg agcaggaaca tgggctgtac agcctgcacc gcatgtttga catcgtgggc 240
actcatctga cacacagaga tgtgcgcgtg ctttctttcc tctttgttga tgtcattgat 300
gaccacgagc gtggactcat ccgaaatgga cgtgacttct tattggcact ggagcgccag 360
ggccgctgtg atgaaagtaa ctttcgccag gtgctgcagc tgctgcgcat catcactcgc 420
cacgacctgc tgccctacgt caccctcaan anganacggg ctgtgtgccc tgatcttgta 480
nacaagtatc tggangaaac atcaattcgc tatgttaccc cca 523

<210> 3097
<211> 463
<212> DNA
<213> Homo sapiens

<400> 3097
gaatcagagc gcggctgaag cggcccccgc agccaacccc cganggagcg gccggctggc 60
gtccgccgcg cccaggagtt ggggatgtcc tacaaaccca tcgcccctgc tcccagcagc 120
acccctggct ccagcacccc tgggccgggc accccggtcc ctacaggaag cgtcccgtcg 180
ccgtcgggct cagtgccagg agccggcgct cctttcagac cgctgtttaa cgactttgga 240
ccgccttcca tgggctacgt gcaggcgatg aagccacccg gcgcccaggg ctcccagagc 300
acctacacgg acctgctgtc agtcatagan gagatgggca aagagatccg gcctacctat 360
gctggcagca agagcgccat ggagcgcctg aaganaggta tcatccatgc ccgggcccta 420
ntcaganagt gcctggcaga nacagancgg aacgcccgca cgt 463

<210> 3098
<211> 606

US 2005/0048500 A1

<212> DNA
<213> Homo sapiens

<400> 3098
gcgctcctgc tcttaggaag cctggggaag gaccggtgtg ctagggagat gatcggggaa 60
agcatagtcc cctgtctgtg gcaccagaca ctcccgactg tgcgctgact ctccccgccc 120
agccagcagc cttttccaga gaggctgtgg tccatagcct ctgttcgttt tcactgcagg 180
accaggcacg aaagttaaaa caaaatgaag atttttttctg aatctcataa aacagtgttt 240
gttgtggatc actgccctta tatggcagaa tcttgcaggc agcatgtcgg gtttgatatg 300
ctggtgaaga atanaaccca aggaatcatt cctttggccc ccatatctaa atcattgtgg 360
ccttgctcag taaaatcttc catggaatat tgtagaataa tgtntgatat atttcctttc 420
aaaaagccgg tgaattttat tgtgagtgac tctggancac atgttttaaa ttcttggact 480
caagaagacc aaaatttaca ggagctaatg gcancattan ccgctgttgg gcctcctaat 540
cctcgggcag atccagaatg ctgcantatt ctgcatggcc ttgttgcanc antggaaact 600
ctctgc 606

<210> 3099
<211> 563
<212> DNA
<213> Homo sapiens

<400> 3099
aagatggcag ctgcgggagc cgtctccgcg gcgcgtgggc ttcgtgggcg cgggccgcat 60
ggcgggggcc atcgcgcagg gcctcatcag agcaggaaaa gtggaagctc agcacatact 120
ggccagtgca ccaacagaca ggaacctatg tcactttcaa gctctgggtt gccggaccac 180
gcactccaac caggaggtgc tgcagagctg cctgctcgtc atctttgcca ccaagcctca 240
tgtgctgcca gctgtcctgg acagaggtgg ctcctgtggt caccactgaa cacatcttgg 300
tgtccgtggc tgctggggtg tctctgagca ccctggagga gctgctgccc ccgaacacac 360
gggtgctgcg ggtcttgccc aacctgccct gtgtggtcca ggaaggggcc atagatnatg 420
gcctcggggc cgccacgtgg ggagcaccga gaccaacctc ctgcagcatc ttctggatgc 480
ctgtgggcgg tgtgaggagg tgcctaaatc ctacgtcgac atccacactg gcctcaatgg 540
cagtggtcgt ngccttccng tnt 563

<210> 3100
<211> 651
<212> DNA
<213> Homo sapiens

<400> 3100
ggacccactg ggttgccaag ctcgcgccgg atgcggagcg cggtgctgcc ggtggagctt 60
caggtcttga tanactttct gtaaagaagg aatgatttgg tgatggagtg ttcccactga 120
ccgatggact caaagaagag aagctcaaca gaggcagaag gatccaagga aagaggcctg 180
gtccatatct ggcaggcagg atcctttccc ataacaccag agagattgcc aggctgggga 240
ggaaagactg ttttgcaggc ancctcgga gtgaaacatg gagttcttct gactgaagat 300
ggtgaggtct acagctttgg gactcttctc tggagaagtg gaccagtgga gatttgtcca 360
agtagcccca ttctagaaaa tgccctggtt gggcaatatg ttattactgt ggcaacagga 420
agcttccata gtggagcagt gacagacaat ggtgtcgcgt acatgtgggg agagaattct 480
gctggccagt gtgcngtanc caaccancag tatgtgccgg aaccaaatcc tgtcagcatt 540

0356.PCT.ST25

gctgattctg aagccagccc tttgttagca ntcaggattt tacagttggc gtgtggccaa 600
gaacacactc tggcnttgtc cntaagcana naaatttggg catggggtta c 651

<210> 3101
<211> 547
<212> DNA
<213> Homo sapiens

<400> 3101
atcggctgtg gggagtaccg gctgcagtcg gctgtgccgg gagggtagga tggcgtctgg 60
ccgatgcggc gatagcaccg aaagcagacg gccgccaggc gctcccccta ccccccgaag 120
tttctcccca gcggcggggg atgggggtag gcggttcctc tgttctttct gcgttccccg 180
cggcctctta ccacagagac gcgggcctcc accgtcctag ccctcccgcc ctgttctcta 240
gtgcggacta gagcgtctcc tcgccatttc ctgtcgccct ggggccccgc ggggaaaaag 300
ggggagtatc aggacagcgg agggaagtcg cgagcttagg tggtgtgtag acgccggaag 360
tgttgggaac gaggccggaa gctaggggcg gggccaggaa gtgaggaggg gcgggggttt 420
atgacgantc caagggagca ttggggcaga cttgcactca gagccacctg acggacttgg 480
cggtggcgcc cagcactgtc ccctcccctc gtagagacac ggttgtcgtn tgggantang 540
gaacact 547

<210> 3102
<211> 599
<212> DNA
<213> Homo sapiens

<400> 3102
tggcagatcc tgacatgcct gagctgcacc ttcctgccga gtcgagggat tctcaagtat 60
ctcaagttcc atctgaaaag gatacgggaa cagtttccag gaaccgagat ggaaaaatac 120
gctctcttca cttacgaatc tcttaagaaa accaaatgcc gagagtttgt gccttcccga 180
gatgaaatag aagctctgat ccacaggcag gaaatgacat ccacggtcta ttgccatggc 240
ggcggctcct gcaagatcac catcaactcc cacaccaccg ctggggaggt ggtggaaaaa 300
ctgatccgag gcctggccat ggaggacagc aggaacatgt ttgctttgtt tgaatacaac 360
ggccacgtcg acnaagccat tgaaagtcga accgtcgtan ctgatgtctt agccaagttt 420
gaaaagctgg ctgccacatc cgaggttggg gacctgccat ggaaattcta cttcaaactt 480
tactgcttcc tggacacaga caacgtgcca aaagacagtg tggantttgc ntttatgttt 540
gaacaggccc ncnaagcggt tttccatggc ccccatccng ccccggaaag aaaacctcc 599

<210> 3103
<211> 612
<212> DNA
<213> Homo sapiens

<400> 3103
tatgtcaaga aacttgtggc ttccttaggt aaggattact taaattggat cggagttgtt 60
ttctgtttta ggtagctgac ttagaaacct actaactaat aagtctttaa aatagagaaa 120
aattaacact aaacaactaa tccaagtttt ttcttaaatc caattctgat gtataaattt 180
tgaataatat taggttctta actggaaatt accatttcag ggtttgaaaa ggactaggtg 240
cgtataaaaa gttcagcccc tcatctgtta gactgattat tggtaagact ctttcactta 300

0050305450 : 09/28/2006

gtcagcaagc tgtgcaaagc aaatactggt atgcatcctc agcaattgag atttgaaatt 360
gtaagcaaaa gctattcttt tgcattcctg tgtccaaatg tcatcctaaa gaacttgctg 420
acttatgcca gtttgggttt tagagtaagt taactgcttg ttatatggca ggtgattggc 480
tgatgctgca tttctcctcc ccaggcagca attcccccag gcaagcaacc gtcttcacta 540
ncttctccaa atcctcccat ggcaaaaggc tcngaacaag gcttccagtc acctccanca 600
antattantt ca 612

<210> 3104
<211> 471
<212> DNA
<213> Homo sapiens

<400> 3104
ggaggcagcc tttgtctggc gggaacacgc attggtagcg ggagctgtcg gtaggacctg 60
gggacaccgc ggaagtcggg aaatggcctc agtggcttta gaggatgtgg ctgtgaactt 120
cacccganaa gagtgggctt tgctgggtcc ttgtcanaan aatctctaca aagatgtgat 180
gcaggaaacc atcaggaacc tggattgtgt aggaatgaaa tggaaagacc agaacattga 240
agatcaatat agatatccca ggaaaaatct aagatgtcgt atgttagaga gatttgttga 300
aagtaaagat ggaactcaat gtggagaaac atctanccag attcaagata gtattgtgac 360
caagaacact cttcctggag taggtccttg tgaaagcant atganaggag aaatcgtcat 420
gggtcattca tcccttaatt gttgcatcan agttggtgct gggcncaanc c 471

<210> 3105
<211> 468
<212> DNA
<213> Homo sapiens

<400> 3105
gtgctggccg cggtaaaagt ggtagcagcg gangcgancg gagggtttcc cgcggcggga 60
ntctcactct gctgcctagg ctgagtgcag tggtgtgatc gangcgcact gcagccttga 120
cctcctgagc tcaagcgatc ctcacctcgg cctaccgagt agctgggact acaggcacgc 180
gccactacac tcggatttct gacagtcaga cttgtccaca agaactcaac tggcaaggct 240
gcttttctgt gctaaaactg gggagctagt gggcaccatg aanatcttct gcagtcgggc 300
caatccgacc acggggtctg tggagtggct ggaggaagat gaacactatg attaccacca 360
ggagattgca aggtcntctt atgcagatat gctacatgac aaagacagaa atgttaaata 420
ctaccaangt atccgggctg ccgtgagcan ggtgaangac anaagaca 468

<210> 3106
<211> 530
<212> DNA
<213> Homo sapiens

<400> 3106
gcgggtgttc ggctacgtca ctggggcgct acggttcctg gagctgggca gtcttctcgt 60
cagagtgggg actggtaaga gcgacctccc cgccaggtcc tgtgtgttgc cggctgaaga 120
anggatgatg attattcccc accttctaag agacaaagac caacgagcca ccacagccac 180
cagtcccaga acccgccaat gctggggaat ggaaaatgag ggagttcaac tctggccctc 240
acaatccagt ggangagacg aaactcatct gcctctgtcc ctctgggcac acctcatgcc 300

US 2005/0196800 A1 Sep. 8, 2005

angtgcatct gtggacaggg gccatgctcc tgggcttcca aagttggaga aagctgccag 360
gctcagaccc acctaagctg aagattccct tgagaacaag tnctgtcctg tggtttcatg 420
gcctttcttc catttgtggt tcttgcgaag tggaatttaa atgacatctt atcnagatgg 480
ataaaccctg gtttcccagt gctggaatat anaaaatgga tggacaagtn 530

<210> 3107
<211> 621
<212> DNA
<213> Homo sapiens

<400> 3107
aaaaaacgaa tacaaagagc catacgacct tcggacccta cagcttgggg cctgggctcc 60
tctgaccatc ctcattgaga aaggaaagtg agtccagaga agttgatgct tcctacctgt 120
tggagcggcc cagcagtgta agcgtggttg ttactgcccc atccgccatg tccttcagtg 180
ccaccattct cttctcccct cccagtggca gcgaggccag atgctgctgc tgcgcctgta 240
agagtgagac taatggaggc aacacaggct cccagggtgg gaatcctcct cccagcaccc 300
ccatcacagt gactggacat ggcttggctg ttcagagctc agagcagctc ctgcatgtta 360
tctaccagcg ggtccataag gcagtgggtt tggctgaaac tgctctgggt cttgccaggg 420
ccaacaatga gttgttaaaa cgtctccagg aagaagtggg tgacctgagg caagggaaag 480
tgtccatccc tgatgaaaat ggggaaagcc gggcacatag ttccccacct gaggacctgg 540
gcctctcaag gaaatccggg gaacctttaa ggctctgtct gccgtggaaa aagaatgtga 600
cancgtgggc ancggcgtnc a 621

<210> 3108
<211> 512
<212> DNA
<213> Homo sapiens

<400> 3108
aagagacctc cccaatcccg gcctgccacc acctggctcg cgcgcagccc cggcccagaa 60
tgccttaacc tgcgccgatt gctgccgccg aggtgcccct cccctgtagg gaccccgacg 120
ccgccagccc cttcctcctt tcccgcaggt tagcctggca aggaagataa agacatttgc 180
aaccaagatg gtaatcacta gtgaaaatga tgaagacaga ggaggtcaag aaaaagaaag 240
taaagaggag agtgtcttgg caatgctggg gattatcggg accattctga acctgattgt 300
gatcatattt gtctacatat acaccaccct gtgaatggcc cagagcgtcc tcanaggcct 360
cagaatggcc aaagacggaa gtcctgcgtg tcggcgcatc actgaccaga ccctgcgana 420
acaagcaggc ttgacccgca catnccaccc aatcaaatgc accttcnaac tttacaaaag 480
gtcncacaaa tanaccgatc ctgctgcagg ga 512

<210> 3109
<211> 662
<212> DNA
<213> Homo sapiens

<400> 3109
atgtanaaaa acatttaggc ataggtcagg ccttatgcag catcagagaa cacacaccag 60
agtttaactc tgtgggtaag agttgtacaa ttgtgaaatg caaggagttc actgtagggg 120
tgagactcca cagaaaagaa aagtttcctg agagcagaac ttctgtcctt ccctcccagt 180

0562946.02/2800

tcggtactat aagaagacat gcacacaaag atgtttgtta tgattattga agtgttaaat 240
ggaagaaaaa tgttacccaa gtcttctcca aaaagaatgg tagatatttc cttgaaatgc 300
ctaacccatt tctggatgag actcatcaat atccccttca ctccactctc tgccaactca 360
gatataattt ccattgggca ccttcacagt aatgccagga ttggggcaga natcctgaaa 420
gagcttctta taagatggca aatgtgcctg gcaagagcat ttgtattttg tcaggtggag 480
gcatgtgctg anagttattc aactatctga aatgttgaat ttggangttg tgaaaatatt 540
gaattatgct attagtttaa taatatctga ngcagtaaaa tantacctga agaatggtgc 600
ctcattctgc ccccttgcca nttgtctcct caatcctgaa cttcctgctg angttaattc 660
na 662

<210> 3110
<211> 528
<212> DNA
<213> Homo sapiens

<400> 3110
agtccctcgc cgaccagtct gggcagcgga ggagggtggt tggcagtggc tggaagcttc 60
gctatgggaa gttgttcctt tgctctctcg cgcccagtcc tcctccctgg ttctcctcag 120
ccgctgtcgg aggagagcac ccggagacgc gggctgcagt cgcggcggct tctccccgcc 180
tgggcggccg cgccgctggg cangtgctga gcgcccctan agcctccctt gccgcctccc 240
tcctctgccc ggccgcagca gtgcacatgg ggtgttggag gtagatgggc tcccggcccg 300
ggaggcggcg gtggatgcng cgctgggcan aancanccgc cgattccagc tgccccgcgc 360
gccccgggcg cccctgcgan tccccggttc agccatgggg acctctccga gcagcagcac 420
cgccctcgcc tcctgcagcc gcatcgcccg ccgagccaca gccacnatga tcncgggctc 480
ccttctcctg cttggattcc ttancaccac cacngctcan ccagaaca 528

<210> 3111
<211> 486
<212> DNA
<213> Homo sapiens

<400> 3111
ctgcttccgc ccaaaaagat aattgggaaa aactcaagaa gcttggtgga gaagagggag 60
aaggatctgg aggtctacct ccagaagctc ctggctgcct tccctggcgt gacccccaga 120
gtactggccc acttcttgca ttttcacttc tatgagataa atggcatcac cgcggcactg 180
gctgaagagc tctttgagaa aggagaacag ctcctggggg ccggcgaggt ctttgccatt 240
ggacccctgc agctgtatgc cgtcacgggg cagctgcagc agggaaagcc cacgtgcgcc 300
agtggggatg ccaagaccga cctcgggcac atcctggact tcacctgtcg ccttaagtnc 360
cttaaggttt ctggcacaga angacctttt gggaccagca acattcagga ncanctcctg 420
ccgttcgacc tatcaatatt caagtccctg cntcaggtgg anataagtca ctgtgatgct 480
angcac 486

<210> 3112
<211> 501
<212> DNA
<213> Homo sapiens

<400> 3112

0502503.0002

atctgacggc gcggctacca tggcggcggc atttgaagcc tcgggagcct tagcagcagt 60
ggcgactgct atgccggctg agcatgtggc cgtgcaggtc ccggccccag agccaacacc 120
cgggcctgtg aggatcctgc ggaccgctca ggatctcagc agcccgcgga cccgcacggg 180
ggatgtgctg ttggcggagc cggccgactt cgagtcactg ctgctttcgc ggccggtgct 240
ggaggggctg cgggcggccg gcttcganag gccctcgccg gtgcagctca aggccatccc 300
gttggggcgc tgcgggctcg atttaattgt tcaagctaaa tctggcaccg ggaaaacctg 360
tgtgttctcc accatagctt tggactctct tgttcttgaa aacttaagta cccanatttt 420
gatcttggct cctacaanan aaattgctgt acagatacat tctgttatta cagccattgg 480
aataaaaatg gaangcttan a 501

<210> 3113
<211> 544
<212> DNA
<213> Homo sapiens

<400> 3113
atgatattga agagatggga gaagaagata gtgaggtcat tgaacctcct tctctacctc 60
agcttcagac ccccctggcc agtgagctgg acctcatgcc ctacacaccc ccacagtcta 120
ccccaaagtc tgccaaaggc agtgcaaaga aggaaggctc caaacggaaa atcaacatga 180
gtggctacat cctgttcagc agtgagatga gggctgtgat taaggcccaa cacccagact 240
actctttcgg ggagctcagc cgcctggtgg ggacagaatg gagaaatctt gagacagcca 300
agaaagcaga atatgaaggc atgatgggtg gctatccgcc aggccttcca cctttgcagg 360
gcccagttga tggccttgtt agcatgggca gcatgcagcc acttcaccct ggggggcctc 420
caccccacca tcttccgcca ggtgtgcctg gcctcccggg catcccacca ccgggtgtga 480
tgaaccaagg antggccccc atggtnngga ctccancacc angtggaaat ccatatggac 540
aaca 544

<210> 3114
<211> 526
<212> DNA
<213> Homo sapiens

<400> 3114
atccgccggg gggagaatat ggttgcacca tcccagaagc tgctgttagc tcgccggtcc 60
tcggcacgcc gcccgttcgc ccctgcgctg tccgcccttc ccctagcgtt acttccggtc 120
cctcgctgag ggggttcgtg cggctcccan gangcgtgaa ccgcggacca tgagcgtggg 180
cttcatcggg gccggccagc tggcctatgc tctggcgcgg ggcttcacgg ccgcaggcat 240
cctgtcggct cacaagataa tagccagctc cccagaaatg aacctgccca cggtgtccgc 300
gctcanggta agtgganccg ggcggaatgg gaagcgggtg gaggcccagg aaaaggatga 360
cctgagatga antgagtctg gccggcccct gcgcccaant gctggtcttt ggccggcggt 420
gacctttact ccangaacgt nacaatcttt ccaccttctc ttgggcanct caatgtggtg 480
ggaacaccca gggaaacata actgggggtc anatccanac actgga 526

<210> 3115
<211> 776
<212> DNA
<213> Homo sapiens

08/27/2015 5:45:35 PM

<400> 3115
aaagaggaaa acaccataat tttgcagcag ctactcccac tgcgaaccaa ggtggccaaa 60
ctactcggtt atagcacaca tgctgacttc gtccttgaaa tgaacactgc aaagagcaca 120
agccgcgtaa cagcctttct agatgattta agccagaagt taaaaccctt gggtgaagca 180
gaacgagagt ttattttgaa tttgaagaaa aaggaatgca aagacagggg ttttgaatat 240
gatgggaaaa tcaatgcctg ggatctatat tactacatga ctcagacaga ggaactcaag 300
tattccatag accaagagtt cctcaaggaa tacttcccaa ttgaggtggt cactgaaggc 360
ttgctgaaca cctaccagga gttgttggga ctttcatttg aacaaatgac agatgctcnt 420
gtttggaaca agantgttac actttatact gtgaaggata aagctacang agaagtattg 480
ggacagttct atttggacct ctatccaagg gaangaaaat acaatcatgc ggcctgcttc 540
ggtctccagc ctggctgcct tctgcctgat ggaagccgga tgatggcagt ggctgcctcn 600
tggtgaactt ctcccagccn gtggcaggtc ctccctctcc tcctgagacc nacaaaactg 660
attttgcccn aattagcgga acaatgtnga aactgacttt gtttnaagtg ccctccccaa 720
atgccttnaa aaattggggt tgtgggaact tcnggtcccc cccaaaaaat tgtccn 776

<210> 3116
<211> 503
<212> DNA
<213> Homo sapiens

<400> 3116
attcaagcct gggccctgga aagaggggtg gacagtcccc tcccttccag tccagcatgg 60
gtctggggaa nangagcagc tttgcctgga aggggcctcc taggaggggg agcggtggtt 120
tctagctcag gctttaggat cagagagcan canattcaaa tcctgacggt tttggtaaag 180
tcaattcaat ctctccaana ctccgtttac ttgatctgcg aagtggggat aatggtatca 240
cgtcgcaggg ttgtcaggcg gagctggtag gggagctgcc ccccaaanca gcatggatgc 300
cccgcgaagg gacatggagt tgctcancaa cagcctggct gcctacgcgc acatccgcgc 360
caaccccgaa agctttggcc tctacttcnt gctgggcgtc tgcttcggcc tgctgctcac 420
cctctgcctg ctcgtcatca ncatctcgtg ggcgccccgc ccgcngcccc ggggcccggc 480
tcancgccgg gacccccnca nca 503

<210> 3117
<211> 440
<212> DNA
<213> Homo sapiens

<400> 3117
attgggcggc gtgatctcgc cgcggttccg cggccctgcc gccgccgccg ccagcagagc 60
gcaccgggcc gatcgggcga gtggccatgg cgggcgccga ggactggccg ggccagcagc 120
tggagctgga cgaggacaag gcgtcttgtt gccgctgggg cgcgcagcac gccggggccc 180
gcgagctggc tgcgctctac tcgccaggca agcgcctcca ggagtggtgc tctgtgatcc 240
tgtgcttcag cctcatcgcc cacaacctgg tccatctcct gctgctggcc cactgggagg 300
acacacccct cgtcatactc ggtgttgttg caggggctct cattgctgac ttcttgtctg 360
gcctggtaca ctggggtgct gacacatggg gctctgtgga gctgcccatt gtggggaaan 420
gctttcntcc nacccttccc 440

<210> 3118
<211> 261

US 2003/0096360 A1

<212> DNA
<213> Homo sapiens

<400> 3118
gtcaaaatgg cggcgagggg aacctggagc agtcccggag cctgagccac tgacaggaga 60
tgagagggcg gcggcggcgg tgggaggagg atggccgggg gtgctggcgc cggtgcggac 120
ggcggtgctg gtggcggcgg cggcggatgc caccgccgcg gtcccagcgg caacagcagc 180
ggcgggagga gcctccggga aatggatgaa aagacgctgc tggatccann gttgaaggtt 240
cataaaagcc tctgggatta n 261

<210> 3119
<211> 609
<212> DNA
<213> Homo sapiens

<400> 3119
gttggccgcg ggaaaagggg anaccgcggc ggcccccagt gagagcggct ttccaggacg 60
gtgcgatgtg ctgcgcagcg aaaagcagga ggccggcttc ctggggtanc ggtacaggcg 120
ggcgcttact ctgtgcgctt gcttccccaa ccctgcaccg gccatgcgcc cggccttggc 180
ggtgggcctg gtgttcgcan gctgctgcag taacgtgatc ttcctagagc tcctggcccg 240
gaagcatcca ggatgtggga acattgtgac atttgcacaa tttttattta ttgctgtgga 300
angcttcctc tttgaagctg atttgggaag gaagccacca gctatcccaa taaggtacta 360
tgccataatg gtgaccatgt tcttcaccgt gagcgtggtg aacaactatg ccctgaatct 420
caacattgcc atgcccctgc atatgatatt tanatccggt tctctaattg ccaacatgat 480
tctaggaatt atcattttga anaaaaaata cagtatattc aaatatacct ccattgccct 540
ggttgtctgt ggggatattt atttgcactt ttatgtcnnc aaancaggtg acttcccant 600
ccancttga 609

<210> 3120
<211> 564
<212> DNA
<213> Homo sapiens

<400> 3120
aggcgctggt ggggcagaaa cgcggcgccc tgcgtcttct ggttccgagg ctggtcctca 60
ccgtttccgc tccggcggaa gtgaggagga gggtccttcg acccgtgctg agctggatgg 120
accgcgagac gcgcgccctc gccgacagcc acttccgagg cctgggggtc gatgtccccg 180
gcgtcggcca ggctccgggc cgggtagcct tcgtctcgga gccgggcgcc ttctcctacg 240
ccgactttgt gcggggcttc ttgctgccca acctgccctg cgtgttttcc agcgccttca 300
cgcagggctg gggcagccgg cggcgctggg tgacgcccgc ggggaggccc gacttcgacc 360
acctgctacg gacctacgga gacgtggttg taccagttgc aaactgtggg gtccaggaat 420
acaactcgaa ccccagagag cacatgactc tcagagacta catcacctac tggaaagagt 480
acatacaggc gggctactcc tctcccaggg gctgtctcta cctcaaagac tggcacttgt 540
tgcaggnact ttccngtnga aaga 564

<210> 3121
<211> 632
<212> DNA

0956469.0002

<213> Homo sapiens

<400> 3121
ggaagatggc ggcgggagcg acaggaggcg ctgagggagt tcgtggcggt gacgggcgcc 60
gaggaggacc gggcccgctt ctttctcgag tcggccggct gggacttgca natcgcgcta 120
gcgagctttt atgaggacgg aggggatgaa gacattgtga ccatttcgca ggcaaccccc 180
agttcagtgt ccagaggcac agcccccagt gataatagag tgacatcctt cagagacctc 240
attcatgacc aagatgaaga tgaggaggaa gaggaaggcc anaggtttta tgctgggggc 300
tcagagagaa gtggacagca gattgttggc cctcccagga agaaaagtcc caacgagctg 360
gtggatgatc tctttaaagg tgccaaagaa catggagctg tnnctgtgga gcgagtgacc 420
aagagccctg gagagaccag taaaccgaga gttcatgttn tattgaaact ctggaagaat 480
ggattcagcc tggataatgg agaactcana agctaccaag acccatccaa tgcccagttt 540
ctggagtcta tccgcagaag ggangtgcca ncanacttcc gaagctanct cacggtggac 600
aggtgaactt ggatatggan gaccatccgg ac 632

<210> 3122
<211> 640
<212> DNA
<213> Homo sapiens

<400> 3122
gctgctgatt tagttgggag tcttggtaag ttgtgggggt acagaatgct aagctgcctt 60
tcccactctc cactgcttgt cctgctctca cgcttgaacc tagtctaatc tgaacgaggg 120
acattctagg gcaatcactg aagaggaaga tggtgggcaa taggaaggag gaggaggagt 180
agccctgaaa caaagcagtg ggggagaggg gataggagga gggaaacact agacaaaatc 240
tggaaaggca agaataaggg caagggacca aggtctgtca ccaggagatc agtttccaca 300
ttctcctgtt tgtttatttg tccataggtc tgcctgtaga tctgctgtag ggcttgtcac 360
cattggaagc aaggtcctac ttcagtggca gatctggtgg ccttggagtg gctgaagacc 420
accaccctcc acagggctgg gcccatgcac agccatcctt ccctaccttg agtgagcttc 480
ctctgcatgt tttctatatc actggcagag cctgtagttg gaaaggggac agagtgacta 540
ctggactttg tgtgaaaaca ccaaccggga caaaacttca ntcaaggctg agacgggtgg 600
gggtatatna cttgtcctna cgttaacttg gaacatggtt 640

<210> 3123
<211> 670
<212> DNA
<213> Homo sapiens

<400> 3123
tagaangatg ccatgaagga aatgactgct ttgtaaagcg agggtaaact tctgaaatgc 60
tttgattaaa ataagctata ttaaagaccc caaaaccact tccctcgcag ctttcctctg 120
aatgtctttc acatgaaatg ggcctgagtc actctaagac tcaccttagg gtgatcaaag 180
tagcaccttt gcaaaacaaa gaggtagaga ctccctcggc tggccgtgtg gactttgcat 240
tcaatcagaa tttggaagaa aagacttcat attcactggc aagactgcag gaccagaata 300
aagccttgga agggcagctg ccacctttac aagaaaactg gtatggaaga tattctacag 360
catccagaga catgtatttt gacatcccac tggaacacag agaaacaagt nttattaaaa 420
ggcatccacc ccaaagactt caaaagcttg aacccattga cttgccacga gtnattactt 480
caggaagact cctgagccag cgagaaacca ggacaatgca caaagcaaag caggttctan 540

US 2003/0224385 A1

aaaagaaaat gcaaactcca atgtntactt ctganaacag acaatntttg catnagatgc 600
aagtgctgga aatgatccgt aaaagacaag aaggccaaat gganttaaag aaaagtcttc 660
atgganaagc 670

<210> 3124
<211> 833
<212> DNA
<213> Homo sapiens

<400> 3124
agatttgaat gtccaagtta aggaacttga agctaatgta cttgctacag cccctgacaa 60
aaaaaagcag aaattgctag aagaaaacgt tagtgctttc aaaacagaat atgatgctgt 120
ggctgagaaa gctggtaaag tagaagctga ggttaaacgc ttacacaata ccatcgtaga 180
aatcaataat cataaactca aggcccaaca agacaaactt gataaaataa ataagcaatt 240
agatgaatgt gcttctgcta ttactaaagc ccaagtagca atcaagactg ctgacagaaa 300
ccttcaaaag gcacaagact ctgtcttgcg tacagagaaa gaaataaaag atactgagaa 360
agaggtggat gacctaacag cagagctgaa aagtcttgag gacaaagcag cagaggtcgt 420
aaagaataca aatgctgcag aggaatcctt accagagatc cagaaagaac atcgcaatct 480
gcttcaagaa ttaaaagtta ttcaagaaaa tgaacatgct cttcaaaaag atgcacttag 540
tattaagttg aaacttgaac aaatagatgg tcacattgct gaacataatt ctaaaataaa 600
atattggcac aaagagattt caaaaatatc actgcatcct atagaagata atcctattga 660
agagatttcg gttctaagcc cagaggatct tgaagcgatc aagaatccaa gattctataa 720
caaatcaaat tgcacttttg ggagcccggt gtcatngaaa tgaaaccaaa cctccggtgc 780
catcgnaaga gtataaaaaa ggaanggaag aanttgtant tgcaaccggg taa 833

<210> 3125
<211> 780
<212> DNA
<213> Homo sapiens

<400> 3125
ccatattgcc aaaggagaag cttggggagc gggaagtcta cttggcaatc ctggctggga 60
tacactccaa gtcactggtg cctgtgtatg tgaaggtgag gcctcaggct gagggcaccc 120
ccgggagcac cggcaagcga gtgtccacct gccccttttg ctttggcccc tttgtgacaa 180
ctgaggccta tgagctgcat ttgaaggaga ggcaccacat catgcccaca gtccacacgg 240
tcctgaagtc tcccgccttc aagtgcatcc actgctgtgg ggtctacacg ggaaatatga 300
ccctggctgc catcgccgtc catttggtgc gctgcagaag tgctcccaag gacagcagct 360
cagacctgca ggcccagccg ggttttattc acaacagtga actgctttta gtcagtggtg 420
aagtgatgca tgattccagt ttttctgtta agagaaagct gcctgatggc cacttagggg 480
ccgaagacca gcggcatggg gaggagcagc ctcccatcct aaatgccgat gcagccccgg 540
gtccagaaaa ggtgacgagt gttgtgcctt ttaaaagaca aaggaatgaa agcagaacag 600
agggacctat tgtcaaggac caggctcttc anattttagc attaagattc ctaaaaaata 660
tgaagggcgt tcttatgaaa gaaaagaagc aatttcttaa ngattaattt ccatnaagaa 720
accatatcct anntaaaaaa gggnaaatag aactggttgg tccctcaact ccttttggg 780

<210> 3126
<211> 803
<212> DNA

05550450.0700

<213> Homo sapiens

<400> 3126
gttcaggctg gaaaaggatc ttctagccag ctgtaccgag agagtgccac gaccatggaa 60
aaactggctg ttctcaaagc ttgggcagag gtatatgtgg tcgctatgaa tattaaaaag 120
gaagcagagt caaaaccaaa aagagcaatt aaaaatactg acgatgatga tgacgactgt 180
ggtaccatcg atgaactgcc accagatagt ttaataacac tggtacaacc tgaactacca 240
acactcagtc gcctgtggtt agcagcatta aaagattatg cactcttgac tttaccagcc 300
gaattttcta gtcagcttcc tccagatggt ggagcatttt ataccctga aactattgat 360
acagctagac ttcactatcg gaattcctgg gccccaattc tccatgcggt ggcactttgg 420
ttaaatagca caggatttac gtgctcagag tctacagaag cagcagcaat atctggttta 480
caaaaacgtt ctacatctgt caatttaaac caggcatcag gagcagtggg tagtgctaaa 540
tctttgccag aaattaacaa gagacagaat gcatctgatt ttaggtgtga agtatacagt 600
ttctttgttc ccctagacct gaggagccca ttgaacatgt tacagcatgc ctgcaggcct 660
tacatacctt gctagactcc ccttatgctc cgaagtccat attgcagnaa gantcagccn 720
gataaggtgg ttgggttgcc tgagtgtttt gcaccggccc ttctaattga ccctgggaat 780
ccaatcatnc tgtccangct gtt 803

<210> 3127
<211> 799
<212> DNA
<213> Homo sapiens

<400> 3127
cagttagctt caaacaaaaa cgaaagttag accaagggaa cgtattagat atggaagtaa 60
agaaaaagaa acatgataaa caagaacaga aaggaagtgt gggagctaca ttcaaattag 120
gtgactcttt gtcaaaccca aacgaaagag ccattgttaa agaaaagatg gtatcaaata 180
ctaagtctgt agacacgaaa gcgagttcat ctaaatttag tagaattcta actcctaagg 240
agtatttaca aaggcagaag cataaagaag ctccgagtaa taaagcatcg aagaaaatct 300
gtgtgaaaaa cgtgccatgt gattctgaac atatgagacc aagtaaactt gccgtgcagg 360
ttgaaagttg tgggaaatca aatgagaaac acagcagcgg cgtgcagacc tctaaagaat 420
cattaaatgg cttgacaagc catggtaaaa acctcaaaat ccaccattct caggagtcta 480
aaacatacaa cattctaagg aatgttaaag aaaaagttgg tgggaagcag cctgataaaa 540
tatggattga taagactaaa ttagacaaat taaccaatat aagcaacgaa gctcaattca 600
gccaaatgcc tccccaagta aaggatcaaa agaaattata tctgaataga gttgggttta 660
aatgcactga acgttgaaag catttctctc accaaattta gaaagttcac ccaggaagct 720
tcataaagga taagagacag ggaaaattan ncattangac ctttttttac cgggtgaaaa 780
ggtaaccnca agganaaaa 799

<210> 3128
<211> 658
<212> DNA
<213> Homo sapiens

<400> 3128
gtatagtatc catgaatgaa tttatggaaa tagatatttg tgcagctcaa tttatgcaga 60
gattaaatga catcataata ctggatgaaa acttgcatag aattctgatt aaatagtggg 120
tctgtttcac atgtgcagtt tgaagtattt aaataaccac tcctttcaca gtttattttc 180

0502050-0502050

ttctcaagcg ttttcaagat ctagcatgtg gattttaaaa gatttgccct cattaacaag 240
aataacattt aaaggagatt gtttcaaaat atttttgcaa attgagataa ggacagaaag 300
attgagaaac attgtatatt ttgcaaaaac aagatgtttg tagctgtttc agagagagta 360
cggtatattt atggtaattt tatccactag caaatcttga tttagtttga tagtgtgtgg 420
aattttattt tgaaggataa gaccatggga aaattgtggt aaagactgtt tgtacccttc 480
atgaaataat tctgaagttg ccatcagttt tactaatctt ctgtgaaatg catagatatg 540
cgcatgttca acttttttatt gtggtcttat aattaaatgt aaaattgaaa attcatttgc 600
tgtttnaaag tgtgatatct ttcacaanag ccttttttata gtcagtnant cangaata 658

<210> 3129
<211> 781
<212> DNA
<213> Homo sapiens

<400> 3129
gagctgtcat ggctgctcct gtacgtagtc acggtcttgt gctctaagga aaacgacagc 60
acgtgttctt tttcactagt agaagtgacg ttggtttcat gttgacaact ttgaagccat 120
ttggaagtgt ttcagtggag agcaaaatga ataacaaagc gggctccttt ttctggaacc 180
ttagacaatt cagtacatta gtttcaacaa gcagaactat gaggctatgt tgtttgggac 240
tttgcaaacc aaaaatagtt cattcaaact ggaacatttt aaataacttt cataacagaa 300
tgcaatcaac tgatatcatt agatatctct ttcaggatgc attcattttt aaatcagatg 360
ttggctttca aacaaagggc ataagcactc taacagccct tagaattgaa agactacttt 420
atgctaaaag actgtttttt gactcaaagc agtctcttgt ccctgttgat aaatctgatg 480
atgaattgaa gaaagtaaac cttaatcatg aagtctccaa tgaagatgtt cttaccaagg 540
aaacaaaacc aaaccgtatc agcagtagaa aactgtctga ggaatgtaat tccctgagtg 600
atgtgttaga tgcattttca aaagcgccca catttcctag tagcaactat ttcacaagca 660
atgtggacaa ttgccaaaag gactgtccga tgaccagaaa gcgctttgaa aaacgactga 720
tgtttancca ncctgcattt aatcaagctc tgtgaacaat atgatnagag nagccaanga 780
t 781

<210> 3130
<211> 744
<212> DNA
<213> Homo sapiens

<400> 3130
ttcttggttg ctgtgcatgt gcttaagtga aatgagacta gggttggact atactttaag 60
acaacagggc gtagctgggt gcggtggctc acgcctgtaa tcccaggact ttgggaggct 120
gaggcgggcc gatcgtttta ggtcaggagt tcgagaccag cctggccaac atggtgaaac 180
cctgtctcca ctaaaaaaaa acacacacac aagaatcagc ctggcacggt ggcgggcgcc 240
tttaatccca gctatttggg aggctgaggc aggataatcg ctggaacctg ggaggcagag 300
gttgcagtga gctgagattg ccccactgca ctccagcctg ggcgacagag caagactgtc 360
tcaaaaaaca aaacaaaaaa cagggtgtat ttttctggtg accatttaaa aataattttt 420
atgggtacct agtatgtgta aattagcagc gtaacctttt tagtatattt tgagcataat 480
agctaaatta tcgagcactt gctacatgct agcagcttga cttagatgtt ttacatagat 540
atttctcatt taattctcac aacaaaccta taantcangt gagaaaatgg agacacaggt 600
aatttaccta aggccacant gttaaaaaat tgttaaagaa gctggggatc tgatccttgt 660
gtgatcacca agtnaaaact gacaagcctc tgttctcccc taagaagggt ccccncttaa 720

US 9,353,409 B2 2016/05/31

aatcaagnat naaccaatgn aaat 744

<210> 3131
<211> 693
<212> DNA
<213> Homo sapiens

<400> 3131
acttggtctc ctgctttcgc gacatggcct tcaattttgg ggctccctcg ggcacctccg 60
gtaccgctgc agccaccgcg gcccccgcgg gtgggtttgg aggatttggg acaacatcta 120
caactgcagg ttctgcattc agcttttctg ccccaactaa cacaggcact actggactct 180
ttggtggtac tcagaacaaa ggttttggat ttggtactgg ttttggcaca acaacgggaa 240
ctagtactgg tttaggtact ggtttgggaa ctggactggg atttggagga tttaatacac 300
agcagcagca gcaaactaca ttaggtggtc tcttcagtca gcctacacaa gctcctaccc 360
agtccaacca gctgataaat actgcgagtg ctctttctgc tccaacgctg ttgggagatg 420
agagagatgc tattttggca aaatggaatc aactgcaggc cttttgggga acaggaaaag 480
ggtatttcaa caataatatt ccgccagtgg aattcacaca agaaaatccc ttttgccgat 540
ttaaggcant aggttatagt tgcatgccca gtaataaaga tgaagatggg ctagtggttt 600
tagttttcaa caannnagaa acaggagatt cgaaagccaa caacaacaag ttggnanaat 660
caattgcata aaaggttttt gggaagggaa cca 693

<210> 3132
<211> 775
<212> DNA
<213> Homo sapiens

<400> 3132
tcttcaagga aagtcagatt ggtccaaact acttgagcca ccgaatttct ttcaaaagta 60
tagacattat atagtattga ctgccagcgc atcaacagaa gaaaaccatc tagagtgggt 120
tggattagta gaatctaaaa tccgtgtact tgttggaaac ttggaacgga atgaatttat 180
tactcttgcc catgtgaatc cccagtcatt cccagggaat aaggaacatc ataaagacaa 240
caattacgta tcaatgtggt tccttgggat aatttttcgg agagtagaaa atgcagaaag 300
tgtcaacata gacttgacat atgatataca gtcatttact gatacagtgt acagacaggc 360
aaacaatata aatatgctaa aggagggaat gaaaattgaa gcaactcatg taaagaaaaa 420
acaacttcac cactaccttc ctgcagaaat tcttcaaaag aagaaaaagc aaagtctctc 480
tgatgtcaat cgaagctcgg gcggacttca atccaaaaga ttgtctctgg atagcagttg 540
tctggatagc tccagagaca ctgataatgg aacacctttt aattctccag cgtccaagtc 600
tgatagccct tctgtaggag aaacagaaag gaatagtgct gagcctgctg ctgtaattgt 660
ggagaagcca ctgagtgtac accagnccaa ggactttcca ttccagtgat tggcgcaaaa 720
gttgactcta cagtaaaaac tggtntcacc ccccacggng ngttacaatt cccna 775

<210> 3133
<211> 805
<212> DNA
<213> Homo sapiens

<400> 3133
aaatcttttg tagttatccc acagttctta tatcttgttt ttttattctt ctctttgctt 60

0052904.0052800

ttcaggtgtg gatgtttctg ctgatatatt ctcaagctct ttagttggct gtttcttggc 120
caataataag cctaccaaag acattcttca tttctgttac actgtcttca atttctagca 180
tttctttgtg gttcttagaa tttccatctc tgtgtttaca ctgcctgtct gttcttggat 240
gctgtctgct ttatccagta gaacccatgg catatcaatc ataattgttt taaattccca 300
gtctgataat ttcagcaatc ctgctatatc tggttctggt tcttactctt tctctttaaa 360
ctaacttttg ccttttagta tgcttgtaat ttttccttan ctggacatgg catactggat 420
aanaggaaat gctgtaagca ggcctctagt aatcatgata agctgtgggg anaggggcan 480
cattctattg tccagggatt aaatgtcagt cttgcagtga gtctgtgctt ctgcactgcg 540
aacttcagtt tttcccaccc tttaattggg tcaggatgta taaaattggg tggaattgga 600
tatttccctt ccccaggtca ctgaaactct gantaaaacc caggtgtggt gggcttatgc 660
ctgttatacc ancactttgg gaaggccaan ggcaggtgga tcacctgaag gttnggaatt 720
catgaaacaa ccctgaattg gcttgaatcc caaaaaggtg gaaggtcccc ntngaaccca 780
aaaatttgtg aatactgccc ncccn 805

<210> 3134
<211> 624
<212> DNA
<213> Homo sapiens

<400> 3134
agccggccgc taagaagccg aaagatgtcc aggtcgggcg cggcggctga gaagcggact 60
ccagacagcg accccagatg aaggtaaatg aatataaaga aaatcaaaac atcgcttatg 120
tgtctctgag accagcacag actacagttt taataaaaac agctaaggtc tatcttgccc 180
ccttttcact cagtaattac cagctagacc agcttatgtg ccccaaatcc ctatcagaaa 240
agaattctaa caatgaagtg gcgtgtaaga agactaaaat aaagaaaact tgcagaagga 300
ttatacctcc aaagatgaaa aacacatctn ccanggcaga atccacgctg caaaattcat 360
cctcagctgt tcatactgaa agtaacaagc tacaacccaa gagaacggca gatgcgatga 420
aatctcagtg ttgatgtgga aagtngtcag gatggagaca gtgatgaaga taccncncca 480
gccctggatt tttcgggatt gtcaccctac gaaaggaaga gactgaagna acatttcaga 540
aaacgcagac ttttttgctt ctcttcagtt gtctgantct gctgcaanac tccgtggaaa 600
tgatagaana aganaccgcc tcct 624

<210> 3135
<211> 423
<212> DNA
<213> Homo sapiens

<400> 3135
atcttgctgg tttgcggccg gtcttggatg aagcggcggc cgtggtgaga gcgtggggaa 60
gggtggggtg agggggcgag gccgcagcta gggcggcgaa actctcctcc cctcggcccc 120
accgcgtggg acggcgtgaa cgtggtgtcg gagggatgtc agccttctct gaggcggcgc 180
tggagaagaa gctgtcggag ttgagcaact cgcagcagag cgtgcagacc ttgtccctgt 240
ggctcattca ccaccgtaaa cactcgcggc ccatcgtcac cgtgtgggac cgggagctgc 300
ggaaagccaa accaaacagg aagcttactt ttctctacct agccgatgat gtcatacgga 360
ncagcaagag gaaggggcca gagtttacaa aagattttgc accagtcata gtngangctt 420
tta 423

<210> 3136

09/02/2005 - 09:50:36

<211> 484
<212> DNA
<213> Homo sapiens

<400> 3136
ggacggtggc ggcgagcggc gtcagagctt gagggggggt tgacggcttc tggcgggtgg 60
cggtgttgaa ggcgagagct tgcttggccc gtgtcgcttc tgtcccaaga accggacgga 120
gagtgagggc acgagggtcg ctgtcggggg ctgtcgtctt ccacgtacac gtcgtcgtga 180
ggagcgcagt ccggactctt cccgcaaccc ctccggctcc ctttccgcac gcctcgaggc 240
ggcggcggcc accgagacag cagcgcacct tcccccatcc cttcccctta tcccccagcc 300
caaaagggcc cggtctgcgc cccacccccg cccgtccgcc cgctacgccg ccgccatgtc 360
ggcgcaggcc cagatgcgcg cgatgctgga ccagttgatg ggcacctccc gggacggaga 420
tacaactctc aacaaatcaa attcagntga tgacagagta tgcaagantc accttcncaa 480
ctgt 484

<210> 3137
<211> 774
<212> DNA
<213> Homo sapiens

<400> 3137
acaaaagagt gctaactact ctaggagaga ttaaagcctg tgaaatagaa cttttccaga 60
taatggcgag tttttaggct tgctcatgct gaagcttaat ataagctaat aagtagagaa 120
attaggaggc ttggatattg caaactttat tggttggggt gttacccagg ctaatagaaa 180
aaaaattata tcctagaaag acagaacagg tgcgacttct gagaagaaag gttagagaag 240
actagaaagg ctgggaccac cttgaatttg gcacacacac acacacaccc acacgcacac 300
acaaaatcac caaatgatct ggaatgtgct atgcgatgag tcagcctcca ctgctgtacg 360
tccttggcta cagactcctg gaacagcagc tcttctcaag gctagttgtg acagactcct 420
ggaacagcag ctcttctcaa ggctagttgt gacatccaaa gtgacaagag caggcccata 480
ttcagccacc tcatccaggc cttatcaaag aagagtctta tatgagatca aatggctgcc 540
tttccccaca agattatatt tttcctggta tgctctactt tgacacatgt ggctttctca 600
ggaattttca ataaaccgtg acttcactan ggtggcctaa gccccgatgt aaaatgtata 660
tcccactgga ccctgattta caatgcagac tgccccaatg tngacagcac ctgtttgtgc 720
ctcaaaatgg gnacactttc canaaatgag tggtttnctt ttggngttga aaca 774

<210> 3138
<211> 890
<212> DNA
<213> Homo sapiens

<400> 3138
gcgcgctctc gccggcccgc cccgaaccgc cccgcgctgg gaatttgcgg cggcctccgc 60
cggggcagcc gagctgaacc ggtctcttcc tcggaaaggc agggccgagg ggcctgcggg 120
gcagccatgg aggcgacgcg gaggcggcag cacctgggag cgacgggcgg cccaggcgcg 180
cagctgggcg cctccttcct gcaggccagg catggctctg tgagcgctga tgaggctgcc 240
cgcacggctc ccttccacct cgacctctgg ttctacttca cactgcagaa ctgggttctg 300
gactttgggc gtcccattgc catgctggta ttccctctcg agtggtttcc actcaacaag 360
cccagtgttg gggactactt ccacatggcc tacaacgtca tcacgccctt tctcttgctc 420

0052045-0002

aagctcatcg agcggtcccc ccgcaccctg ccacgctcca tcacgtacgt gagcatcatc 480
atcttcatca tgggtgccag catccacctg gtgggtgact ctgtcaacca ccgcctgctc 540
ttcagtggct accaagcacc acctgtctgt ccgtgagaac cccatcatca agaatctcaa 600
gccggagacg ctgatcgact cctttgagct gctctactat tatgatgagt acctgggtca 660
ctggcatgtg gtacaatccc ccttcttcct catcctcttt catgtacttc aaccggntgc 720
tttactgcct ccnaaagctg agagcttgat tccagggcct gccctgctcc tgggtgggaa 780
ccaatgggcc tgtacnaact gggtacctgg tcaaccgang ggccaaaatt ttnaacctcc 840
ttaaccttta acctttttc gccaatgctg ggccctnctt cctggaacna 890

<210> 3139
<211> 785
<212> DNA
<213> Homo sapiens

<400> 3139
accttccaac ccagccctcg gctgagccgc gccgcaccat gcccgccgtg gacaagctcc 60
tgctagagga ggcgttgcag gacagccccc agactcgctc tttactgagc gtgtttgaag 120
aagatgctgg caccctcaca gactatacca accagctgct ccaggcaatg cagcgcgtct 180
atggagccca gaatgagatg tgcctggcca cacaacagct ttctaagcaa ctgctggcat 240
atgaaaaaca gaactttgct cttggcaaag gtgatgaaga agtaatttca acactccact 300
atttttccaa agtggtggat gagcttaatc ttctccatac agagctggct aaacagttgg 360
cagacacaat ggttctacct atcatacaat tccgagaaaa ggatctcaca gaagtaagca 420
ctttaaagga tctatttgga ctcgctagca atgagcatga cctctcaatg gcaaaataca 480
gcangctgcc taagaaaaag gagaatgaga aggtgaagac cgaagtcgga aaagaggtgg 540
ccgcggcccg gcggaagcag cacctctcct cccttcagta ctactgtgcc ctcaacgcgc 600
tgcagtacag aaagcaaatg ggcatgatgg agcccatgat aggctttgcc catggncaag 660
attaactttt ttaagaaggg agcagagatg tttttccaaa cgtatggnca gccttttan 720
cctcccgttg canacatggg ttcaaagcat tcaaggtana aactgggaaa ccnagggcgg 780
gaaaa 785

<210> 3140
<211> 809
<212> DNA
<213> Homo sapiens

<400> 3140
tgagaaactg gcacttcaga tattatatcc tttagctata ggttcttctc tccctaagaa 60
cattagatat tttagttttc cagaacaaaa gctttaaact tctgcagtaa gttgagagaa 120
gggttgagaa gaggaaaaga acttctcatt ttctatcaga taagaatcac attagaaact 180
aagtacaaga ttagacaaca aattatgtgg tcaaataata tagtcattag ccacctaaac 240
attttaattc cagatattat ttaattccat ataataactg aattcttgtg agtggattac 300
aggtttttga tcccaaaatt ccagagcttt caactctctg aatttgtagt cctgaatatc 360
ccagtggtgg gggttcccag cattgtgggt gctacttgca aggccatagg atctagatgg 420
ccctgtcttg accctgaaat gaaccttaag ccttagaaca aagtcatgca gatgccccat 480
ttgataataa tcttattcac ctgtgctctg gtcctcggtt tctgcatgtg ttagcattgc 540
attgataact cagaatcttg ataaacactt aatatttggg cctgaagcat taaactttct 600
ttttattgta tatacttaaa aaatagaact cactgcccta tcatacattg gtngccctcc 660
ttattctttg gtctttcata tgcattaagt taaatcccct taaaggtaga cattcataaa 720

US 2003/0224385 A1 Dec. 4, 2003

aaacttacat tggttaattg gggtataaaa atattaccca angtttcctt caatgagntt 780
gacaatgaag ctggttttaa aatacnggg 809

<210> 3141
<211> 787
<212> DNA
<213> Homo sapiens

<400> 3141
atttcattgt tactattgtt gttcttaaaa atgtcctatc ttttacaaga gcctttggga 60
aaaacctcca ggggcaaacc tctgatgtct tctttgcggc cggtagcttg actgcagtac 120
tgcattcact caacgaagtg atggaaaata ttgaagttta tcatgaattt tggtttgagg 180
aagccacaaa tttggcaacc aaacttgata ttcaaatgaa actccctggg aaattccgca 240
gagctcacca gggtaacttg gaatctcagc taacctctga gagttactat aaagaaaccc 300
taagtgtccc aacagtggag cacattattc aggaacttaa agatatattc tcagaacagc 360
acctcaaagc tcttaaatgc ttatctctgg taccatcagt catgggacaa ctcaaattca 420
atacgtcgga ggaacaccat gctgacatgt atagaagtga cttacccaat cctgacacgc 480
tgtcagctga gcttcattgt tggagaatca aatggaaaca caggggggaaa gatatagagc 540
ttccgtccac catctatgaa gccctccacc tgcctgacat caagtttttt cctaatgtgt 600
atgcattgct gaaggtcctg tgtattcctc ctgtgatgaa ggttgagaat gagcggtatg 660
aaaatggncg aaaggcgtcc taaagcatat tganggaaca ctttgacagg accaaagggt 720
caagtaactt ggctttgctt aacataaant tttgngtatt aaaacacgaa cctnggattt 780
taanggg 787

<210> 3142
<211> 281
<212> DNA
<213> Homo sapiens

<400> 3142
agtccatagc tgcctttgag gtggtgtaga ccttgctaac caggacggcc cagtaggcag 60
agctcatttt tattcctgtc tgcaatcgtg caaaaacgcc tcttatggaa aagccagagc 120
gccaggagtc agcaaaacac actaaagatt gggcagtcac tggggagaac actcagcccg 180
ccagcaccca ggtgaaatat acagccttgt tgctcacaca aagcctgttt ggtggtttct 240
tcacacggan gcatgtgaca tttggtgctg aatcacncag n 281

<210> 3143
<211> 784
<212> DNA
<213> Homo sapiens

<400> 3143
atggcgccgg aggagaactc ggggagcgaa ctcttgctgc agagtttcaa gcgccgcttc 60
ctggcggcgc gcgccctgcg ctccttcccc tggcagagct tagaagcaaa gttaagagac 120
tcatcagatt ctgagctgct gcgggatatt ttgcagaagc acgaggctgt ccacacagag 180
cctttggatg agctgtacga ggtgctggcg gagaccctga tggccaagga gtccacccag 240
ggccaccgga gctatttgct gacgtgctgt attgcccaga agccatcgtg tcgctggtcg 300
gggtcctgcg gaggctggct gcctgccggg agcaccagcg ggctcctcaa ttctacatgg 360

0960450-020805

cccttaccgt ctgcaaccca gagatgtgcc agctgttcac caccgagcta tgctggactg 420
ggatcagatg ggaagcggaa gctcatcatg accagaaact gtttccctac agagagcact 480
tggagatggc aaanctgaac ctcacactgt aggactcaca catgactcca acgggattgt 540
gagaattaag tcactctcgt gggaagaatt tttatatggg aangcggnta aaattttcaa 600
ttggactgga atgttttgga gaatgttaan ttccaaaatc aggaaccaca aactgcgctc 660
taataaagaa catcgggtat ctaagcatgt ggggtttccc cctttctgcc aannagttct 720
gggttcttaa agnaaaatca ccataaatca agancattga aaaattctgg gntccaaaaa 780
atag 784

<210> 3144
<211> 853
<212> DNA
<213> Homo sapiens

<400> 3144
ccttcctggt ctcccttctc ccgctgggcc ggtttatcgg gaggagattg tcttccaggg 60
ctagcaattg gacttttgat gatgtttgac ccagcggcag gaatagcagg caacgtgatt 120
tcaaagctgg gctcagcctc tgtttcttct ctcgtgtaat cgcaaaaccc attttggagc 180
aggaattcca atcatgtctg tgatggtggt gagaaagaag gtgacacgga aatgggagaa 240
actcccaggc aggaacacct tttgctgtga tggccgcgtc atgatggccc ggcaaagggg 300
cattttctac ctgacccttt tcctcatcct ggggacatgt acactcctct tcgcctttga 360
gtgccgctac ctggctgttc agctgtctcc tgccatccct gtatttgctg ccatgctctt 420
ccttttctcc atggctacac tgttgaggac cagcttcagt gaccctggag tgattcctcg 480
ggcgctacca agatgaagca gctttcatag aaatggagat agaagctacc aatggtgcgg 540
tgccccaggg ccagcgacca ccgcctcgta tcaagaattt ccaagataaa caaccagatt 600
gtgaaactga aatactgtta cacatgcaag atcttccggc ctccccgggc ctcccattgc 660
agcatctgtg acaactgtgt ggancgcttc gaccatcact ggccctgggt ggggaattgt 720
ggttggaaag anggaactac cggctacttc taactcctca acctttctc tctccctcct 780
canaatccta ngtcttcggc cttcaaanat ccgtccaaag gtgggcccct caaaaatcct 840
ttngaaaaat tng 853

<210> 3145
<211> 871
<212> DNA
<213> Homo sapiens

<400> 3145
acaacttggc aagcctgtcc gagctctaaa tatcaacagg atgaataatg tcacgacttt 60
acatctttgg caatcggctg gaaggggtct gtgtacatca gcaactttca aacccatttt 120
atttggagaa aatgtactct ctggatgcct gttagaagtc gggattaatg aaaattgtac 180
tcagctcagg gagaatgctg ttgaaagact tgattcatta atacaagcga ctcacgttgc 240
aatgagaggc aactccgatt acgctgatct tagtgatggc tggctcgaaa taatacgtgt 300
agatgcccct gatccaggtg cagacccgct ggctagcagt gtgaacggca tgtgcctgga 360
tattcctgct cacctgagca tccgcatcct catctcggat gctggcgcgg tggaagggat 420
tactcagcag gagatactcg gtgtagagac aaggttctcc tcagtgaact ggcagtacca 480
gtgtgggctt acctgtgagc acaaggccga ccttctccct atcagtgcat ccgtccagtt 540
tattaaaatt cctgcacagt taccccaccc cctgacaaga ttccaagatc aattatacag 600
agtatgactg gcaacaagaa atgaggtgtg ttgggccgca gcttctatat ccatggactc 660

0050050.0053800

agtattatca agggggagct gcattctcag tgtgttgcta angggcttac nggttgcctg 720
ttggttcctc acattgggcc ttggttcctc aanaaacccc tgggaccang aatatgcaaa 780
gcctaatagt tagacaacca acctgggctt tttaattttt ttgagaatgg gagttttgcc 840
ccttgggtgg cccaangccn gaaatngntt n 871

<210> 3146
<211> 633
<212> DNA
<213> Homo sapiens

<400> 3146
cccggaaccc gcggtcgcca ccgcggcggc ggccccaggc tggaggcgtc cgggcgcctc 60
tttcctccag cctctgggac tgcgctgctc gcagtctcct cgccctgcct gggcttgaga 120
aacctagtgc atacccgaaa gagggttttt gtgtatgtgt gtgttttaa agggtggcta 180
tgatgactgg gccttggaga tgtgagactg ggaggtaaaa tgcacacttg ctgccccca 240
gtaactttgg aacaggacct tcacagaaaa atgcatagct ggatgctgca gactctagcg 300
tttgctgtaa catctctcgt cctttcgtgt gcagaaacca tcgattatta tggggaaatc 360
tgtgacaatg catgtccttg tgaggaaaag gacggcattt taactgtgag ctgtgaaaac 420
cgggggatca tcagtctctc tgaaattaac cctccccgtt tcccaatcta ccanctcttg 480
ttgtccggaa acctttttgaa ccgtctctat cccaatgagt ttgtcaatta cactgggggc 540
ttcaattttg catctaggta ncaatgttat ccangacatt gngnaccggg gggctttcca 600
tgggctacng gggtttgagg gagattgcat cta 633

<210> 3147
<211> 651
<212> DNA
<213> Homo sapiens

<400> 3147
gaaacccatg tggagcccgg cgatcgttgt gacatcggga agggaagtcc aaagggagga 60
atcctggaga ggaacaggga ggagggtgct ccaggctgaa ccgctgctcg ctctccctcc 120
aggccagact tctgggagtt cccgggcaga cggcgtttcg gtcgggacct attcctgcta 180
gtgcaggcct ccaggtgacc tcactcggac ggaagaatct tcccgaggct gggctgttcc 240
ctctcctgcc cggactgtgg cctcgccggg gagagcgggc gggggagctc gcgccgagga 300
ctggaccatc tgtacagacc agcgggagtg cgcgcgcccg cctcgcacag ggccgggggcc 360
tggaccaaac cacatgaact ggactgagag ggggaagaag cggggaggaa gaaatcccgc 420
cccaaacgtc cgctttcctt ttctctactt tgtaatttat tgatcagttt ctgttgggag 480
acgggtgtcc tttacccgcg ggaaggggggc ggggcttccc tcccgggccg catgcgggga 540
gaggctgctc cctccccttt ttcctgccca gtcgcggggc ccaagtcttc cttcttcgtc 600
cgaaaggang gganggggggg actcnctgct acaagcctcn gccccctgtg n 651

<210> 3148
<211> 753
<212> DNA
<213> Homo sapiens

<400> 3148
acttacacat ttcttcaatg ctgaaaagtg cttgtggtga acctgcttac acaaattatg 60

0050245 0050245

ttggtggctt tcatggatgt ctagattaca ttttcattga cttaaatgct ttagaggttg 120
aacaggtgat tccattacct agtcatgaag aagttaccac ccaccaggcc ttacctagtg 180
tttcccatcc ctctgatcac atagcacttg tatgtgattt aaaatggaaa tagatgtgtg 240
tttaatggaa ttgaagtctg aaaaggaagt agttatttta gcagaaaatt taatatgaat 300
caaagcttat atgtaaactt caaggaggaa tggtaaaatg ttcagccctc ctagttatgt 360
tcctgatgtc ttcgttatga aactgttgat gtttgcatca tacatcttct ctttccttgt 420
tttcctctac aattggagga gaaacaaata tatttcttac tagcaaaata gaaaactgaa 480
ttatttttct ccaaattgag actctcagaa aaggaagatt gaattagcgt gtttttttgtt 540
tgtttgtttt tgtttttgtt tttgtttttt tgagatggag tttcactctt gttgcccang 600
ctggagtgca atggcacaat ctcggctcac tgcaacctcc ggccccctg ggtttaagcg 660
antctcctgc ctcaagcttc cccgagttag ctgggaatta caggcatgcg ccaacaatgt 720
ccngggctaa antttttgga atttttaagt nan 753

<210> 3149
<211> 759
<212> DNA
<213> Homo sapiens

<400> 3149
aagcgcctcg cgggggtctg gcccggagtg gagggcgcgc ggtcccagcc ctcccgctcg 60
gccggcgggt gtcgagttca gccctagggg acctctttct cctggacatt gaagatatgg 120
ccctttggag gtgacccang agagaaggga tgaaggcctt tggtcctcca catgagggcc 180
ccctccaagg actcgtggcc tcccgcattg agacttatgg gggccggcat cgagcctctg 240
ctcagagcac tactggcaga ctctatcccc gaggataccc tgtgctggat cccagtcgcc 300
gacgcctcca gcagtatgtc ccctttgcca ggggttctgg ccaggcccga ggcctgtcac 360
ccatgagact gcgagatcca gagcccgana agaggcacgg gggccatgtg ggggctggcc 420
tgcttcactc ccccaaactc aaggaactca ccaaggccca tgagctggag gtgaggctgc 480
acactttcag catgtttggg atgccccggc tgccccctga ggaccggcgg cactgggaga 540
taggaanagg gtgggcgaca agtggcctga ccatcgaaga agtcctggag gggagctggt 600
gcctggggca caagggagat gagccaggaa gctctgccac caaacannga gggcctggtg 660
ggaagctcct gacaaccgaa cttgatttac gttgagaaaa nctcaaagnt tatgaacnga 720
tttggtagcc gccggccctg ctgaacctgc aantgaant 759

<210> 3150
<211> 708
<212> DNA
<213> Homo sapiens

<400> 3150
atgtcgtgaa gctgggggag ctcgtcgccg ccgccggcgg ctagcgggcg tccgcgccat 60
ggagcgctac gcggccgcct tggaggaggt ggcggacggt gcccggcagc aggagcgaca 120
ctaccagttg ctgtcggcgc tacagagcct ggtgaaggag ttgcccagct ctttccagca 180
gcgcctgtcc tacaccacgc tcagcgacct ggccctggcg cttctcgacg gcaccgtgtt 240
cgaaatcgtg caggggctac tggagatcca gcacctcacc gaaaagagcc tgtacaaccg 300
gcgcctgcgc ctacagaacg agcaccgagt gctcaggcag gcgctgcggc agaagcacca 360
ggaagcccag caggcctgcc ggccccacaa cctgcctgtg gttcaggcgg ctcagcagcg 420
agaactagag gccgtggaac accggatccg tgaggagcag cgggcgatgg accagaagat 480
catcctggag ctggaccgga aggtggctga ccagcagagc acactggaga aggcgggggt 540

US 2005/0250800

ggctggcttc tacgtgacca ccaacccaca ggagctgatg ctgcanattg aacctgctgg 600
nactcatccg aaagcttcaa caaaggggct gccggggcaa ggaatgcanc cctgggactg 660
ggaagtccct gggcaantcc cctgctgccc aatnttgacc annaaagg 708

<210> 3151
<211> 844
<212> DNA
<213> Homo sapiens

<400> 3151
atacacgctt gagcaagctt tgctatcagc cagccaagag atagaaatgc atgcagataa 60
cccagcagcc attcagacag tggtgttaca aagggatgat ttacaaaatg gactgcttag 120
tacgtgtcga gaactttctc gagccactgc cgaattggaa cgagcatgga gagaatatga 180
taagttagaa tacgatgtaa ctgttaccag gaaccagatg caagagcagc tggatcacct 240
tggtgaagtt cagacggaat cagcaggaat tcagcgtgca cagattcaga aaaagaactt 300
tggcgaattc aggatgtcat ggaagggctg agtaaacata agcagcaaag aggtactaca 360
gaaataggtt cccactttcc tgttggagta gtccctccaa gagcaaaatc accaacaccc 420
gaatcttcga caatagcttc ctatgtaacc ttgaggaaaa ctaagaagat gatggatcta 480
agaacggaaa gaccaagaag tgcagtggaa cagctctgtt tggctgaaag tactcgacca 540
aggatgactg tggaagagca aatgggaaga ataagaagac atcaacaagc gtgcctgagg 600
gagaagaaaa aagggttaaa tgttatcggt gcttcagacc agtcaccctt acaaaggccc 660
ttcaaattta agggataatc catttaggac tactcagact cnaaaggagg gatgataagg 720
gactgggcac tgccattaga gaaaaatgan gtaaaggtca ggnccatgga aactcccgga 780
acagaaaatt gttcaactaa aaggaaaacc gnacccccaa aaatggtggn ccttcagcaa 840
angg 844

<210> 3152
<211> 635
<212> DNA
<213> Homo sapiens

<400> 3152
caaatgtatc aagtaattct gaaattcttg gggtccggcc atctaatgtt tccagtagtt 60
ctgggattat tgcagcccaa ccaccaaata ttctaaataa ctctggaata ttgggaatac 120
agccacccag tgtgtcaaat agttctggac ttttgggagt gctaccccca aatataccta 180
acaattctgg acttgtagga gtacagccac caaatgttcc aaatactcct ggacttctgg 240
gaacacagcc accagctgga cctcaaaact tacccccttt aagtatccct aatcaaagga 300
tgcccacaat gccaatgtta gacattcgtc cgggactaat accacaggca cctgggccaa 360
gattcccttt aatacagcct ggaattccac cccaacgggg aatcccaccc ccatcggtac 420
ttgattcagc tcttcatcca ccaccccgtg gacctttcc tccaggagat atttttagtc 480
aaccagaaag acctttttta gctcctggaa gacaaagcgt gacaatgtta ctaacccaga 540
anaaaggata ccacttggga atgataacat tcaacaggaa ggagatagag attaccggtt 600
tcctcctaaa ggaancangg gaaagcntta ntaga 635

<210> 3153
<211> 678
<212> DNA
<213> Homo sapiens

0060204.0004000

0002470459

<400> 3153
atcgaggtat acctacataa agtgtactga tattctgtgt atagcccagt ggatttgtac 60
atatgtatgc acttgtgtag ccaccaccca gatgaagata ctgagcaggt ccagtacccc 120
agagctacct tcatttctat cactttccca agctgtcatc cccgccggct gtcatgggaa 180
ccctgtctgt aagatgcgac agtttgggta aaggagtttg gtcattttaa agagtgtgaa 240
aggcagagaa cagagaaatc aaaaccttgc agggccaagg tgggtggaga gggtgttttt 300
cttttaacat acatgggcgg ttttaaggag aaattgaagc agcctgttca gacaattgtt 360
ttggtatctg gccccaggtc tgtggttcct aacatgactt gtgatattat tttaagtggg 420
cagatggctt tttgatagct tctttatctt tcgatctcaa gctcttgcaa aggggaggtt 480
ggtgctcatt gcaagatcag cgataagggt ttctttgtag gtcggtggct ttcctgggtg 540
agtacatttc aacatantat tggttttaga acctgtgtgc tgccagntna ctttgcaaca 600
ctgttgaaga ctanccaccc tttgngacct accctccttg ggaaaatggc ggaggatctc 660
angggtatat ccccttac 678

<210> 3154
<211> 744
<212> DNA
<213> Homo sapiens

<400> 3154
ccctgcccca caaacatgaa agaaaagaca agagaagcac cccagaagag gaggggagag 60
gtgccccaga aaaaatcatc cagtctctga agctttgccc aggtgggcac aggccagcca 120
gcctctcctc tggttgccca gctggctgca ggctgtcatt taaccttccg cccagcatgc 180
ttttgagtgt gcagaagtgc tgcatgccct cttctttgaa aacctgttga gcaaatgcct 240
ccgcatttta tgcaccttca acctccacag ccaaaggccc ccaagaccaa acatgctgtg 300
cacacacagc agctctttgt gtcccactcc tggccgatct cctgcatcat ctcgttgagc 360
ttcattgaac cccgcagtct gcatgctctg tggaactcag ggtcttcatt ttgcacgaaa 420
ctcagggtct tcattttccg tggaactcaa agtcttcttg ctctgtggaa cttggagtct 480
caaggccttt gtgctccatg gnacttgggg tctgtgtgat tcatggnact cagaatcctt 540
gtgctctgtg gtactcaagg tgtgcgtgct ctgtggnact ccgggtctgc atgctccatg 600
gnaagcaaca agggatgcac tttgaccccc caaaaccaat acatacatcc ttcaatttat 660
tcctggncct caaactgtca aatctggtna gggttcttca accccaatct ccnttgaggc 720
tcaaagcccg gggtctttta agac 744

<210> 3155
<211> 590
<212> DNA
<213> Homo sapiens

<400> 3155
catctccccc aacctggggg tcgtgttctt caacgcctgc gaggccgcgt cgcggctggc 60
gcgcggcgag gatgaggcgg agctggcgct gagcctcctg gcgcagctgg gcatcacgcc 120
tctgccactc agccgcggcc ccgtgccagc caaacccacc gtgctcttcg agaagatggg 180
cgtgggccgg ctggacatgt atgtgctgca cccgccctcc gccggcgccg agcgcacgct 240
ggcctctgtg tgcgccctgc tggtgtggca ccccgccggc cccggcgaga aggtggtgcg 300
cgtgctgttc cccggttgca ccccgcccgc ctgcctcctg gacggcctgg tccgcctgca 360
gcacttgagg ttcctgcgag agcccgtggt gacgccccag gacctggagg ggccggggcg 420

anccgagagc aaagagagcg tgggctcccg ggacagctcn aagagagagg gcctcctggc 480
acccacccta gacctggcca ggagcgccct ggggtgggcc ccaaggagcc aagcacnggc 540
tgangcccca tgcaagactg anaaagaanc caanaccccc cggggagttt 590

<210> 3156
<211> 750
<212> DNA
<213> Homo sapiens

<400> 3156
ccggacgcga ggggcggggc gaagcgcggg acaaagggaa gcgaagccgg agctgcgggc 60
gctttttctg cccgcggtgt ctcagattca ttcttaagga actgagaact taatcttcca 120
aaatgtcaaa aagaccatct tatgccccac ctcccacccc agctcctgca acacaaatgc 180
ccagcacacc agggtttgtg ggatacaatc catacagtca tctcgcctac aacaactaca 240
ggctgggagg gaacccgggc accaacagcc gggtcacggc atcctctggt atcacgattc 300
caaaaccccc aaagccacca gataagccgc tgatgcccta catgaggtac agcagaaagg 360
tctgggacca agtaaaggct tccaaccctg acctaaagtt gtgggagatt ggcaagatta 420
ttggtggcat gtggcgagat ctcactgatg aagaaaaaca ngaatatttt acgaatacga 480
agcagaaaag atagagtaca atgaatctat gaaggcctat cataattccc ccgcgtacct 540
tgcttacata aatgcaaaaa gtcgtgcaaa aagctgcttt anaggaagaa agtccacaga 600
gacaatctcg catggagaaa aggagaaccg tacatgagca ttcaacctgc tgaaagattc 660
aagatgatta tgatgatggc ttttcaattg aagcatacaa gccaccggcc ccgttttcca 720
ngangaaaaa ccaacggcct ccanncangt 750

<210> 3157
<211> 694
<212> DNA
<213> Homo sapiens

<400> 3157
atatgaaaaa taattgcatg atttctcatt cctgagtcat ttctcagaga ttcctaggaa 60
agctgcctta ttctcttttt gcagtaaagt atgttgtttt cattgtaaag atgttgatgg 120
tctcaataaa atgctaactt gccagtgatt aaatgagtgc ccttccaaag tttcttttta 180
ccagaaatac agtggattga gactagaaca ttgctttcat ttgggtttgt aggtttaaaa 240
atctgattct aatcagaagt atatttagaa caaaacactt tatttataaa agatgactcc 300
aaaattcatc ttagtatttc accatgttat atattattat cagcaagtcc ttctgaatat 360
tatcacagat tactccatgt ctctaaaata tattggcatt gagctcattt gttaggtttg 420
cccaccttat tgaacagatt tattttcctt atacatactt gtgttgtcct tggttacgtg 480
tgtccccaaa tgtaaatacc aaatttttat aaatcaaaaa ttttttagtg tgtaagagat 540
tttatgtaat tttaaggggc cttttcagtt catccttttg caaaaccatc accacttaat 600
tatacttttg catcagtcta gaagactgca tattggnaaa gcaangtaaa tctannatga 660
tggtgattct gggtgagctg gaataagggn atta 694

<210> 3158
<211> 908
<212> DNA
<213> Homo sapiens

0050450-0050750

<400> 3158
atctcactcc cgccacagct tgggatcggt ctctgctgtt ttacgtcctc cacctcggga 60
gcccccggtg actgtcacag cctcttgccc tgtgatctgc aggttctggg agacgcacag 120
ctaagatgcc aggacatcct ggaagctggg aaaagatgga gtttcactct tgttgcccag 180
gctggagtgc attatcccaa tctcggctta ctacaacctc cgcctcccag gttctgacaa 240
caaaggagat tgtgacatat tgctgggcct aacactaagg tgatgttagt tatatgcttt 300
ggctgtgccc ttggaaggca ttgagacata ctgctgtgcc cagcaccaag atgatgtaac 360
gtgactcttc tgcttcaggc ctgccaaaag aaaagattgt gacagatcac tggacccagc 420
acctaggtag gattgtgaca tatatctggc caagcgcaca gatgtaatga tgactgtcat 480
accttgaaga agccaatagc aagagagaat gttgctctca ggcttaggaa aatgangaag 540
tctttctgta caaaagtcat aaagaattac tactctctca catatattac gccctantgt 600
gttacagaga atgtcntaac agggcccagc acacaaagtg aagattgggg tttgtcctat 660
gcacactnca ccaaaccttt tacagttgtc aaccctggac caattgacaa gagtctgcta 720
agtggaaggg tcctgaaatt acaatgtgga acacaagtcc cgcaantttg ggaatttgtg 780
acctggtcaa natggtgaaa catcctgggc taacaagttt gggaatgggg gactccattt 840
tcctaaatcc aagcttcaat agggaaaggn tgaaaaantn cncctaacct gggacncaaa 900
tttggtga 908

<210> 3159
<211> 187
<212> DNA
<213> Homo sapiens

<400> 3159
gtgctggtgg ctggcccgcg ggaggagcga agcggggctc ggtgggctga aacccgaaac 60
ctccagtccc ggagcgcggc ggggaggaag gaagcggcgg cggcggtggc cgaggcggng 120
aggcggctgg gccggggcct gagctgccgc ggcggccgct cctcggtgag cacccggcnt 180
ggngcgc 187

<210> 3160
<211> 602
<212> DNA
<213> Homo sapiens

<400> 3160
atctgagcat tgataatgtt ctatctaaat ttgtacagtg tgatttttt tttagaataa 60
atattttata aaagggttta ttgtcccttg tttatgttaa aatgcttgtt tccatgaggg 120
gtttcttccc tctcaatgcc cctagcccct tgggaaccag aggccccaga gacagtgtgg 180
gctcctcagc gtagcctctt ggtgacagca tgcgctgcct gggcaggcac agtgctgctg 240
tgatcacagg ggaggccatg acttggcacc tgggaagcca gctcagagca tattcagtca 300
agttgatgag gaatggcggc ccgacctcan cagcaggtcg gcgtgcggga ctctcagaat 360
ggcggcctga tctcagcagc gggtcggcat gccagactct cggagccctc agctatcttc 420
atgtgtttca ggactgctgc catgtaacgt gtgtgtgtgg agagtgtgcg gagtgtacac 480
gaagcatgcc cggaggctca gcatgaagca ctctgtaccc agctctacct cctcattgtc 540
cttcanccag tgtgtacctt cagccangcc tgnnctccnt gtgggganggg cagtccccaa 600
gg 602

<210> 3161

0960204.0002000

<211> 300
<212> DNA
<213> Homo sapiens

<400> 3161
cccggctctg gagcataaac aagagcgggg acgggatgag gcggcggttg atcccagggt 60
ggcgagtggc ggcgaccgag gcggcgagcg gggcccggcg ccgaccctga gtgcagcctg 120
acccgccctc gcgcgcgcgc cctccccggc cgggcccact cgccgcgcgc ccagccatga 180
acctggcgag ccagagcggg gaggccggca ccggtcagct gctcttcgcc agcttcagcc 240
agaacaacac agaagtgaag ggggcatcga gagcagctgg acttgggcgt cncnctgtng 300

<210> 3162
<211> 756
<212> DNA
<213> Homo sapiens

<400> 3162
agggccccgc cctgccttct ggggcaaagc ggagagtggt cggttctgcc ccacagtaac 60
gcgaggaaag aaatctcgcg aggctggagt tctccgggag cgccggtcgg aggcggtcgg 120
cggaggtgtc taccccgccg gtgatggcgt tgaacgccac tggcttcccg gccttccgtc 180
cgctgcctcc gtccgattct gcgtctgctt gctgaggagg cggattaggg gggcgcggag 240
tctcttccct tgagtgcata ggtcccggtt ggtagagggt ttgagtccgc atcgccacag 300
ctgaaggctg cgagggacta agagcagaat atatctttag aaatgagttg cacaattgag 360
aaggcacttg ccgacgctaa agctcttgtt gaaagattaa gagatcatga cgatgcagca 420
gaatctctga ttgagcaaac cacagctctc aacaagcgag tagaagccat gaaacagtat 480
caggaagaaa ttcaagaact taatgaagtc gcgaagacat cggccacggt ccacgttagt 540
tatgggaatc cagcaagaaa acagacaaat cagagagttg caacaagaaa acaaagaatt 600
acgtacatct ctggaagaac atcagtcggg cttggnactt ataatgagca agtacccgag 660
aacaaatgtt tanattgcta atggctagca aaaaagatga tccgggtaaa aataatgaag 720
tttaaagnng caagnactnc caaggattgg catggg 756

<210> 3163
<211> 155
<212> DNA
<213> Homo sapiens

<400> 3163
cacattttgt agttattttg atatgaaata ttgtcttgga aattgatcaa ttctctgaga 60
agtacacgtt atgatatttg tgctggttca gggggaagaa ggagcacaaa gtcaaagggc 120
ttcctaccag tggccaatgg gnttaagnag aagna 155

<210> 3164
<211> 648
<212> DNA
<213> Homo sapiens

<400> 3164
tatatgtgac ctttttaaaa aatgagctgt aagcagtctc ccagacagta gctcagcctc 60

0050750-0050950

cagaactctc tttctgcata gttgaagacc cctcttcaca caagatggta gcaacaaatc 120
ataggtgcaa ttgcaccaaa ttcacagaag atcaattgaa aatcctcatc aataccttca 180
ctcaaaaacc ttacccaggt tatgctacca aacaaaaact tgctttagca atcaatgcag 240
aagagtccag aatccagatt tggtttcaga atcaaagagc taggcatgga ttccagaaaa 300
caccagaacc tgactttaga tttaagccac agccatggnc aagattaacc tggtgtggag 360
tttcaaaata gagaagccag atggtgttgt accacctata gcacctttca attacacaca 420
atcatccatg catttatgaa aaacccatac cctgggattg attccggaga acaacttgct 480
gaagaaattg gtgcttcaga gtcaagagtc caaatttggg gtccaaaatc aaggntttaa 540
gatttcatct ccagaggaaa aagagaacct ggtatggcct tagaatgngg naagnccaag 600
tgaagnccag ggggaagggt tctgagggac ttcaaggnac aggaggat 648

<210> 3165
<211> 741
<212> DNA
<213> Homo sapiens

<400> 3165
ttagaagaat gcataaaacg tagtaaatgg ggtctgtcat tagcaaaggc aaatctaagc 60
aatcattttt ccccccagaa gttacttaga aggagaactg ggaacacttg gggtctctct 120
aactgatggc attcacttca cacagtcgtc tatgttatcc agagattttt atttcatttt 180
acattttagg gcacagttct ttggggctaa ttaaaatggg gtttgcaggc tttttatggt 240
gaagaataat atatctctgt ctatagcttt cccatggtag cctgataagg ctgagagaga 300
aaaatatgtg cagtatctca tcctcccccc gtaccaggcc atagctttga agtgtatttt 360
gtaaattcaa ctataggtta gtcagaatgc tgtttttcgt taattaactt agcctgtgtt 420
gatatctcct ccttcctggt cacattcaaa ccttcccaga gtacaaaggg gtatgtagaa 480
aggattccag aagaagtaat actttattct ctaatgttaa tagcttttcc nggatctctt 540
aagtanggggg aaagtanaaa atgatggtta acagtatgtg tggngatgtc attatctcca 600
nagagggttc aagaaaatcc tttggaaata aaaagttaaa tggttgcaat tcaaggggna 660
atttcaagtc ctcaaggtct gattaactta ctttttttccc tttggccntt gggctggatt 720
ccggcnttgg tanataaatn a 741

<210> 3166
<211> 763
<212> DNA
<213> Homo sapiens

<400> 3166
tttgtattcc tagacttgct gatatttacc tctctcttgt ctcttcagag taaatggttc 60
ccttctttcc ttcctacttt ccttcattct ctcttccttc cctccttcct acttcttttc 120
ttccttcctc ttcctctctt aaaactatct tagatgtaga atcctggtgt agggttttat 180
tttatttta ttttttgacc caataaaatg ttatatgaaa gaatgaaaat attaatttaa 240
gagactctgg gagtctgaat aaagtagctt tatattaact acaggataat attagcctta 300
ttacccccac aagatttttt aaaacttgag gtaggtagct acattaaata aatttgctac 360
ttatataaaa atttttatca acactaaact tttaaagttt acaagttttt tttttctttt 420
ttacagtctt ctatagagtt aggttaaaaa tgtggntcta accatcaaca attgcatggg 480
taaatgaccc tgaactaaaa ctggatgggt tccctancaa nacaaataaa aatatacctt 540
tttcagggtt caatctgtgc anggtatatg caaggttaaa tccaccaagg cntaagaact 600
tccacaaaaa tatttcaagg ganaagggcc tgcaatttag acgggaacaa gaaatgggtt 660

0052870-950246

tttcccctca ctggtcccgg aatgctccaa nacttgggnt ttaaaatttt tgctaacctt 720
tttttaaana aatccngatt aaggatanga ccaatttaac cct 763

<210> 3167
<211> 727
<212> DNA
<213> Homo sapiens

<400> 3167
aaaatcgcat ttccaagccc aatgacatcg agctgtttca gatcgacgac gagacgttct 60
ttgtcatcgc agacagctca aaggctggtc tgtccacagt ttataaatgg aacagcaaag 120
gattctattc ttaccagtca ctgcacgagt ggttcaggga cacggatgcg gagtttgttg 180
atatcgatgg aaaatcgcat ctcatcctgt ccagccgctc ccaggtcccc atcatcctcc 240
agtggaataa aagctctaag aagtttgtcc cccatggtga catccccaac atggaggacg 300
tactggctgt gaagagcttc cgaatgcaaa ataccctcta cctttccctt acccgcttca 360
tcggggactc ccgggtcatg aggtggaaca gtaagcagtt tgtggagatc caagctcttc 420
catcccgggg ggccatgacc ctgcaagccc ttttctttta aagataatca ctacctggcc 480
ctggggaagt gnctatacat tctctcagat ataccagtgg gataaagaga agcagctatt 540
caaaaagttt aaggagattt acgtgcaggc gcctcgttca atcacagctg tctccaacgg 600
acaggagaga tttctttttt tgcatccaag tttcaaaggg gaaaacaaag atttttgaa 660
catataantt gntgacttta antttttgtga aaggtgttgg tggggtgaaa actaaggnga 720
aatggtn 727

<210> 3168
<211> 712
<212> DNA
<213> Homo sapiens

<400> 3168
ctggttctaa gtcttctcaa agaggaggag gaagatggtc aagaaggcag cattcacaat 60
ctaccacttg taacatccca aaggccattt tatgatggac ccatgccaac tccccggcaa 120
aagccatttc agtcaggttc tacaccgttg catctcactc acagattcat gcaagcttca 180
ctgcctgcac tttagttctt gggattcaag caaagagtgg ataatagact tgcctcagaa 240
tgaggatatt gaagccatat gtctcggtca aggatgggct gctgccgcta ctagtgccct 300
gcttcttcga ttgtttacta ttggaggggt tcaaaaagag gtattcagcc ttgctggacc 360
tgtggtgtca atggcaggac atggagaaca gcttttcatt gtttatcaca gaggtacagg 420
atttgatggg gatcagtgcc ttggagttca actgctagag ctggggaaaa agaaaaaaca 480
aattttgcat ggtgaccctc ttcctcttac aaggaaatcc taccttgcat ggattgggtt 540
ttcaagctga aggtacccct tgttacgtgg attcagaagg aattgttcga atgcttaaca 600
gaggacttgg taatacgtgg nctcctanat gtnatacaag agagcactgc aaagggaaaa 660
tctgatcact actggggtgg gntggtatcc atgaaaatcc cancaactaa gg 712

<210> 3169
<211> 522
<212> DNA
<213> Homo sapiens

<400> 3169

0505050.0020000

gaaacagcac agaacacgag gtggtcccca tgtccctggc acactagcat tccgggggat 60
gaggaatccc cagcccttga ggcagaggtg ccgagtgact gccatgcttc gcccgtccgc 120
atgggcgctt ctgtccagct gcacccgagg ccgggggttt ccctcacctc ggtcttccca 180
agatggagat gctaacgaaa ctgagaaggg ggcgtatctt gacgaaggtt tgtgcaagtc 240
aggcccttct ggaacacagc agggcctaca acgaggggcc tttgcgatgg gctgtgagga 300
tgggggtggt gggaagaatt ggccacgtta gagaccccat gccaccccac catggtgagt 360
gctctgtgcc tcctgctcac ctgtggtgag ctgggcgagc tgggcgagct gggcgagctg 420
ggctggggag agcctgtgag gaccganagg agaaatgana anaangaaca naaatattat 480
ttctatgtaa tttatatttt acttatgcca aattatttat ga 522

<210> 3170
<211> 641
<212> DNA
<213> Homo sapiens

<400> 3170
ttcattttac tgggagaatt aagaatgagc catatcaggt agtagaatgt gccatgcgag 60
cacttcactt ctcttccagg cacaataaag acattgccct ggtccacctg gcaaacgttc 120
tacacagagc acacttctct gctgatgctg ctgtcgtggt ccatgcagct ctggatgaca 180
gtgacttctt caccagctat tacactttgg ggaatatata tgcaatgctt ggggaatata 240
accactcagt gctctgttat gaccatgctt tgcaggccag acctgggttt gagcaagcta 300
taaagaggaa gcatgctgtc ctatgtcagc aaaaactgga gcagaaattg gaggctcagc 360
atagatctct ccagcgaaca ctgaatgagt taaaagagta tcaaaagcag catgaccact 420
acctgagaca gcaggaaatc ctagaanngc ataaactgat tcaggaggag canatcttaa 480
gaaatatcat tcatgaggac tcagatggca aaagaggcac aattaggana tcatcagata 540
tgccgactgg gcaaccanca gcatagttta cattgccagt gggaccagnc tgtacgccta 600
tcatcgtggg ngatatcctt tgnaaatgtn ggctatggtc a 641

<210> 3171
<211> 747
<212> DNA
<213> Homo sapiens

<400> 3171
gtgctaggtt ttaaatacca tccatatgct gaccacccct aaatgtacat ctcttgcttt 60
aagatctctt cttacaccag acttatttgc tcactgctga ctttacattt ccatttggat 120
gttcgcaaga cgtttaaaac tcaacccggc ccaaaatgaa ctctttatta ctctcccaaa 180
cctgctcttc ccacagtttt caccatcttg gctaacagcc aatgacccag ggctaaaact 240
taggaaccat ttttaacttc cctgtttctt tcactttcta ccatgcattt catttcttcc 300
ttcacaatca agctaggatt tgattgcttc tcagttcctt tattgctgtc aacctggtct 360
cagccaccat ctgtctcatg aaatcctgaa gtaacctcct gtggctacct ttactgttga 420
cagttaattc ttcacattgc tgccatagtt ttacttttaa tatgccagat cacatgactg 480
cttaaaacgt acgatagctt ttcatcttcc ttgggagtaa aagccaaagc cttatcatgg 540
cttgtaaaat tctgtgtctt ctggcctgca gttaacacct ttgactctac atcctatttc 600
tctctaatat tcctcnaaac atgccaagca ngcttctact tgggggacct ttggcagttg 660
ctatncccccc tcccagtttn cgctttccnc ctaaaaaaaa ttacataatt ttgttcccca 720
ttcctccttt tanggcccan ctccaaa 747

0952945.0720001

<210> 3172
<211> 600
<212> DNA
<213> Homo sapiens

<400> 3172
gaaataacga agatccctat gggagatatc tggttaacag acaagcaacc tgaggaacac 60
aactttagcg ataccaaaat aatttccctt tctcatcttg aaatgacctg gactaacaga 120
agaaattttc ctgcattgct tgtgaggatc ttacataaat caaaactgcg atactatgga 180
aaacctgata aaaagatgat tgaaccatat cagacctttt tggaagttgc tgacagttca 240
ggcacagtgt cagtgattat gtggaatgcc ctgtgtcctg agtggtataa aagtttgcgg 300
gttggtttag ttcttctgct tcaagactat tctgttaaaa agagttatcc attcagaata 360
cagcctgtcc ccgtggatcc acagatcaaa ctaatttcta caatggaaat ctgcctgaat 420
cttcgagatc ccccnacaaa tataattatc attccagaaa agcaggtgaa accagaatgg 480
agactgccaa agctaaatca ccgatttacc ccnaggtcag aaactggatg atatgccnaa 540
aaattgcatc tgtgatgtta tnggccnttt atttttgttg gaaagggtcc ancgggtcaa 600

<210> 3173
<211> 686
<212> DNA
<213> Homo sapiens

<400> 3173
ttcggatgct tggcttggtt ttgtgttgat tctgcaagag cggttgattt tggattgagt 60
atcctgtggt tcttgctttt tactccttgt tcatttgtct gttggtacag accactttat 120
ggagctttca gtggttggat ttcatccctt actggtctca accaaaatat tcctgttgga 180
atcatgatga taatcatagc agcacttttc acagcatcag cagtcatctc actagttatg 240
ttcaaaaaag tacatggact atatcgcaca acaggtgcta gttttgagaa ggcccaacag 300
gagtttgcaa caggtgtgat gtccaacaaa actgtccaga ccgcagctgc aaatgcagct 360
tcaactgcag catctagtgc agctcagaat gctttcaagg gtaaccagat ttaagaatct 420
tcaaacaata cactgttacc ttttgactgt acctttttct ccagttactg tattctacaa 480
atatttttat gttcaaaaca cacagtacag acagcatgga tatttcctgt tcacttgtgc 540
atgggctaaa accaagaaaa cttccttgtc ttattacttt acctaataat tcttaatatt 600
tcagtgcccc ctgcanaaaa aatattacat ggccaaataa atattccccc atatttttgg 660
ggggangana ttcnntggaa ttattc 686

<210> 3174
<211> 548
<212> DNA
<213> Homo sapiens

<400> 3174
aactagccca gccgcgcgga agcgcctggg gagaggagaa ngagccgacc tgccgagatg 60
gaggcgaccg gcacctgggc gctgctgctg gcgctggcgc tgctcctgct gctgacgctg 120
gcgctgtccg ggaccagggc ccgaggccac ctgccccccg ggcccacgcc gctaccactg 180
ctgggaaacc tcctgcagct acggcccggg gcgctgtatt cagggctcat gcggctgant 240
aagaagtacg gaccggtgtt caccatctac ctgggaccct ggcggcctgt ggtggtcctg 300
gttgggcang aggctgtgcg ggaggccctg ggangtcagg ctgaagantt cagcggccgg 360

0960230 : 0960230

ggaaccgtan cgatgctgga agggactttt gatggccatg gggttttctt ctccaacggg 420
gaacggtgga agcagctgaa gaantttacc atgcttgctc tgcgggacct gggcatgggg 480
aagcganaag cnaagaactg atccangcgg aagcccngtg tctggtggaa acattccagg 540
ggacanaa 548

<210> 3175
<211> 671
<212> DNA
<213> Homo sapiens

<400> 3175
gctagccttg cgcggcgcgg ggagagcgca gtggcgccgg cgggaaaggg ctgcggacct 60
gcggcgccgc gttgtgcgtt cgacgacgcg gcaccggctt cgacgccctc tgcccgctcc 120
agaagcagta agaagacatg ttggataaca agaagaggtg tagagtttgc atatatcaac 180
tgtggcctta atgagcatgt tgacagcatc gatgctagac agacagtctt tttactgctg 240
gattgtgcaa gatatttaac cctattttgt ttgaattatg acttaaatgt caaacatctt 300
aactaagaaa agggaaacat tttagttttg gaagtcagaa tgccaaggag aaggaaaaat 360
cttgggggaa atccttttcg gaagactgca aaccctaagg aagttgtcgt atccagtgtt 420
gctantcgtg aggagccaac cactactcta ccttccatgg gtgagacaaa agttgatcag 480
gaagaactct tcaccagtat ctcagaaata ttttctgatc tgggatcctg atgtntgtat 540
ttgatgcttt ctgaatgtga tttcnaagtt gaaaatgcta tggattgtct attanaatta 600
tctgcccctg ataccnagat agaagaatcc cttcccnaan tttcgttgct tctgaaaacc 660
cagttngtgc c 671

<210> 3176
<211> 250
<212> DNA
<213> Homo sapiens

<400> 3176
aactctccgg gaggggcgct tcccgacgcc aagtcttact gttgctcagg ctggaatgca 60
gtggtgcgct ctcggctcac tgcaacctct cccttctggg ttcaagcgat tctcgtgcct 120
cagcctccca agtagctggg attacagaca aaaggatgcc acggagaaag aaaaaagtta 180
aagaagtctc cgaatctcgg aaccaggaga acaaggatgt ggaaactacc agttctgtca 240
ntgtnanaag 250

<210> 3177
<211> 740
<212> DNA
<213> Homo sapiens

<400> 3177
ggatctccag cagtggcgtt acttctagcg gctggatacc gggttctccg cgagatcccg 60
agatattctc cccgcacgga agcgacgact ggcctggcca gaggactcgc gtgggagcga 120
ggtgccggcc ccgacaggac ggtgagccta cccgtatatt acaagaaatc tcaagtcaaa 180
cactggaaaa gatgtcagaa gattcagaaa aggaagacta ttcagacaga acaatcagtg 240
atgaagatga atcggatgag gatatgttca tgaaatttgt aagtgaagat cttcatcggt 300
gtgcactttt aacagctgac tcttttggtg atcccttctt cccccggact acacagatac 360

0062945 - 072800

tattagaata tcagctaggg agatgggtgc cacgtcttcg tgaaccaagg gatttatatg 420
gtgtctcttc ttctggtcca ttgagcccaa cacggtggcc ataccattgt gaagtcatcg 480
atgaaaaagt ccagcatatt gatggagtct catgctggag tgagtctcac caggctggag 540
cgcagtggtg cgatctcggc tcactgcaac ctccacctcc caggttcaag cgattcgcct 600
gcttcagcct cctgagtagc agagactaca ggcgcgtgcc accacgccca gntaatttgg 660
nattttagt aaaaacgggg tttcaccatg ttggccagga tggtctccgc tcttgacctc 720
gtgatccgnc tgcctcactt 740

<210> 3178
<211> 638
<212> DNA
<213> Homo sapiens

<400> 3178
aaaaaaaaga tgaatcactg caacttgtgg gacagccacc accctgaggt accccagcgc 60
atcttgcgga tcatgtgccg tctggaggag ctgggccttg ccgggcgctg cctcaccctg 120
acaccgcgcc ctgccacaga ggctgagctg ctcacctgtc acagtgctga gtacgtgggt 180
catctccggg ccacagagaa aatgaaaacc cgggagctgc accgtgagag ttccaacttt 240
gactccatct atatctgccc cagtaccttc gcctgtgcac agcttgccac tggcgctgcc 300
tgccgcctgg tggaggctgt gctctcagga gaggttctga atggtgctgc tgtggtgcgt 360
nccccaggac accacgcaga gcaggatgca gcttgcggtt tttgcttttt caactctgtg 420
gctgtggctg ctcgccatgc ccagactatc agtgggcatg ccctacggat cctgattgtg 480
gattgggatg tccaccacgg taatggaact cagcacatgt ttgaggatga ccccagtgtg 540
ctatatgtgt ccctgcaccg ntatgatcat ggcaccttct tccccatggg gggtgagggt 600
gccagcagcc agatnggccg ggctgngggc acaggctt 638

<210> 3179
<211> 730
<212> DNA
<213> Homo sapiens

<400> 3179
cacacaggca ggtcgggcag gcgggtcgca ggttgtaaat ccatgtggcg ggggctttgg 60
accctggcgg cccaagcggc acgtgggcct cgcagattgt gcacgcgccg gagcagcggc 120
gcaccagccc ccggctccgg cgccaccatc ttcgcgctaa gctctggcca aggccgctgc 180
ggcatcgcag tgatccggac cagcggcccc gccagcggcc acgccctccg aattctcacc 240
gcaccccgag acctgccccct tgctcgccac gccagcctgc gcctgctcag cgatccccgc 300
tccggggagc ctctggaccg cgcactggtg ctctggttcc caggtcccca gagtttcacc 360
ggtgaggact gcgtggagtt ccacgtgcat ggaggcccgg cagtggtgag cggcgtcctg 420
caggccttgg gcagcgtgcc agggcttcga ccggcggagg caggcgagtt cactagacgg 480
gcgttcgcca atgggaagct gaacctgacc gaagtggagg ggctggcgga ccttatccac 540
gcggaaacag aggcgcagcg gcggcaggcc ctcaggcagc tggacggaga gctgggccac 600
ctctgccgtg gctgggcccg agaccctcac caaagctttt ggcccacgtg gaggcctata 660
tcgatttcgg cgaaggatga caacctggga nggangggggt ncctggagca aggcccgaca 720
tcgaaagtac 730

<210> 3180
<211> 819

0956450.02800

<212> DNA
<213> Homo sapiens

<400> 3180
atcaatagaa acaagaccgg agagataaca gcctcctcca acaaatccct caacttgcta 60
aaaatcaagc atggcgattt gttgttcctg tttccctcga gccttgctgg gccctcatct 120
gaaatggaga cgtcagttcc accgggcttc aaagtctttg gcgctcccaa cgtggtggag 180
gatgagattg atcagtacct cagcaaacag gacgggaaga tttacagaag ccgagaccca 240
cagctatgcc gccacggccc tttggggaaa tgcgtgcact gcgtccctct agagccattc 300
gatgaggact atctaaacca tctcgagcct cccgtgaagc acatgtcctt ccacgcctac 360
atccggaagc tgactggagg ggctgacaag gggaagtttg ttgccctgga gaacatcagc 420
tgcaagatta agtcagggtg cgagggggcac ctcccgtggc cgaatggcat ctgtactaag 480
tgccagccga gcgccatcac gctgaacaga cagaagtaca ggcatgtgga caatatcatg 540
tttgagaatc acaccgtcgc tgaccgcttt cttgacttct ggagaaagac agggaaccag 600
cattttgggt acttatacgg acggtacacg gagcacaaag acattcccct tggcatcagg 660
gctgaagtgg ctgcgattta tgagccacct cagattggta cacagaacag cttggagctt 720
cttgaggatc caaaagctga agtggtcgat gaaattgctg ccaaacttgg cctgcggaag 780
gttggctgga tatttacaga cctcgtctca naagatccc 819

<210> 3181
<211> 703
<212> DNA
<213> Homo sapiens

<400> 3181
agcatcccaa agaatttctt gtattcctaa aacccatatt tctaataagt atgggaataa 60
tttcctccag gaagcacaca tgagagaaaa atctttccaa tgtaatgaga gtggcaaagc 120
ctttaattgt agctcactgt taaaaaaatg tcagataatc catttaggag agaaaaaata 180
taaatgtgat atatgtggca aggtctttaa tcagaagcga taccttgcat accatcatag 240
atgtcacact ggtgagaaac cttacaagtg taatcagtgt ggcaagacct tcagttacaa 300
gtcatccctt gtaattcaca aggcaattca tactggagag aaacctcaca agtgtaatga 360
atgtggcaag gtttttaatc aaaaagcata ttttgcaagt catcatagac ttcatactgg 420
agagaaacct tacaaatgtg aagaatgtga caaagttttt agtcgctaat cacaccttga 480
aagacatagg agaattcata ctggagagaa accgtacaaa tgtaaggttt gtgacaaggc 540
tttcagacgt gattcacacc tggcacaaca tattgtaatt cacactggag agaacccttа 600
caagtgtaat gagtgtggca agacctttgt tcaaaattca tctcttgtaa tgcataaggt 660
cattcatact gganagaaat gtccaggtgn aatnaatggg cca 703

<210> 3182
<211> 798
<212> DNA
<213> Homo sapiens

<400> 3182
tcagctcgca ctgcatatgc aacgcaactc aactcatgct gcgtatgcaa ctcaactcac 60
actgtatgca actcagctcg ctctgcatat gcaattcaac tcgcactgcg tatgcaaatc 120
aacttactgc atatgcaact caactcactg cgtatgcaac tcaactcgca ctgcgtatgc 180
aactcaactc gcactgcgta tgcaactcaa ctcgcactgc gtatgcaact cagctcgcac 240

09529459.072800

tgcgtatgca actcaactgt tgcaagtact tatttccggc cacttccttt ttctaactac 300
cacaccaagc cagtatttct cctccctgaa gtcagcccag gatgaggcac tagacagcag 360
gacatgctgt atgcccttgg gcctgctgga agtatgcaga ctagccagcc ccagacttca 420
tcctgccctg tcctgccttt cctgtgaaaa ccctgtggcc tctgcctccc ctggctctga 480
cttctgcctc ctgcccagct ctgcagctcc ccttgggccc tgcctggagt gatgtgccgc 540
cttctcttga cactgtgagt gataaacttt ccatgtcagg aacctgtgtg tgtcactcac 600
tcaccttgac gagtccgcgt ctaggcccca ccagtggtgt ggttttcctc atagtctctc 660
tacctaagca catgtctgtg acaaggtctt acccagccca nggattcttg aactatctgt 720
aggaactgcc atgttgactc ctggcagttt tattctttct ctctactcgn tcaaccttct 780
tanggagtga cgtttttt 798

<210> 3183
<211> 825
<212> DNA
<213> Homo sapiens

<400> 3183
agacagatgg agaagttaga agttttagag gaatggcagt ctcacattga aggctgggag 60
gggtccaaca tcactgacac ctgcactgaa atgctaatgt gtggagtctt actgaaaatt 120
tcttctggaa atattcaaga acgggtgttt tttcttttcg ataatctttt ggtgtactgc 180
aaaagaaaac acagacggtt gaagaacagc aaggcatcta cagatggaca tcggtacctt 240
tttcgtggcc ggatcaacac ggaggtgatg gaagtggaga atgtggatga tggcaccgct 300
gatttccata gcagtggaca cattgttgtt aatggatgga agatacataa cacagcaaaa 360
aataaatggt ttgtttgtat ggcaaaaaca cctgaagaga agcatgaatg gtttgaagct 420
attttgaaag aaagagaacg gcggaaaggt ttaaaattag gaatggagca agatacctgg 480
gtcatgatct ctgaacaggg tgagaaactt tataaaatga tgtgcagaca aggaaatctg 540
atcaaagacc gaaagagaaa actgactacg ttccctaaat gctttcttgg aagcgaattt 600
gtgtcatggc tgttggaaat tggagagatt cacaggcctg aggaaggcgt gcacttggga 660
caagcattat tagaaaatgg aatcattcac catgttactg ataaacatca attcaaacca 720
gaacagatgt tatatagatt tcctatgatg atggaacatt ttatccaaga aatgagatgc 780
caggacgtga tttcnaangg tgtaagatta tattgccnct tcata 825

<210> 3184
<211> 831
<212> DNA
<213> Homo sapiens

<400> 3184
acgttgcccg ggatgcggac aggttccgcc gcctccagcg ccccatcctg agccgattat 60
ctgcaattat gaaatgaagt aactcaagat gagcaagtta aaagtgatac cagaaaaaag 120
ccttaccaat aattctagga tcgtaggact cctggctcaa ctggagaaga tcaatgctga 180
gccttcagaa tcagacactg cccgatatgt tacatcaaaa attcttcatc tggctcagag 240
tcaagaaaaa acaaggagag aaatgacagc caaaggttct acaggaatgg aaattctgct 300
gtcaacatta gagaacacaa aagatcttca aactacactt aatatcttaa gcattcttgt 360
tgagctggtg tcagctggtg gaggtcgaag agtgagtttc ttagtcacca aaggtggttc 420
acaaatattg ttgcagttac ttatgaatgc cagcaaagaa tctcccccac atgaggactt 480
aatggtacag attcattcta ttcttgcaaa gattggacca aaagataaaa aatttggagt 540
aaaggctaga attaatgggg ctctgaatat aaccctgaat ttggtcaagc agaatttgca 600

09/02/2009 05:50:56

gaatcatcgc ttggttctac cttgccttca gcttttacga gtatattctg ccaactctgt 660
gaattcagta tccttaggga aaaatggagt tgtggaactg atgtttaaaa tcattggacc 720
atttagtnag aagaattcca gtcttataaa ggttgcttta gacactcttg ctgcattgnt 780
taaatcaaaa acaaatgcca ggagagctgt anacagagga tttgtccagt g 831

<210> 3185
<211> 824
<212> DNA
<213> Homo sapiens

<400> 3185
acattaaagc tatttaatta attattatta ttattatttt gagacagggt cttgctctgt 60
tgcccagact ggactgcagt ggcgtgatca tggctcactg cagcctcgac ctccagggct 120
caagcgatcc tcccacctca gcttcccaag tagcggggac tgcaggcaca tgccaccaca 180
cccagctatt ttttttatt gtttgttgag acagggtctc actatgttgc ccaggctggt 240
cttgaacttc tgggctcaag cggtccactt gcctcggcct cccagagtgc taggattaca 300
ggcaggaggc actgcacctg gccagaaaaa actattcttg acttcacatt ttccgccagc 360
ttcacccctg ccccttgct tctctttgca gcaaaacttc aaaaagcata gtccacgctc 420
tcccccaggc attcttgggt ctctctaccc aggattttgc tcccccatcg ccacatctcc 480
ttttgccaag ggcaccagag gcctccgtgt tgttggatcc agcggtcggc tctcagcctc 540
ctcttaactg ctcagtggca ctggtgccgc caagcaaccc ttcctccaag agagccacag 600
gctctgggat acttcactct ggggttcctc ctacctcaca gactctcctg gctggtcctc 660
ctcttctccc caacatctta tggccaggtc ttcaggctct tttctgncta caggcactct 720
tcatgagtcc ttattcaagc tcctggcctc aaatgccagc tgtgctgaga ccccccttatt 780
tgtagcttca gctancctgn tcttccctga acccaaactt atgt 824

<210> 3186
<211> 777
<212> DNA
<213> Homo sapiens

<400> 3186
aggctcaggc tccgacggtg gccggcgggg gtcacgaggc ttcgtagtgg aggaacgggt 60
ttggcgtgtg ggacgcagct gcctctgtac tggggagtca cggagtggcc gggctccagg 120
gacatggcgg cggcctctgc ggtgtcggtg ctgctggtgg cggcggagag gaaccggtgg 180
catcgtctcc cgagcctgct cctgccgccg aggacatggg tgtggaggca aagaaccatg 240
aagtacacaa cagccacagg aagaaacatt accaaggtcc tcattgcaaa cagaggagaa 300
attgcctgca gggtgatgcg cacagccaaa aaactgggtg tacagactgt ggcggtttat 360
agtgaggctg acagaaattc catgcatgta gatatggcag atgaagcata ttccatcggc 420
cccgctccct cccagcagag ctacctatct atggagaaaa tcattcaagt ggccaagacc 480
tctgctgcac aggctatcca tccaggatgc ggttttcttt cagaaaacat ggaatttgct 540
gaactttgta agcaagaagg aattattttt ataggccctc ctccatctgc aattagagac 600
atgggtataa agagcacatc caaatccata atggctgctg ctggagtacc tgttgtggag 660
ggttatcatg gtgaggacca atcagaccag tgcctgaagg aacacgccag gagaattggc 720
tatcctgtca tgattaaagc cgtnccgggt ggangangaa aaggaatgag gattggt 777

<210> 3187
<211> 854

0507050.00700

<212> DNA
<213> Homo sapiens

<400> 3187
tgttgcttga gaaatggcga tgatcgaatt ggggtttgga agacagaatt ttcatccatt 60
aaagaggaag agttcatcgc tgttgaaact catagctgtt gtctttactg tgcttctatt 120
ttgtgaattt ttaatctatt acttagcgat ctttcagtgt aattggcctg aagtgaaaac 180
cacagcctct gatggtgaac agaccacacg tgagcctgtg ctcaaagcca tgtttttggc 240
tgacacccat ttgcttgggg aattcctagg ccactggctg gacaaattac gaagggaatg 300
gcagatggag agagcgttcc agacagctct gtggttgctg cagccggaag tcgtcttcat 360
cctgggggat atctttgatg aagggaagtg gagcacccct gaggcctggg cggatgatgt 420
ggagcggttt cagaaaatgt tcagacaccc aagtcatgta cagctgaagg tagttgctgg 480
aaaccatgac attggcttcc attatgagat gaacacatac aaagtagaac gctttgagaa 540
agtgttcagc tctgaaagac tgttttcttg gaaaggcatt aactttgtga tggtcaacag 600
cgtggcgctg aacgggatgg ctgtggcatc tgctctgaaa cagaagcaga gctcattgaa 660
gtttctcaca gactgaactg ctcccgagag gtaggagagc atctgaatgc cacaggtgcc 720
ttctgtcccg tgttgctccg cttccggttg cttacttcag ccccctagcc gcttcttgcc 780
cttttgatga agggtcaagg tgtgccggat taatggcctg gactttgtac cccancangc 840
accgtggntt ccag 854

<210> 3188
<211> 829
<212> DNA
<213> Homo sapiens

<400> 3188
gaaaaacata ctattccttt ggtagtccag aaagaaacat catcttcaga taataagaaa 60
cagataccta atgaagcttc tgctagaagt gaaagagaca catcagacct agagcaaaac 120
tggtcattgc aagatcatta tagaatgtat tcacccataa tataccaagc cctctgtgag 180
cacgtgcaga ctcagatgtc actgatgaat gacttgactt caaagaacat ccctaatgga 240
attcctgctg taccatgcca tgctccctct cattctgaat ctcaggcaac tcctcattct 300
agttatggct tatgtacctc caccccagtc tggtcacttc agcggccacc ctgccctcca 360
aaggttcatt ctgaagttca aactgatggc aacagtcagt ttgcatcaca agaggattca 420
gaaattcaga ggttgattac agaaatggag gcatgtatat ctgtacttcc aacagtaagt 480
ggaaacacag atattcaagt tgagatagca ctggccatgc aaccattaag aagtgagaat 540
gctcagttac gaaggcagtt gagaattttg aaccagcaac tcagagaaca acagaaaact 600
caaaaaccat ctggtgctgt ggattgcaac cttgaattgt tttctcttca gtcattgaat 660
atgtcactgc aaaatcaatt ggaggagtca ctaaagagcc aggaattact gcagagtaaa 720
aatgaagagc tgttaaaagt gattgaaaat caagaangat gaaaaccaaa aatttagtag 780
tatatttaaa ggccaaggat caaactatac ttggaaaatt aaccgcant 829

<210> 3189
<211> 837
<212> DNA
<213> Homo sapiens

<400> 3189
gaactcgtca tgctctttgt agcgtggtgc ttctgttgct cacaggatgt ttgccacacg 60

0056456-0072000

agtcactcga gagaatctct gagtcctggc gagggctttc tgaggcttcg tgtattagca 120
gctgttgtct tccaactcag cggcaggaca acttgccttt gatgattttc aagagagttg 180
tgctatgatg tggcaaaagt atgcaggaag caggcggtca atgcctctgg gagcaaggat 240
ccttttccac ggtgtgttct atgccggggg ctttgccatt gtgtattacc tcattcaaaa 300
gtttcattcc agggctttat attacaagtt ggcagtggag cagctgcaga gccatcccga 360
ggcacaggaa gctctgggcc ctcctctcaa catccattat ctcaagctca tcgacaggga 420
aaacttcgtg gacattgttg atgccaagtt gaagattcct gtctctggat ccaaatcaga 480
gggccttctc tacgtccact catccagagg tggccccttt cagaggtggc accttgacga 540
ggtcttttta gagctcaagg atggtcagca gattcctgtg ttcaagctca gtggggaaaa 600
cggtgatgaa gtgaaaaagg agtagagacg acccagaaga cccagcttgc ttctagtcca 660
tccttccctc atctctacca tatggccact ggggtggtgg cccatctcag tgacagacac 720
ttctgcaacc caatttttca gcccccantg ggatgatgtg gtctggaact gaaagtgatg 780
cctatttctg agttatgcct gnatttaaga actgatgaan cccaagaagt ccatgat 837

<210> 3190
<211> 853
<212> DNA
<213> Homo sapiens

<400> 3190
cgatgaagat gaagaggata atctttttgg gggtacagct gctaagaagc agacattgtc 60
tctacaagct cagagagaag agaaagcaaa agcctccgag ctctccaaaa agaaagcatc 120
tgccctgttg ttcagcagtg atgaggagga ccagtggaat attcctgctt cacagaccca 180
cttagcatct gacagcaggt ctaaaggaga acccagggat tctgggaccc tccagagcca 240
ggaggccaag gctgtgaaaa agaccagtct ctttgaggaa gacaaagaag atgatctttt 300
tgccattgcc aaggacagcc aaaagaagac ccagagagtg tcactcctct ttgaagacga 360
tgttgatagc ggaggctctc tgtttggctc tcctcccaca tctgttcctc ctgcaacaaa 420
gaaaaaagag actgtctctg aggcaccacc tttgctgttc agcgatgaag aagagaagga 480
ggcacaactt ggagtgaagt ctgtggataa gaaggttgag agtgccaagg agtcattaaa 540
atttgggaga actgatgtgg ctgagtcaga aaaggaagga cttttgacta gatctgctca 600
ggagacagtc aagcattctg atttattttc ttcatcatcc ccatgggaca aaggaaccaa 660
gcctagaacc aaaactgttc ttagcttggt tgatgaggaa gaggatnaaa tggaagatca 720
aaacattatc cangcttcac agaaagaagt aggaaanggc tgcgatcctt gatgcccacc 780
ccaagagccc aggtgtcttt caggatgaaa agctgctttt cagccccaag cttcaaaagg 840
gcaatgancc cnt 853

<210> 3191
<211> 828
<212> DNA
<213> Homo sapiens

<400> 3191
agactccgtg ggcgtaggac cctccgagcc aggtgtggga tatagtctcg tggtgcgccg 60
ttttttaagc cggtctgaaa agcgcaatat tcgggtggga gtgacccgat tttccaggct 120
gctatccatg tccagggcca aacatgaatc ctattgctct tgggagccgc tggcttgctt 180
atgcagaaaa caagttgatt cgatgtcatc agtcccgtgg tggagcctgt ggagacaaca 240
ttcagtctta tactgccaca gtcattagtg ctgctaaaac attgaaaagt ggcctgacaa 300
tggtagggaa agtggtgact cagctgacag gcacactgcc ttcaggtgtg acagaagatg 360

0202304650 - 09-12-2020

atgttgccat ccacagtaat tcacggcgga gtcctttggt cccaggcatc atcacagtta 420
ttgacaccga aaccgttgga gagggccagg tgcttgtgag tgaggattct gacagtgatg 480
gcattgtggc ccacttcccc gcccatgaga agccagtgtg ctgcatggct tttaatacaa 540
gtggaatgct tctagtcaca acagacaccc ttggccatga ctttcatgtc ttccaaattc 600
tgactcatcc ttggtcctca tcacaatgtg ctgtccacca tctgtatact cttcacaggg 660
gagaaactga agccaaagta caggacatct gcttcagcca tgactgtcgc ttgggttgtg 720
gtcagtactc ttcggggtac ttnccacgtt ttccccatca acccttatgg tggncaacct 780
tgtgttcgta cacatatgtc accacnagta gtgaatccat gagccgtt 828

<210> 3192
<211> 763
<212> DNA
<213> Homo sapiens

<400> 3192
aaaaaaaaaa aaaaaattgg tgttttgtta gataatctgg gttcatcttt caaaattcag 60
aaaatacaga cctgtaaaga ggaaaaggaa gactcctata attccatcat tcaaaagcaa 120
tcactgttaa ctgaatttat tgttttagac ttttttcttg catttatgta aacctgactt 180
ttcagaatta ggatttatac tgtatacgat gttttgtgac tgatatcagc atttagagcc 240
atacagagaa tgtttttcat tatgcttaag aactacataa tgttccattg tgtgggtgta 300
caaagttgat ccagttctct acatttgggc atttaggtta ttttcaatag tttgcattca 360
atagaacata ttcttacaaa taaaatctgt ccatgtatcc aaggatagtt ccatttgttt 420
taagttttga ttttatcact attacatcac tataccaaat atcccccaaa agattatacc 480
agtaaatgtc ttttaaaata taataataaa taccagccgg gtgcagttgc tcacgcctgt 540
gatcccagca ctttgggagg ccgaggcggg cagatcactt ggggtcagga gtttgagacc 600
agccttggta acatggcaaa acccttctct actgagaata caaaaattag ccggtcatga 660
tggcggccac ctgtggtccc agctgctcag gaggctgagg caggaggatg gcttgagccc 720
cggagggtgg angttgcagt gagctgaggn tgcccactgn act 763

<210> 3193
<211> 841
<212> DNA
<213> Homo sapiens

<400> 3193
agtaattttc agctcacaaa tgatgaagaa atccataacg tcggaacttc cttgaccttt 60
ggatttggca cattgacctg ctggatccag gctgcgctga cactcaaggt caacatcaag 120
aatgaaggac ggagagttgg aattccacgg gttattctgt cggcatctat cactctctgt 180
gtggtcctct acttcatcct catggcccaa agcatccaca tgtatgcagc cagggtccag 240
tggggcctgg tcatgtgctt cctgtcttat tttggcacct ttgctgtgga gttccggcat 300
taccgctatg agattgtttg ctctgagtac caggagaatt tcctaagctt ctcagaaagc 360
ctgtcagaag cttctgaata tcagactgac caggtgtaaa ccatcagttt ttccttgctg 420
gtgaggtggg tgtgacagtg ggggaggggc cagtaggaca cactcacagg acttgacata 480
gaacctcatt tcacacacac acacacacac acattcatgg ccacatttgc caaatgagct 540
tttcagggcg agttatttct ttaatgaaaa agcacaagcc cttatgtgtc gaaatacacg 600
ctgttacact gaaaatatat gcacgacaga gcaagaagct tgtgcatgat cacttcttat 660
ccgtcccctt tccagcactt ccttctcttc cattctcttc acatgtctna agcaccctac 720
cgagtagggc aggccaaatg ttccttggga gtaatgccaa cttccgacgt tgccttcagg 780

0352045.00200

tcccaanggc ttggaaccag ctcgtgagga agttctgaat ctgcactaat attcttgagt 840
g 841

<210> 3194
<211> 848
<212> DNA
<213> Homo sapiens

<400> 3194
tggggcagaa aagtaataca gacggagcac tgcagaaacc ttcaaatgaa ggtgtcattg 60
aaataaaagc aactaaggtc tgtgaccaga ggaccaaatg taaaagtcgc tgtaatgaaa 120
tgctgccagg cacgtcaaca ggcaataatc aaagcactat cactctatca gttgcttctc 180
agaacttaac tttcaccagc agcagctcac cacctaatgg tgactcaatc aataaagacc 240
ctaaattatg cactaaaagc ccaagaaaac gactgtcttc tacattgcaa gagacccagg 300
tgcctcctgt aaagaaacca attgtggaac agctttcagc agctaccata gaagggcaga 360
aacaaggcag tgttaagaag gaccaaaagg ttccacattc agggaaaaca gaaggttcaa 420
cagcaggtgc tcagattcct agcaaggtat cagtaaatgt cagttcacac ataggagcaa 480
atcaaccctt gaattcctct gcccttgtta tcagtgattc agctttggaa cagcaaacaa 540
ccccatcatc atctccagat ataaaagtaa aacttgaagg aagtgtcttt ctcttggaca 600
gtgattcaaa gtcagttggc agctttaatc caaatggatg gcaacaaatc actaaagatt 660
ctgagtttat atctgccagt tgtgaacaac agcaagatat cagtgttatg acaattcctg 720
agcactctga tatcaatgac ttagagaaat ctgtttggga attagnaagg aatgccacag 780
gacacatata gncagcagct acatagccag atccaggaat cttctttaaa tcaaatccaa 840
gcncattt 848

<210> 3195
<211> 653
<212> DNA
<213> Homo sapiens

<400> 3195
aggccatgta aaaattttcc gtggagaagt ttgattctaa agtagcttct ctaaagtagg 60
ctttggtagg taatcaactt gacagcagtc tagatgtctc acaggacagg agggagtgag 120
ggaaaggggc catgattggc tgctttgtgg ttttattttg gttctttcca ttctccgcca 180
ttcattggag gcttcgttcc agacctgcct gggaaaacag cttctgagcc attttgggga 240
gcagttcttc atctgaatgg atggacatct gggcttcctt caagggccat tgaatgggaa 300
ctagaaaacc actggaaact agaaatttga gctattgggc ccaccagtag cagcatgtga 360
tactagatgg ttaaaatcat gaaagcagtc actatccaat tagaagcaga gtcacaacaa 420
ctgttgggaa atgtgactct tggaggaagg tggggaggga gtggccttgc cagccctgtg 480
ggacgtcccc tgaagtttgt aataagaccc cttttccaaa gggatgtgaa ttggagtgaa 540
aaggaaatct ttcatcttan aaaacttctg gtccttaacg canggtggta tttgggtatg 600
tgcttggaaa ttgagatctc aagagtgttt gccttggagc cagctcccca nga 653

<210> 3196
<211> 836
<212> DNA
<213> Homo sapiens

0956946-070800

<400> 3196
ttgtcttctg cagctgactc aggtcattga tgtttgctcc aattttctca taaaacagct 60
ccatccttca aactgcttag ggattcgatc atttggagat gcccaaggct gtacagaact 120
tctgaacgtg gcacacaaat acactatgga acacttcatt gaggtaataa aaaaccaaga 180
attcctcctg cttccagcta atgaaatttc aaaacttctg tgcagtgatg acattaatgt 240
gcctgatgaa gagaccattt ttcatgctct aatgcagtgg gtggggcatg atgtgcagaa 300
taggcaagga gaactgggga tgctgctttc ttacatcaga ctgccattac tcccaccaca 360
gttactggca gatcttgaaa ccagctccat gtttactggt gatcttgagt gtcagaagct 420
cctgatggaa gctatgaagt atcatctttt gcctgagaga agatccatga tgcaaagccc 480
tcggacaaag cctagaaaat caactgtggg ggcactttat gctgtaggag gcatggatgc 540
tatgaaaggt actactacta ttgaaaaata tgacctcagg actaacagtt ggctacatat 600
tggcaccatg aatggccgta ggcttcaatt tggagtcgca gttattgata ataagctcta 660
tgtcgtggga ggaagagacg gtttaaaaac tttgaataca gtggaatggt ttaatccagt 720
tggcaaaatc tggactgtga tgccttccat gtcaacacat nggcacggct tagtgtacca 780
ctcttgaagg accaatgtat gctgnagtgg catgatggat ggagctttct aaatct 836

<210> 3197
<211> 789
<212> DNA
<213> Homo sapiens

<400> 3197
tttcctaaaa ttctagaatc ccttaaaaaa aaaaaaactc atgtaatagt actcataaag 60
tctactcatg attctccaac ctccaggctg gactggactt agcccagcct aaaagatgaa 120
agtgtgtgtg tgtgttacat atagataaca tatgtgttat atataggtat tacacataac 180
atctatataa aagtatactt tttttggtcc acattaaaag gattcaacaa tctttttta 240
ctaaccccag acatcatact tccaaaagca catctttaag atcctgctac tgaaatttga 300
atttgttgtc taagctcatt agagatgaaa aacaactgct cgtcatttac aattcatcag 360
ctggttcgga gtaagaaaat ctctctctct ttctctctgt ctctctgtct gtctgtccgt 420
ctctctctct ctctctcaca cacacacaca cagagagaga gagagagaga gagagagtgc 480
gagagagacc attatacccc agccttattt ctaacttaaa ttctaacatt agatttgatg 540
cagatatttt agctgctaac aggaagtgtt atctcctttt ctatgagatg cctgggcttc 600
cctaaagtgg tgctcatctt ttttttttt ttttttggc tataaatata tgaaagagtc 660
tgtcaagagt gcctgcaggg aatgaaagtg aaagtgcagt aaagagcaag tttatgagtt 720
ggcancttga gtgactggct nctaaacagg ggcccatctg gtctggggnt gccttgggaa 780
tctctctcg 789

<210> 3198
<211> 803
<212> DNA
<213> Homo sapiens

<400> 3198
tctttatgct ttcggatttc taaatgagag agtcatccag aaactcgagg ggtggagagc 60
atttgtcagt gactgtcctt tggtccccaa ggggctcctc agtgggtttc tcctgagggt 120
ctgtgactac tctcctgtca cagaagctgc tcctctctgg cactgtcttg tccttctcca 180
ctgacctctg ggattgacta tccttctcag caggggtgac tgtgacactc ctggctgttc 240
cttctcagtc ttggctggtc cttcactcct agctggtcct tctccacaac tgggacactc 300

0962946 .07200

tgctatgctt ggttttgaac tagtgacagc ctctcccttc cttttcggca ttgatttccc 360
tggatgccct ggttagcctc caggtagatc attgtggagc cctgatgtcg aagtctatcc 420
gtcttccttt tctggacctt gttgggttcc tcagtcgtat cattctgact ctcagcttca 480
gttgcaaatt aagagttcat ggaattacga gaactatctt tggaatcagc cttaaagctg 540
caggcttcct tttctagaga agctatttct tctagaaagg gattggtagg atgtggaggg 600
gttccccctg acgaaaggaa tccctgagtg ctctgaatca ngcagccttt ggtggcggcc 660
ccgcccacac ctgtgcccga ggaatgccgg ggaggaatgt aagagttaaa gaaaggaaag 720
aaacaggaaa agcngntcac agtcaaagac aggtttgttt tggacaataa acctgaaaag 780
gccttntggg ccgaattagg tca 803

<210> 3199
<211> 770
<212> DNA
<213> Homo sapiens

<400> 3199
aagcagaatg gcagacagaa cctcaggagc cccccatccc tgagtccctg gccgctgcag 60
ccgctgccgc ccaacagctc caagtggcta ggaagcagga tactcggcag acggccacct 120
tcaggcagca gcccccacct atgaaggcct gcttgtcatg tcaccagcaa attcaccgga 180
atgcacctat ntgccctctt tgcaaggcca agagtcggtc ccggaacccc aaaaagccga 240
aacggaagca ggatgaataa agaaagggag agcacatgaa gctttgctaa ttataacccc 300
tcaccttgac cagagtcatt gatgtcctga tgtgaaacaa cccttgccca accccacgaa 360
gtctcctatt taatgtgatg gaagcacaac ccctctctca ctttgctcct atttctttct 420
gctcttggga tttctggttt aggaaganat gtggttcagg tgctaaacag tgtgtctgat 480
gatcccttct ctcccactca catttcaacc cctgcccttg tttggagcta agggaagggc 540
aaaaggctca gatatgattc tctatctctt gtgcctgagg cctggagcct aaggagctgt 600
aaggtctgag gggcagggga ggcccatatc ttgtttcagg taaaggaccc actatttccc 660
ctccttgtac ttttgcctta ngttctcang ggacaatagn cttcatgttg gattcttcaa 720
caggctgggt gcatgtatcc cctactccta ccctcatctc atccttaagg 770

<210> 3200
<211> 757
<212> DNA
<213> Homo sapiens

<400> 3200
gtgcatacgg ctgccggcat ggcacattac aacttcaaga aaattacggt ggtgccgtcc 60
gccaaggact tcatagacct cacgttgtcg aagactcaac gaaagactcc aaccgttatt 120
cataaacatt accaaataca tcgcattaga cattttaca tgagaaaagt caaatttact 180
caacagaatt accatgatag actttcacaa attctaacag atttccccaa attggatgat 240
attcatccgt tctatgctga tttgatgaat attctctacg acaaggatca ttacaagttg 300
gctctggggc aaataaatat tgccaaaaat ttagtggaca atgttgctaa agattatgtg 360
cgactgatga agtatggcga ctctctctac cgctgcaaac agctgaagcg tgcggccctg 420
ggacggatgt gcacagtgat caagaggcag aagcagagtt tggagtattt ggagcaagtg 480
cgtcagcatt tatcccgttt gccaaccatt gatccgaata ccaggaccct gcttttgtgt 540
gggtacccaa atgttgggaa gtccagcttc atcaacaagg tgacgagagc agacgtggat 600
gtccagccct atgcgttcac aaccaagtct ctgtttgttg ggcacatgga ttataagtat 660
ctacgttggc aggttgtaga cacttctggg atcctggacc accctntgga ggataggaac 720

0956340.0042000

accattnaga tcaggccatn actgcctggc cacttcg 757

<210> 3201
<211> 768
<212> DNA
<213> Homo sapiens

<400> 3201
atccaagatg gcgtccccag gagctgggag cgggtgaccg gcggcgggga agcggnctgg 60
gttggccctc agattgcggg gtctgggggc atctcgccgg gcaaaccctt ggcccgccta 120
caaggacttc ccccggccag agcaatggcc gctgagaaca gcaagcagtt ttggaagagg 180
agcgctaagc tgccggggag cattcagcct gtatatggag cacagcatcc tcctcttgac 240
ccacggctca ccaaaaattt cattaaagaa cgatcaaaag tcaacacagt tcctctgaag 300
aataagaagg cctccagttt tcatgagttt gcacggaata ccagtgatgc ttgggacatt 360
ggcgatgatg aggaagagga cttttcctca ccttctttcc aaactctgaa ctcaaaagtt 420
gctttggcaa ctgcagccca agttctagaa aaccacagca agctgagagt aaaaccagaa 480
cggtcccagt caacgacatc ggacgtccct gccaactaca aggtcataaa gtccagcagt 540
gatgcccagc tgtccagaaa ctctagtgat acatgcctga ggaacccact ccacaaacag 600
caatcactcc ctctccggcc catcatcccc ctcgntgccc ggatctcgga tcagaacgct 660
tctggggccc ccccaatgac tgtccgggag aaaacccgct agaaaaattc cgtcagcttc 720
tnttcagcca naacactgac ttagatgaac tgaggaagtg tancttgg 768

<210> 3202
<211> 815
<212> DNA
<213> Homo sapiens

<400> 3202
aagcgtcgca cagcgactgc atcaccatgg agccgagggc agtaggtgtn tccaaacagg 60
acatacgtga acaaatttgg ggctacatgg aatcacaaaa tttagctgac tttccccgac 120
ctgttcatca caggataccc aactttaagg ggtcttatct ggcttgccaa aacatcaaag 180
acctagacgt ttttgccaga gcacaggaag ttaaagtgga ccctgataaa ccactggaag 240
gcgttcggct gctggtgctg cagagcaaaa aaacattgtt ggttccaaca ccacgactga 300
gaacgggatt gtttaataag atcacaccac cccctggggc aactaaagac atcttgagaa 360
aatgtgccac ctctcagggt gtgaggaact acagtgtccc cataggcttg gactccagag 420
tcctcgtgga tttagttgtg gtgggatccg tcgccgcttc tgaaaaaggc tggagaatcg 480
ggaagggaga aggctacgcc gatctggaat atgccatgat ggtatccatg ggcgccgtca 540
gcaaggagac gccggtggtc accatcgtcc acgactgcca ggtcgtggac atccctgaag 600
agcttgttga ggagcacgac atcactgtgg actacatcct cacttcaacc agagtcatcg 660
ncacaggctg caagcgccca aagccaatgg gaatcacctg gntcaagatc agcctggaga 720
tgatggagaa aatccccatc tgaggagcct tcgngcccga aagcacaggc tgggaaggat 780
gtcacccttc anggtgagca ccaacaacct ttcng 815

<210> 3203
<211> 512
<212> DNA
<213> Homo sapiens

0962045.0720

<400> 3203
atgcgcggcg cggctggagc ggccggacag tccggcgtcc gggaacgctc aggagccgga 60
ggagccggaa agcgccggga cccctcgcgg ggcctctgag cggcgcgggc ggacccgagc 120
ccccagcccg ctggcgccgc tgcccgccag gccccggggg cggcggccaa gatgtccgtg 180
cctaacgtgc tggccaaagc gctctatgac aatgtggccg agtccccgga tgagctctcc 240
ttccgcaagg gtgacatcat gacggtgctg gagcaggaca cgcagggcct ggacggntgg 300
tggctctgct cgctgcatgg gcgccagggc atcgngcctg ggaaccgcct caagatctcg 360
gtgggcatgt atgataagaa gccagcaggg cctggctccg gccctcccgc cacccggnc 420
cagcctnagc ctggcctcca tgccccagcg cctccggcct cccagtacac gcccatgctc 480
nccaacacct accagcccca gccagacagc gt 512

<210> 3204
<211> 777
<212> DNA
<213> Homo sapiens

<400> 3204
attgcttctg ggactaaaag ataaagaggg gtacacatct ttctggaatg actgcatatc 60
atcaggcctg cgaggggca tcctgataga gctggccatg cggggtcgaa tctatctgga 120
acccccgacc atgcgtaaga agcgactact agacagaaag gtactgctaa agtcagacag 180
cccaacaggt gatgttttac tggatgaaac tctgaaacac atcaaagcaa ctgaacccac 240
agaaactgtc caaacatgga tagagctact cactggtgag acctggaacc ccttcaaatt 300
acagtaccag ctgagaaatg tacgagagcg catcgcaaag aacctagtag agaaaggtat 360
tctaaccact gagaagcaga atttcctgct atttgacatg actactcatc cagtgaccaa 420
tacaacagag aaacagcgac tagtgaaaaa acttcaagat agtgtactag agcggtgggt 480
aaatgaccct cagcgtatgg acaagcgaac actagcactc ctggtgctag cccactcctc 540
tgatgtgcta gagaatgtct tctcctctct gacagatgac aagtatgatg tggcaatgaa 600
tcgagccaag gacttagtag aactggaccc tgaagtggaa gggacaaagc ctagtgccac 660
agaaatgatc tgggctgtgc tggcagcctt caataaatct taaagcccgg cangtggatt 720
tcttcttttn ccctgctggc tggtgactgt caanagaccc ccatcactgg agttttg 777

<210> 3205
<211> 807
<212> DNA
<213> Homo sapiens

<400> 3205
atctaaacaa gaaagtagtg agagtttgcc aaangaagcc tttctggtcc tctctgatga 60
agaggatatt tcgggtgaaa aagatgagtc tgaagttata tcgcaaaatg aaacgtgctc 120
tccagcagaa gtagaaagta atgaaaagga caacagacct gaggaagaag agcaagtaat 180
acatgaagat gatgaaagac cttctgagaa aaatgaattt tctagacgaa aacgttctaa 240
atcagaagac atggacaatg tacagtctaa acgtcgtcga tatatggaag aagaatatga 300
ggcagaattt caagtaaaga ttacagccaa aggagacatt aaccagaaac ttcaaaaggt 360
tatacagtgg ttgctggaag aaaaattgtg tgcgctgcag tgtgctgtat ttgataagac 420
tttggcagaa ttgaaaacac gagtggaaaa gattgaatgt aacaagaggc ataaaacagt 480
tctcactgaa ctacaggcca agatagccag gttaaccaaa cgctttgaag cagccaaaga 540
agatcttaag aaaagacatg aacatccacc caacccacca gtatcaccag gaaaaactgt 600
aaatgatgtc aacagcaata ataacatgtc ttacagaaat gcaggcacag tgagacagat 660

0506205.00200

gctggagtcc aaaagaaatg taagcgagag tgcaccacca tnctttcaaa ctcctgtgaa 720
tacagtatct tcaaccaatc ttgncacttc ttcagcagtt ggtcagtagt caacctaaat 780
tgccagactt ccantggctt cngggtt 807

<210> 3206
<211> 856
<212> DNA
<213> Homo sapiens

<400> 3206
gaccctgttt ctctagccgt gcagctgcaa ggtcactaga cagaaaaact caagtcataa 60
acatgttttt tcttgaaagg gcagtagtca gaaaagaaag gaactgatct tggacttgaa 120
gaaacagccc cagaggtgaa agagatagtc gttaacctgc acagcctctt tccagcctct 180
tcacagataa caagggcttt cggaacaaga aacttgtata ttctgtgcag ctcaaataaa 240
attaagaagc tgaacatcag ttgacaaaga gtaaaaaata actgggagtt gacgggaaaa 300
taaactgtcg tttatgaaaa tgtagcttat tccagaacac cagatttcaa aagatacaga 360
atcctgttgc tccacaattc aatttgtcct acaaaaagca aatatagtaa atagaagttg 420
ccaacactga agagaagatt aacaaatctg agcatcccaa tggagcagac aacatgttca 480
gaccatccaa agatccaaat ggcaggtttg atcactccaa ttgacaccag gtacaagcca 540
ggtaatgtag taatcatggg atcccacttt aaaatgaaag aaaatgaagt aaaagcaaga 600
ggtaatagga acaagacagg cacaaatatg tcaagcccaa gtctcatctt cagcaacaat 660
cagaaatttt gagaagttat tctatgacaa gattaagtaa gtccttggca gaacaggatt 720
cgtttttcct atttttgcc cccggaccaa gctttaatga tggntcangt agcagcaacc 780
aattaaacaa caacaactta aaatctattt ctatttttcc aagaaatgtt ctttaaaagc 840
ctttattttg atnaat 856

<210> 3207
<211> 857
<212> DNA
<213> Homo sapiens

<400> 3207
tccgggttcg gcaataacct ggagccggcg gcgtaggttg gctctttagg gcttcacccc 60
gaagctccac cttcgctccc gtctttctgg aaacaccgct ttgatctcgg cggtgcggga 120
caggtacctc ccggctgctg cgggtgccct ggatccagtc ggctgcacca ggcgagcgag 180
acccttccct ggtggaggct cagagttccg gcagggtgca tccggcctgt gtgtggcgcg 240
aggcagggaa gccggtaccc gggtcctggc cccagcgctg acgttttctc tccccttttct 300
tctctcttcg cggttgcggc gtcgcagacg ctagtgtgag cccccatggc agatacgacc 360
ccgaacggcc cccaaggggc gggcgctgtg caattcatga tgaccaataa actggacacg 420
gcaatgtggc tttctcgctt gttcacagtt tactgctctg ctctgtttgt tctgcctctt 480
cttgggttgc atgaagcagc aagcttttac caacgtgctt tgctggcaaa tgctcttacc 540
agtgctctga ggctgcatca aagattacca cacttccagt taagcagagc attcctggcc 600
caggctttgt tagaggacag ctgccactac ctgttgtatt cactcatctt tgtaaattcc 660
tatccagtta caatgagtat cttccaagtc ttggtattct ctttgcttca tgctgccaca 720
tatacgaaaa aggtccttga cgcaaggggc tcaaatagtt tacctctgct gaatctgnct 780
tggacaaatt aagtgctaat caacaaaata ttctgnaatt cattgcttgc aatgnaatat 840
tcctgatgcc tgcaaag 857

0050204-0050204

0003704350 - 07 Oct 2010

<210> 3208
<211> 860
<212> DNA
<213> Homo sapiens

<400> 3208
ctcccagggc atagaattac tgagttagaa gaaataactg gtttattttt acataggatg 60
tgatgtctaa tattgtacta aaaatgagga tgcttatgct atactccact ggtactatcc 120
actggattta tttatttttt ttatttttg agacggagtc tcgctctgtc gcccaggctg 180
gagcacagtg gtgcaaactt ggctcactgc aagctctgcc tcctgggttc acaccattct 240
cctgcctcgg cctccagagt agctgggact acaggtgccc gccatcacac ctggctaatt 300
ttttttgtat tttttagtag agacgggggt ttcaccgtgt tggccaggat gccctcgatc 360
ttctgacctc atgatccacc cgcctcggcc tcccaaaatg ctgggattgt aggcgtgagc 420
taccgcacct ggctgttttt gtatttagat agagtttaag tgcaaagtaa tctgctgatt 480
taaggttgtt ttaaattcat atctgaggaa taaaggatgg acaggcaatt tccatccctt 540
tgatgttcca taattctagc tatttatatc attcatttgc cccttcagca tggattggct 600
tacacctgta atacgttcca gaatagctgg atttcttttg ttttcccatc ggtgattttc 660
atagagtaga tgctcaatga catataatgc agaaaggcca aaaatagagg taagtaaagc 720
tatgaaagaa aagaagaacg aaagangaac agagtagttt gattttggtt attgctgctt 780
aaaccagaga gattgtattc ttggaagggg atttgcttgn tttacncatt tgcagcctga 840
ctggtttagg cttggttttt 860

<210> 3209
<211> 863
<212> DNA
<213> Homo sapiens

<400> 3209
agctgatttt ctgacagccc cttctcctct cctcactgga tatccagttt ccagggtctg 60
tgtgtggtgg gaagcaaact ggcctgaggt tccatccact ggtagaaatg accccaaaga 120
cttcccatgc agggagggca aagaagaaag tgctttggaa tggagatacc ccttttcctc 180
ctcctgaatg tatcagagtt agttatcaat gctgactgag tgtgcactct cctagacacc 240
atggggagag gcagaagagg aaaccagata tggtccttct tcttgggact ctcctgacct 300
aggaaaagag acagatgaat gcagataact gagtctatat acagggactg ccacaagctc 360
acactttact gaatgttcag acctagtcat acatcctaag ggcattgttg gaagcttctg 420
gaactaagtc tctggggatt tgaatcaact cagaagactg actcattcac ttggctgtgg 480
aggctgttcc agatattagg agctatgtat gtggagcccc ggatttgggc caaaagatgc 540
atttgactgg agagaaggga ttgagatttg agcagttgtt ggacaacaca gaaatgaaac 600
agccatagca aacttgcctg ccgtgatttc tctgctgaga taatgggact tttcagactc 660
cctgtaactg agatctagat naaaagagac gtctggaaaa aaactggtcc caattgncgc 720
ttggctttgc tttcataact atctgaatgt ggcatatgtc agactttgaa atgctgggtc 780
tcttggaaat ncnaatccat ctgggtcttg gataattncc agaaacctag gctctcagta 840
ggaaatgagg actggaaaca tta 863

<210> 3210
<211> 782
<212> DNA
<213> Homo sapiens

<400> 3210
aaggaagtcc cacctgcgcc cgacggcgga agttccggga gtgccaagta cccgcgtgca 60
tacggctgcc ggcatggcac attacaactt caagaaaatt acggtggtgc cgtccgccaa 120
ggacttcata gacctcacgt tgtcgaagac tcaacgaaag actccaaccg ttattcataa 180
acattaccaa atacatcgca ttagacattt ttacatgaga aaagtcaaat ttactcaaca 240
gaattaccat gatagacttt cacaaattct aacagatttc cccaaattgg atgatattca 300
tccgttctat gctgatttga tgaatattct ctacgacaag gatcattaca agttggctct 360
ggggcaaata aatattgcca aaaatttagt ggacaatgtt gctaaagatt atgtgcgact 420
gatgaagtat ggcgactctc tctaccgctg caaacagctg aagcgtgcgg ccctgggacg 480
gatgtgcaca gtgatcaaga ggcagaagca gagtttggag tatttggagc aagtgcgtca 540
gcatttatcc cgtttgccaa ccattgatcc gaataccagg accctgcttt tgtgtgggta 600
cccaaatgtt gggaagtcca gcttcatcaa caaggtgacg agagcagacg tggatgtcca 660
gccctatgcg ttcacaacca agtctctgtt gntgggcaca tggattataa gtatctacgt 720
tggcaggttg tagaccttcc tgggatcctg ggaccaccct tntggaggat nggaaccccc 780
tt 782

<210> 3211
<211> 851
<212> DNA
<213> Homo sapiens

<400> 3211
acttccggga acgccgggga accgcagtag ccgcctgcta gtggcgctgc tagccggccg 60
gcgcaggctg ccgagcgggt gagcgcgcag gccaggccaa agccctggta cccgcgcggt 120
gcgggcctca gtctgcggcc atgggggcgt ccgcgcggct gctgcgagcg gtgatcatgg 180
gggccccggg ctcgggcaag ggcaccgtgt cgtcgcgcat cactacacac ttcgagctga 240
agcacctctc cagcggggac ctgctccggg acaacatgct gcggggcaca gaaattggcg 300
tgttagccaa ggctttcatt gaccaaggga aactcatccc agatgatgtc atgactcggc 360
tggcccttca tgagctgaaa aatctcaccc agtatagctg gctgttggat ggttttccaa 420
ggacacttcc acaggcagaa gccctagata gagcttatca gatcgacaca gtgattaacc 480
tgaatgtgcc ctttgaggtc attaaacaac gccttactgc tcgctggatt catcccgcca 540
gtggccgagt ctataacatt gaattcaacc ctcccaaaac tgtgggcatt gatgacctga 600
ctggggagcc tctcattcag cgtgaggatg ataaaccaga gacggttatc aagagactaa 660
aggcttatga agaccaaaca aagccagtcc tggaatatta ccagaaaaaa ggggtgctgg 720
aaacattctt cggacagaaa ccaacaagat ttggcctatg natatgcttt tctacaacta 780
aagtttcaca aaagaanccc gaaagcttta agttacttcc atgaaggagn aaatgtgtgt 840
aacttttaat t 851

<210> 3212
<211> 847
<212> DNA
<213> Homo sapiens

<400> 3212
ggcgacactt tgctacggag tgcatcggac gtcgaagcct agagtctctg cgtctttccc 60
tcttccgctg cctcattcct ttccttccta gccttggtcg tcgccgccac catgaacaag 120
aagaagaaac cgttcctagg gatgcccgcg cccctcggct acgtgccggg gctgggccgg 180

0050205-0050205

ggcgccactg gcttcaccac gcggtcagac attgggcccg cccgtgatgc aaatgaccct 240
gtggatgatc gccatgcacc cccaggcaag agaaccgttg gggaccagat gaagaaaaat 300
caggctgctg acgatgacga cgaggatcta aatgacacca attacgatga gtttaatggc 360
tatgctggga gcctcttctc aagtggaccc tacgagaaag atgatgagga agcagatgct 420
atctatgcag ccctggataa aaggatggat gaaagaagaa aagaaagacg ggagcaaagg 480
gagaaagaag aaatagagaa atatcgtatg gaacgcccca aaatccaaca gcagttctca 540
gacctcaaga ggaagttggc agaagtcaca gaagaagagt ggctgagcat ccccgaggtt 600
ggcgatgcca gaaataaacg tcagcggaac ccacgctatg agaagctgac ccctgttctg 660
acagtttctt tgccaaacat ttacagaccg gagagaacca taccttaatg gatccccgac 720
aaactcaatt ttgganggct taacacaccc tattcaggtg gactaaacac ttcataccca 780
agtnggaatg acgccaggac tgatgacacc tggcacaagg ganctggaca ttaagaaaaa 840
tggncca 847

<210> 3213
<211> 838
<212> DNA
<213> Homo sapiens

<400> 3213
ggtcaggatg gacgaggacg tgctaaccac cctgaagatc ctcatcatcg gcgagagtgg 60
ggtgggcaag tccagcctgc tcttgaggtt cacagatgat acgtttgatc cagaacttgc 120
agcaacaata ggtgttgact ttaaggtgaa aacaatttca gtggatggaa ataaggctaa 180
acttgcaata tgggatactg ctggtcaaga gaggtttaga acattaactc ccagctatta 240
tagaggtgca cagggtgtta tattagttta tgatgtcaca agaagagata catttgttaa 300
actggataat tggttaaatg aattggaaac atactgtaca agaaatgaca tagtaaacat 360
gctagttgga aataaaatcg ataaggaaaa tcgtgaagtc gatagaaatg aaggcctgaa 420
atttgcacga aagcattcca tgttatttat agaggcaagt gcaaaaacct gtgatggtgt 480
acaatgtgcc tttgaagaac ttgttgaaaa gatcattcag acccctggac tgtgggaaag 540
tgagaaccag aataaaggag tcaaactgtc acacagggaa gaaggccaag gaggaggagc 600
ctgtggtggt tattgctctg tgttataaac tctgggaaat tccatctctt gcatatttga 660
tcagatagtg acatctttct gnatataaac tctttaactg ctattttang gaccttgcag 720
tttgcacata attggtttat atcatagcag taaatatttg caagaaatcc ccttatngcc 780
cccggttaaa tggtatggta agcattgcnc agtttgcagt ctacagtttt ttattgtn 838

<210> 3214
<211> 852
<212> DNA
<213> Homo sapiens

<400> 3214
gcgtctgcga gaccgacttg gacggagccg agctgaggct cggcttcctg ctgatggtca 60
gggttttggc aactccccgg tgtgagaggg gtagggagtg ctcccggcgg cgacggggcc 120
gagttcacca gccgccgggg cagtagtcga aggcccggcg cggcatgtcc tgggtgccgc 180
ggtgcgggca gtgaacgcgc gccgggcggg atgggccggc gccgggcgcc agagctgtac 240
cgggctccgt tcccgttgta cgcgcttcag gtcgacccca gcactgggct gctcatcgct 300
gcgggcggag gaggcgccgc caagacaggc ataaagaatg gcgtgcactt tctgcagcta 360
gagctgatta atgggcgctt gagtgcctcc ttgctgcact cccatgacac agagacacgg 420
gccaccatga acttggcact ggctggtgac atccttgctg cagggcagga tgcccactgt 480

0950450-0700800

cagctcctgc gcttccaggc acatcaacag cagggcaaca aggcagagaa ggccggttcc 540
aaggagcagg ggcctcnaca aaggaaggga gcagccccag cagagaagaa atgtggagcg 600
gaaacccagc acgaggggct agaactcagg gtagagaatt tgcaggcggt gcagacagac 660
tttagctncg atccactgca agaaagttgt gtgcttcaac cacgataata ccctgcttgc 720
cacttggagg aacagatggc tacgtccgtg tcttggaagg tgcccagcct tgganaaggt 780
tctggaattc aaaagcccac naaaggggaa gattggaaga nccttggctt ttaggggcct 840
tgatgggcaa ag 852

<210> 3215
<211> 836
<212> DNA
<213> Homo sapiens

<400> 3215
ctaattttcc ttactctttt tgtttgtttg tttcttagtg tggtttattg acaatcattt 60
acaatgccga agagtgctgt agtgagccag cacagtgggt aacacagcaa cggagaacag 120
atgcaggttt gaggaattta acttgctaaa accttgaact gaagtcttag agattggaac 180
atacgggttt gtataaatag gcttttaagc cctgtttgca atgggttact gataggagaa 240
acttgcttgt ggaatgtcag ctgcgtgagc tcactgtcag acaagatgga agaagaaggg 300
ctggagtgtc caaactcttc ctctgaaaaa cgctattttc ctgaatccct ggattccagc 360
ggtggggatg aggaagaggt tttggcctgt gaggatttgg aacttaaccc ctttgatgga 420
ttgccatatt catcacgtta ttataaactt ctgaaagaaa gagaagatct tcctatatgg 480
aaagaaaaat actcctttat ggagaacctg cttcaaaatc aaatcgtgat tgtttcagga 540
gatgctaaat gtggtaagag cgctcaggtt cctcagtggt gtgctgaata ttgtctttcc 600
atccactacc agcacggggg cgtgatatgc acacaggtcc acaagcagac tgtggtccan 660
ctcgccctgc gggtggcgga tgaaatggat gttaacattg gtcatgangt tggctacgtg 720
atcoctttcg agaactgctg tccaacgaaa caatcctgag gtattgnact gatgatatgc 780
tgcaaagaga aatggnggtc caatcctttt ttgggtanct atggggcatc atctta 836

<210> 3216
<211> 839
<212> DNA
<213> Homo sapiens

<400> 3216
aacgctggtc ccggggactg agtaaggtgt ctggatcgga gggaggttcg ggtgggcatc 60
gggcggctgg aagagctcga ctcgtcccgc tgggaaagcg cgagtctgag tggaaccctg 120
gacgacttgc agagcggctg gcgcagtcat ggcggactac tggaagtcac agccaaagaa 180
attctgtgat tactgcaagt gctggatagc agacaatagg cctagtgttg aatttcatga 240
aagaggaaag aatcataagg aagatgtggc aaaaaggatc agtgagatta aacagaaaag 300
cctggataag gcaaaggaag aagaaaaggc atcaaaggag tttgctgcaa tggaggcagc 360
tgccctgaaa gcataccaag aggatttgaa aagacttggc ttagagtcag aaattttgga 420
gccaagcata acaccagtaa ccagcactat cccacctacc tcgacatcaa atcaacagaa 480
agaaaagaaa gaaaagaaga aaagaaaaaa agatccttca aagggcagat gggtagaagg 540
cataacctct gagggttacc attactatta tgatcttatc tcaggagcat ctcagtggga 600
gaaacctgaa ggatttcaag gagacttaaa aaagacagca gtgaagaccg tttgggtaga 660
aggtttaagt gaagatggtt ttacctatta ctataatcca gaaacaggag aatncagatg 720
ggagaaacct gatgattcat tncacacact atgatctgcc ttctagtaag gtcaatgaaa 780

0050345-0720800

attcacttgg caccctaatg aatccaatca tcagattcgc atagtgattc tgatgggga 839

<210> 3217
<211> 831
<212> DNA
<213> Homo sapiens

<400> 3217
aaaatgccaa aatattttaa ttttcttaat actgtcataa attgaattgt tatttacatt 60
tttattttct attctttcac tatatataga aatacaatta atttttgtgt tttgaacatg 120
tatcctgcaa ctttactaaa ttgacttata ttaatccttg taacttttt ctggatttct 180
tagagctttg tacatacaaa atcatgtctg caaataggac agttttactt cttctttcca 240
atttgccttt ttctttttct tgccttattc actatctggg tcttacaata caaatttaaa 300
tgcaaatagt gagagtggat atgcctgctt tgctttgttt gtgattttag gtagaaaaca 360
ttaaatcttc accattgagt ttgatgttag ctgtagattt tttttataac cttaattgga 420
tgaggaagac ttctattcct agttgttgag agatttagtg atgaaagagt gttgattttt 480
atcaaatgtt ttttctgcat ccatttaaat aattatatgg ttctttttct gttttctatt 540
catagagtag attatattga ttgattttct gatgttaagc caaccttgca ttctgagata 600
aaccccactt ggatatgata gatagtattc tttttacatg ttattggttc ttattgctat 660
atttngtagg aacttttttgt tctatgctca tgagtaatat tgctctgcag ttctattatc 720
ttgngatgta tttggatttc taataaaggt aatggtagcc ccataaaacg atctgggaaa 780
gctccctcct cttttatatt ttggaaacct ttggtgtaag aatggccgtc n 831

<210> 3218
<211> 786
<212> DNA
<213> Homo sapiens

<400> 3218
ttgttggatc cctagactaa gttgaaatgt atttctaata gtaggcaatt ttaattttca 60
tgtagttgtt taattgttct ctaattaatg gaccaatgaa aaatgagttc atgtgtgtgt 120
gtgtgtgtgt gtgtgtgtgt gtgtattcta ccttttttatg ggaaaactac ttttttgttg 180
taaagatttt cttctgtttt ctttgctaat aaagaattgt tattaatttg catgtatgtg 240
aagtttatat agtctcatgt acattgttat tttcattttc tttcctttat tctgtcatga 300
gtttttgctg ttacttgcat agttcacttt tttaaaaaat gttatgtttt tagagagggt 360
ctcactttgt cagctaggct gaagtgtagt ggtaataata gtcttagctc actgcagcct 420
caaattcctg ggctcaagtg attctcccac cttagcctcc tatgtagctg gagctacaga 480
cacatgccac catgctcagc taattatata attttaaaaa ttttttatag agatgggatc 540
tcgctgtatt gtctaggctg gtattgaatt cctggcctca agctatcctc ctgcctcagc 600
ctgtctacat gttggggtta ctgacatgag ctaccacacc tggcccactt ttactttgaa 660
ttaagaagag agaactgtga ttggacagta tgcttggcta atctgcgtgt gaaancttca 720
gctcccatcn aagntattgg ggattttcat aaatattctc aacaggctca ggaagtttct 780
tggggt 786

<210> 3219
<211> 707
<212> DNA
<213> Homo sapiens

0060230-0020800

<400> 3219
aagatgatcg taggcgaaga gaagaagttc ctgctgccct tctggctgca ggtgatcttc 60
atttcgctgc tgctgtgcct gtcgggcatg ttcagcggcc tcaacctggg gctcatggcc 120
ctggacccga tggagctgcg catcgtgcag aactgcggca cggagaagga gaagaattac 180
gccaagcgca tcgagccggt gcgcaggcag ggcaactacc tgctgtgctc actgctgctg 240
ggcaacgtgc tggtcaacac cacgctcacc atcctgctcg acgacatcgc cggctcgggc 300
ctcgtggccg tggtagtctc caccatcggt atcgtcgtct tcggagagat cgtgccccag 360
gccatctgct cccggcatgg cctggctgtg ggggccaaca ccatcttcct caccaagttt 420
ttcatgatga tgaccttccc cgcttcctac ccggtcagca agctgctgga ctgcgtcctg 480
ggccaggaga taggcaccgt ctataaccgg gaaaaactgc tggagatgct ccgggtcacc 540
gatccctaca acgacctcgt taaggaggag ctgaacatca tccaaggggc gctggagctc 600
cgcaccaaga cggtgganga cgtgatgacc ccactccggg actgcttcat gatcaccggc 660
gaagccatnc tgacttnaac accatgtctg agatcatggt gaagcgg 707

<210> 3220
<211> 706
<212> DNA
<213> Homo sapiens

<400> 3220
gatgcacttt tggttctatt atgccaccct tttacctggc ttccaaagaa ctgtgggtat 60
agcagattcc aattataatt ggttttatgg tccagaaagc cagctagttt tcttggataa 120
gttcatctta aagaatggag ctgaaaattg gttagctcag caaattagaa agcaccgacc 180
taaagatgga ccgatggttc cttcaactgc ccaaaggtgg agtactcttc acactgaata 240
catctggtat gatccccagc tcacaccaca gccacctgct gattatggta ctgcaaaaat 300
acacacattc cctaactggg gtgtggttac ttatggggct gggttgccaa acacacagac 360
caacaccttt gtgtctttta aatctgggaa gctgggggga cgagctgtgt atgacatagt 420
tcattttcag ccatattcct ggattgatgg gtggagaagt tttaacccag gacatgagca 480
tccagatcag aactcattta cttttgcccc caatggacaa gtatttgttt ctgaagctct 540
ctatggaccc aagttgagcc accttaacaa tgtattggtg tttgctccat caccctcaag 600
ccagtgtaat aagccctggg aaggtcaact gggagaatgt gcgcagtggc ttaagtggac 660
tggcnaagan gttggtgatg canctgggga aataatcact ggcttt 706

<210> 3221
<211> 744
<212> DNA
<213> Homo sapiens

<400> 3221
aatatgcttt agatggaact aatgttgcta ttaatattcc aaggctctta cttgacaaaa 60
ttgagaaaca aatgtttcag ttgcacatag gaaatgttta tgaggctgga aaactgaacc 120
tcttaacagt tattcagtta ttaaatgaag tcttgaaggt gatgaaatat gaacgttgtc 180
aggctgatca agcaagattg acggtagacc ttcactacct tgaaaaagag accaaatttc 240
agaaggaaag attatcagat ctgaaacata tgaggtatag aataaaagat gatctcacaa 300
ctataagaca ttctgttgtt gaaaagcaag gagaatggca taaaaagtgg aaagaatttc 360
ttggtttgtc tcctttcagt ctaattaaag gttggactcc atctgtagat cttttaccac 420
caatgtctcc ccttttgttt gatcctgcct cagaagaagt gtatgcaaag agtattcttt 480

US 2005/0059800 A1

gtcagtatcc tgcttcactt ccagatgcac ataagcaaca taaccaagaa aatggttgca 540
gaggagacag tgataccttg ggagcgctac atgatctagc caacagccct gcctctttct 600
tgtcgcagtc agtttcatca tcagatagaa acaagtgtta cagtacttga aaaggacaca 660
aagatgggaa ctnccaaaga aaaaaatgga agcaatttct aagaaaatac cnngaatttg 720
gaagtgggaa aaattcttcc attt 744

<210> 3222
<211> 804
<212> DNA
<213> Homo sapiens

<400> 3222
attttatcaa tttgtaatgg ctaacaaact tggatagcaa gtactagaag attttatgat 60
tattcaggga catattttct agcactgaat atgtgccaga cattgtccta ggtgctagag 120
ctatagtgat aaacaaatca gatgaaagta gaaatccatg ccctaaagaa cttaatgttt 180
caattgggaa ggtcaagtca gataggttaa aaggcaaaca cagtagcact gtagacatta 240
ctatataagc tttatggcaa ctagtgtttg tgcagtgctt tacagttagt aaacagtgtt 300
cacgtacctt atctcacagt ggctttgtgg gtttgacaaa gtagcaatcc tcatctcata 360
ggtgaggaaa ctagggctct ttaagattag ataatctgtc taatagcatc cagccaggtg 420
gtcatctgac tctaaatcct ttgaagtctt acttatgcta cagtgccttt ctttttccta 480
cagatattgt taggcataat tcatcatcta gcaagtccag aatcatcttt ccagagttcc 540
agctcattca taataacatg tttcagaaat cagggtcctg tattagttac gtttttctta 600
aatggagacg gaatcaaatg tgactgcatg tagtttttct ggtctcattt ggcctatttt 660
ccaagagtaa gggtagtaga tggctatttg gagcagtaac tggacagcat ctgtccagtg 720
ggacagctgg agacttggct ttagtatttg ggaatgctga cttatgggct gcttaatcnt 780
ttggagtctt gaanggangg atta 804

<210> 3223
<211> 704
<212> DNA
<213> Homo sapiens

<400> 3223
agccggggat tgccggcgcc aggtgctggg ggcgactcgg acagcgggag cgtggggtgg 60
agtaggatgg agtctccctc ccgagctggg ggtgtgggcc taggaaaggc tgcttcgccg 120
ctgtgttcgg agagctctgg atactgcggg gcttttccgc ggaggagcgc ccgccggcat 180
ctgcatctgg gaccgacctc ctgggctggc tgatcaaaga ggaagcagca gcaatgtctg 240
ctgtgggggc tgcaactcca tacctgcatc atcctggtga tagtcacagt ggccgagtga 300
gtttcttggg ggcccagctt cctccagagg tggcagcaat ggcccggcta ctaggggacc 360
tagacaggag cacgttcaga aagttgctga agtttgtggt cagcagcctg caggggggagg 420
actgccgaga ggctgtgcag cgtcttgggg tcagcgccaa cctgccggag gagcagctgg 480
gtgccctgct ggcaggcatg cacacactgc tccagcaggc cctccgtctg ccccccacca 540
gcctgaagcc tgacaccttc agggaccagc ttcaggagct ctgcatcccc caagacctgg 600
tcggggactt ggccancgtg gtatttggga gccagcggcc cttcttgatt ctgtggccca 660
acagcanggg gcctgcttgc cncatgttgc tgactttcgg tggc 704

<210> 3224
<211> 774

0505245.0020

<212> DNA
<213> Homo sapiens

<400> 3224
actcagtgca gagggaaatt gacacagcca tgatgaggcc tggctcacaa gagccatagt 60
tactgtagga gtttctgtgg ctaaatatgc ttagctattg aggcaaggac atgtgctgga 120
tgtgtatgca gtctttgaag ctggagaggc ctgtgttgga aactgtgctc tgtcccatgc 180
cagttccctg accttggaac ccctagagca atcaacagac agacagagcc ctgcttcatg 240
gagcgtctgc tctctcctgg agctcacacg ctgaaacaga caggatgcaa cacctcaggg 300
ttgttggaga accagaggct gttgcaatta ggatggcgaa tggtgaaaaa cagtgtggtt 360
gaattgaaca taagctgaag ggctagacat catggcttca atccttgtgg aggagccttc 420
atctaccaca taagaattgc agcaaaccct gcagctatcc tgaagctgcc atgctgaaaa 480
ggccaattgg gagaccacat agagaccgag agagacttcc aaggactcca gccaatcctg 540
ggccccagca gtttgaatct cccagcaatg ccaccataca ggagagggag caaatctcag 600
aagattcaag tgccactgca tgggttgata cctacataaa aggcattggg tatgtgctct 660
tgggtgattc cctaatcata gtggaaagat gggagctgan actntaagac tggaagtact 720
tggccaaact tatggcttga tacggatctt ttaacttaaa atcggnggtc ttct 774

<210> 3225
<211> 644
<212> DNA
<213> Homo sapiens

<400> 3225
tgaccagcga ctgagcggcg gccggcgcgc ttagcgccct gaacatgcgg cagtccctgc 60
gggcgacccc gggctccgga caggcggcgg cggaggcggc ggctcgggag ggaaggaggc 120
ggcggcgccg gcggaggtgg cggnggagac ggccggcgcc cggcgcggag ccctagggag 180
gcagttcagc gcggcctcgg gcctngtcga gaaggatgct gtcccgaaag aaaaccaaaa 240
acgaagtgtc caagccggcc gaggtgcang ggaagtacgt gaagaaggag acgtctcctc 300
tgcttcggaa tcttatgcct tcattcatcc ggcatggtcc aacaattcca agacgaactg 360
atatctgtnt tccanattca agccctaatg ccttttcaac ttctggagat gtagtttcaa 420
gaaaccagag tttccttaga actccaattc aaagaacacc tcatgaaata atgagangag 480
aaagcaacag attatctgca ccttcttatc ttgccagaag tctagcagat gtccctagag 540
agtatggntc ttctcagtca tttgtaacgg aagttagttt tgctgttgaa aatggagact 600
cttggttncc cgatattatt attcanacaa tttttttga tggt 644

<210> 3226
<211> 645
<212> DNA
<213> Homo sapiens

<400> 3226
ttttgcattc ctccagcttg cagctccggt agttggaggc tgggtagggc agggggaacc 60
gacaggccgg tgtccccagc cgcaaaagag ctgctgaact gtccgtttaa atgctgctgg 120
gagactcgta aaaaaatcat cgtggacctg gaggatgaga ggggcgagct ttatttcggt 180
cggattgcgg tgtggtggtt tagctgcaag gggatgccgc agccccagtt gaggggggaaa 240
atagttctta aaaagcatat gccccccctaa ggaatgtctc taaagaacca aatcaaagct 300
gctctttgga aggtatgaat agaatttaaa aaaaaaagat ttctatggag cttaaagttc 360

0056356-0002

acagccattc tgtgtagaca agagctgana aaaatgtgag aattatacan aaaaccatta 420
atcacttctt ttctttaaat acgtatcctc tctcctttgt tattattcaa cagcaaatct 480
ccttggaccg gctgttgggg gaaaaaagtg ttagccgtct ctcccggatc tgcaaggggg 540
aaaaaatttg gaaccataaa gttgaaaact tttttctctc agtttggaag aagcccttcg 600
tcatgaatgg gatctgcaga gttcgggcga naggangcga naggc 645

<210> 3227
<211> 865
<212> DNA
<213> Homo sapiens

<400> 3227
tgtgattttt atctttattt agctcagact agcttattcg gtcagtgaga gggagcctct 60
tcagcttggc tcttgctttc ttttgataag tgtgcacatg tgtgcataca tgtgtgcaca 120
gaccacacgc acagtcattg atagctccct gcagcctggc atgtcaagat gctctaggcc 180
caatttatag agcttctgct ccaaacctgt cttaaaagaa aaactttaga caagttagca 240
gtttaattga gcagaaaata gtttcttcag ctgggtagca ctcaggacca aaagtggttc 300
agaacgttct cctgtgcgtt gtgtgcaggc tgtatttatt tatagccaca ggaagggaaa 360
gacacatgta catggccaga ctgactgcag gtcagcctcc acctcacata ggcatgtttt 420
gggagccttc agcatgtgat tggtgagact ctgctgcttg ttacagaagt gtactctcaa 480
gtcaggtccc agtttgctta tacattaagt gaggttataa gtcactatgt acagaggcag 540
ttttaggcca aacttaattc cgtttaacac ttggaatcca ttatttttcc cagagtctct 600
ggtagagatg gtatttcaga tccagtttag gatgctcatt gctattgcgt tggtcattat 660
ttctagatct ttggacggag ctttaaaaaa atacaaacat tgcacacaca tatttaaagg 720
aagaatattt tctgagccta tattgatatt cccaatacaa attcaaggtc ctggggcctt 780
tacatagccc tcctctatat gaaggcctgg gnctnctggc acttcggaat ncctgctttt 840
tcaagacaca ggaccaatgg catgg 865

<210> 3228
<211> 859
<212> DNA
<213> Homo sapiens

<400> 3228
taattttaaa gccagtccca gcagatcaaa tgatagtttc tccgtcaagc aatacttcca 60
cttcaacttc cactcttcag agccctgtgg gagctggcac acacactgtc acaaaaattc 120
agtctggcat aactgggaca gtcatatcgg ctccttcaag cactcccatc accccagcca 180
tgcccctaga tgaagacccc tccaaactgt gtagacatag tctaaaatgt ttggagtgta 240
atgaagtctt ccaggacgag acatcactgg ctacacattt ccagcaggct gcagatacga 300
gtggacaaaa gacttgcact atctgccaga tgctgcttcc taaccagtgc agttatgcat 360
cacaccagag aatccatcag cacaaatctc cctacacctg ccctgagtgt ggggccatct 420
gcaggtcggt gcacttccag acccacgtca ccaagaactg tctgcactac acgaggagag 480
ttggttttcg atgtgtgcat tgcaatgttg tgtactctga tgtggctgct ctgaagtctc 540
acattcaagg ttctcactgt gaagtcttct acaagtgtcc tatttgtcca atggcgttta 600
agtctgcccc aagcacacat tcccacgcct acacacagca tcctggcatc aagataggag 660
aaccaaaaat aatatataag tgttccatgt gcgacactgt gttcaccctg caaaccttgc 720
tgnatcgcca ctttgaccaa cacattgnaa accagaaggt gtctggtttc aagtgtccag 780
actggtctct ttatatgccc agaagcactt atgatggacc atatcaagtc tatgcatngn 840

0 5 0 2 0 5 0 3 0 0 2 0 0 0 0

acatttgaaa agtnttgaa 859

<210> 3229
<211> 820
<212> DNA
<213> Homo sapiens

<400> 3229
nttctgggag caagcctgca gcccggctca cctggagaaa gggtgaccaa gaactccacg 60
gagaaccaac ccgcatacag gaagatccca atggtaaaac cttcactgtc agcagctcgg 120
tgacattcca ggttacccgg gaggatgatg gggcgagcat cgtgtgctct gtgaaccatg 180
aatctctaaa gggagctgac agatccacct ctcaacgcat tgaagtttta tacacaccaa 240
ctgcgatgat taggccagac cctccccatc ctcgtgaggg ccagaagctg ttgctacact 300
gtgagggtcg cggcaatcca gtcccccagc agtacctatg ggagaaggag ggcagtgtgc 360
cacccctgaa gatgacccag gagagtgccc tgatcttccc tttcctcaac aagagtgaca 420
gtggcaccta cggctgcaca gccaccagca acatgggcag ctacaaggcc tactacaccc 480
tcaatgttaa tgaccccagt ccggtgccct cctcctccag cacctaccac gccatcatcg 540
gtgggatcgt ggctttcatt gtcttcctgc tgctcatcat gctcatcttc ctcggccact 600
acttgatccg gcacaaagga acctacctga cacatgaggc aaaaggctcc gacgatgctt 660
cagacgcgga cacgggcatc atcaatgcag aaggcgggca gtcaggaagg gacgacaaga 720
aggaatattt catctagagg cgcctgccac tttctgcgcc cccaagggcc ctgtggggac 780
tgctggggcc cgtaccaacc cggacttgtn canggangca 820

<210> 3230
<211> 860
<212> DNA
<213> Homo sapiens

<400> 3230
tacaggctct gtgctgattg caaggcactc ttgagagaaa ttcattctta ttttgcagaa 60
gaagaactga aacttcatta agtcattaag caacttgctc aggtggtgga actgagcttt 120
aaatatggac tttttccagt ctcaattcag cattatacta ggctgcctcc atgtgttttt 180
caaagcccca ttcaagtttt acttctatgg taaactaatt ttacatacac aaatcttttc 240
attttctgaa cttcctttat ggctttactg tcaccccact agtatttgat gtcttagcta 300
ttaactaatt cctgattatt tcacttgtca catcaggaac cctatcctct tagttctccc 360
attgagattt cactgctgga ctaagattat tcttgattcg tagtcattgg tttctgtttc 420
cattcatttt cagcactgat tatgttaatc gtattgcttg agtttttct ttgttcaatg 480
ttgtttatta cattcatttt gtttcatata cacacatttt tttttttaa ctggcatttt 540
gaggacattg gtttaatgga aggaaaaagg aatggtgcaa agcacatggt atttgaattc 600
caaagacctt gaccctcagc attagcaagt cacttgtttt ctgagcctca gttttcttac 660
tctcaaatga ggtaatatcc gaaagtcttt gacaacacac taaagcctga tgcagatttc 720
ctttttgaag taattgggct ggttctattc atattggata tggnattcta tggtattggc 780
tatagatnct acattttaaa atgtatttaa cagcatgtaa atgtcattca tgcctgtgac 840
atgttccctt tatgaatttt 860

<210> 3231
<211> 886
<212> DNA

0052345-0420800

<213> Homo sapiens

<400> 3231
atgatttaca tttcaagatt tcagttacat tttttaagga attcaacaat tctgcatcat 60
gaagtattct ttcacacaaa tgttccatag tcattagttt ttacagaacc cttttcttat 120
attctgcatt tcatctggaa tactataagc acaagttcag tttggcattc tgttctccac 180
tagtgattga gtttgaagcc caaggtcagg atattgattg atgacatttc cctttaaagt 240
atttgtatcc atttgcaatt tggggacaga gtgattccca gtatggtgca ggaaataact 300
aaactggaag tcagcctgac tcagttttgt agttaatttt ctttgtgacc ttgggcatgt 360
cacttaacct tccaataact gagggagttg gcccagaact agcacagtct tctaatgcag 420
acattccacg attctctagg gaggattcac ttccatagag gtttaaaagt ggatacattt 480
ttaggttaaa tggctttgtt catttagttt ttttctcctt aacccatttt ggagcaataa 540
gactgtcatg gagtaaaacc aaattacctg gaactctcaa aaggctgcag ttcttatcct 600
atttttttta tttttaaggg aagggaaaaa aatggcaaca aacaaattta tatccatgag 660
tcaggacaaa tccatcccag ttttctaaca tacacagtgt cataaacata ttcaatgaag 720
cactgcagat tcttaacccg aaaatggaat atttgggttg gacttaccat tcctaaaatg 780
gtgggaaaga actggncttt ggaaatatac ctttttggag tanttttag ccaaaaaatt 840
ggttttaaag ccagttggcc ttgggtttgg ccaagggacc ttgtgn 886

<210> 3232
<211> 599
<212> DNA
<213> Homo sapiens

<400> 3232
aaatgaaacc agacccagat caatatttta ggatactaga tgttttaatg ggttcagaat 60
ccagtttgta ggaagatttt ttaatggttt tggttgctcc tcccccagct gccacccccc 120
accttaccct tattcctctc tgtccacatt ttctgcccca ccttacttct cctccctgac 180
agacatccag cccctagtaa tacttaaggc actatggcac ttagctttga agtgacacta 240
ccctgtcttc cttccgcccg ctggtgggta accagtgcct tccctgtaac ggtaatgctg 300
cagaactgca acctttttgta cctttctttg gggaatgggg tgggggtggg agaggaggta 360
gatggggaag aaatacccca gacccaacaa acctccagcc agaaagccag ctattttgca 420
tttgaaggaa ttgacttcct cattcattga gctttttaaa agatcacaac ctcaagatgg 480
ttaaaatcca ttgacatttg cactttcaaa catgacaagt ctcggagctg ctganatgac 540
aggcccctgg cctttccact tatgcctnct tttctcctta ttcctnctac ctccgcccg 599

<210> 3233
<211> 868
<212> DNA
<213> Homo sapiens

<400> 3233
aggaacgaca atcgagtggt tagaaccaaa gatatcttta tcaaaccact ataaaaatgg 60
agctgaccag ccctttgcaa ctgatcagag taagccggtg gcagtcccag aagagcagcc 120
tgttgcagaa tctggactat tagcgaggga gcctaaagaa ataaatgcag atgatgagat 180
agaggataca tgtgaccaca aagaggatga cctgggagct gtagaagaac aacgtagtgt 240
catcctacat ctcttgtcac agcttaagct gggcatggat ttaacaagag tggtgcttcc 300
tacatttatc ctagagaagc gttccttgct ggaaatgtat gcagacttta tgtctcatcc 360

05625405.0072600

agacctattt atagccatca ctaatggagc cacagctgag gacagaatga ttcgctttgt 420
tgagtactac cttacctcat ttcatgaagg ccgtaaggga gccattgcta aaaaaccata 480
caatcctatc attggagaaa catttcactg ttcctggaag atgccaaaaa gcgaggtagc 540
atccagtgtt tttagcagtt cttccaccca gggagtcaca aatcatgctc ctttatcggg 600
ggagtctttg acccaggtgg gatcagactg ttacacagtc agatttgttg ctgagcaggt 660
ttctcatcat cctccagtct caggatttta tgcagaatgt acagagagga agatgtgtgt 720
aaatgcgcat gtctggacta agagcaagtt cttangcatg tcaataggcg tgacaatggt 780
tggagaaggt atccttagtc tgttggagca tggagaagag tccccatttt cttntaccct 840
ggggcatatg ctcggcaaat ttgctgnt 868

<210> 3234
<211> 867
<212> DNA
<213> Homo sapiens

<400> 3234
aaatgatgtt aaagtaagaa ttgcactcct gtccctctgg ccttccatct ctcccgccct 60
tgtgccccac aacctggcca acagtactgg aagaaactgg acacagtcac cagcatcccc 120
ggggagggca aaacagccat gtcgtgccct gatgaagagc aattctgatc acagctgtta 180
ctcactgagc accagccagg caccaggcac cccataacac ggcttcctgt gctctccctc 240
cagagcctgt cgcagctcta ggagggagct atacaatgat gtctttatta gtgtcatcat 300
gagaagccca ataagcagta tgccctaaca gttagtaggc caggctctgg agctaagctg 360
catgggttca aatcccagct ccaccattca gcctgcagag accatgagcg agttacttaa 420
gccaggctct ggagctaagc tgcatgggtt caaatcccag ctccagcatt cagcctacag 480
agaccatggg tgagttactt aagccaggct ctggagctaa gctgcatggg ttcaaatccc 540
agctccacca ttcagcctgc agagactgtg ggtgagttac ttgagctctc tgtgccaata 600
ttttctcacc tataaggtgg aggtgaaaat aaactctata acatgacaag aactacttca 660
cagtagttgc agtgaggatt caacgagatg aacatttagt acttgggaca cagcagtggc 720
ccaatgtaaa tgggctactt gtcataagcc ctaagtcaca ggtcaacaaa ctgagangca 780
aaaagccctt gggttgagct tgggtatcta gtgagtatgg attcanggac cagattccag 840
cccacgaact ggtaacaanc ccacctt 867

<210> 3235
<211> 839
<212> DNA
<213> Homo sapiens

<400> 3235
gctctgctgc ggaggccgta gccgcgggta gttgggagga accgagattt acgcttggta 60
aggcaagttg cgagctgtcc ggcgccggtc gagttcctgc cgccgtcgtc gtcaggcagg 120
ggagaagggg gcccaacccc tctagtgaca gctgtttgct acctaatagg gcttttcatc 180
ccaccgggcc ccagggcctt cgttaggagc ccagcaggct caacttcttg ctgtggttct 240
ggaaaaggga gtgaccacct ggctcaacac ctctctctgt gatgtgtttg ggagttttgg 300
gaaatgagac ggctccgagg gaagagcttg agggagcggc gtcgcactcg ttcgaccttc 360
ccgggcctgg gctttgtttc taggcatttt aggttgaacg ctctacatct taactgaggg 420
caggggaggt ggccagagca tcccgctgag cgttttccga ttccccagat ggccaggcac 480
ctggtcctgg tggctggaca gtgaccccgt ggacgcacat ttacagctat agccattcag 540
tgccgcgggg aggtgaggat agtgatcctg ggacctgctc gaggattcac ccttgcccca 600

US 2005/0059005 A1

agaacctgtt ccattcccag gaatgaaggc ggtcaggcag gggaggagaa gggggcctca 660
actcttctag tgacagcagt ttgccaccta atagagcttt tcagattttg tcttctcang 720
ccattttact cagcctcgga ctatcaaagg atggtcacat ttgaaactgg ttttctgcan 780
tcaggaacca aaaagtnccg gcttgttgaa ggaagaaact tgaatcttgg ntcaggagt 839

<210> 3236
<211> 864
<212> DNA
<213> Homo sapiens

<400> 3236
agcgcgggga atttcgagtg gtgttggagc gccggaggct agtgggtggc tgacccccag 60
catcctcgag agcgaccatg gactccctgg ccgagtctcg gtggcctccg ggcctggcag 120
tcatgaagac aatagatgat ttgctgcggt gtggaatttg cttcgagtat ttcaacattg 180
caatgataat acctcagtgt tcacataact actgctctct ctgtataaga aaatttctgt 240
cctataaaac tcagtgtcca acttgctgtg tgactgtcac agagccggat ctgaaaaata 300
accgcatatt agatgaactg gtaaaaagct tgaattttgc acggaatcat ctgctgcagt 360
ttgctttaga gtcaccagcc aaatctcctg cttcttcctc ttcaaagaat cttgctgtca 420
aagtatatac tcctgtagcc tccagacagt ctttaaagca ggggagcagg ttaatggata 480
atttcttgat cagagaaatg agtggttcta catcagagtt gttgataaaa gaaaataaaa 540
gcaaattcag ccctcaaaaa gaggcgagcc ctgctgcaaa gaccaaagag acacgttctg 600
tagaagagat cgctccagat ccctcagagg ctaagcgtcc tgagccaccc tcgacatcca 660
ctttgaaaca agttactaaa gtggattgtc tgtttgcggg gttaacattc cagaaagtca 720
cattaataag catttagaca gtggttatca cgccaagaga agaaggaaag ccttagaagt 780
tctgtcacaa aaggaaccgc tgcccaaaac tgnatataat ttgctctctg atcgtgattt 840
aaagnaaaaa gcttaaagga cctg 864

<210> 3237
<211> 811
<212> DNA
<213> Homo sapiens

<400> 3237
accagcgcca tgctgggctc gcgagccgcg gggttcgcgc ggggcctgcg ggctttggca 60
ctggcgtggc tgccgggctg gcggggccgc tccttcgccc tggcgcgtgc ggcaggcgcg 120
ccccacggtg gtgacttgca gccccccgcc tgtcccgagc cgcgcgggcg ccagctcagt 180
ttgtccgcgg cggcggtggt ggactctgcg ccccgccccc tgcagccgta cttgcgcctc 240
atgcggttgg acaagcccat tggtgagtgc gggcgggcgg gcagcccggg aatttgcaag 300
tagcagccgc cgagtcggct ccgcggagct gtccgcggcg gccggccggg gcgtgatgga 360
aatgagaacc tgaaagcttg ggcttggctg ccgggtgccg tgcgccctgg ggcgaatcac 420
ctcgggacac tttgaaatga gagcctgaaa gcttgagctt ggctgccggc tgccgtgcgc 480
cctggggcga gtcacctcag gacacgcagt cgggacagtc tcctaaagga cccgccagtt 540
tcacgtctgt ctgcatcctg agcacctgaa gcgggcaaga taattctcat tccacaaaca 600
cttgtttaaa tggtgactca agcggaaggt tccgttctcg tggccctcct tcatttatta 660
gaatgtttga ttcttcccgc aatcttgtaa ggcccacaaa gacaatcctt aagacagtta 720
agacgcttgg ggaaactaag gttctcgtca gagccnngac cngaagaact tttgggtttt 780
gatgctgaat tcggactctt ttaccctgca t 811

09/25/2006 09:57:09

<210> 3238
<211> 857
<212> DNA
<213> Homo sapiens

<400> 3238
gatgaagatg atgaatctga tgacagccaa tcagaatcag atagtaattc agaatcagat 60
acagaaggat cagaagaaga agatgatgat gataaagacc aagatgaatc agatagtgat 120
actgaaggag agaaaacttc aatgaaactg aataaaacaa cttcctctgt caaaagccct 180
tccatgagtc tcacaggtca ctcaacacct cgtaacctcc acatagcaaa agccccaggc 240
tctgctcctg ctgccttatg ttctgaatcc cagtcacctg cttttcttgg tacatcttct 300
tccacactta cttcaagccc acactctggc acttccaaaa gaagaagagt aacagatgaa 360
cgtgaactgc gtattccatt ggaatatggc tggcagagag agacaagaat aagaaacttt 420
ggagggcgcc ttcaaggaga agtagcatat tatgctccat gtggaaagaa acttaggcag 480
taccctgaag taataaaggg aatgcagtgg tgtcttttga aagaagagga tgtcattcct 540
cgtatcaggg caatggaagg tcgtagagga agaccaccaa atccagatag acaacgagca 600
agagaggaat ccaggatgag acgtcggaaa ggtcgacctc caaatgttgg caatgctgaa 660
ttcctagata acgcagatgc aaagttgctt anaaaactgg cagctnaaga aatagccngg 720
caagcagcac aaataaagct tttgagaaaa cttcaaaagc aggaacaggc tcgggttgct 780
aaagaagcca aanaacaaca gcaataatgg ctgctganga gaagcggaag ccaaaagaac 840
nggttaagga tatgaac 857

<210> 3239
<211> 864
<212> DNA
<213> Homo sapiens

<400> 3239
gacgggccgt ctcgagagcc ggcatctcct aggagctagt cctggtcctc ggctaggcgg 60
cttggggtcg cggcgtaact ggggagccag cctgacgccg gcggaccccg cctgtgatcc 120
tggcaacgat ggatgatgac ttgatgttgg cactgcggct tcaggaggag tggaacttgc 180
aggaggcgga gcgcgatcat gcccaggagt ccctgtcgct agtggacgcg tcgtgggagt 240
tggtggaccc cacaccggac ttgcaggcac tgtttgttca gtttaacgac caattcttct 300
ggggccagct ggaggccgtc gaggtgaagt ggagcgtgcg aatgaccctg tgtgctggga 360
tatgcagcta tgaagggaag ggtggaatgt gttccatccg tctcagcgaa ccccttttga 420
agttgaggcc aagaaaggat cttgtagaga ccctcctgca tgaaatgata catgcctatt 480
tatttgtcac taataacgac aaagaccgag aagggcatgg tccagaattt tgtaaacata 540
tgcatcgcat caacagcctg actggagcca atataacggt ataccatact tttcacgatg 600
aggtggatga gtatcggcga cactggtggc gctgcaatgg gccgtgccag cacaggccac 660
cgtattacgg ctatgtcaaa cgagctacta acagggaacc ctctgctcat gactattggt 720
gggctgagca ccagaaaacc tgtggaggca cttacataaa aatcaaggaa ccagagaatt 780
ctcaaaaaaa ngcaaaggaa aggcaaaact nggaaaggaa ccatattggc cgcagagaat 840
taaggataac ccaacagagg tgag 864

<210> 3240
<211> 559
<212> DNA
<213> Homo sapiens

CONFIDENTIAL

<400> 3240
atgacactct gagcgctccg ggaacggaca gcccggcggc ttcccgaagc cggcggcgca 60
gctgcccggg gcgaggggga gaaagggaga gagggagggg gagggcgggc gaagcgggag 120
agccagagac tcctcggcgc tgagcgcggc ggcggcccgg gcagccccac gcccctgcct 180
cgcgcgccgc ccgcgccatg aagcacatcc cggtcctcga ggacgggccg tggaagaccg 240
tgtgcgtgaa ggagctgaac ggccttaaga agctcaagcg gaaaggcaag gagccggcgc 300
ggcgcgcgaa cggctataaa actttccgac tggacttgga agcgcccgag ccccgcgccg 360
tagccaccaa cgggctgcgg gacaggaccc atcggctgca gccggtcccg gtaccggtgc 420
cggtgccagt cccagtggcg ccggccgttc ccccaagagg gggcacggac acagccgggg 480
agcgcggggg ctctcgggcg cccgaggtct ccgacgcgcg gaaacgctgn ttcgncctag 540
gcgcantggg gccaggact 559

<210> 3241
<211> 871
<212> DNA
<213> Homo sapiens

<400> 3241
ccttggccaa gaagttgcca ccaccaccgg gcagcccccc gggccactca ccaactgcct 60
ctcctcctcc tacggcccga aagatgttcc caggcctggc tgcaccctcc ttgcccaaga 120
agctgaagcc tgaacaaata cgggtggaga tcaagcggga gatgctgccg ggggcccttc 180
atggggaact gcacccatct gagggtccct ggggggcacc acgggaagac atgacacccc 240
tgaacctgtc gtcccgggca gagccggtgc gcgacatccg ctgtgagttc tgcggcgagt 300
tcttcgagaa ccgcaagggc ctgtcgagtc acgcgcgctc acacctgcgg cagatgggtg 360
tgaccgagtg gtccgtcaat ggttcgccca tcgacacact gcgagagatc ctcaagaaga 420
agtccaagcc gtgcctcatc aagaaggagc caccggctgg agacctggcc cctgccctgg 480
ctgaggacgg gcctcccacc gtggcccctg ggcccgtgca gtccccactg ccgctgtcgc 540
ccctggctgg ccggccaggc aaaccaggtg cagggccggc ccaggttcct cgtgagctca 600
gcctgacgcc catcactggg gccaagccct cagccactgg ctacctgggc tcagtggcag 660
ccaagcggcc cctgcaggag gaccggcttc ttccagcaga ngtcaaggcc aagacctaca 720
ttcagacttg aactggcctt tnaagggcaa agaaccctttt cattgaagaa agacccttcc 780
aacttccttc caaccgaagg ccctggcttg caaaacttgt ggtngggccc ttttactttt 840
ggaaaaaccc gcnaagggnc cttgggccaa g 871

<210> 3242
<211> 811
<212> DNA
<213> Homo sapiens

<400> 3242
atgctattga agacagcaga caggcccgga ctgagaccgt ggttgatgac tgggacgaag 60
agtttgaccg agggaaggaa aagaaaatta aaaaatttaa gagagagaag aggagaaact 120
tcaacgcctt ccagaaactt cagactcgac ggaacttctg gtctgtgact cacccagcaa 180
aggctgccag cctcagctat cgccgctgac tgtgcccctg tggaaggagg actaccgtgg 240
tttgttctgc agcctcctgg agacaaggcg tcccttcccg ggagctgtcg gtctggatct 300
gagggagctc tctgtgtggg ctctgctgtg ctgggagcct gtcacggtag gagctctccc 360
ggtaccagtg tccacagacc gcccaacata gaggctttga ggcttctcta gatcggaacc 420

US 2005/0260609 A1 Nov 24 2005

tctttggtga cattcccgac cagccctgca agagaaacga cagtgtgtgt gtgagcagag 480
gtggctgcac acctgctgga catctttgcc aggctgtgcc ttctcatgtt tcatagacag 540
tggtctgtgc tggcagaggc tgctgcccct ggttggggct atcaggagag tgggggatgg 600
tggccacatg tcctccaggt ggtctcccgg tgcatagctg gtggctctgg gcaagccatc 660
ccttgcttct cggggctgac gccaccgttg tgtccgagcc cgcctccctg cttcctnacg 720
ggacccccttc atctggtggc cttacctgtc ctcaaaaagg aaaagtgacc ccacccagcc 780
acctttncct tttatggaac tcnaaaggtg g 811

<210> 3243
<211> 806
<212> DNA
<213> Homo sapiens

<400> 3243
catcaaaata tgaagtcctg acagttcaag agcctccaag gattgaagat gccgaggaat 60
ttcccaacct ggcagttgca tctgaaagaa gagacagaat agagacaccg aaatttcaat 120
ctaagcagca gccacaggat aattttaaaa ataatgtaaa gaagagccag cttccagtgc 180
agttggactt ggggggcatg ctgacagccc tggagaagaa gcagcactct cagcatgcaa 240
agcagtcctc caaaccagtg gtagtctcag ttggagcagt gccagtcctt tccaaagaat 300
gtgcatcagg ggagagaggc cgccgcatga gtcaaatgaa gaccccgcac aatcccttgg 360
actccagcgc cccactgatg aagaaaggga agcagaggga gatccccaag gccaagaagc 420
caacctcact gaagaagatt attttgaaag aacggcaaga gagaaagcag cgtctccaag 480
aaaatgctgt gagtccagct tttaccagtg atgacacaca agatggagag agtggtggtg 540
atgaccagtt tcccgagcag gcagagctgt cagggccaga ggggatggac gaactgatct 600
ccactccttc ggttgaggac aagtctgaag agccaccagg cacagagctc cagagggaca 660
cagaggcctt ccaccttgct cccaatcaca ccaccttcct aagatccaca gccgcagatt 720
cagggattct gcagccagat gcttagtnaa gaaatggatg cttgggtacc cgcctactca 780
aagaactggt ccgntttcaa gancgt 806

<210> 3244
<211> 796
<212> DNA
<213> Homo sapiens

<400> 3244
aaatgctcgg tgctttaaat ttgcaattac catatttgca gaaacttgaa aaatcatccc 60
aattaaatga caaaatgtat aggaggatta tctttctttt gcccttacaa ctcaaattat 120
attcgaagta acatttttac agcagtcaaa acttttaacc aaaactcaca cctgcagtct 180
cataagttta acaaaatggc cacattccac gctttatttt cttaacaacc ctgactgttt 240
aaatgactcc cattgaacca acagcttaca gttgctgggc aataaaaaag cgagcaaaag 300
gacctccagc cctgctgttt tagctattac ccagcactct cagagtttgc tctagtctgg 360
ctgttcaatc aaattcattt tccagtagct tctggccttt gtctcctctt tctggccacg 420
catttcattg cctcctgaat ttgatgacaa cattttcttt cttcactttg aatcttggcc 480
cagaatctca ctctcccagc cccatggaaa gatggggaaa agatttcatt ctgctgatca 540
aatttgttag aagacattct ttagagtctg aaaaaatata tttcattagc agttctctag 600
gtagtggaat ttttagtgat gtttactctt ttttccttgt tctaattttc ctctaataaa 660
cagaaaaaaa gcaagagtaa cccaccaaat ttggataaag ggcttctgct tttcatattc 720
tcttcaacca gaacagctta acttttctcc atttatttat ttaagtattt attcatattt 780

09/05/2005 08:50:03 PM

gaaaacaagg nnnttg 796

<210> 3245
<211> 714
<212> DNA
<213> Homo sapiens

<400> 3245
gtggcccctg agtgctgggt gggaccgcgg tgactgaacc tagaaggtgg agaggaatcg 60
tcctcggtgc ccagaggcgg ctctgcagcc ccgtgacggc gaccactgct cccgggccgt 120
gcttccccaa gtagtccgat ggcagcggct gtgccgaggc gcccaactca gcagggcact 180
gtgacctttg aagatgtggc tgtgaacttt tcccaggagg agtggtgtct tcttagtgag 240
gctcagaggt gcttgtaccg tgatgtgatg ctagagaacc tggctctcat atcctcgctg 300
ggttgttggt gtggatcaaa agatgaggag gcaccttgta agcagagaat ttctgtacaa 360
agagagtctc agagcaggac tcctagggca ggtgtttctc ctaagaaggc tcacccctgt 420
gaaatgtgtg gcctcatctt ggaggatgtt tttcactttg ctgaccacca ggaaactcat 480
cacaagcaga agctgaacag gagtggagca tgtggaaaaa acttggatga cactgcatac 540
cttcatcagc accagaagca gcatattgga gagaaattct acagaaagag tgtcagagaa 600
gcatcgtttg taaagaaacg taagctcaag gtgtcacagg agccatttgt cttncgcgag 660
tttgggaang acgttctgcc cagttcanga ttgtgccaag aagaagctgc tgta 714

<210> 3246
<211> 763
<212> DNA
<213> Homo sapiens

<400> 3246
ntgaagcaat gtgggttaaa gttagaccct ggggaaacct tgcaggggtc tgtangcctg 60
tgaagaactg gactaggtga gaagaagaag cttttgaccc atgtcactcc ctggcccaga 120
actatatcct acccacaggt gggttgagtt caggactgct gcttccagcc cccagcagca 180
aggttcaagt gagagctgac tcacctaggg ccccttgtta gagcctnaga gccaggtgaa 240
aagccacaca caggctgggc gcgatggctc acgcctgtaa tcccagcact ttgggaggcc 300
gaggcaggtg gatcacctga ggtcaggagt tcaagaccat cctggccaac atggcaaaat 360
cccgtctcta ctaaaaatac ataaattagt cctgcctggt ggcacatgcc tgtagtccca 420
gctactcggg aggctgaggc aggagaatcg cttgaacccg ggaggcggag gctgcagtga 480
gccgagatcn tgccactgca ctccagcctg ggtgacagag cgggactctg tctccaaaaa 540
aagaaaagcc acacaggtgt gtgtgtaggg gcaagggagt ttcctactgt cttcctagca 600
gaaaatggng agaaactgtt aaagccagaa tgagggatgg ctgtgtgtgg cctgggactg 660
gcaacanaag tgtcaagctg ccaggtttca agccagtnca gagcacgggt ctacctgggt 720
tatgtgttgc ccggactaat ggttanagac atctgtcact ggt 763

<210> 3247
<211> 861
<212> DNA
<213> Homo sapiens

<400> 3247
ttgaattcag atgtgcctca gcaacgccca agtgtagttg tctcaccaca ttctacaacc 60

US 2005/0260200 A1

tctgttatac agggacatca aatcatagca gttcccgact caggatcaaa agtatcccat 120
tctcctgccc catcatctga cgttcggtct acaaatggca cagcagaatg caaaactgta 180
aagaggccag cagaggatac tgatagggaa acagncgcag gaattccgaa taaagtagga 240
gttagaattg ttacaatcag tgaccccaac aatgctggct gcagcgcaac aatggttgct 300
gtgccagcag gagcagatcc aagcactgta gctaaagtag caatagaaag tgctgttcag 360
caaaagcaac agcatccacc aacatatgta cagaatgtgg tcccgcagaa cactcctatg 420
ccaccttcac cagctgtaca agtgcagggc cagcctaaca gttctcagcc ttctccattc 480
agtggatcca gtcagcctgg agatccaatg agaaaacctg gacagaactt catgtgtctg 540
tggcagtctt gtaaaaagtg gtttcagaca ccctcacagg ttttctacca tgcagcaact 600
gaacatggag gaaaagatgt atatccaggg cagtgtcttt gggaaggttg tgagcctttt 660
cagcgacagc ggttttcttt tattacccac ttgcaggata agcactgttc aaaggatgcc 720
ctacttgcag gattaaaaca ggatgaacca ggacaagccg ggaagtcaag aagtcttcta 780
ccaaagcagc caactgtang ggggcacaaa gctcaacttc tagagcccaa aaaggncatt 840
gngaatcatt cccagtggct g 861

<210> 3248
<211> 721
<212> DNA
<213> Homo sapiens

<400> 3248
agtccccaca gctgcgccgg tgactgaggg gccgggcagt ggagaagtgg tggcggcggg 60
cggcgggcgg caaaggagca gccatgaggg ccgggcccag tcaccgaccg tgctgaggag 120
tcatggaaga gtttttaaac cagtgtgagc cactgcccca tgttgtgttg atgccaatct 180
gccatgctag cctgtctacc agggccaggt gacctgtcct ttcagcctct ttctcacacg 240
cagatgaaca ctggacttca gaaatgggac actacacaga aaatgagaac tgctcactat 300
cctaccccag ccgaattgga tgcgtatgct aagaaggtcg caaacaaccc actgactata 360
aaaatcttcc ccaacagtgt gaaggttccc cagcggaaac acgttcgtcg tactgtgaac 420
ggcctcgaca catcagccca gcgctacagc ccctacccga cacaggctgc caccaaggca 480
ggcctgcttg ccattgtcaa agtgccagcc aaaagcatac tcaaggactt tgacggcacc 540
cgagcccggt tgctccctga ggccatcatg aacccccccag tggcacccta tgctactgtg 600
gcacccagca ctttagccca cccccaggcc caggctctgg cccgncagca ggccctgcag 660
catgcacaga ccctggccca tgcccccttcc cagacgcttg cagcaccctt anggtatncc 720
g 721

<210> 3249
<211> 841
<212> DNA
<213> Homo sapiens

<400> 3249
agacgcgcaa gggcgccgat ggaggcagac tcgccagcgg gccccggcgc cccagagccc 60
ctcgcggagg gagcggcggc cgagttctcc agcctgctgc gcaggataaa aggcaaactc 120
ttcacctgga atattttgaa aacaattgcc ctgggtcaga cgttgtcctt gtgtatatgt 180
gggacagcca tcaccagcca gtatttggca gaaagataca aagtgaacac ccccatgctt 240
cagagcttta tcaattattg cttgctgttc ctaatttata cagtgatgct ggcatttcga 300
tcaggcagtg ataacctttt agtaatcttg aaaagaaaat ggtggaagta catcctgctg 360
ggactagcag atgtggaagc taattatgtg atcgtcagag cctaccagta cacaactcta 420

0952450.0952800

accagtgtcc agcttttgga ttgctttggg attcctgtgt tgatggctct gtcatggttt 480
attcttcatg caagatacag agtgatccac ttcatcgccg tggctgtctg tctgttgggt 540
gtaggaacca tggttggtgc agacatacta gcagggaggg aagacaattc agggagtgat 600
gtattgattg gtgacatctt ggtccttctt ggggcttccc tctatgccat ttcaaatgtt 660
tgtgaggaat acatcgtgaa gaagctganc agacaggagt ttttaggaat ggtgggcctg 720
tttggaacaa ttatcagtgg tatacagcta ttgattgtgg aatataagga tattgncagc 780
attcattggg acttggaaaa ttgcctgctg tcgtggcatt tgcctgngna tgtttggctg 840
t 841

<210> 3250
<211> 857
<212> DNA
<213> Homo sapiens

<400> 3250
aatagaagat cgctcgggaa ttcttactct cgataaagat tataacaaca taggaaaatt 60
cttaaataga attttaggca tggaggtgca tcagcagaat gcgttatttc agtattttgc 120
ggacacactt actgcagttg ttcaaaatgc caaaaaaaat ggaagatatg atatgggaat 180
cttagatctt ggttctggag atgaaaaagt gcggaaaagt gatgttaaaa agtttctgac 240
tccaggatat tcaacctctg gccacgtaga attatacaca attagtgtag agaggggaat 300
gtcatgggag gaagctacca agatttgggc tgagctgaca ggaccagacg atggctttta 360
cttgtcattg caaataagga acaacaagaa aactgccatc ttagttaaag aagtgaatcc 420
taaaaagaaa cttttcttag tttatcgacc aaatactggg aagcagctca aattagaaat 480
ttatgctgat ctaaaaaaga aatataagaa ggtcgtctca gatgatgccc tgatgcactg 540
gttagatcag tataattcat ctgcagatac ttgtactcat gcttattggc gcggcaattg 600
caaaaaagca agcttggggc tagtttgtga aataggtctt cgttgccgta catattatgt 660
attatgtggt tcagtgctga gtgtctggac aaaagttgag ggtgtctagc atctgtcagt 720
ggcacaaacg tgaagatcag atcgtgcggc ttaanaacgg aagatgggcc accggattgt 780
agggtttgga tcatttnccg gcaaaattgg gggggctccc tcttggnaaa tcttcctatc 840
aactttagac ccagnct 857

<210> 3251
<211> 754
<212> DNA
<213> Homo sapiens

<400> 3251
agcattggga tgctgtctat gagagagaac tgcaaacttt ccgagaatat ggagatacag 60
gtgaaatctg gtttggagaa gagagtatga atcgactaat aaggtggatg cagaaacaca 120
agattccact ggatgcttca gtgcttgata ttggaactgg aaatggtgtt ttcctggttg 180
aacttgcaaa atttggtttc tctaatatta ctggaattga ttactctcct tctgcaattc 240
agctttctgg aagtattata gaaaaagaag gtttatctaa cattaagtta aaggtagaag 300
acttttgaa tctctccaca cagctgtctg gatttcatat ttgtattgac aaagggactt 360
ttgatgccat aagccttaat cctgacaatg caattgagaa gaggaagcaa tatgtgaaat 420
ctctctccag ggtgttgaaa gtaaaaggct tttttctaat aacgtcatgt aattggacca 480
aggaagagtt gctaaatgaa ttcagtgaag gatttgaact tctcgaagag ctaccaacac 540
ccaagttcag ctttggaggc agatctggaa acagtgtagc agcattggtt ttccaaaaaa 600
tgtgagactt tttcttggac gaattcaggg agttgaccac atttggccat ttcccanaag 660

0095456.0002000

ggccccaccc caagggtgag tggccaatgg ggagctgttt ctgctgacat caattcccca 720
ggangtctca ccccaagtct gnccaagtga agat 754

<210> 3252
<211> 736
<212> DNA
<213> Homo sapiens

<400> 3252
agtgctacgc ggaggattag agcaggcggt gcgctggggg cgggagcagc gcggagcccg 60
gctcggccac accgatcgcc cgccgccatg ggctcctcgc aaagcgtcga gatcccgggc 120
gggggcaccg agggctacca cgttctgcgg gtacaagaaa attccccagg acacagagct 180
ggtttggggc ctttctttga ttttattgtt tctattaatg gttcaagatt aaataaagac 240
aatgacactc ttaaggatct gctgaaagca aacgttgaaa agcctgtaaa gatgcttatc 300
tatagcagca aaacattgga actgcgagag acctcagtca caccaagtaa cctgtggggc 360
ggccagggct tattgggagt gagcattcgt ttctgcagct ttgatggggc aaatgaaaat 420
gtttggcatg tgctggaggt ggaatcaaat tctcctgcag cactggcagg tcttagacca 480
cacagtgatt atataattgg agcagataca gtcatgaatg agtctgaaga tctattcagc 540
cttatcgaaa cacatgaagc aaaaccattg aaactgtatg tgtacaacac agacactgat 600
aactgtcgag aagtgattat tacaccaaat tctgcatggg gtggagaang cancctagga 660
tgtggcattg gatatgggta tttgcatcga atacctacac gcccatttga nggaaggaaa 720
gaaaaattct ctttca 736

<210> 3253
<211> 655
<212> DNA
<213> Homo sapiens

<400> 3253
gctgtagaag aggggaggaa acaagccagt gcaaggggag caaaagagaa aaggagccag 60
gctgggcttc ctgatcccac agcatcgcag agctcgggag gcacagctca cagacacagg 120
aaacacagga ctgctattct gctctcctgc ccacggtgat ctggtgccag ctggtggaac 180
agtgggtgat ggcgtccctg ctgcaagacc agctgaccac tgatcaggac ttgctgctga 240
tgcaggaagg catgccgatg cgcaagtctc aatctctgat gtggagacaa tacgtaatgg 300
ccatgattcc gagttgctgc gtagcctggc agaggagctc cccctggagc agggcttcac 360
cattgtcttc catggccgcc gctccaacct ggacctgatg gccaacagtg ttgaggaggc 420
ccagatatgg atgcgagggc tccagctgtt ggtggatctt gtcaccagca tggaccatca 480
ggagcgcctg gaccagtatc ggcaggatgg agtcagggtg ggggtgaggg atcacgctat 540
ccctgaagga gccagatgca acaggtttag gaaaggcagc agacacgtnc cantctggaa 600
ccctggaagg agaagaattc ntacagttct ataaggcatt gactaaacgt gctga 655

<210> 3254
<211> 755
<212> DNA
<213> Homo sapiens

<400> 3254
ccttacaatt ccagccccta gacatacagt agatgtgcag cttcccagag aagacaaccc 60

US 2003/0170809 A1

tgaagaacct agcaaggaaa tcacctctca cgaggaagga ggtggagacg tttcacctcg 120
aaaagaacct caagagcctg aggtttgccc cacaaagatt aagccgaacc tgagcagctc 180
ccctaggtca gaggaaacga cagcctccag cctggtgtgg cctctccctg ctcaccttcc 240
tgaagaggac ctgccagaag gtggctccac agtctcagct cccacagcaa gtgggatgtc 300
ttctcctgaa cacaaccaac caccagttgc actgttggat acggaggaga tgagtgtacc 360
ccaggactgt cacctccttc cctccactga aagcttttcc gggggagtca gtgaagatgt 420
catttctagg cctcattctc ctcctgaaat agtcagtaga gaagaaagtc ctcagtgctc 480
agaaaatcag agttccccaa tgggcttgga gccccccatg agtctgggaa aggctgagga 540
caaccaaagc atcagtgctg aggttgagtc tggagacacc caggagctaa atgtcgaccc 600
actcttgaag gaaagcagca cttttactga tgaaaacccc agtgaaactg aggaaagtga 660
ggcancaggt ggtataggaa aattagaggg agangaccgt gatgtaaaat gcctgtcaga 720
aaaaagacac ctntgataca agcattgctt actcc 755

<210> 3255
<211> 834
<212> DNA
<213> Homo sapiens

<400> 3255
atatgatccg ctcggcttcc tgggtctggc tgctgccgcc cgccggtgtc cgcccgtgtc 60
gcgccggggc accaaggagc cgttggaggg tccgggcgga ggcccgctcg tgtggaagtc 120
gtcgacgccg ccgctcgtcc gtcctcccgt ccgttctcgc tcccggccgc catcatgctg 180
gcgctcatct cccgcctgct ggactggttc cgttcgctct tctggaagga agagatggag 240
ctgacgctcg tggggctgca gtactcgggc aagaccacct tcgtcaatgt catcgcgtca 300
ggtcaattca gtgaagatat gatacccaca gtgggcttca acatgaggaa ggtaactaaa 360
ggtaacgtca caataaagat ctgggacata ggaggacaac cccgatttcg aagcatgtgg 420
gagcggtatt gcagaggagt caatgctatt gtttacatga tagatgctgc agatcgtgaa 480
aagatagaag cttcccgaaa tgagctacat aatcttctag ataaaccaca gttacaagga 540
attccagtgc tagtgcttgg aaacaagaga gatcttccta atgccttgga tgagaaacag 600
ctaattgaaa aaatgaatct gtctgctatt caggatagag aaatttgctg ctattcaatt 660
tcttgcaaag aaaaggataa tatagatata cacttcagtg gcttattcan cattcaaaat 720
ctagaagaac tgaacatctt tgaatcttca gtccttcttg ctataatcta natattgccg 780
ttctctaata atccaaatac ggccttctaa cccaaaaatg cttttaggct attt 834

<210> 3256
<211> 658
<212> DNA
<213> Homo sapiens

<400> 3256
gtttggcgtt gcagctgtgt gggcgctggt gcgtgcgagt agcgctcgaa gaaacccaaa 60
ggcgtcgtgg ggctgccgtg tgccccagag agcactgcag gccgggtagg ggctaaggct 120
ccccgcagtc ttctgtgtgt cgtccagtac gcagttgaaa tcgttctcca acctggccag 180
tcctccgagg cccttctcag gcgaccagac tctgttaaca gagtccattg ctaaaactcc 240
tcgttagtat ttaccactcc tccagtctgt gttttgaagc agtggttttc aaccactgcc 300
cgttttcaga agaaatcatc tcaagcgtcc gtgtgctgct agaagccggg ccgggaggtc 360
ttggtgccgg actccaccct gcagcccttc cctttcgcca ccgccctgtg cttagagaaa 420
ccttagagtg gagcaatgag tcgcccttga ctgagtaact cttcggggtc aacttctcct 480

US 2020/0239880 A1

tccacgccaa ggaaaggatt ccagggcgat gtttctggaa atagagatct gaccaagcca 540
ctgctctggt gaaaattcag tgggtcccta gcacctagtg cagcggctcc tagcctgagt 600
attgccgtct ttcggtgggg aggggttngg gttttttgta ncatctgttg atctgant 658

<210> 3257
<211> 710
<212> DNA
<213> Homo sapiens

<400> 3257
ggacagtgtt tctcgatcag aaattgcctt gggttgcaaa gacctcaatc atgtcagctt 60
atcttctttg ataccagaac tagatgtcac ctccgaatat attaattcag acactcttgt 120
cagagagata aacaagcata catctccaga agaatataat ctaaatttat ttctgcaaga 180
aaaaaaacac ataaacctga ctaaactcgg cttaaatgta caaaaacatc ctggaaatga 240
gaaagaagat tcactacaat atttggccaa taagaaatat acacaaggcc ggggaagcca 300
cagccaagaa atgaggtaca atcgacaaaa cagatggaaa cggcagaact ttcatgagtt 360
tcctcctttg tttgctttcc cgagtctcag ccaaacggat ctggaagaac ttacttattt 420
tttcccagag gaccatgctg aggatgtaca gcaagagttt ttcccctctt ggcccactcc 480
ctctggcctc accgagtata gcaccttgac cctctgtcag gagactctag ccaactccag 540
cataggaagg ctgtgtcttg cttttcttgg caagagatta gacagtgtta tagagatgtg 600
tgtgaaggat gttctgttaa aagatgatct tagttgggca gaaacaggtg tggccctttt 660
agaaaatgaa tgtgaaaaga ngattgtgga ggaagggaaa tntaacncaa 710

<210> 3258
<211> 826
<212> DNA
<213> Homo sapiens

<400> 3258
gttgggggtc aggtgccgga agaggaaacc tctcgctggg gctaggagtt cggcggggcg 60
cgcgccggcg gctgcggagc tggcaggtgc gaagcgtctg cacctggcgg gcgatggcgc 120
ccgatgcggg cgccccggga tagcgtgggc gaggctgcgg ggccccggcg cgcacgcccg 180
cacctctccc cagccctggc gtgggcccag cccggcccag gcagcaatgg ggttcctgca 240
gctgctggtt gtagcggtgc tggcatccga acaccgggtg gctggtgcag ccgaggtctt 300
cgggaattcc agcgagggtc ttattgaatt ttctgtgggg aaatttagat acttcgagct 360
caataggccc tttccagagg aagctatttt gcatgatatt tcaagcaatg tgacttttct 420
tattttccaa atacactcac agtatcagaa tacaactgtt tcctttctc cgactctcct 480
ttccaattcc tcggaaacag gcactgccag tggactggtt ttcatcctta gaccagagca 540
gagtacatgc acttggtact tggggacttc aggcatacag cctgtccaga atatggctat 600
cctactctcc tactcagaaa gagatcctgt ccctggaggc tgtaatttgg agttcgattt 660
agatattgat cccaacattt acttggagta taatttcttt gaaacgacta tcaagtttgc 720
cccagcaaac ctaggctatg ccaaaaggcg tagaatcccc caccatgtga acgcttngga 780
caagacccaa ggactttcca ggtnggaagg ttgccantat tgaagg 826

<210> 3259
<211> 842
<212> DNA
<213> Homo sapiens

0050205.00000

0508202-000300

<400> 3259
aatgcctcat gccccagttc agcaaaagga ggaaaatgtg cctgcctcac agtcatcagt 60
ctttttaaat ctttttttgtt gttgttctta agggtttgaa tttgtctgca ttccttgtct 120
ttaggggaaa ttccctttc atattgtgtg cttcccaaag ctatagtcat agatttcttc 180
cagaaactat tgtcataatt gtcactggag tgcttaaata tacgtactat actgacaaaa 240
tacatggaag tgagttataa tgaggcagaa acaaaatcct cggtaacatt gatgatactc 300
taccgatcac cgtggttttg gaaagtcagt caacagttgt attattgcac tcaatttcat 360
tgtgacattt tatttaactt cttcatcttg gtggtccttg cccagttatt ttgcctcatt 420
agacatcaag aaatggagaa agactgaaag ttaatatctt aagtgcttgt tcttcatgtt 480
tccttcttgt tatttatgct attctctttg tggctccatt cttctttcaa tcttctcagc 540
ttataaccgt ctttccctta tgctaaggat agcccttaca ctcatcccat ctatgctgtc 600
aagggctgct ggttggtgct ggtacaagga gcccactcag cagttttctt acctttgcct 660
gccctgcctt tcatggaata agaaaggcaa cgttttgcag cttccaaatt tctgaagaaa 720
ctaatctcag attggcagtt aaagtcaaaa tgttgccaaa tatttattcc ttttgcctaa 780
gtttggctac ccggntcaat tgctttttat ttttaatgnc ttgactcttc anagttcgta 840
cc 842

<210> 3260
<211> 843
<212> DNA
<213> Homo sapiens

<400> 3260
agaagcgggc ggcgcggggg agatgcataa gcttaaatcg tctcagaagg acaaggtccg 60
ccagtttatg gcgtgcactc aggctggcga gagaactgct atctactgct taacgcagaa 120
tgagtggaga ctagacgagg ccacggacag cttcttccaa aacccagact cgctccacag 180
ggagtccatg cggaacgctg tggacaagaa gaagctggag cggctgtacg gcaggtacaa 240
agatccacaa gatgaaaaca aaattggagt cgatgggatt caacagtttt gtgatgatct 300
gagcctggat cctgccagta tcagtgtatt ggtcatagcg tggaagttca gggcagcaac 360
tcagtgtgaa tttagcagaa aggaatttct agatggcatg acagaacttg ggtgtgacag 420
catggagaag ctaaaggctc ttctgccaag actggagcag gagctgaagg acacagccaa 480
gtttaaagat ttttatcagt ttaccttcac cttcgctaag aacccagggc agaaaggttt 540
aggttcacct ccatttctca atgtgaaagc tttacatcat taagatgagt tgaatataga 600
tttcaattaa tgttcttcct aagtgataag gatgtagact tataagcagg acaagactaa 660
tcatcttctt agcattttac tgcgggtccc atcgacttag aaatggctgt tgcgtattgg 720
aaattagtgt tatctggaag gtttaaattt ttagatctct ggacacattc ttaatggaac 780
atccaaaaga tcaatttcaa gggacacctg gaaccttctg ctggactttg gaaacatgat 840
tgn 843

<210> 3261
<211> 761
<212> DNA
<213> Homo sapiens

<400> 3261
ccatatgccg ccccggagct gtttcagggc aagaagtacg acgggccgga ggtggacatc 60
tggagcctgg gagtcatcct gtacaccctc gtcagcggct ccctgccctt cgacgggcac 120

aacctcaagg agctgcggga gcgagtactc agagggaagt accgggtccc tttctacatg 180
tcaacagact gtgagagcat cctgcggaga tttttggtgc tgaacccagc taaacgctgt 240
actctcgagc aaatcatgaa agacaaatgg atcaacatcg gctatgaggg tgaggagttg 300
aagccataca cagagcccga ggaggacttc ggggacacca agagaattga ggtgatggtg 360
ggtatgggct acacacggga agaaatcaaa gagtccttga ccagccagaa gtacaacgaa 420
gtgaccgcca cctacctcct gctgggcagg aagactgagg agggtgggga ccggggcgcc 480
ccagggctgg ccctggcacg ggtgcgggcg cccagcgaca ccaccaacgg aacaagttcc 540
agcaaaggca ccagccacag caaagggcag cggagttcct cttccaccta ccaccgtcag 600
cgcaggcata gcgatttctg tggcccatcc cctgcacccc tgcaccccaa acgcagcccg 660
acgagcacgg gggaagcgga gctgaangaa gaaccggctt gncaggcccg gaaaggcgaa 720
cttgcaacac ccgcngggga gttgggaagt cgaagggctt g 761

<210> 3262
<211> 776
<212> DNA
<213> Homo sapiens

<400> 3262
cattataaat cccagtagca gtctgctggc cagccaagat gagacaaagt tgcctaaaat 60
agacttttt gactattcta aattgacccc tcttgaccag cgctgcttca tccaagctgc 120
tgacctcctc atggccgact tcaaagtgct cagtagtcag gacatcaagt gggccctgca 180
cgagctcaaa ggacactatg caatcacccg aaaggccttg tctgatgcca ttaaaaaatg 240
gcaggagctg tcaccagaaa ccagtggaaa aaggaagaag agaaaacaaa tgaaccagta 300
ttcttacatt gattccaagt ttgaacaagg tgacataaaa atagaaaaga ggatgttctt 360
tcttgaaaat aagcgacgac attgtaggtc ctatgaccga cgtgctctcc ttccagctgt 420
gcaacaagag caggagttct atgagcagaa aatcaaagag atggcagagc atgaagactt 480
tttgcttgcc ctacagatga atgaagaaca gtatcaaaag gatggccagc tgattgagtg 540
tcgctgctgc tatggggaat ttccattcga ggagctgacg cagtgcgcag atgctcactt 600
gttctgcaaa gagtgtctca tcagatatgc ccaagaggca gtctttggat ctggaaagtt 660
ggagctcagc tgcatggaan gcagcttgcc gttgttcgtt cccaaccagt gagctggaaa 720
aggtgctccc ccagaccatn ctgtataagt actatgagcc aaaaagccna ggaaga 776

<210> 3263
<211> 768
<212> DNA
<213> Homo sapiens

<400> 3263
caaagaatgc taatgcttag cacttgctgt tgagcatgct ctaactttta aagccctggc 60
ctcctgtctc cttagctgct tagctacgcg gcctagcaga tcatcaccca tcagtaatcc 120
tgtggctaga tccaggggaa aattgtttat gtccaggccc cacccctgtc actcataaat 180
acccccttgtg ggggtggaat tttagtgttt tcagctaaga aaaccacatt ttctctttcc 240
ttgcctctct gctaggactg tgagcatctc atagtccact ccctaaacac tttctggtaa 300
cacctagttt tccgcctgag ggtcagaggc tagaatcatt gcctgcacag caggactacc 360
ttggttctta aaacttggat cacccaggca aggcgtggtg gctcacgcct gtcatctcag 420
cactttggga gactgaggct ggtggatcac ttgaggccac gagtttgaga ccagcctgac 480
caacgtggtg aaaccccatc tctactaaaa atacaaaaat tagccaggcg tggtggtggg 540
cacctgtaat cccagctact tgggaggctg aggcaggaga atcccttgaa cccaggaggc 600

0950245.0020

ggaggttgca gtgagcagag atggtgccgc tgcagtccag cctgggtgac agagcgagac 660
tctgtctcaa aacaaaacaa aaaccacaca cacatacaga aatnaagaga aatnatcaac 720
tagaaaaaaa acaaaacttg gatcacccag aaagagcgtc acagangc 768

<210> 3264
<211> 840
<212> DNA
<213> Homo sapiens

<400> 3264
gaagctctcc tgtttgacga aagtatgtct caggaaggtg cggncccagc tagcgcggtt 60
cccctggaag aattaagtag ctggccagag gagctatgcc gccgggaact gccgtccgtc 120
ctgccccgac tcctctcatt gtctcaacat tctgaaagtt ggattgagca tattcactgt 180
gaaattattc gatgacatga tgtatgaatt aaccagtcaa gccagaggac tgtcaagcca 240
aaatttggaa atccagacca ctctaaggaa tattttacaa acaatggtgc agctcttagg 300
agctctcaca ggatgtgttc agcatatctg tgccacacag gaatccatca ttttggaaaa 360
tattcagagt ctcccctcct cagtccttca tataattaaa agcacatttg tgcattgtaa 420
gtttcagacc ttctccaggc tcttttcaag gaggcctatt ctcttcaaaa gcagttaatg 480
gaactgctgg acatggtttg catggaccct ttagtagatg acaatgatga tattttgaat 540
atggtaatag ttattcattc tttattggat atctgctctg ntatttccag tatggaccat 600
gcatttcatg ccaatacttg gaagtttata attaagcana gccttaagca ccagtccata 660
ntaaaaagcc agttgaaaca caaagatata attactagct tgtgtgaaga cattcttttc 720
tacttccatt cttgttacag ttagctgagc agatgacaca gtcngatgca caggataatg 780
ctgctacaga ttatttcaga aaacactcaa attgggtcnt ttttttgnca actccctttg 840

<210> 3265
<211> 846
<212> DNA
<213> Homo sapiens

<400> 3265
atgaggcttc agaggagaat aatgaccagc aatcacaaga agttccagaa aaagtaactg 60
tatccagtga tcatgaggaa gtagacaatc cagaagaaaa accagaagaa gagaaagaag 120
aggttataga tgaccaggag aacctagctc atagcaggag gaccagggaa gatagaaagg 180
tagaagccat catgcatgct tttgaaaact tagagaaaag aaagaagcgg cgggatcagc 240
ccttggaaca gagcaactct gatgtagaga ttactacaac cacctcagag actcctgttg 300
gtgaagagac aaaaactgaa gcccctgaat ctgaagttag caactctgtt tcaaatgtta 360
ccatcccaag caccccacag agtgttggtg tgaatacccg gaggtcttcc caagcagggg 420
atattgctgc agaaaaacta gtccccaagc cacctccagc aaagccttct aggccccggc 480
cgaagagtcg aatttctcgg tacaggacca gttcagccca aagactaaag cgtcagaagc 540
aggccaatgc acagcaggca gaattgtcac aagctgcctt ggaagaggga ggaagtaaca 600
gtttagtaac tcctactgaa gctggaagtc tagacagttc aggagaaaac aggccattaa 660
cagggtctga cccaactgtg gtgtcaatta ctggatccca tgtcaacccg tgctgcatct 720
aaatccccaa aaccaaaaag tatctagtta cagaatggtt gaatgacaaa gcagagaanc 780
aggaatgccc tgttgagtgc ccnttacgta tcacaacgga tccaactgtc tgcaacgacc 840
cttaan 846

<210> 3266

0050250.0050250

0060306-020200

<211> 872
<212> DNA
<213> Homo sapiens

<400> 3266
tgcattttat aaattagtga ttattgttag ttgaatgatc tataagtaaa atccttgcac 60
atgcattcaa cagaatacac taggatagaa aatttctgaa aggtatacca gaagctatac 120
atggtggtcc ctagagagtg cagctaggtg tggggaggaa gcagacttat tttactttat 180
gccagttagt gccctttgaa atggtcttaa acagaaatag tgtattactg taataattat 240
agtgaagtac tgcacttggg caggatattc ccttccaggg ctcctaccct ctcctgattt 300
tgcatccagg gacgtcctct gtgcttttga atgtattaag gagtgacgta cggctggatt 360
cactctgatc tcattcactg acagtggtgg gagagcccag agctgagtag aaactggttc 420
tggggcatcg tgtggctagg gtgccaaagc cgagaaaggt cccgtagtcc ctgtgtggtc 480
agcagggaag gcagcagtgc tctgtcagta ttgattcttc aggggcaggc tgcccactta 540
ccaaagttat gcttagcaga ggggctctgg ctcactcccc gtccctcatc ctaccaggtg 600
tgaggctgcc aggagcccga tcgcacaagg cttggcaagg cagatgctcc ccagctcctg 660
acatcagaga gaagggctgg gattgtggcc tgccggttgg tgggcaagga gagcctggtc 720
tgatgacagc aaccaccctt tgactacctt ctctgnggct ggtactgnct gattccaacc 780
tttcactgtt gaacagacct tctaccactt ttcctactac ttcccctaat gataacatac 840
tgaactcact tttatgaatt tggtgagacc tt 872

<210> 3267
<211> 844
<212> DNA
<213> Homo sapiens

<400> 3267
gnaagtaaga aacttttaaa actaaaatct gaaatggagg aaaaagtata caacttgaca 60
agagaaagag atgagttgat aggcaaattg aaaagtgaag aagaaaaatc ctctgaatta 120
agctgcagtg ttgacttact aaagaagaga cttgatggta tagaggaagt ggaaagagaa 180
ataacaagag gaaggtcacg aaaagggtct gagctcacct gcccggaaga taataagatt 240
aaggaactaa cacttgaaat tgagagactg aagaaacgtc tccaacaatt ggaagtggtc 300
gaaggggatt tgatgaagac agaagatgag tatgatcagc tggaacagaa atttagaact 360
gagcaggata aggctaactt cctctctcaa caactagagg agatcaagca ccaaattgcc 420
aagaataaag caatagagaa gggtgaggtt gtgagccagg aagctgaact gagacacaga 480
tttcggttgg aagaagctaa aagtcgagac ttaaaagccg aagtacaagc tcttaaagag 540
aagattcacg aattaatgaa caaagaagat cagctttctc agctccaggt agattattct 600
gtacttcaac aaagatttat ggaagaagaa aataagaaca aaaacatggg gcangaggtt 660
ctcaatctga ccaaagagtt ggagctttcc aagcgctaca gcagagctct tagcccagtg 720
tgaatggaag aagaatggtg gatgttcctg tgacgtcaac tggagtccaa actgatgcag 780
tccagcggtg aancacagan gaagaaacgc cagctgtatt catacggaaa tccttncagg 840
aaga 844

<210> 3268
<211> 726
<212> DNA
<213> Homo sapiens

<400> 3268
aaaaaaaaaa aaaaaaccgg ctcgcggcgc gtggaggctg ctcccagccg cgcgcgagtc 60
agactcgggt gggggtcccg gcggcggtag cggcggcggc ggtgcgagca tgtcgtggct 120
cttcggcatt aacaagggcc ccaagggtga aggcgcgggg ccgccgccgc ctttgccgcc 180
cgcgcagccc ggggccgagg gcggcgggga ccgcggcttg ggagaccggc cggcgcccaa 240
ggacaaatgg agcaacttcg accccaccgg cctggagcgc gccgccaagg cggcgcgcga 300
gctggagcac tcgcgttatg ccaaggacgc cctgaatctg gcacagatgc aggagcagac 360
gctgcagttg gagcaacagt ccaagctcaa agagtatgag gccgccgtgg agcagctcaa 420
gagcgagcag atccgggcgc aggctgagga gaggaggaag accctgagcg aggagacccg 480
gcagcaccag gccagggccc agtatcaaga caagctggcc cggcagcgct cgaggaccaa 540
ctgaagcagc agcaacttct caatgaggag aatttacgga agcaggagga gtccgtgcag 600
aacaggaagc catgcggcga gccaccgtgg agcgggagat ggagctgcgg cacaagaatg 660
agatgctgcn agtggaagcc gaagcccggg cgcgcgccaa aggccaaacg ggagaatgcc 720
ngacnt 726

<210> 3269
<211> 704
<212> DNA
<213> Homo sapiens

<400> 3269
atgttcatct tttgtaaagt taaaaaaaaa aaaaaaagcc agcctccaag gctgagaatc 60
gatattaatt tcatgggctt atgggcagtg agataaagca ggtttctggc agccctttcc 120
agccctattg gattttacaa tcttgaactg tgaagacagc gaataaaggt atcaagggct 180
ctgcccgtct ccagctgtct cgggccagag ctcatccaaa tcccccacct tccatcccag 240
cctgcagccc tctgaaaggc aggttggatg gcaagaaatg tcagcttgag ccctcgaaga 300
cggctcacta caaggacagt tgggattgtg gctttaggag ggatttatgc agctcctctg 360
gggcaggtga ggaccacggg gtcatgctag agagtcagct caacgtggct gcctgggaca 420
cgtctatgtg ccagagggca gccaagggga tgactgactc tacatctggt tttagaccag 480
ggctgctcgt ccgggcacca ttgaggtagg gcaagaatgg gctcagcgtg ctggggacca 540
tcctcctctg caaccctgcc ctccctgcat ttacgagccc gtgcgtggca ctgcccgcac 600
cagctagcct gggcatcttc cctctgtgtg atccatttca gggcctgttg cttggncttt 660
ctgaaactcc ancttcntgg gggtgaccca cacaagtgaa cctt 704

<210> 3270
<211> 741
<212> DNA
<213> Homo sapiens

<400> 3270
gttaaaagag cccgnctctc cctcggccgg tcactctttc gccacgggcg gnagttgcac 60
catccggcag ggcggggccc ggccatggcg accgcggagc ccancgggcg cgcgttgcgg 120
ttgtctaccc cgggaccccg gcccagcggg gctcgggacc gcgcgccggg agctgcgggg 180
ccaccctccg ggcagatcgg taatagagcc ctccgtctgg gggagcgcac ccccgcggcc 240
gtggaaaagc gggggccata catggtgacg cgcgcaccct ccattcaagc caagctgcgt 300
cagtgaagtt taacaagggc tatactgctc ttagccagag tccagatgaa aacctggtgt 360
ccctcgactc tgacagtgat ggggagctgg gatccagata ctcctccggg tattcatctg 420
cagaggtgaa ccaggatgtg agccggcagc tgcttcagga tgggtatcac ctggatgaga 480

0000-0000-0000-0000-0000-0000-0000-0000

ttccagatga cnaggacttg gacctcatcc cccctaagcc catggcctct tcaacatgct 540
cctgctgctg gtgctgtctt ggggactctt cttcctgtac ccttcagtag acattaccct 600
tcaaggtggg ccctgctcac catgaggcct acagagccct gttggccact catagctnac 660
acagtgcant gagcactgaa gtcactgacc cctagaaagt gacctgcang tagcccctta 720
cctggtgctt ctcaggccag a 741

<210> 3271
<211> 855
<212> DNA
<213> Homo sapiens

<400> 3271
cttcaggctg aggaggactt gctcaggccg attccaaaca ttgtgctcgt tcaatgcgta 60
gaaatgattt gcatgatggc atgccgtgat cagaagtcat gcatgagatc catacaccac 120
aggacactac taatctagtc ccttgcactg ggtcagcctt tggacaggac ccagccctgc 180
accgttcact gtatttggag aaaatggtaa gagttccata ccggctacaa ttctttgagt 240
tcttaatagt ccttcataca ccttctgggt agggaaacaa ccaactaatt gactaacacc 300
accaacaaca aaaaacaaac ccaatccaac aagcagatgg atccgttgcg tgtatatgtt 360
taacagacat ctctaacata cagccattgt tgcacatttt gcaagatgaa ctatttaatg 420
ctgctctgtg tccagtacat gggggagact ttgatcccaa atggcttgta ctatttatgt 480
cactgtaaaa ccaaatccta gggctaaaaa aaaaattcat ttgtatcttg caatatttat 540
gacgatcgtt tagccttcat actggagaat tgacacttat ttggggtaga gataaaagtg 600
cttttcaaag tagcaccagt tatctctagg ggtaatttgg ggaacttaaa atgacctttc 660
attgggagtt atggggtgct catttcattt cgtatcatgt cctctgcatt gtggctttct 720
ccaggcatgg gtcgataccg cgaggggttc aaatattctg aactaacctc tntcttctgc 780
aaaagggtca ttcgcatact tacacacttg catggnttcc cctgcttcca tacatttctt 840
cactgagcan ggctt 855

<210> 3272
<211> 774
<212> DNA
<213> Homo sapiens

<400> 3272
aagtgctggt gccctctgcc gctgctcccg tctctttggc tacgctcgtc agccggtcgg 60
ccggcgcctc cagccgtgtg ccgctatggg agtcccggcg ttcttccgct ggctcagccg 120
caagtacccg tccatcatag tcaactgcgt ggaagagaag ccaaacgaat gcaatggtgt 180
aaagattcca gttgatgcca gtaaacctaa tccaaatgat gtggagtttg ataatctgta 240
tttggatntg aatggaatca tccatccctg tnctcatcct gaagacaaac cancaccaaa 300
aaatgaagat gaaatgatgg ttgcaatttt tgagtacatt gacagacttt tcagtattgt 360
aagaccaaga agacttctct acatggcaat agatggagtg gcaccacgtg ctaaaatgaa 420
ccagcagcgt tcaaggaggt tcagggcatc aaaagaagga atggaagcag cagtcgagaa 480
gcagcgagtc agggaagaaa tattggcaaa aggtggcttt cttcctccan aagaaataaa 540
agaaagattt gacagcanct gtattacacc aggaactgaa ttcatggaca atcttgctna 600
atgccttcgc tattacatag ctgatcgttt aaataatgac cctgggtgga aaaatttgac 660
agttatttta tctgatgcta gtgctctggt gaangagaac ataanatcat ggattcattt 720
gaaggcanag agcccaccta accatgaccc aaatactcat cattggttaa tgtg 774

09625945.072800

<210> 3273
<211> 728
<212> DNA
<213> Homo sapiens

<400> 3273
aatcgagcgc cgagagagcg agtcggtgct actggcgtcg ggtcggtccg ggtaggcgca 60
gcgggactgg acctgggtgc cgagcggagc cgctgccatg ggcctgggcg tcagcgctga 120
gcagcccgca ggcggcgccg agggcttcca cctccacggg gtgcaggaga actccccagc 180
ccagcaggcg ggcctggagc cctactttga cttcatcatc accattgggc actcgaggct 240
gaacaaggag aatgacaccc tgaaggcact actgaaagcc aatgtggaga agcccgtgaa 300
gctggaggtg ttcaatatga agaccatgag ggtgcgcgag gtggaggtgg tgcccagcaa 360
catgtggggc ggccagggcc tactgggtgc cagtgtgcgc ttctgcagct tccgcagggc 420
cagtgagcag gtgtggcatg tgctggatgt ggaaccatct tcacctgctg cccttgccgg 480
cctgcgcccc tacacagact atgtggttgg ttcggaccag attctccagg agtccgagga 540
cttctttacg ctcatcgagt ctcatgaggg gaagcccttg aagctgatgg tgtataactc 600
caagtcagac tcctgccggg aggtgactgt aactcccaac gcagcctggg gtgganaggg 660
caggtacttc gtggggttgg agggctgnan ggccaggtgg gttggggcct gacattgggc 720
atggacct 728

<210> 3274
<211> 834
<212> DNA
<213> Homo sapiens

<400> 3274
ttttccgcca tctttccgcg ccgccacaat ggtgcgcatg aatgtcctgg cagatgctct 60
caagagtatc aacaatgccg aaaagagagg caaacgccag gtgcttatta ggccgtgctc 120
caaagtcatc gtccggtttc tcactgtgat gatgaagcat ggttacattg gcgaatttga 180
aatcattgat gaccacagag ctgggaaaat tgttgtgaac ctcacaggca ggctaaacaa 240
ggttggagtg cagtggcacg atcttggcta ctgcaacctc tgtctcccag gttcaagcga 300
ttctcctgcc tcagcctccc tagtagctga gattacagtg tggggtgatc agccccagat 360
ttgacgtgca actcaaagac ctggaaaaat ggcagaataa tctgcttcca tcccgccagt 420
ttgggtaagt tggcctttcc ttaattaaaa gaagttaatg ctaagaattt ctgtggtgca 480
gtttgactta agggtttttt tctttttttc tgtttaaaac aaagcagtgg taatttgtct 540
actcttaacc attttgacct aatagctcaa gtgttatcca tatttctttt ctctctcttt 600
aaaaagagac agggttggcc aggcacagtg gctcacgcct gtgatcctag cattttgggg 660
angctgangc aggcggatca cctgaggttg ggagttcgag accaccctgc caacatggag 720
aaccccgtgt ctacctaaaa tccaaaatta gccagcctgg tggcacacac ctgtgatccc 780
aactacttga aaggttangc aggaaatact tgaccccgga aaaggtncgn gact 834

<210> 3275
<211> 780
<212> DNA
<213> Homo sapiens

<400> 3275
aaaaaaaaaa aaaaaacttc tacaagtatg gagaaggcaa aaggcaagga gtggacctcc 60

0088-0056-0209

acagagaagt cgagggaaga ggatcagcag gcttctaatc aaccaaattc aattgctttg 120
ccaggaacat cagcaaagag aaccaaagaa aaaatgtctg tcaaaggcag taaagtgctc 180
tgccctaaga aaaaggcaga gcacactgac aaccccagac ctcagaagaa gataccaatc 240
cctccattac cttctaaact gccacctgtt aatctgattc accgggacat tctgcgggcc 300
tggtgccaac aattgaagct gagctccaaa ggccagaaat tggatgcata taagcgcctg 360
tgtgcctttg cctacccaaa tcaaaaggat tttcctagca cagcaaaaga ggccaaaatc 420
cggaaatcat tgcaaaaaaa attaaaggtg gaaaaggggg aaacgtccct gcaaagttct 480
gagacacatc ctcctgaagt ggctcttcct cctgtggggg agccgcctgc cctggaaaat 540
tccactgctc tccttgaggg agttaataca gttgtggtga caacttctgc cccagaggct 600
ttgctggcct cctgggcgag aatttcagcc agggcgagga caccagangc agtggaatct 660
cccaagangc ctttggtgtc aagtggtgtg tggtccatgg gaaaagtctn ccttgcagac 720
acagatggtt gggttcacct gcagtttcat gctggtcaan cctgggttcc anaaaagcca 780

<210> 3276
<211> 790
<212> DNA
<213> Homo sapiens

<400> 3276
tagcaaaaaa ctctccaaga agcgcgctgc gaccaccgtc ttacaggagc ttaaaaaact 60
tccacctctt cctgtggtgg aaaagccaaa actatttttt aaaaaacgcc ctaaaacaat 120
agtaaaggcc ggaccagaat atggccaagg gatgaaccct attagccgcc tggcgcaaat 180
tcaacaggcc aaaaaggaaa aggagccgga ttatgttttg ctttcagaaa gaggaatgcc 240
tcgacgtcga gaatttgtga tgcaggtgaa ggtaggcaat gaagttgcta caggaacagg 300
acctaataaa aagatagcca aaaaaaatgc tgcagaagca atgctgttac aacttggtta 360
taaagcatcc actaatcttc aggatcaact tgagaagaca ggggaaaaca aaggatggag 420
tggtccaaag cctgggtttc ctgaaccaac aaataatact ccaaaaggaa ttcttcattt 480
gtctcctgat gtttatcaag agatggaagc cagccgccac aaagtaatct ctggcactac 540
tctaggctat ttgtcaccca aagatatgaa ccaaccttca agctctttct tcagtatatc 600
tcccacatcg aatagttcag ctacaattgc cagggaactn cttatgaatg gaacatcttc 660
tacagcttga agccataggt ttaaaaggaa gttctnctac ttnccttggg tcttcagtac 720
aacctttaaa acaactggaa tatttagcaa ggattcaagg ctttcaggtg tgaattaaaa 780
gcaaaaaccn 790

<210> 3277
<211> 638
<212> DNA
<213> Homo sapiens

<400> 3277
caaaaaaaaa aaggacctag gcgcggtagc tggggctggc ttttgagggg cgcgggcagc 60
cttctgactg ggtcggaggc ctgcgggccc gaagcctctg tccctcctgt tcttgtccgg 120
cgctgcttag cccctccgcg tagtcatcat ggatctgatt ttaaaccgaa tggattatct 180
gcaggtggga gtaacatctc agaagactat gaagctaatt cctgcctcaa gacacagagc 240
tacacaaaag gtggttattg gagatcatga tggggtagtt atgtgctttg gcatgaagaa 300
aggagaagca gcagcagtgt tcaagacttt acccgggccg aagattgcaa ggctggaact 360
gggaggggtt atcaacacac ctcaggagaa aatttttatt gctgcagcat ctgagattag 420
aggcttcaca aaaagaggaa aacagttcct ctcctttgaa acaaacctca ctgaaagcat 480

WO 2005/003300 PCT/US2004/020000

taaagctatg cacatatctg gctcagacct ctttctcagt gcaagttaca tctataacca 540
ttattgtgac tgcaaagacc aacattatta cctttctggg gataaaatca atgatgtgat 600
ctgnctttca atggaaagaa tatntcgtat nacacctg 638

<210> 3278
<211> 703
<212> DNA
<213> Homo sapiens

<400> 3278
agaccacttt cttcattctt ttctaaactg ctgcagattg ccgtgaactc tatcaatagt 60
ctcttttccg caggcaaagt ggcattttct aaacatgttt gcttactgcc aggtggtttg 120
aaatctatga tttactgcag tagtatgtgc ttaaaacaac tgttgaggtc ttttaagcag 180
gaaagttcaa aaggaagtgt cctgataatg gtactggttt ttctacaaat ataagtagtc 240
attagaagtt tgcaaccacc accaagtctg agagaactct gggatattct gtgggttttg 300
gcatattaga tagagaaaat gacagatcta gatgaaggga gcttttggat gtgtgccttt 360
aaaaactgat tatgtataaa tactgatatt tcacatacgg agatatttga agacccaagt 420
ctgcctttca cagagccctc cattccaagt ttagtttttg tcaaaatatg aatcatttta 480
tttgactgta ctatcagtac acaaatgcat gagtatgttt atacagtgtt agactgatgt 540
gaatttgcat ttgttacatt acattgccag cgcatatcat ttagcaagtt ggcattaaca 600
tttatgcttt aattaaatgc cagtatacct atgtgtgcag cagtaaaaaa ttagtgagaa 660
aaagcaactt tttgncactc ttangnaaaa ttttggctta ata 703

<210> 3279
<211> 752
<212> DNA
<213> Homo sapiens

<400> 3279
aaagcggcgg gagggagccg agagacccga gtgcacgtgt ggagaagcgg cggcacaagc 60
gcggcggcgg gagacactcc cgcccccacc agactcaagc cctcactcga ctctcgcggc 120
cttcgttgct cgcacagctc cctgcccagg ctaggaggcc ggcttgcggg gttgagtggc 180
ccgagctaag ggtgcggaga cctaagggcg gcgactacga cggcgttgat atcggtggta 240
acgacggcct cagcaggcgg ggaagatgaa aggtagccgg atcgagctgg gagatgtgac 300
accacacaat attaaacagt tgaaaagatt gaatcaggtc atctttccag tcagctacaa 360
tgacaagttc tacaaggatg tgctggaggt tggcgagcta gcaaaacttg cctatttcaa 420
tgatattgct gtaggtgcag tatgctgtag ggtggatcat tcacagaatc agaagagact 480
ttacatcatg acactaggat gtctggcacc ttaccgaagg ctaggaatag gaactaaaat 540
gttaaatcat gtcttaaaca tctgtgaaaa agatggtact tttgacaaca tttatctgca 600
tgtccagatc agcaatgagt cggcaattga cttctacagg aagtttggct ttgagattat 660
tgagacaaag aagaactact atnagaggat agagcccgca natgctcatg tgctgcagaa 720
aaacctcaaa gttccttctt ggtcanaatg ca 752

<210> 3280
<211> 791
<212> DNA
<213> Homo sapiens

D0820704.0950

0503503.000000

<400> 3280
agacgacgta gcagccatct tttccctggc tttggtgatt cagccctgac ttctcaaaaa 60
gcactgcaca gaggaggagg cagcagaacc ccacttcagc ttcttaggac tctgcacttc 120
cccagaagga agaattaaaa atgaatatgt tcaaggaagc agtgaccttc aaggacgtgg 180
ctgtggcctt cacggaggag gaattggggc tgctgggccc tgcccagagg aagctgtacc 240
gagatgtgat ggtggagaac tttaggaacc tgctgtcagt ggggcatcca cccttcaaac 300
aagatgtatc acctatagaa agaaatgagc agctttggat aatgacgaca gcaacccgaa 360
gacagggaaa tttaggagag aaaaatcaaa gtaagttaat tactgttcaa gacagagaat 420
cagaagaaga gctttcttgt tggcaaatct ggcaacaaat tgcaaatgac ttaaccaggt 480
gtcaagactc catgatcaat aattctcagt gtcacaaaca aggtgatttc ccttaccagg 540
tagggacaga actgtctatt caaatttctg aagatgagaa ctatatagta aataaagcag 600
atggtcccaa taatactggg aatccagagt ttcctatctt gagaacccag gattcttgga 660
ggaaaacatt cctgactgag tcacagagat tgacagagat cagcaaattt ccataaaaaa 720
taaattatgt caatgtaaga anggtgttga tcccatcggn tggatttcac atcatgatgg 780
tcatagagtn c 791

<210> 3281
<211> 897
<212> DNA
<213> Homo sapiens

<400> 3281
aattgcagcc tgtcactctg cccacacgtc tgcagccaag acgcagggtg ggcacgtgta 60
catgtggggc cagtgccggg gtcagtccgt gatcctcccg cacctcaccc acttctcctg 120
caccgacgac gtgtttgcct gctttgccac tcccgccgtc tcgtggcgcc tcctgtctgt 180
ggagcatgaa gacttttaa cagttgcaga gtcactgaag aaagaatttg atagtccaga 240
aactgctgat ctgaagtttc gaattgatgg aaaatatatt catgtccata aagctgtttt 300
gaaaatcagg tgtgagcatt ttcgatccat gttccagtcg tattggaatg aagacatgaa 360
ggaagtgata gaaatcgatc agttttctta cccagtgtat cgtgcctttc tccagtacct 420
ctacacagac acagtcgacc tgccgccaga agatgctata ggtcttctgg atttggcgac 480
atcttactgt gaaaacagac tgaaaaaact ttgtcagcac attatcaaga gaggaattac 540
tgtggagaat gccttttcgc tattctctgc tgcagtcaga tatgatgcag aggatttaga 600
agaattctgc tttaagtttt gcatcaatca tttgacagaa gttacacaga ctgcagcatt 660
ttggcaaatg gatggccctc tgctaaagga attcattgct aaagccagta aatgtggagc 720
ctttaagaac tgaagcgcaa ggctgctggg ttctgtgtga ntgctctggg gcactggtga 780
ngatgtgtcc agtttggctc tacggtgatg tgattcttgc aggtaaaaga ccattaggtg 840
gttttttca cattnggaca cagttggttg tgtaggaaca tacaaggtgt ccgnttt 897

<210> 3282
<211> 777
<212> DNA
<213> Homo sapiens

<400> 3282
ttttctctgc ttttcgctac cccggtcact ctcatttctc tcccctattc cttgtctctt 60
cccccatccc cctttctcct gtcctccccc tgcctctaca gtggttctcc ccgctgagct 120
gccaccagct gctgggcccc gggctgctgc ggctgggccg cctatggctg cggtcccccc 180
cccatacagc cccggccccc ggtctctggc tgtcagggtt tggcctcctt cgtggtgacc 240

acctcttcct gtgctcagcg ccgggcccag gccccccagc ccctgaggac atggtgcatc 300
tgcggcggct acaggagatc agtgtggttt ctgcagctga caccccagat aagaaagagc 360
atttggtcct ggtggagaca ggaaggaccc tgtatctgca aggagagggc cggctggact 420
tcacggcatg gaacgcagcc attgggggcg cggctggtgg gggcggcaca gggctgcagg 480
agcagcagat gagccggggt gacatcccca tcatcgtgga tgcctgcatc agttttgtta 540
cccagcatgg gctccggctg gaaggtgtat accggaaagg gggcgctcgt gcccgcagcc 600
tgagactcct ggctgagttc cgtcgggatg cccggtcggt gaagctccga ccaggggagc 660
actttgtgga ggatgtcact gacacactta aacgcttctt tcgtgagctc gatgaccctt 720
gtgaccttnt gcacnggttg ctggcttcgc tggaagggaa gcttgctggg aattnct 777

<210> 3283
<211> 800
<212> DNA
<213> Homo sapiens

<400> 3283
agcgaggatg tgcgcagcga cttccagcgc agagtgccct acaactacct gcagcgggcc 60
tacatcaagc ttaaccagct cgaaaaagca gtggaagcag ctcacacatt tttcgtggct 120
aaccctgagc acatggaaat gcagcagaac attgagaatt acagggcgac agctggtgtt 180
gaagcattgc agttggtaga cagagaagcc aagccacaca tggagagtta caatgcagga 240
gttaaacatt atgaggctga tgactttgag atggctatca ggcatttcga acaagcctta 300
agagaatatt tcgttgaaga tacagaatgc cggaccctat gtgaggggcc tcagagattt 360
gaagaatatg agtatttagg gtataaggct ggtctgtatg aagctattgc agatcactac 420
atgcaggtgc ttgtttgtca gcatgaatgt gtgagggaac ttgccacccg ccctggccgc 480
ctctctccca tcgagaattt tcttcctctg cactatgatt acctacagtt tgcctactat 540
cgagttggtg agtatgtgaa agccctggag tgtgccaaag cctatcttct atgccatcca 600
gatgatgagg atgtcctaga caatgtggat tactatgaga gtctgctgga tgatagcatt 660
gacccggcat ccattgaggc cagagaggat ttaacaatgt tcgtgaaacg tcataagctg 720
gagtctgagc tgataaaatc agctgcanaa ngtctggggt ttcatcactg aaccgaatta 780
ttggatcaga tntggaggac 800

<210> 3284
<211> 831
<212> DNA
<213> Homo sapiens

<400> 3284
cataacaagc caaacgccag accgagagtg cctccgtgcg cgagtgcccg gtgtgtgcgc 60
gccggngaga gcaggggccc gaccggctcc ccgcccgccg cggtccgaac tcatgcagct 120
ccgagcgagc gagcggcgcc cagcccagcg cctcggccga acccctccgc agcaggctgc 180
ctgctgtttc ccggggagat catgaaacga ggtcgccttc ccagcagcag tgaggattct 240
gacgacaatg gcagcctgtc aactacttgg tcccagaatt cccgatccca gcataggaga 300
agctcctgct ccagacatga agatcgaaag ccttcagagg tgtttaggac agacctgatc 360
actgccatga agttgcatga ctcctaccag ctgaatccgg atgagtacta tgtgttggca 420
gatccctgga gacaggaatg ggagaaaggg gtccaggtgc ctgtgagccc ggggaccatc 480
cctcagcctg tggccagggt tgtgtctgaa gagaaatccc tcatgttcat caggcccaag 540
aagtacatcg tgtcatcagg ctctgagcct cccgagttgg gctatgtgga catccggacg 600
ctggctgaca gcgtgtgtcg ctatgacctc aatgacatgg atgctgcatg gctggaactg 660

0950350.0020300

accaatgaag aatttaagga gatgggaatg cctgaactag atgaatacac catggagagg 720
gtcctagagg aatttgagca ncgatgctac gacaatatga atcatgccat agagacttga 780
ggaagcctgg ggatcgaata tgatgaaana tgttggctgn gatgtctggc a 831

<210> 3285
<211> 901
<212> DNA
<213> Homo sapiens

<400> 3285
aatccaactc acctccatgt tcaaggatgt ccctctgact gcagaagagg tggaatttgt 60
ggtggaaaaa gcattgagca tgttctccaa gatgaatctt caagaaatac cacctttggt 120
ctatcagctt ctggttctct cctccaaggg aagcagaaag agtgttttgg aaggaatcat 180
agccttcttc agtgcactag ataagcagca caatgaggaa cagagtggtg acgagctatt 240
ggatgttgtc actgtgccat caggtgaact tcgtcatgtg gaaggcacca ttattctaca 300
cattgtgttt gccatcaaat tggactatga actaggcaga gaactcgtga aacacttaaa 360
ggtaggacag caaggagatt ccaataataa cttaagtccc ttcagcattg ctcttcttct 420
gtctgtaaca agaatacaaa gatttcagga ccaggtgctt gatcttttaa agacttcggt 480
tgtaaagagc tttaaggatc ttcaactcct ccaaggctca aaatttcttc agaatctagt 540
tcctcataga tcttatgttt caaccatgat cttggaagta gtgaagaata gcgttcatag 600
ctgggaccat gttactcagg gcctcgtaga acttggtttc attttgatgg attcatatgg 660
gccaaagaag gttcttgatg gaaaaactat tgaaaccagc ccaagtcttt ctagaatgcc 720
aaaccagcat gcatgtaagc tcggagctaa tatcctgttg gaaactttta agatccatga 780
gatgatcaga ccagaaaatt ttggagcagg tcctcaacan ggttggtacc agacatcttc 840
tnccatcagn cattcttaga cctgctttta aatatcgcat gtatgccccc ttagttcttc 900
a 901

<210> 3286
<211> 800
<212> DNA
<213> Homo sapiens

<400> 3286
agcagtttct gtgggcggac agggaaccct gcgtttctac tgtgtgattc tgccaccttc 60
ctggcccgac gccatgggag tgacttgtgt gtcccagatg cctgtggccg agggcaagag 120
tgttcagcaa accgtagagc tccttacccg gaaattggag atgcttgggg cagagaagca 180
aggaacattt tgtgtggact gtgagactta ccatacggcc gcctctaccc ttggcagcca 240
aggtcagacc gggaagctga tgtatgtgat gcacaactca nagtacccat tgagctgttt 300
cgccctcttt gagaatggcc cttgccttat tgctgacacc aactttgatg tgcttatggt 360
gaagctcaag ggctttttcc agagtgctaa ggccagcaag attgagaccc ggggcaccag 420
gtaccagtac tgtgacttcc tggtgaaggt gggcacggtc acaatggggc ccagtgcccg 480
gggcatctct gtggaggtgg agtatggccc ctgtgtggta gctagtgact gctggagtct 540
gctgctcgag ttcctacaga gttttctagg cagccacaca ccaggggctc ccgcagtgtt 600
tgggaacaga catgatgcgg tctacgggcc agcagatacc atggtccagt acatggaact 660
cttnaacaag atccgcaagc agcaacaggt gccggtggct gggattcgtt agtgatgaac 720
anctgccaac tgaactcttg tcaccagggg tacttcacan gaaggaacag gtgctgactt 780
ttaaggtccc ttgganccca 800

09621350.CNR00

<210> 3287
<211> 896
<212> DNA
<213> Homo sapiens

<400> 3287
acttaaaagt gaggggaaaa ctgagacaac aatgcaagtg ggtaatagtc aaacaaaagt 60
taaaggtgaa gattcaaaaa atataccatt ggagaaagaa acaagaaaat cactggtttc 120
agattcaggt ggacaaagga caagtgataa aatccaagaa tatccacagc tcagagaaga 180
aacgatctag ccctgctatt tcagatcttt cacagatcct taagtctcaa gatgaatcag 240
cattttaga gagttcaaat gaagtttcag ttgctgaaaa ccaatcctat aaatctccat 300
cagagaccca tgataaatca cttacaacag tatcatccag caaagaagtt caagattcac 360
tgtctgttgg aacattggct caaaaaaacg aaacagtgat atcaccattc attttacctc 420
ctgttcttac agaaagtaaa aaggctgatg tttcagaaga acaattacaa aagatgactg 480
aagaacaaac ttaccaagca gcagaaaaat ctcaagctca taatgaagta ccaaatgaaa 540
ggcttgtagt tgagcatcaa gaatcattgt caaaaaccaa attacaagta aagaaacaag 600
aaacttctac agagcaacca ctcaccactc ctgataaaga accaaatgaa aatcttatac 660
ttaggcatca agactcaatg tcaaaatcag aaatgcaagt gaaggaacaa agaactctca 720
aagggcaaag aattattact catgatgaag aaccaggcaa aaatttgtgc ctgacatcaa 780
ggattcagtg tcaaaactgg aaatgcaaat tggaaaaaac cnaaaaactt tctagagagg 840
aaaagaccta gtnctcatgg atgaagaatc aggtggaaaa tcctattgct tnaacc 896

<210> 3288
<211> 919
<212> DNA
<213> Homo sapiens

<400> 3288
tttaaaaggg acagggtaca gttttattgg cttagagaaa aaaagcgggg gcagggatga 60
ggtgacagtc ctcctcacct gaataattgc agctgaggat taaacatatc tcttcccaaa 120
tactttatct tctaggtata cttctcttac aatttattag aaagctggtt acttgagata 180
actaaagaga tactaatttt catgcaaacc catcacaatg tattgaaact gagatacttt 240
tctgctgcta acatatttag gaaaaatagt tttatttta gtaaataaaa tctccactta 300
tttcaataaa aatggcaagg agaaaatgtc ataagattat cctgccatgt aaaataagct 360
gctccccaaa ggactgtgtc aagattggtt ttaaatagaa aatatctatt ttaaatatat 420
ttagattata attgcctggg ggttggcaaa ctttttctgt aaagggccag atactaaata 480
ccttaggctg tacgggcctt cagatctctg tcacaactgt tcacccgcgc ggtgtagtgt 540
gaaggcatcc acagacaaaa tgtaaacaca caggtgtggc tgttctaata aaacctcacc 600
aaacaggcag cacaggccac agtatgctga cctctgcact agcctcatct caggttaact 660
gtcctctagt tattaaaaaa gaaacccaaa attaagttac acaaaagtaa tttttaaaaa 720
ctactttgga ccgttaaaat ggggcccaag gtagaatnca ccggaggtaa aagttcttga 780
ccaagccagt cagggaaaat ctggaatgaa ttctggccct ttggtcttgc cccataacca 840
gctggggaan ctctttgggc caaatcacca ttattccctt ntggggaatt tcctttattg 900
gcaatcntct taaatctgg 919

<210> 3289
<211> 849
<212> DNA

0962045.0-0720

<213> Homo sapiens

<400> 3289
gctagaatgc actgtctttg aagcattgag caggccctca ccagacacca aatctgctgg 60
ttcctggatc ttggacttcc cagcctcata actaggcatc acaaatctcc gagaggaacg 120
catccacttc ctggcctggt agagcggaga gcagaggtgg gcccaggagt ccaagaactt 180
cccctaaggc tgctagtcgc acccatctct tgagcagaga cccaagaggg caggacagga 240
agaatggaag tgagatttgg ccccggtcat gttttccaaa gtgctgacat caggaaaata 300
atagaagtta acgcagatat ggggctgcca ctgaggagag agaagactga aagaagcata 360
tagataaaag tttcagttac ctgaggtcaa ccttggtctg aaattagatt atctgagtag 420
gctgaaccat cggtgaaaag gaggccaagc atctcaaaaa taggacacgt gagagtatgg 480
agccaatgtg acactcaggt gagttagcct tatgatccct aagcatgcag tccttggacc 540
agatgcatca ggatcttctg gtaagtgtgc taaaatatag gctactgaga cccaccctat 600
gtctgtcaaa tcagaatatt ctaaggaagc aggtcccagg gaatatatat tttaaagctc 660
cctaaataca cttcatgggc tgccagattt gggaatcgca ggattaggta gctacctaaa 720
tgaagacact taaatgtgcc aaaagcttct ctttcaccca tncatttatc ctctattcac 780
ccatccttaa ccaaacatgt gccagtatct ggatttgctt natgacctgt actgctgngg 840
tggtgcaaa 849

<210> 3290
<211> 704
<212> DNA
<213> Homo sapiens

<400> 3290
ggaaatctag ttcgggaaaa gtgtgagggg ctcttcacgt ggggaaggaa cagcaggcgc 60
ggaggagggg gcaagcgtgt gtgagattca gtggtccatg cgtgcgtttg tcgtgtgctg 120
gtgattgggt gtggcaactc agaactgagt gagcaactgt atgatgtggg ctatcgggat 180
atagtgaaca tcgacatcag tgaggttgtc atcaagcaaa tgaaggaatg taatgccacc 240
cgacggcccc agatgagctt cttgaagatg gacatgacgc agatggagtt tcctgatgcc 300
tcgttccagg tggtgttgga caagggcacc ctggatgctg tcctgacaga tgaggaagag 360
aagaccttac aacaggtgga caggatgctg gctgaggttg gccgtgtcct gcaggtgggc 420
ggtcgctatc tctgcatctc cctggctcag gctcacatcc tgaagaaagc agtgggccac 480
ttctcccggg aggggtggat ggtgagggtg caccaagtgg ccaacagcca ggaccaggtg 540
ttggaagcag agcctcagtt ctccttgcct gtctttgcct tcatcatgac caagttcagg 600
ccagtccctg gctctgccct tcagatcttt gagctgtgtg ctcanganca gcgcaagcct 660
gtgccggctg gaaaagtgcc caaccggctg gccnaagcgg tgca 704

<210> 3291
<211> 792
<212> DNA
<213> Homo sapiens

<400> 3291
ctactccgag aggccccggg tccctctgcc acaacttctg tcgctctgcc gcctgcaccg 60
tgacccgcac tattcacggg agccctagag aggacaccgg gacacccaga agccggggaa 120
tgatgtttca ggattcagtg gcctttgagg atgtggctgt cagcttcacc caggaggagt 180
gggctttgct ggatccttcc cagaagaatc tctacaggga tgtgatgcag gaaaccttca 240

0088270 = 9/5/2012

agaacctgac ctctgtagga aaaacatgga aagttcagaa cattgaagat gagtacaaaa 300
atcccaggag aaatctaagt cttatgagag agaaactctg tgaaagtaaa gaaagtcatc 360
actgtggaga aagcttcaac cagattgcag atgacatgct gaacaggaaa actcttcctg 420
gaataacacc atgtgaaagc agtgtgtgtg gagaagttgg cacgggtcat tcatctctta 480
atacgcatat cagagctgac actggacaca agtcatctga gtatcaggaa tatggagaga 540
atccatatag aaataaggaa tgtaagaaag ccttcagtta tcttgactcc tttcaatcac 600
atgataaagc ttgcactaaa gagaaactct atgatggtaa agaatgtaca gaaaccttca 660
tttccattca tgcattcaaa gacacagggt aatgcacagt ggagatggcc ttataaatgt 720
aagtttgtgg gaaagccttc tattttctca atttatgnct tatncatgaa cgaattcccc 780
tggtgtgaaa nc 792

<210> 3292
<211> 859
<212> DNA
<213> Homo sapiens

<400> 3292
gaggcgctcc gggatactga gggcggaggg cggtggcagc gctggcgctg gggaccggct 60
tggtggcttc gggaaacagt ttggcgccgg cggccgtccg tgttactccg catcccgccc 120
cgtctcggca cggctagcag ccccctggcc accagcgtcc agcaatgtgt ctcaccggcc 180
gggcgtagca gctgcgcgtg cgcggaaccg cggggccatg agcgaagccg gcggccgggg 240
ctgtgggtcc ccggttcccc agcgagcgcg atggagacta gtggcggcga cggccgcgtt 300
ctgcctggtg tcggccacct ccgtgtggac ggcgggggcc gagcccatga gtagggagga 360
gaaacagaag cttgggaatc aagtactgga aatgtttgat catgcttatg gtaactatat 420
ggaacatgct taccctgctg atgaactcat gcctttaacc tgtagaggtc gagttagagg 480
ccaagagcca agtcgcggtg acgttgatga tgccttggga aaattttctc tgacactgat 540
tgattctttg gacactttag aggtgattac ctctagccat cagccttact ccatcccatg 600
tttggtatgc aatttgagcc acaaggctcg tatcgccaac agctatatac attttgttcc 660
atttttctgt cttacagagc catgatagaa ctgtggttag tgagttaaaa ttcctggagt 720
aactactggt tttctncttt gaaacttagg tttctaaagt tgcacctaag gaatctgtca 780
cattttctgg tgaatcatgg gttttggttt tggttttaac anatattcct tttgatacgg 840
actttaaaaa ttanggnat 859

<210> 3293
<211> 710
<212> DNA
<213> Homo sapiens

<400> 3293
atctttaaca tttgggatgc tgccccacgc cgcctgccac tcctgctcag aagacagtgg 60
ctctgacgtc tccagcatct cccaccccac ttcgccgggc agcagcagcc ccgacatctc 120
ctttctgcag cctctctccc ctcccaagac ccatcgtcac cgcggggcct gggtcccagc 180
cggcagcaga gagctggtcg cccaccaccc caagctactg ctgccgcctg gctatttccc 240
ggcggggcgg tacgtggtgg tggctgagag ccccctgccg cctggcgagt gggagctgcg 300
ccgcgcagcc ccgggccctg cttacgagga ggagggcact cccctgcgct accagcgtct 360
ggtgccctcc cgcagccgca tcgtgcggac gccctccctg aaggacagcc cggcaggccg 420
ggggctcagc aaggccgccg tgtccgagga gctcaagtgg tggcacgagc gtgcacgcct 480
ccggagcacc cgcccccact cactggaccg ccaaggagct ttccgggtca ggagcctgcc 540

0956348 - 0720

ccttgggaga gagggcttcg gacgagccct gggaccccgg gcacaggtgc ccacagtttg 600
tgtgctgcgg agatcgcctg atggggcccc tgtgcaagtc tttgtacctg aaaaaggaga 660
gatcatcanc caggtgtaac tnttgngccc cacgctggaa aaaactggtt 710

<210> 3294
<211> 870
<212> DNA
<213> Homo sapiens

<400> 3294
tttctatgac ccagagggtg ggtccatcac tcaagtagcc agagttgtca tcgagagaat 60
cgcacggaag ggtgaacaat gcaatattgt acctgacaat gtcgatgata ttgtagctga 120
cctggctcca gaagagaaag atgaagatga caccctgaa acctgcatct actccaactg 180
gtccccatgg tccgcctgca gctcctccac ctgtgacaaa ggcaagagga tgcgacagcg 240
catgctgaaa gcacagctgg acctcagcgt cccctgccct gacacccagg acttccagcc 300
ctgcatgggc cctggctgca gtgacgaaga cggctccacc tgcaccatgt ccgagtggat 360
cacctggtcg ccctgcagca tctcctgcgg catgggcatg aggtcccggg agaggtatgt 420
gaagcagttc ccggaggacg gctccgtgtg cacgctgccc actgaggaaa cggagaagtg 480
cacggtcaac gaggagtgct ctcccagcag ctgcctgatg accgagtggg gcgagtggga 540
cgagtgcagc gccacctgcg gcatgggcat gaagaagcgg caccgcatga tcaagatgaa 600
ccccgcagat ggctccatgt gcaaagccga gacatcacag gcagagaagt gcatgatgcc 660
agagtgccac accatcccat gcttgctgtc cccatggtcc gagtggagtg actgcagcgt 720
gacctgcggg aaggcatgcg aacccgacag cggatgctca agtctctggc agaacttgga 780
gactgcaatg aaggatcttg gaancaggtt ggaaaaantg cattgcttcc cttgaatgcc 840
ccatttgact ggtgagcttc accnaatggg 870

<210> 3295
<211> 845
<212> DNA
<213> Homo sapiens

<400> 3295
gatactatga tgctgaatgt gcggaatctg tttgagcagc ttgtgcgccg ggtggagatt 60
ctcagtgaag gaaatgaagt ccaatttatc cagttggcga aggactttga ggatttccgt 120
aaaaagtggc agaggactga ccatgagctg gggaaataca aggatctttt gatgaaagca 180
gagactgagc gaagtgctct ggatgttaag ctgaagcatg cacgtaatca ggtggatgta 240
gagatcaaac ggagacagag agctgaggct gactgcgaaa agctggaacg acagattcag 300
ctgattcgag agatgctcat gtgtgacaca tctggcagca ttcaactaag cgaggagcaa 360
aaatcagctc tggcttttct caacagaggc caaccatcca gcagcaatgc tgggaacaaa 420
agactatcaa ccattgatga atctggttcc attttatcag atatcagctt tgacaagact 480
gatgaatcac tggattggga ctcttctttg gtgaagactt tcaaactgaa gaagagagaa 540
aagaggcgct ctactagccg acagtttgtt gatggtcccc ctggacctgt aaagaaaact 600
cgttccattg gctctgcagt agaccagggg aatgaatcca tagttgcaaa aactacagtg 660
actgttccca atgatggcgg gcccatcgaa gctgtgtcca ctattgagac tgtgccatat 720
tggaccagga accgaaggaa aacaggtact tttacaacct ttggaaccag tggacttcac 780
ccttgaacca ggcaaggcca acnttgggag ccccaagaaa ccttggggna cccggaccan 840
ttggt 845

US 2003/0170605 A1

0882705.0045250

<210> 3296
<211> 858
<212> DNA
<213> Homo sapiens

<400> 3296
atttcctcca gctagaggag ctcaactgat ctgttttctt tcgcccagcc aaaatcacag 60
aatgaaggcg gtgaagagcg aacgggagcg agggagccgg cgaagacacc gggacgggga 120
cgtggtgctg ccggcggggg tggtagtgaa gcaggagcgt ctcagcccag aagtcgcacc 180
tcccgcccac cgncgtccgg accactccgg tggtagcccg tctccgccga ccagcgagcc 240
ggcccgctcg ggccaccgcg ggaaccgagc ccgaggagtt agccggtccc cacccaaaaa 300
gaaaaacaag gcctcaggga gaagaagcaa gtctcctcgc agtaagagaa accgaagtcc 360
tcaccactca acagtcaaag tgaagcagga gcgtgaggat catccccgga gaggacggga 420
ggatcggcag cacagggaac catcagaaca ggaacacagg agagctagga acagtgaccg 480
ggacagacac cggggccatt cccaccaaag gagaacgtct aacgagaggc ctgggagtgg 540
gcagggtcag ggacgggatc gagacactca gaacctgcag gctcaggaag aagagcggga 600
gtcttataat gccaggcgac gggagcatcg ccagaggaat gacgttggtg gtggcggcag 660
tgagttttca ggagttggtt cctcggcctg gttggcaaca acaaaagaaa aaagangtgc 720
ccgcttaaag aaaaaccaag cttttgaact ttcttggggc actttttga ggacaccaac 780
acttttccgg ggtggtaagt canttaaatt ttngtgagcc ccccanaaac ccgttttcc 840
ccaaaaaaac ggtggcgt 858

<210> 3297
<211> 887
<212> DNA
<213> Homo sapiens

<400> 3297
gatgatatga gtaatgctgg tgattttcta aatgacaatg cagttgagat cccttctttt 60
tcaaaaggga ttataaatga tgatgaggat gatgaagacc tcatgatggc ttcaggtcgt 120
cctagacagc gaagtcacat cctagaagat gatgaaaact cagttgatat ctcaatgcta 180
aaaactggtt ctagtcttct caaagaggag gaggaagatg gtcaagaagg cagcattcac 240
aatctaccac ttgtaacatc ccaaaggcca ttttatgatg gacccatgcc aactccccgg 300
caaaagccat ttcagtcagg ttctacaccg ttgcatctca ctcacagatt catggtgtgg 360
aactctattg gaattattcg ctgctataat gatgagcaag acaatgccat agatgtggag 420
ttccatgata cctccataca ccatgcaaca cacttatcaa acactttgaa ttatacaata 480
gcagatcttt cccacgaagc tattttgttg gcatgtgaaa gcactgatga actagcaagc 540
aagcttcact gcctgcactt tagttcttgg gattcaagca aagagtggat aatagacttg 600
cctcagaatg aggatattga agccatatgt ctcggtcaag gatgggctgc tgccgctact 660
agtgccctgc ttcttcgatt gnttactatt ggaggggttc aaaaagaggt attcagcctt 720
gctggacctg tggtgtcaat ggcaggacat ggagaacagc ttttcattgt tatccagagg 780
tccggatttg atggggatca atgccttgga gttcaactgc tagagctggg gaaaaagaaa 840
aaaccaattt tgcatggnga ccctttttct ttacaaggaa atcctac 887

<210> 3298
<211> 799
<212> DNA
<213> Homo sapiens

0030050750.0 2008.07.30

<400> 3298
aaaagggcag ctccggggga aagagggtgg cgtcccgggg aagcccgcag ccgccgccga 60
tgtcgctggg actcggaagt gccgaaagag gggtgttggg aactcgcggc gcgcgtgaac 120
gttgccgtcg ccgccgcccg ggacagcccg gagaaactct cagcgtaggc atcgggaacc 180
ttcgtgccaa ggagccatgc cgccccgatg ggaactggca ctttacctac ttgcctcact 240
aggcttccac ttctattcct tctatgaagt ttacaaagtc tccagagaac acgaagagga 300
gctggaccag gaatttgagc tggagactga cactttattt ggaggattaa agaaggatgc 360
gaccgacttt gagtggagct tctggatgga atgggggaag cagtggctgg tgtggcttct 420
ccttggccac atggtagtgt ctcaaatggc cacactgctg gcaagaaagc acagaccctg 480
gattctcatg ctctatggga tgtgggcctg ctggtgtgtg ctggggaccc ctggtgtggc 540
tatggttttg ctccatacca ccatctcttt ctgcgtggcc cagttccggt ctcagctcct 600
gacgtggctc tgttctctcc tnctcctctc cacactgagg ctgcagggtg tggaagaagt 660
taagagaagg tggtacaaga cagaaaacga gtactacctg ctgcagttca cgctgacccg 720
ttcgctgcct ntactacacc agctttagcc tggagctttt gctggcagca acttgnctgc 780
tgcatcganc ttctacttc 799

<210> 3299
<211> 849
<212> DNA
<213> Homo sapiens

<400> 3299
tccaaagaac tctgctttaa aacaaggatg tgaagcgaac atttggatca acctcacaat 60
caagtagttt ttcaaaaatt cataagcggc cacacagaat acagaaagct cggaaaagca 120
ttgcccaatc aggtgtaaac atgtgcaatc aaaacagctc tcctcataag aatgttacaa 180
ttaaaagcag cgttgaccaa aaacctaagt atttccatca agcagcaaaa gaaaagtcta 240
atgccaaggc aaatagccac tatttgtata gacacaaata tgaaaactat aggatgatca 300
aaaaatcagg tgaatcatat cctgtgcatt tcaaaaaaga agaagctagt tcattaaatt 360
ctttacacct gttttcatca tcaagtaatt ctcacaacaa ttttatttca gaccctcata 420
agcctgacgc caaaaggcct gaaagcttca aagatcacag acgtgtagct gtaaagagag 480
taattaagga atctaagaag gaaagttctg ttggagggga agacttggat agctatccag 540
atttttgca taaaatgact gttgtcgttt tgcaaaaact taattctgct gaaaagaaag 600
atagttatga aacagaagat gaaagttcct gggataatgt tgagttagga gactacacta 660
cacaggccat agaagatgaa acctatagtg atattaatca agagcatgta aatttattcc 720
ctttatttaa gagcaaagtg gaaggcagga gcctggaaaa aatgctactc ttagttatgn 780
ccaacgatgg ctttattttg atactttgaa natcctggag gtacaacttt tgctgagatc 840
atganctac 849

<210> 3300
<211> 802
<212> DNA
<213> Homo sapiens

<400> 3300
cttaaggcta aatcctggaa taaaaagttc tatgattatg aagcaaacat gccagacaga 60
tggggtcaca gtggttataa agagttatac cctgaagaat ttgaaacaga cagtagtgat 120
cagcaagata ttaccaacgg gaagaaaaca tctccccagg taaagtcatc tacccatgaa 180

tcccgcaaac acaagaagtc aaagaaatcc cacaaaaaaa aagcagaaaa aaaggtcaca 240
caaaaaacag aagaaaagca aaaaggaagc cacagatata acagcagatt cctcgagtga 300
gttctcagaa gaaactgggg cttctggtac aaggaaaggg aaacaaccac ataaacgcaa 360
gaaaaaatcc aggaaaaagt ctctcaaaaa acctgcttta ttcttagagg cagaaagtaa 420
cacttcacat tcagatgatt cagcatccag cagttctgag gaaagtgagg aaagagacac 480
taagaaaacc aaaaggaaaa agagagagaa aaaagcccat acctctgtaa ccaacaatga 540
aatacaggag aggacaaaca aacgcacaaa ttggaaagta gctacagatg aaaggtctgc 600
tgagagctca gaggatgact aaatgggaaa cacttttgtt ttccacatga ctgtggatat 660
ttacagttct tactccttgt ggttttgcag tgactcttgt tcagcacggg gcctgaggtc 720
anagctgtct tgtgccatct gnatgntctg acagacgtct tggcttctat tttggcgtta 780
agcttgatcc ccttttcttg gt 802

<210> 3301
<211> 893
<212> DNA
<213> Homo sapiens

<400> 3301
ccgagcgggc tgggggaggg gagcgtgggg ccgacagttt tgggggtgaa aaggcaaaag 60
gcgggtgaaa ggctgcctcc cgagactctc cttgcttgga attctgccca ctctgcggag 120
ttagcagtca cgacctccag cacaggatgt ggtaccacag attgtcccac ctacacagca 180
ggcttcagga cttgctgaag ggaggagtca tatatccggc ccttccacag cccaacttca 240
aaagcttact tcctttagct gtccattggc accatacagc ctccaagtct ctgacttgtg 300
cttggcagca acatgaagat cattttgagc tgaaatatgc taataccgtg atgcgctttg 360
attacgtctg gcttcgagac cactgccgct cagcatcgtg ctacaactct aagactcacc 420
agcgcagcct ggatactgcc agtgtggatt tatgtatcaa gccaaagacc attcgtctgg 480
atgagaccac actcttttc acttggccag atggtcatgt gactaaatat gatttgaatt 540
ggctggtgaa aaacagctat gaagggcaga aacaaaaagt catccagcct agaatactat 600
ggaatgctga aatctaccag caagcccaag ttccatcggt agattgccag agcttcttag 660
aaaccaacga gggactgaag aagtttctgc aaaactttct gctctatgga attgcattcg 720
tagaaaatgt cccttccact caagacacac agagaanttg gcagaaagga tcancttaat 780
cagagaaacc atttatggga ggatgtggga tttcacttta aaacttnttc cagaggtgac 840
actgggtaca cccaagctag ctctggatcg ggacacttgn cctacctatt tna 893

<210> 3302
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3302
actattccat attattaaaa agaaaaaaaa aaagccaaaa agaaaaaaaa aaaaaaagca 60
agccacctct ctctttcttt tcttgctctc tttttctttc tctctctctc aagtttgtgc 120
agggagatgg tgaactgttt tgtcagaact taaatggaaa aaaaaataaa actacaacaa 180
gcctaccttt tataactggg tgtttagtgc taaacagcca gaaccacaga gacagtattg 240
tatgaccaaa gcatttgatg ccaaaatttg acgttaaagt aatgatttga tttcctgccc 300
tggttttgaa ggtccatttt tttccctttt gcattgactt gcttgtttcc cctttgaaac 360
acctaaaaat acctttccaa aacatcgcga gagcatacat agacaaaaat gaaatagaaa 420
gctcttgcat gcttgagtcc accattgggg gaaatgacag aaaactggac ctgagggcat 480

0062354600 2007-03-02

taggaacatc ctacagagtt gtgtttagtg tcgtttgcca tggtatttca cagtgaaaca 540
tggatactct ccacacatca tttacttcat gctgtgtact tatgtactgg tttttgcatt 600
ttactcactt gataagtctg ctccactggt ttcatcagat agacttgctg ctactggctt 660
ttccattgta gattgggtta ttttacacgc agttcgccaa atgggattgc tctgtatagt 720
caaattggtg atggacagat ggacagaatg cagangtaca tagatgagct gangctgatc 780
cancttccct gaaattcaaa gtgtaacttt gta 813

<210> 3303
<211> 774
<212> DNA
<213> Homo sapiens

<400> 3303
gagtgcgccg tgcggtctcc ggacgctcgc tgctcagccc gatccccgcc aactgtgcag 60
gcggctgacc cgcagcggta gcggcagcag cgaggactcg agcgctggct gcagcgacac 120
catggatctc tcctttatgg ccgcgcagct gcccatgatg gggggagctt tcatggactc 180
gcccaacgag gacttcagca ccgagtactc cctgtttaac tcctctgcca atgtccacgc 240
ggctgccaat ggccagggcc agccggaaga tcctcctcgg tcctccaacg acgccgtctt 300
gctatggatt gccatcatag ctacgctggg gaacatcgtg gtggtgggcg tggtgtatgc 360
cttcaccttc tgaggacggc acaccctgca ccaccatggg gtgaggcttg gcacgtagct 420
ctgacttgct gtcggccttt ggcttctcct gtgttctaga accaggagtt ttgaccaggg 480
gcggcggccg tccttctgga atttctcccc agcagccctg atttcaaata tcccatgttg 540
tggtcaagct gagtcagaag acatggaagt atgggcctcc tgcccctaga ggcatgacgg 600
ggcaaggcct tcagagggca gattggggat ccttgaaact acattccang aacatgggac 660
cagatgagac agctagttaa gtttaaaaca tagacatgat ttgatgatcg cttgcttgtg 720
gtaaataatc actcgngtgn cttggtttta tgcaaactta tcgaacctta nggc 774

<210> 3304
<211> 765
<212> DNA
<213> Homo sapiens

<400> 3304
aagatggcgg cggtggctgg atctggggct gccgcggctc cgagctcact gctcctcgtg 60
gtgggcagcg agttcgggag cccggggctc ctcacctacg tcctggagga gctcgaaaga 120
ggcatccggt cttgggatgt cgatcctggc gtctgcaacc ttgatgaaca gctcaaggtc 180
tttgtgtccc gacactctgc caccttctcc agcattgtga aaggccagcg gagcctgcac 240
caccgtggag acaacctgga gaccctggtc ctcctgaacc catcagacaa gtccctgtat 300
gatgagctcc ggaaccttct gttggaccct gcctctcaca agctactggt gttggctggg 360
ctctgcctgg aggagacggg ggagctgctg ctacagacag ggggcttctc gcctcaccac 420
ttcctccagg tcctgaagga cagagagatc cgggacatcc tggccaccac gcccccacct 480
gtgcagccgc ccatactcac catcacctgc cccaccttcg gtgactgggc tcagccggca 540
cccgctgtgc ctggccttca gggggcgctc cggctccagc tgcggctgaa ccccccggcg 600
cagctgccca actctgaggg cctgtgcgaa ttcctggagt acgtggctga gtctctggag 660
ccaccgtccc ccttcgagct gctggagccc ccgaccttcg ggggcttnct nagctgggcc 720
ggcctgctgc tacatcttnc ctggagcctc gggatccgct tcttc 765

<210> 3305

09825469.070800

0080270-0001-0884

<211> 884
<212> DNA
<213> Homo sapiens

<400> 3305
atagcacttt taggaaactg attattgtaa atgtttaatt ttgtctcaaa tatagttggc 60
attggaagtt tagcctttac ttgaatgtat actgtagatt tttaacaaag cgagttctat 120
atttattatg tttagtgtgg tttgaaatta cctctttcat atgttttaaa taaagtgaaa 180
tttatgtatg ttttgtacat agatacacat gattatgtta agaggcttta agatttaaaa 240
gtttcacaca accataagta tagtatttca tgccagtaaa atttttttag tggtattctg 300
tttacagatg tattaggacc attgatgcat tacatttaag aattctcttt aatacatctg 360
ggcaataaat attgaaaggt attccatgaa gctgagttct ttagataatc aacattacta 420
acattacatt tttgagattt ttatgacatt agatttttat tttgtatatg tagaatatta 480
taatttttaa aaggactatt gatgatagaa gaataggggc aagacgacaa aagtaccttt 540
gaataaaaca atttaagaaa ttggtttaag atattggatg atagaagaca tttaagatat 600
ctagatggtg atattttcct tacaagatgg gtaccagtat agtaatatct gtatactaac 660
tagggctttg tattgtcaat aatttttaa taatttttta atgaggtatt taccactgaa 720
gaaatatgat aatgtaaaac catcaaattt tataattgag atgatactct ggaaaaacat 780
gtcatttcat tttcagaaaa ctcttaagct ctcttcagtc tctgtaaggt tctgaatgca 840
tgttcntcat gaaaagtatg tggtggtttg aagtaataat aata 884

<210> 3306
<211> 708
<212> DNA
<213> Homo sapiens

<400> 3306
acaaaagtaa ctatgtttcc ggtagcccct aaaccccagg attccagtca accatcagac 60
agactcatga ctgaaaaaca gcnggaagaa gcagaatggg aaagcataaa tgtgctattg 120
atgatgcatg gcttaaaacc tttgtctcta gtcaaaagaa cagacanaga tctcatcatt 180
tttgacaaac agtcatcaca aaggatgaga cagaattaga aattgntggt ggaagaaaca 240
tnatgtcaac agaacatgat acaggagctt atagaaacta atcaacagct tagaaatgaa 300
cttcagctag agcaaagccg agcagccaat caagaacaac gagctaatga cttggaacaa 360
attatggaaa gtgtgaaatc caaaattggt gaattggagg atgaatcact aagtagggct 420
tgccaccaac agaattaaat gaangatctt caaaaggagc agaaaacttt acaggtgaag 480
tgccagcatt ataagaaaaa acgaacggag cangaagaaa ctattgcttc tttgcaaatg 540
gaagtctgta gattaaaaaa ggaggaagaa gatcgcattg tcactcaaaa cagagtgttt 600
gcctatctgt gcaaaagagt tcctcatccg tcttggatag acagttgctt tggctaattg 660
attactatga atctaanatt tgaaaaattc atacnccaag gcantatt 708

<210> 3307
<211> 844
<212> DNA
<213> Homo sapiens

<400> 3307
tacgtgatgg ttttacagcc cgaggagccc aagatcagcc tgagtggcgt ccaccatttt 60
gcccgagcag cttctgaatt tgaaagctca gaaggggtgt tccttttccc tgagcttcgc 120

atcatcagca ccatcacgag agaagtggag cctgaagggg acggggctga ggaccccaca 180
gttcaagaat cactgttgtc cgaggagatc gtgcacgacc tggatacctg tgaggtcacg 240
gtggagggag aggagctgaa ccacgagcag gagagcctgg aggtggacat ggcccgcctg 300
cagcagaagg gcattgaagt gagcagctct gaactgggca tgaccttcac aggcgtggac 360
accatggcca gctacgagga ggttttgcac ctgctgcgct atcggaactg gcatgccagg 420
tccttgcttg accggaagtt taagctcatc tgctcagagc tgaatggccg ctatatcagc 480
aacgaattta aggtggaggt gaatgtaatc cacacggcca accccatgga acacgccaac 540
cacatggctg cccagccaca gttcgtgcac ccggaacacc gctcctttgt tgacctgtca 600
ggccacaacc tggccaaccc ccacccgttc gcagtcgtcc ccagcactgc gacagttgtg 660
atcgtggtgt gcgtcagctt cctggtgttc atgattatcc tgggggtatt tcggatccng 720
gcccggacat cggcggacca tgcgggatca ggacaccggg aaggagaacg agatggactg 780
ggacactntg ccctgaccat naccgtcaac cccatggaga cctatgagga ccagcacaca 840
ntga 844

<210> 3308
<211> 697
<212> DNA
<213> Homo sapiens

<400> 3308
acttccgccc caggtacgct aggccgcggc cttcgttcct cccagaaagg agatggtgac 60
attcaaggat gttgctgngg ncttcactga ggaggagctg gggctgctgg actctgtcca 120
gaggaagctg taccgagatg tgatgctgga gaacttcagg aacctgctct tagtancaca 180
tcagcccttc aagccagacc taatatccca gctggagaga gaagaaaagc ttttgatggt 240
ggagacagaa accccaaggg atggatgttc aggaaggaag aatcaacana agatggagag 300
tattcaggaa gtaacagtaa gctacttttc ccccaaagag ctttcctccc gtcagacctg 360
gcaacaaagt gcangtgggt taatcaggtg tcaagatttc ctgaaagttt ttcaagggaa 420
gaattctcag ttgcaagaac aaggtaattc cctcggccag gtttgggcag gaataccagt 480
tcagatttct gaagataaga actatatatt gactcatata gggaatggct ccaattatat 540
aaaaagtcaa gggtatccat cttggagggc acatcattct tggaggaaaa tgtatctgaa 600
agagtcacat aattatcagt gtagatgtca gcaaatttcc atgaaaaatc atttctgtaa 660
gtgtgacagt gtcagntggc tntnacatca caatgat 697

<210> 3309
<211> 770
<212> DNA
<213> Homo sapiens

<400> 3309
aaactacaac gaaaaaagac agagctcata atggatgcta tccataaaca aaagagctta 60
caattcaaga aaaccatgga tgcaaagaag aactatgagc agaaatgccg ggacaaagat 120
gaggcagaac aggccgtcag ccggagtgcc aacctggtga acccgaagca acaagaaaag 180
ctttttgtga aactggcaac ttcaaagacc gcagtagagg actcagacaa agcatacatg 240
ctgcacatcg gcaccctgga taaggtccga gaagagtggc agagtgagca catcaaggcc 300
tgcgaggcat ttgaggctca agaatgtgaa cgaataaact tcttccggaa tgcattgtgg 360
ttacatgtga atcagctgtc acaacaatgt gtcaccagtg atgaaatgta cgaacaagtc 420
cgaaagagtt tagaaatgtg cagcattcag agggacattg aatactttgt gaatcaacgc 480
aaaactggac agattccacc agcacccatc atgcatgaga atttctactc ctcccagaag 540

0950204.0022800

aatgcagtcc cagcaggaaa ggctacaggg cctaacttgg caaggagagg acccccttcca 600
attcctaaaa gctnaccaga tgatcccaat tactctttgg ttgatgacta cagtttgctc 660
tatcagtaaa atcaatgaaa ccagagcttt ttccggtagt gcttctggga tattggaang 720
gcnccagaca caggcctata gccacgtttt ttanccatgg aaactttgaa 770

<210> 3310
<211> 865
<212> DNA
<213> Homo sapiens

<400> 3310
tagaaaatgc cactcctcgg gggaagtcca gaatggcaag atgtccacca acggtgtgtc 60
caacggtgtg tccaatggcc tgcaccttca tagcaatggc ttccggctgc cggagagtag 120
gggacatgtc agcccccaag tagagctacc accatacctg gagcgtgtga aacagcaagc 180
caatgaggct tttgcctgcc agcagtggac ccaagccatt cagctttaca gcaaggctgt 240
gcagagggcc cctcacaatg ccatgcttta tggaaaccga gcagcagcct acatgaagcg 300
caagtgggat ggtgaccact atgatgccct gagggactgc ctcaaggcca tctccctaaa 360
cccatgccac ctgaaggcac actttcgcct ggcccgctgc ctctttgagc tcaagtatgt 420
ggctgaagcc ctggagtgcc tggacgactt caaagggaaa tttccggagc aggcccacag 480
cagcgcttgt gatgcattgg gccgcgacat cacagctgcc ctcttctcta aaaatgatgg 540
tgaggagaag aagggacctg gtggcggcgc cccagtccgc ctccgcagca cgagccgcaa 600
ggactccatc tcagaggatg aaatggtgct gcgggagcga agctacgact atcagtttcc 660
gctactgcgg ncactgcaac accaccacgg atatcaaaga ngccaatttc tttggcagca 720
acgctcagta tatcgcagtg gctntgacga tggctccttc ttcatctggg aaaaggagac 780
cccaacctgg tccgtgtgct tccaagggga ttaagtccat tggnaactgc ttgaanccca 840
ccccanttct ggttctgggc accaa 865

<210> 3311
<211> 756
<212> DNA
<213> Homo sapiens

<400> 3311
catagctcac tgcatcctcg aactcctggg ctcaagcgat cttcccaccc cagcctcccg 60
aggagctgag actacaggcg cgcgccacta ctcccggcta attgttcaat atttttgtgg 120
aaacagggat cttgctatgt tcctatggtg gtcttgagct ccttagcctc ctaaagtgtt 180
ggtatcacag gcgtgagcca ctgtgcccgg cgttaacaat cttctgcccc agggtcggcc 240
acagttggac aggagcaccc tgcctccccc gtagcattcg tccccgtgcc cggagttaac 300
tcctggacga cgtacacctg ctgcactgct ggatatagcc attcttcatt tttccctcct 360
ccacccacca tgtacacccc atcagcaagt cccatccgat atacccacta catacatctg 420
ccagctgttc ccatctccac ccacaccccg gcctccagca tctgtctgga ctgctgcggc 480
agatcctcac tggtttctct gcttccactc tcgcccttcc cctaggtcca ttctccacgt 540
agcagccaag gggattctta tatttattta ttatttaatt tagttttaga gacagggtct 600
tgtcctgatg cccaggctgg agtacagtgg catgatcata gctcactgtg gcttcaacct 660
cttgggctca agtgatcctn ctgcctcagc tcctgagtag ctgggactac aggtgtgcac 720
caccacacct angtatttnt atttatttat ttttg 756

<210> 3312

09/05/2008

0605205.0020800

<211> 916
<212> DNA
<213> Homo sapiens

<400> 3312
tacaaaatgc tgggatttac caaccacatc aatccagcca tggactttac ccagactcct 60
cctggaatgc tggccttgga caacatgctg tacttggcta aagtccacca ggacacctac 120
atccggattg tcttggagaa cagtagccgg gaagacaaac atgaatgccc ctttggccgc 180
agtgccattg agctcaccaa aatgctctgt gaaatcctgc aggttgggga actaccaaat 240
gaaggacgca atgactacca cccgatgttc tttacccatg accgagcctt tgaagagctc 300
tttggaatct gcatccagct gttgaacaag acctggaagg agatgagggc aacagcagag 360
gacttcaaca aggttatgca agtcgtccga gagcaaatca ctcgagcttt gccctccaaa 420
cccaactctt tggatcagtt caagagcaaa ttgcgtagcc tgagttactc tgagattcta 480
cgactgcgcc agtctgagag gatgagtcag gatgacttcc agtccccgcc aattgtggag 540
ctgagggaga agatccagcc cgagatcctt gagctgatca agcagcagcg cctgaaccgg 600
ctctgtgagg gcagcagctt ccgaaagatt gggaaccgcc gaaggcaaga acggttctgg 660
tactgccggt tggcactgaa ccacaaggtc cttcactatg gtgacttgga tgacaaccca 720
caaggggang tgacatttga atccctgcag gagaaaattc ctggtgcana cattaanggc 780
attggcactg ggaaagattg tccccacatt gaaagagaaa aagtgcttnt gaaacagaac 840
aaggaggtgt tgggaaatgg gctttttcaa tccgggntga accctgntga ggacctttaa 900
ctttattgga cctaaa 916

<210> 3313
<211> 809
<212> DNA
<213> Homo sapiens

<400> 3313
gaatgtaaag agatccaggg ctcttggaga gggacaagtg agagccagcc aaaaaggaaa 60
aagcaaaggc agaaacggca tcaggagaga cagagatgtg aaggagggaa ggagcaggag 120
agcaggaagg aaacgcagga ggagggagca gcatctcctg tgaacacaga ggagcacctg 180
tttgctgtta aaatcgatct ccctcggcac cctgagcaat ggatataata tttggcagga 240
ataggaaaga acagctggag cctgtgaggg ccaaagtgac aggcaagatt ccagcatggc 300
tgcagggaac cctgctccgc aatgggcctg ggatgcacac agttggggag tccagataca 360
accattggtt cgacggcctt gccctgctcc acagcttcac catcagagac ggtgaagtct 420
attacaggag caaatacctg agaagcgata cctacaacac caatattgag gcaaacagga 480
ttgtggtgtc tgagtttgga acaatggcct atccggaccc ctgcaaaaac atattttcca 540
aagctttctc ctacttgtct cacaccatcc ccgatttcac agacaactgc ctgatcaaca 600
tcatgaagtg cggagaagac ttctacgcga cctcagagac caattacatc aggaaaatca 660
acccacagac tctggaaacc ctggagaagg ttgattatcg taaatacgtg gcggtaaatc 720
ttggcaacgt cacatnccca ttatgatgaa gctggaaatg ttctaaacat gggccccatt 780
canttggggg aaaangggga agaccaaat 809

<210> 3314
<211> 863
<212> DNA
<213> Homo sapiens

0962376.0020001

<400> 3314
ttattttgct ttattcagag agaaagttga ttactgagtg ctgaattata caatttaggc 60
taggaaactc gtaactttgg tatttaataa aagaaactat acatattctg tttgtaatgt 120
aaataatcta taccccatgc acaaatatct gtttcctggg tgtgatatat taaagtatgt 180
attcttattt tgaggtatct tttggaaata attgaaagag attaaataac aatttatgcc 240
acatgaaaaa taattactta gaagtagtta ggtatcatgt cttatggctt tttatgttcc 300
attttggctt tttttctcat ttgctttatt actatatgta cttgcatgta acagtttgta 360
agcatatatt ctgacttatt ttccttctgt cattatctag tgctgttatg ccttcctatc 420
agaatcgata agtcaaactc agaggtgtga ttttggtgtt gaagttttca ggacagagat 480
actatttcca tggatgcatt ttaagtaata aaattagggg aagtgaaatc agaaaatgaa 540
aaatgattac aaaataactt tcaggttttc tataatcaat ggctttaaaa agtagacagt 600
cttaattaat tttaaattag cttgctcaga aaggtcatgc catacagncc tatcataaaa 660
ggaacactat aagaattaag caatgaacag catgatttct gatccccagt gaggactgac 720
agngtataaa agatacangt atgctactgg atgtacccga taattgtttg agagtttcta 780
gtgaaaaact caaatattgc tagcttaacc acagtagtag ggggcaacct tattatatgg 840
gagagcttca aaacatactg tcc 863

<210> 3315
<211> 786
<212> DNA
<213> Homo sapiens

<400> 3315
gtatttttc agtaagcacc cagaggcctc cattcaggct gtttttttca gatgcccaaa 60
tgcatatttg ggcattagaa ggtctgtcgc acttagtagc agcatcattt acagaggata 120
gatttggagt tgtccagacg acactaccag ctatccttaa tactttgttg acactgcaag 180
aggcagtcga caagtacttt aagcttcctc atgcttccag taaaccaccc cggatttcag 240
gaagccttgt ggacacttca tataaaacat taagatttgc attcagagca tcactgaaaa 300
ctgccatcta tcgaataact actacatttg gtgaacatct gaatgctgtg caagcatctg 360
cagaacatca gaaaagactt caacagttct tggagttcaa agaatagtta agtaatataa 420
actgtgttca ttacactgct gatacaacta cagatgggac agtaaatgtt cagcattctt 480
ggatcagaag aaaacggact aattagatgc ttcctttgtc gtggtggttg ctttgaaaac 540
tatactttaa tgggagaaat catggaaaga aattctcaac agaataactg aaaactgcct 600
tttctgtacc gattgctttt tgtgtgtgtg gtataataaa atctttattc aattttacag 660
aagcattgat ggcagtcgaa atgtctctag ctcatataac ttaataggna ataactaaaa 720
aacttttaga atttactttt gaaanganggg gaacccgttc tgaaatgagt atagggtgat 780
tcatag 786

<210> 3316
<211> 662
<212> DNA
<213> Homo sapiens

<400> 3316
gcactgtgct gcctgtggcc accatccaga acgccagtac tgccatgctg atggcagcca 60
gtgtggctcg caaggctgtg gtgctgcctg gggggactgc caccagccct aagatgattg 120
ctgagaacgt gctaggcctg gtgccccaag ccctgcctaa ggctgacggg cgggcagggc 180
tggggactgg gggacagaat gtgaatggtg cctcggtggt gatggtgcaa ccttcaaaga 240

cagntactgg gccaagtaca gggggcggca catngatatc acggacccag tccagcctgg 300
tggaggcctt caacaagatc ctcaacagca agaacctgct ccctgcctat gggccaaacc 360
tgancccacc agctgaggct gggctggccc tgccttccac cggctaccgc tgcctggagt 420
gtggggatgc cttctcattg gagaagagcc tggcacggna ctatgaccgt cggagcatgc 480
gcatcgaggt cacctgcaac cactgcgccc gccgcctggt cttcttcaac aagtgcagcc 540
tgctcctgca tgcacgtgaa cacaatgaca aggggctcgn catgcagtgc tcacatttgg 600
tcatgaggct gtaccttga ccagatggtg ggggcancnc ggacattaca ccgatgctgc 660
ct 662

<210> 3317
<211> 824
<212> DNA
<213> Homo sapiens

<400> 3317
attaaggaaa ttcaagtccc atataatgtc cagtggatgg caatcttcag tgaacaactc 60
tgtgtgggat tccagtcagg atttctaaga tacccttga atggagaagg aaatccatac 120
agtatgctcc attcaaatga ccatacacta tcatttattg cacatcaacc aatggatgct 180
atctgcgcag ttgagatctc cagtaaagaa tatctgctgt gttttaacag cattgggata 240
tacactgact gccagggccg aagatctaga caacaggaat tgatgtggcc agcaaatcct 300
tcctcttgtt gttacaatgc accatatctc tcggtgtaca gtgaaaatgc agttgatatc 360
tttgatgtga actccatgga atggattcag actcttcctc tcaaaaaggt tcgaccctta 420
aacaatgaag gatcattaaa tcttttaggg ttggagacca ttagattaat atatttcaaa 480
aataagatgg cagaagggga cgaactggta gtacctgaaa catcagataa tagtcggaaa 540
caaatggtta gaaacattaa caataagcgg cgttattcct tcagagtccc agaagaggaa 600
aggatgcagc agaggaggga aatgctacga gatccagaaa tgagaaataa attaatttct 660
aatccaacta attttaatca catagcacac atgggtcctg gagatggaat acagatcctg 720
aaagatctgc ccatgaaccc tcggcctcag gaaagtcgga cagtattcaa tggctcaagt 780
cagtattcca tctatcaccc aaatnccgnc ctgagccang cccg 824

<210> 3318
<211> 725
<212> DNA
<213> Homo sapiens

<400> 3318
agncccggct tggaactgaa ctgtgtgagc acgggtcctg gaacccgggc ccagaaccgg 60
cgagcccagg tctgagccca gagctcagcg gtcagcctcg taggccctga ctcggaatcg 120
agccgaggcg ctgaggttgg agccggagag cgtgagagcc gaagagcagg gagggcgggc 180
cggctgcgcg tccgacgagt cgcagagcag gaccgcggaa ggcagggaga cggccgcaag 240
cccagggcag agggcagagg gcagagagcg gcctggctcg gcggagaggg cgccgcccgg 300
ccggaaccaa gctcgccgcc cgggacggcg ggccccgtgg ggcgcggacc cagggtggcc 360
gtgggtccgc agcgactccc cggccgacgg cgggggggcgt gccccctccc agcccagcct 420
ccccaacccg gcccgcccgc cgcgtcgcgg gggcatgtga gcgggaagcc taggctgcca 480
gccgcgagga ccgcacggag gaggagcagg agcgcggagc cgcgagcccc gagccccgag 540
cccggcgcct ggctgagtag actgtagctc tccanagggt aatgggtccc cagaacccaa 600
gagaccagga gtgtcggagg ctgcctctgg aagccaggag aactggactt caaccgaaat 660
ttgaaagaag tggtgncagc cattgagaan ctgtttgtcc antgacttgg aaaggagaag 720

0502450-050200

gttct 725

<210> 3319
<211> 864
<212> DNA
<213> Homo sapiens

<400> 3319
ccccctgggt cccaccctcc ctcaaggcct cctccacctc cacctccacc ccgcctggcc 60
tggcgtccac ctctgcggct cctacctggg tgcaatcgag ttaaatggct gataagcaga 120
tcagcctgcc agccaagctc atcaatggcg gcatcgccgg gctgatcggt gtcacctgcg 180
tgtttcccat cgacctggcc aagaccaggc tgcagaacca gcagaacggc cagcgcgtgt 240
acacgagcat gtccgactgc ctcatcaaga ccgtccgctc cgagggctac ttcggcatgt 300
accggggagc tgctgtgaac ttgaccctcg tcacccccga gaaggccatc aagctggcag 360
ccaacgactt cttccgacat cagctctcta aggacgggca gaagctgacc ctgcttaaag 420
agatgctggc gggctgtggg gctggcacct gccaggtgat cgtgaccacg cccatggaga 480
tgctgaagat ccagctgcag gatgcagggc gcattgccgc ccagaggaag atcctggctg 540
cccagggcca gctctcggcc cagggggtg cccagccctc agtggaggct ccagctgccc 600
ctcggcccac ggncacccag ctgacccgcg acctgctgcg gagccgtggc attgccggtc 660
tctacaaggg actcggggcc acgctgctaa ggatgtccct tctctgtggt gtacttccgt 720
ctttgcaact gaaccagtgg gccgnccggc gtncgaagag aatcgcttct acgtgtcttc 780
tggccgctgt gtggttggat gccgccgttg tggccgtaac cctggatgtg tgaanaccgg 840
ttcatccttc accagngtna cgag 864

<210> 3320
<211> 840
<212> DNA
<213> Homo sapiens

<400> 3320
gangatngtg atccggggag acaggaacac gggcaagaca gcgctgtggc accgcctgca 60
gggccggccg ttcgtggagg agtacatccc cacacaggag atccaggtca ccagcatcca 120
ctggagctac aagaccacgg atgacatcgt gaaggttgaa gtctgggatg tagtagacaa 180
aggaaaatgc aaaaagcgag gcgacggctt aaagatggag aacgaccccc aggaggcgga 240
gtctgaaatg gccctggatg ctgagttcct ggacgtgtgc aagaactgca acggggtggt 300
catgatgttc gacattacca agcagtggac cttcaattac attctccggg agcttccaaa 360
agtgcccacc cacgtgccag tgtgcgtgct gggaaactac cgggacatgg gcgagcaccg 420
agtcatcctg ccggacgacg tgcgtgactt catcgacaac ctggacagca gacctccagg 480
ttcctcctac ttccgctatg ctgagtcttc catgaagaac agcttcggcc taaagtacct 540
tcataagttc ttcaatatcc catttttgca gcttcaggta agcactcacc acgtggggtg 600
gagtggctgc tggtctctca cctccttcca ggtgtctcct gtgtagcaac gggtctccct 660
nctaacccct gagaaaggct gtgggacctg ctcngagatt ggctgctggc aaggggccca 720
gcgttcttac ttgcacctgc ctgcttcttg ggtnggcaag aagggtacag gggtccttga 780
agggcttaga ccccaantcc caaggaagcc ccctccaacc ttttttgcng ggggaacccc 840

<210> 3321
<211> 776
<212> DNA

0956303.00200

<213> Homo sapiens

<400> 3321
gaagattctg aagctgtggg gatctccagc attatcagca acctgataac cgtgttccca 60
cgaaatgttt taactgccat tccaagtgaa cttttctcct cctttgttaa ctgcctcaca 120
cacctcactt gttcttttgg gcgaagtgct gcattggaag aagtgcttga taaagatgac 180
atggtataca tggaagcata tgataaattg ttggagtcct ggttaacttt ggttcaagat 240
gacaaacatt tccataaagg ctttttacc caacatgcag ttcaagtttt caattcctat 300
attcagtgcc acctagctgc tccagatggc acaagaaatt tgactgccaa tggtgtggcc 360
tctcgtgagg aggaagaaat aagtgaactt caagaggatg atcgagacca gttttctgat 420
caactggcca gtgtaggaat gctaggaaga attgctgcag aacactgtat acctcttctg 480
acaagtttat tagaagaaag agtaacaaga ctccatggtc agtcacaacg acatcagcaa 540
cagttacttg cttcaccggg ttcaagcact gttgacaaca aaatgcttga tgatctctat 600
gaagatattc actggcttat tttagttaca ggctacctct tagctgatga tactcaggga 660
gagactccgc taatacctnc agaaataatg gaatattcca ttaagcattc atctgaagtt 720
gcctttattc caccctttaa attttgggaa cttccggaaa aaangntttt ttcctt 776

<210> 3322
<211> 697
<212> DNA
<213> Homo sapiens

<400> 3322
cggtgctcga ggcggagggg aggaggcggg gaaggcgaaa ggaggggttc ggaggagagg 60
gttcgatctc cgtacgcacc aggtggagag cgcgcgcctg gggaaggagg cgtgtcgagt 120
agcgggaggg aagttgtagt acgggtgggg agaaccacac taaagggaga tgggggtgag 180
cagttaagga accgcgagag cgccaggtag agagctgccc ttaatggggg aacctggaga 240
agagtgtgag cgtagtgggg aagaagggag aagacaaata ggttcgggaa tgtgtctccg 300
agggcgcgag cgggcgctag gacccggcgt cgaaaagatg aggctttggg gctgtcgggg 360
cgcgcgctcc cgttggtgac gcgggggtgg cggaggtctc cggccgggac gaagccccgc 420
agggagtgga tactcgacag ccttcggcct ccgctcgctt ctccctgcgc gctttcctgc 480
tccccttcc ggctacagcc ctggggtcga gctctggtcg aagcgcattc cgcctctcct 540
ttggccctgc ggcttccttt gcaacccgcc gccacccttg ctctccgtgg tttacccctg 600
ggctctgagg cctggtggta gcggccactg ccgcggattg ctgttgcgga cccggggcgg 660
ggcangtgga aaagctcgnt cttcncgggt ttcgttg 697

<210> 3323
<211> 760
<212> DNA
<213> Homo sapiens

<400> 3323
atcgcagcgt cggatgttca gagcagcaga agccggcgtc gtcggatgtt gtgttgcccg 60
ccaccatgag ctacacaggc tttgtccagg gatctgaaac cactttgcag tcgacatact 120
cggataccag cgctcagccc acctgtgatt atggatatgg aacttggaac tctgggacaa 180
atagaggcta cgagggctat ggctatggct atggctatgg ccaggataac accaccaact 240
atgggtatgg tatggccact tcacactctt gggaaatgcc tagctctgac acaaatgcaa 300
acactagtgc ctcgggtagc gccagtgccg attccgtttt atccagaatt aaccagcgct 360

0962946.0002

tagatatggt gccgcatttg gagacagaca tgatgcaagg aggcgtgtac ggctcaggtg 420
gagaaaggta tgactcttat gagtcctgcg actcgagggc cgtcctgagt gagcgcgacc 480
tgtaccggtc aggctatgac tacagcgagc ttgaccctga gatggaaatg gcctatgagg 540
gccaatacga tgcctaccgc gaccagttcc gcatgcgtgg caacgacacc ttcggtccca 600
gggcacaggg ctgggcccgg gatgcccgga gcggccggcc aatggcctca gctatgggcg 660
catgtgggaa gaccccatgg gggcccgggg ccagtgcatg tctggtgcct ntcggctgcc 720
ttccttttt ccagaacatn atncccgagt accggatgtt 760

<210> 3324
<211> 790
<212> DNA
<213> Homo sapiens

<400> 3324
gattatcagc tgccaaaatg gtatattact tagatccttc tagtcagaag cgagctatag 60
agttggcaac aacacttgat gaatctctca ctaacagaaa cctccagaca tgtatggagg 120
tattggaagc cttgtatgat ggtagcctag gagactgtaa agaagctgct gaaatttata 180
gagcaaattg tcataagctt ttcccttatg ctttggcttt catgcctcct ggatatgaag 240
aggatatgaa gatcacagtt aatggagata gttctgcaga agctgaagaa ctggccaatg 300
aaatttgaac atcactaaac aagcaaatgg aatgactttg gaccatatct agtatataat 360
atttttgtca cgcacctgct gcattgctct aacttacaca gaatgagagg agtaaatgtt 420
cttgccttca aatagtgttt tacgtttttt atcctgctga aaaagtatat ataaaatatc 480
taacattaca ggatagaggt tcagtttctt aaaaaattaa agctgctaaa attgagtggt 540
taaaaaagat accttatcct attcctcccc acccacccat gtttttaaac taatttatat 600
aaaatctgga ggctgttaca gctaacaaag caggtgtgtg gcagaaatat tactttaaat 660
ttgtcttgtg agattttact atatctcaga cagcataaat gctggtttag cactggattc 720
tttcactgag cacaaagagt tgntggggct ttagcatctg actggatttg gtacngggnt 780
gattcttacc 790

<210> 3325
<211> 797
<212> DNA
<213> Homo sapiens

<400> 3325
caggaaagag taggaaactt tttggcagac ttttacctgg tgaatggact tgttttagaa 60
tcaaggaaaa gaagagaaca tctcagtgaa gaggatattc ttcgaaataa ggccatcatg 120
gagagtttga gtaaaggtgg aaacataatg gaacagaatt ttgagccgat tcgaagacag 180
tctcttacac ctcctcctca gaacactatt acatgggaag aatatatatc tgctgaaaat 240
ggaaaagctc ctcatctggg tagagaattg gtgtgcaaag agagtaagaa aacgtttaaa 300
gctacgatag ccatgagcca ggaatttccc ttagggatag agttattatt gaatgtttta 360
gaagtagtag ctcccttcaa gcactttaac aagcttagag aatttgttca gatgaagctt 420
cctccaggct ttcctgtaaa attagatata cctgtgtttc ccacaatcac agccactgtg 480
acttttcagg agtttcgata cgatgaattt gatggctcca tctttactat acctgatgac 540
tacaaggaag acccaagccg ttttcctgat ctttaactga cgtggaaaag gatgccgtct 600
aaccaaggaa agaaaatata gagaccctag aagtggatcc aaatagaagg gacaagtgct 660
ttcagtgaag aaaagggaat tacacattga atcgacacat cagtaatacg atacagtgaa 720
atgggcctct aataagaatt tcaccgagtt ttctgatgtg ccatttttg gcttttaaaa 780

0056345.00200

atntcntntt ataaatg 797

<210> 3326
<211> 822
<212> DNA
<213> Homo sapiens

<400> 3326
gagtcctccc cgcctcgcag agttgggaga aggcagggtg gggggtgtgg aaaaataaaa 60
ggaaaagtcc ttgcaccatg tagatcagcg tcccccactt tggcatcccg gccggccggg 120
gacctcccag tctgcggcca tgaacgcgag cagcgagggc gagagcttcg cgggctcggt 180
gcaaattcca ggtggcacaa cggtgctggt ggagctgact cccgacatcc atatctgcgg 240
catctgcaag cagcagttta acaacctgga tgcctttgta gctcacaagc aaagtggctg 300
ccagctgaca ggcacatccg cagcagcccc cagcacggtc cagtttgtat cggaggaaac 360
agtgcctgcc acccagactc agaccaccac cagaaccatc acctcggaga cccagacaat 420
cacagtttca gctccagaat ttgtttttga acatggctat caaacttacc tgcccacgga 480
aagtaatgaa aaccagacag ccactgtcat ctctctccct gccaagtcac gcaccaaaaa 540
gcccacaaca ccacctgctc agaaaaggct taactgttgc tatccaggtt gccaattcaa 600
gactgcttat ggcatgaagg acatggagcg gcatttaaaa attcacacgg gagacaaacc 660
ccataagtgt gaagtctgtg gcaagtgctt tagcccggaa agacaagctt gaaaactaca 720
tgcggtgcca cacgggcgtg aagccctaca agtgtnagac gtgtgacttc nccgttgccg 780
acagcaacag ctnaacagca ccctgaggat ccactcggac ca 822

<210> 3327
<211> 660
<212> DNA
<213> Homo sapiens

<400> 3327
agagccgcgg gatttgcggc cgccgccatg ccgtcgtccc cgctgcgggt ggcggtggtg 60
tgctcgagca accagaaccg gagcatggag gcgcacaaca tcctcagcaa acggggattc 120
agcgtccgat cctttggaac agggactcac gtgaagcttc caggaccagc tcccgacaag 180
cccaatgttt atgatttcaa aaccacatat gaccagatgt acaatgatct tcttaggaaa 240
gacaaagaac tgtatcccag cgggttgccc tttaaaaacc ccccgtgtgg tcctccctgg 300
aaggtgttac gtgtggctcg ggcacaggag gcgtgtcacc ctgtgcagtg cacacactgg 360
ctcctctgtc tttgcgagag cttggtttct attcctggtg cacgtcggat cgtccacggg 420
ttagttccag tgccacccat ggcagtaggc gtggtgaggc gcacagacac ggtgtggggt 480
tcaccctgac gtggttcagc agagggtcgt gacatagcgt agaccaggga tgcttaggtg 540
aggaggtgga acccacaaaa tcccattgct tttcacactg canggctgcc cgttatttcc 600
tttgcaggtt ggtgtgcgtg cntgtgtgcc tgcgtgcctg atacacatgg anccgggctg 660

<210> 3328
<211> 805
<212> DNA
<213> Homo sapiens

<400> 3328
tctaaacatc attccaacct ttgcaaatct tatagactac ccatccatga aaaacgcttt 60

0960760 2007200

gataccaaga attaaaaatg cttgtctaca aacatcttcc cttgcggttc gtgtaaattc 120
attagtgtgc ttaggaaaga ttttggaata cttggataag tggtttgtac ttgatgatat 180
cctacccttc ttacaacaaa ttccatccaa ggaacctgcg gtcctcatgg gaattttagg 240
tatttacaaa tgtactttta ctcataagaa gttgggaatc accaaagagc agctggccgg 300
aaaagtgttg cctcatctta ttcccctgag tattgaaaac aatcttaatc ttaatcagtt 360
caattctttc atttccgtca taaaagaaat gcttaataga ttggagtctg aacataagac 420
taaactggag caacttcata taatgcaaga acagcagaaa tctttggata taggaaatca 480
aatgaatgtt tctgaggaga tgaaagttac aaatattggg aatcagcaaa ttgacaaagt 540
ttttaacaac attggagcag accttctgac tggcagtgag tccgaaaata aagaggacgg 600
gttacagaat aaacataaaa gagcatcact tacacttgaa gaaaaacaaa aattagcaaa 660
agaacaagag caggcacaga agctgaaaag ccagcagcct cttaaacccc aaggccacac 720
ctggtgctac tggtnaacag actaaggact tgacngacac actggtgggt aatatggcat 780
ccttggacca gccctttgg ttgna 805

<210> 3329
<211> 793
<212> DNA
<213> Homo sapiens

<400> 3329
agcgcgcgga agaaaaacca gcaagaaggc ggcgggggaa gatggcggtc ctggggtaga 60
gtttgcaagc tttctgacta ggctagtcga gtaactattc gggtcatggc gtcaaactca 120
actaagtctt tcctggcaga tgccggctat ggcgaacagg aactggatgc caactctgcc 180
cttatggaat tggacaaagg cctaagatct ggcaaacttg gtgaacagtg tgaagcagtt 240
gttcgctttc ccagactttt tcagaagtat ccattcccta ttcttatcaa ttctgcattc 300
ctaaagttag ctgatgtttt cagagttgga aataatttcc tgaggctatg tgttcttaaa 360
gttacccaac aaagtgagaa acatttggag aagattctaa atgtggatga atttgtgaag 420
agaatttttt ctgtgattca tagtaatgat cctgtggcaa gagccatcac cctccggatg 480
ttgggaagtc tggcatcaat aattcctgag aggaagaatg ctcatcatag tattcgtcag 540
agtttagatt cacatgataa tgtagaagtt gaagctgctg tttttgctgc tgcaaacttc 600
tctgcacagt caaaggattt tgctgtagga atctgtaaca aaatcagtga aatgattcaa 660
ggtttagcga caccagtaga cttgaagcta aaattgatcc cattctacag cacatgcncc 720
atgatgcaat cttggcttnc agtgctcgtc aacttttaca acagctggca catnctatcc 780
gtcaccaaaa tgg 793

<210> 3330
<211> 706
<212> DNA
<213> Homo sapiens

<400> 3330
gaaaaggttg cgaagatggc gacggccttg agcgaggagg agctggacaa tgaagactat 60
tactcgttgc tgaacgtgcg cagggaggcc tcttctgaag agctgaaagc tgcctaccgg 120
aggctctgta tgctctacca tccagacaag cacagagacc cagagctcaa gtcacaggcg 180
gaacgactgt ttaaccttgt tcaccaggct tacgaagtgc ttagtgaccc ccaaaccagg 240
gccatctatg atatatatgg gaagagagga ctggaaatgg aaggatggga ggttgtggaa 300
aggaggagaa cccctgctga aattcgagag gagtttgagc ggctgcagag agagagagaa 360
gagaggagat tgcagcagcg aaccaatccc aagggaacga tcagcgttgg agtagatgcc 420

09/02/2010 09:50:03

accgaccttt ttgatcgcta tgatgaggag tatgaagatg tgtccggcag tagctttccg 480
cagattgaaa ttaataaaat gcacatatcc cagtccattg aggcaccctt gacagcgaca 540
gacacagcca tcctctctgg aagcctntca acccagaatg gaaatggagg aggttccatt 600
aactttgcgc tcagaccagt tacttnggca aagggatggg gagagttgga atttggagct 660
ggagacctac aggggccttt gntcggtctc aactgttccg naatct 706

<210> 3331
<211> 814
<212> DNA
<213> Homo sapiens

<400> 3331
tgaattagaa gattttccag tacttggaat tgactgtgag tgggtaaatt tggaaggcaa 60
agccagccct ctgtcacttc tacaaatggc ctccccaagt ggcctgtgtg tcttggttcg 120
cctgcccaag ctaatctgtg gaggaaaaac actaccaaga acgttattgg atattttggc 180
agatggcacc attttgaaag ttggagtggg atgctcagaa gatgccagca agcttctgca 240
ggattatggc ctcgttgtta gggggtgcct ggacctccga tacctagcca tgcggcagag 300
aaacaatttg ctctgtaatg ggcttagcct gaagtccctc gctgagactg ttttgaactt 360
tccccttgac aagtcccttc tacttcgttg cagcaactgg gatgctgaga ctctcacaga 420
ggaccaggta atttatgctg ccagggatgc ccagatttca gtggctctct ttcttcatct 480
tcttggatac cctttctcta ggaattcacc tggagaaaaa aacgatgacc acagtagctg 540
gagaaaagtc ttggaaaaat gccagggtgt ggtcgacatc ccatttcgaa gcaaaggaat 600
gagcagattg ggagaagagg ttaatgggga agcaacagaa tctcancaga agccaagaaa 660
taagaagtct aagatggatg ggatggtgcc aggcaaccac caagggagag accccagaaa 720
acatnaaaga aagcctctgg gggtgggcta ttctgncaga aaatcacctc tttatgataa 780
ctgntttctt catgctcctg atggacaagc ccct 814

<210> 3332
<211> 794
<212> DNA
<213> Homo sapiens

<400> 3332
gagagagaat gttaaaggat gaagtttcca aatgtgtatg tcgctgtgaa gatctggaga 60
aacaaaacag attacttcat gatcagatcg aaaaattaag tgacaaggtc gttgcctctg 120
tgaaggaagg tgtacaaggt ccactgaatg tatctctcag tgaagaagga aaatctcaag 180
aacaaatttt ggaaattctc agatttatac gacgagaaaa agaaattgct gaaactaggt 240
ttgaggtggc tcaggttgag agtctgcgtt atcgacaaag ggttgaactt ttagaaagag 300
agctgcagga actgcaagat agtctaaatg ctgaaaggga gaaagtccag gtaggtatac 360
taagctttaa gaaagcactt gttaaatcaa aagagaagca ctcatttata tctctaccat 420
ttaacgtaat gtaaaattta acttgaagta agcattcttc taaacttgta aattcattaa 480
gcatttgtta aacactaata tagtatagtg cttaaaagta aaggctctgt aaccaaactg 540
cctggtttca gattctagct tcataccatt agctgtggcc ttgggtacat tgnttaactt 600
ccctgctctt agtttcttca tctgtaatat ttggataata atgagggtta attgagtttg 660
tgcacatgaa gcatttagaa gcatgtctgg tatgtantgg gtgcttaata aattccagct 720
atcttaattt attatagnta tggattattc ctgtggatag ncattctagg ataaagggga 780
tttaaactgc ttcc 794

0083705950

<210> 3333
<211> 875
<212> DNA
<213> Homo sapiens

<400> 3333
atatatgctg taataattta agtaaaatta ccttcttttg tggaaatgta gaacagctgc 60
tcactgaaat ggatatttct tcatatcctt gaaaactgtt gagtcaccct tagtattctc 120
ttcttagata taataagttc taatttttcc ttacttggct cattttaac ccttttatct 180
ttttattatt ctgaaatctc tccaaggccc tcacatgtcc tcaagttgta gagtcttaaa 240
ttggacaaca ctttaattac agcctgaagg ttaggtagtt gttattccat ttatatatct 300
tagtatttga gtttactttt gaaatataaa gtcttagtga ctaatttagc atgtggttct 360
ctgccactcc cttcctgacc acccaccacc cctcattctt atcttctttt tttaccttgt 420
ttgtacaaaa accagttgtt gcctatttta tttcttctgt ccataccctg tctgtctatg 480
catttaaaaa cagagaactc attccttata aaacagacaa accagggata attgtcaaca 540
tcaaaaaaga attctttaaa tcactgcagg cttcctttaa ataggtgttt cctgtggtgg 600
ttttaagtgt ttttatatag gtcatcaact gcttgatata aagaaactaa agataaaggg 660
ttaagaggca gtgccagttg aagaacagtt agaaattggg ataaaacagt agtcttaagt 720
aaacagtaaa atcattcaga ttcacagaaa aaaaatatgn atatatatat ttttgagatg 780
gagcttacag ggtgtccagc ttggaatgca tggcgtgatc tagttactgc aacttggctc 840
cgggtcaagc ganctctgct aantccgaga gtgga 875

<210> 3334
<211> 747
<212> DNA
<213> Homo sapiens

<400> 3334
aaacttcatt gagcacctgg gtcgttttcc tgctcatatc ctggactgtc tttcagggat 60
ttactaccgg cttccgggac ttgagcaagt cttgaatacg caggatgttc aggatgttca 120
gaacgttcag aacattttag aaatgctgtt gcgactcctg gacacttacc gggacaagat 180
tcccgaggag gccttgtcac catcctacct gactgtgtgt ctgaaactgc atgaagccat 240
ctgcagcagc acaaagctac ttaagtttta cgagctgcca gccttatctg ccgagattgt 300
ctgcagaatg attagacttc tatctctggt ggattctgca ggacagagag atgaaactgg 360
aaataattca gtccaaacag tcttccaagg gacccttgct gctacgaaaa ggtggctccg 420
agaagttttt acaaagaaca tgctcacatc ttcaggtgcc tcattcacat acgtcaagga 480
aattgaggtc tggaggcggc tggtggaaat ccaattcccc gcggagcatg gctggaagga 540
gtcgttgctg ggagacatgg aatggaggct cacaaaggag gaacccctct tccagatcac 600
tggctactgc aatagttgct gggacaccaa aggcttanag gacagtgtgg ccaagacctt 660
ngagaaatgc atcattgaag cccgtgagct caacctggca ggtgaacaat cttttcttct 720
gggnaacgga ttcggcttac anctggg 747

<210> 3335
<211> 774
<212> DNA
<213> Homo sapiens

<400> 3335

0952946 "0952800

agtgggcggg cgcggcgcat tgctgctcgg cggcgccggc gccggggtcc gggcggccat 60
ggggcaacag gcggccaggg cgccaagggc caggtagcga cggctggcgg cggcgcggcg 120
gcggggcctg cgggctcggt ccggcatgta gacgcccccg caggcgcccg cggcagcgaa 180
cggcatcagt gtttttctga ccgaagttct catttcctga caatggaaat ggaacaagaa 240
aaaatgacca tgaataagga attgagtcca gacgcggctg cttactgctg ctcggcctgc 300
cacggcgatg agacctggag ttacaaccac cccatccggg gccgggccaa gtctcgcagc 360
ctgtctgcct cgcccgccct ggggagcacc aaggagttca ggaggacacg ctctcttcat 420
gggccatgcc cggtgaccac ttttggacca aaggcctgtg tgctgcagaa cccccagacc 480
atcatgcaca ttcaggaccc cgcgagccag cggctgacgt ggaacaagtc cccaaagagc 540
gtccttgtca tcaagaagat gagagatgcc agcctactgc agccgttcaa ggagctcttg 600
cacgcacctc atggaggaga acatgatcgt gtattgtgga aaagaaaagt gctngaagac 660
ccttgccatc ggcagccaat gaaaagcttt tgggggcaag tggaaagaaa gaaaaatttc 720
ttgtaccctt ttcnaaggaa agaattattg aatgnaccan ttttccccaa ttca 774

<210> 3336
<211> 669
<212> DNA
<213> Homo sapiens

<400> 3336
agagcggagc gaggaccgcg tccggcgcag tcttcaatga gcagcgcgga aactgcaccc 60
cagacccgag cctgctgcgc gccccctccc agagctcacc tggtgccagg taacaggcct 120
ggcctcgccc tgtggatgat gatggccttg cccccgtgag ctacaacctg gccttcagca 180
cccgcccacc tccaaccagc aggatgcggc tgtggaaggc ggtggtggtg actttggcct 240
tcatgagtgt ggacatctgc gtgaccacgg ccatctatgt cttcagccac ctggaccgca 300
gcctcctgga ggacatccgc cacttcaaca tctttgactc ggtgctggat ctctgggcag 360
cctgcctgta ccgcagctgc ctgctgctgg gagccaccat tggtgtggcc aagaacagtg 420
cgctggggcc ccggcggctg cgggcctcgt ggctggtcat caccctcgtg tgcctcttcg 480
tgggcatcta tgccatggtg aagctgctgc tcttctcaga ggtgcgcagg cccatccggg 540
acccctggtt ttgggccctg ttcgtgtgga cgtacatttc actcggcgca tncttnctgc 600
tctggtggct gctgtcaccg tgcgggcaag gcacccaagc cctggaccag gggcggncac 660
cgaggctta 669

<210> 3337
<211> 769
<212> DNA
<213> Homo sapiens

<400> 3337
attcttccac ccggcaccgg ctccgcaatg aacaacttca ggttcactga gctgagcgga 60
ttccactcgc tgtgccctcg gagcctgcct gaatctcccg cccagtctca aaccatgcag 120
ctgagtaact gcaagggcgc ctttgaggag tagcacgcag agagtgtcaa tgaagacctc 180
aaagtctgga gaaaaatgac ctttcatgga ataagaagta tacctccttc tacatgtttt 240
tgtcttactg acctctgata actggaacac atgactctgg gtctgtagaa agtcaactga 300
tcaaactcat cctcaccatg catcaactgt tcagactggt tttgggacaa aaagatcttt 360
cacgagctgg ggacctcttc tccttagatg actctgagat tgaagacagc cttacagaag 420
ctttggagca aattaagata attagctcat cttcagatta ccaaaccaat aacaatgacc 480
aggcagtagt tgaaatctgt atcacaagaa tcacaacagc catcagagag accgagtcca 540

0082705450

ttgaaaagca tgcaaaggcc cttgtggggc tctgggactc ctgcttggaa cataacctga 600
gacccttgg gaaagacgaa gacacttctc atgcaaaaat cgcatctgat atcatgagtt 660
gcattttaca gaattacaac cgacccccag tgatggcatt agccattccc attgcagtga 720
aaattcttca cagaggcaac aaggnactgt gcnggaatat gnctaacta 769

<210> 3338
<211> 677
<212> DNA
<213> Homo sapiens

<400> 3338
gagaacaacg gaggcagagg agctgaagac tccagtatgc aactgactac aaggaggtag 60
tcgtttgaaa agctttcttt ccttctctga actccttctt tccctcctct caggtcattg 120
ggtgaccccg ggccgggcgg agacaggtga atcccaagag aggaggaaga gggagggaca 180
gatgatggag ggagaaccgc gtttaggcaa tgaatgagcc tgctgcatcc gcaccacctg 240
ttccttccaa gggtgccacc ccgacctgcc agcagggttc ccacaccaac cgggccgcga 300
ctcctgccgg tgtcgcccac ttgcccgcca aaggccgggc ctcttctccc ccagatcggg 360
gagaatgaga accggcagtc tagaagccgg gaggtcgggg cctagtccgg aaccagggcc 420
tcaagcgtgg ggatggaatg aagaagcctg tggtccctgg cgcgcgggcc atagtaggaa 480
ccacagagag ggagcaaagc aatgcattcg gcctgacgag agctatgaag gcggggtccc 540
gggcgggagt ggctcaatgc ccgccgggcc gaggttaggg gtgacaggcc cggttaccgg 600
ctaaatcctc ccaccgnttg ccggacctta cacttaccaa gatccgcttg aaagcgcatt 660
cttcttgggc nggagnt 677

<210> 3339
<211> 717
<212> DNA
<213> Homo sapiens

<400> 3339
agctgtgaga cgacgagtgc gtgaagtgaa ggcgattgag aggggctgag ggaattgtcc 60
tctgtggaag ggactttctt ttggccctag gccccttcct gcccctgtcg tcagcagaga 120
gatggaaaac ttgatgacta gctccaccct accgcccctt tttgcagatg aagacggttc 180
caaggagagt aatgatctgg ctaccactgg gttaaatcac ccagaggttc catacagtag 240
tggcgccaca tcatccacca acaatccaga atttgtggag gatctctctc aaggtcagtt 300
gcttcagagt gagtcttcaa atgcagcaga aggcaatgaa cagaggcatg aagatgagca 360
acgaagtaaa cgaggaggtt ggtccaaagg aagaaagagg aagaaacctc ttcgagacag 420
caatgcaccc aaatcccccc ttacaggata tgttcggttc atgaatgagc gtcgagaaca 480
acttcgagca aagagaccag aagtcccatt tccagaaatc acaaggatgt taggcaatga 540
atggagtaaa ctgcctcctg aggaaaaaca gcgctacctt gatgaagcag acagagataa 600
ggagcgttac atgaaggaac tggaacagta tcagaaaaca gaggcctaca aggtcttcaa 660
tanggaaaac ccangaccgt cagaaaggca aaatntcata ggcaagatgc aaccccg 717

<210> 3340
<211> 908
<212> DNA
<213> Homo sapiens

0050209.0050209

<400> 3340
acacaacaat ttgataccag caaacgagct ctgtctacct ggggaccagt tccttacctt 60
ccgccaaaga caatgactag caacctagaa aaaagttcac aagaacaatt acttgatgca 120
gcacatcatc gacactggcc tggagtattg aaggtggtat caggatgcca catatcctta 180
tttcagattc cattaccaga agatgggatg caatttggag gatcaatgag cttacatgga 240
aatcatatga cactggcatg ttttcatggt ccaaattttc gttcaaaatc ttgggccctt 300
tttcatttag aagaaccaaa tattgctttt tggactgaag ctcagaaaat ctgggaagat 360
ggctccagtg atcattctac atatattgta caaacactag attttcacct gggtcataat 420
actatggtta ccaaaccatg tggtgctttg gaaagtccta tggcaacaat atccaagata 480
acaaggcgtc gccatgaaaa tccaccccat ggagtagcaa gtgtgaaaga atggttcaat 540
tatgttacag ctacaaggaa tgaagagcta aatctgcttc gtaatgttga tgctaacaac 600
actgagaata gcactactgt gaagaattct agtttgntga gtggattcag aggangttct 660
agctacaacc atgaaacaga gactatcttt gcattaccaa ggatgcagct tgactttaaa 720
tccattcatg ttcaagaacc acaggagcct tcattacagg atgccagcct gaagcccaaa 780
gtagaatgta atggtggtga cagagttcac tggccacatt tgngtgacta tggatgctga 840
gctcatcatg gttcttcatg aattaatatc agcttatctt aaagaaaaag aaaaagcntt 900
ttttcnct 908

<210> 3341
<211> 768
<212> DNA
<213> Homo sapiens

<400> 3341
cagtgcgcag gcgtgagcgg tcgggccccg acgcgcgcgg gtctcgtttg gagcgggagt 60
gagttcctga gcgagtggac ccggcagcgg gcgatagggg ggccaggtgc ctccacagtc 120
agccatggca gcgctgcgct acgcggggct ggacgacacg gacagtgagg acgagctgcc 180
tccgggctgg gaggagagaa ccaccaagga cggctgggtt tactacgcca atcacaccga 240
ggagaagact cagtgggaac atccaaaaac tggaaaaaga aaacgagtgg caggagattt 300
gccatacgga tgggaacaag aaactgatga gaacggacaa gtgtttttg ttgaccatat 360
aaataaaaga accacctact tggacccaag actggcgttt actgtggatg ataatccgac 420
caagccaacc acccggcaaa gatacgacgg cagcaccact gccatggaaa ttctccaggg 480
cccggatttc actggcaaag tggttgtggt cactggagct aattcaggaa tagggttcga 540
aaccgccaag tcttttgccc tccatggtgc acatgtgatc ttggcctgca ggaacatggc 600
aagggcgagt gaagcagtgt cacgcatttt agaagaatgg cataaagcca aggtagaagc 660
aatgaccctg gacctngctc tgnttccgta gcgtgcagca ttttgcttga agcctttcaa 720
ggcccaagaa ttgtgccttc tttnatggtg ccttgtgtgc caacgcaa 768

<210> 3342
<211> 810
<212> DNA
<213> Homo sapiens

<400> 3342
cgcgcggccc tgcccggccc accgagccct ggtgtggcag cggctcatgg cggccgtggg 60
gcccccgcag cagcaggtgc ggatggccca tcagcaggtc tgggcggcgc tcgaagtggc 120
gctccgggtg ccctgccttt acatcatcga cgccatcttc aactcctacc cggattccag 180
ccaaagccgg ttctgcatcg tgctccagat cttcctccgg ctctttggtg tatttgcatc 240

0960946.0720800

cagtattgtt ctgatcttgt cacaacgatc acttttcaag ttttacacgt acagctcagc 300
ctttctgtta gctgcaactt cagtgttggt gaattattat gcttctttgc acattgactt 360
ctatggtgcc tacaacacgt cagcttttgg aattgagctg cttcctcgaa aaggtccctc 420
gctgtggatg gcacttatcg ttctacagct aacatttgga attggatacg ttacactact 480
ccagattcat tccatctatt cacaattaat tattttggat ctcttggttc ctgtaatagg 540
cttaatcaca gagctaccat tacacatcag agagacttta ctgtttactt cttccttgat 600
tctcacatta aatacagtgt ttgtcctggc agtgaaactg aagtggtttt attattccac 660
acgatatgtt tatcttttgg tgangcacat gtatcgaatt tatggattac aagttattga 720
tggaggacac atggaagang attcgtttcc cagacatact acgaagtctt tttggctaac 780
aagaagttac aggttcangc tacaagnggt 810

<210> 3343
<211> 756
<212> DNA
<213> Homo sapiens

<400> 3343
tcttaaacaa ggagaagtgc cagaaagccc ggaagcaagg aaggaaagtg accaagcatg 60
tggcaaaatg gatactgtgg atattgcaaa caactctact ttgggaaaac ccaagaggaa 120
aagaagaaaa aagaaggggc atggctggag cagaacggga acgagaacgc agaaaaacaa 180
ccaacaaaat gataacagca aagccgatgg ccagctggtc tcgagtgaaa agaaggcgaa 240
catgaatctg aaagaccttt ccaagattag ggggagaaag agaggcaaac ctggaaccca 300
ctttactcag agtgacagag ctccacagaa aagagtccga tcaagagctt caagaaagca 360
caaagatgaa actgtggatt ttcaggctcc tttacttcca gtgacctgtg gtggggtgaa 420
gggaatttta cataaggaga aattggaaca aggaaccttg gcaaagtgta tacagactga 480
ggatggaaaa tggttcaccc ccatggaatt tgaaatcaaa ggaggctacg caagatcaaa 540
gaactggagg ctgagttgtg cgctgtggcg ggtggcccct acgacggctg atggaggaag 600
gatctctacc taatccttca agaatatatt acaggaacaa aaagagaata cttgaagtct 660
caaaacaata gctcaattga cccttgtatg agaaacttgg attaatgtna agtgttccgg 720
gaccggaagg gaacttntct ggtgcgaaac tttgnt 756

<210> 3344
<211> 741
<212> DNA
<213> Homo sapiens

<400> 3344
ctttcccgag ccggggccat ggcacctgca aggtgtttct cagcaagatt gaggaccgtg 60
tttcagggcg tggggcattg ggctttgtcc acatgggctg gcctgaagcc cagccggcta 120
ctgccacagc gggcttctcc caggctgctc tcggtcggcc gtgcggacct cgccaagcat 180
caggaactcc cggggaagaa gctgctctct gagaaaaagc tgaaaaggta ctttgtggac 240
tatcggagag tgcttgtctg tggaggaaac ggaggcgctg gggcaagctg cttccacagt 300
gagccccgca aggagtttgg aggccctgat ggaggggacg gaggcaacgg tggacacgtc 360
attctgagag ttgaccagca agtcaagtcc ctgtcgtcgg tcctgtcgcg gtaccagggt 420
ttcagtggag aagatggagg gagtaaaaac tgcttcgggc gcagtggcgc cgtcctctac 480
atccgggtcc ccgtgggcac gctggtgaag gagggaggca gagttgtggc cgacctgtct 540
tgcgtgggag atgagtacat tgccgcgctg ggcggggcag gagggaaagg caacccgctt 600
cttcctggcc aacaacaacc gtgcccctgt gacctgtacc cctggacaag ccaggacagc 660

0950804.0007800

agcgagttct tcacctggag ctcaagacgg tggcccacgc cngaatggtg ggattnccca 720
acgcccggga agtcctnact g 741

<210> 3345
<211> 718
<212> DNA
<213> Homo sapiens

<400> 3345
aaaaaaagtc tgcgcggcgc ggccaggccc ggccgaccgc gtctcggtct ccgcgtctgc 60
cagcctggct ggcagtccgt ctgtccatcc cgccgcgccg gggcagtcta ggcggagcgg 120
gggctcaggc ggcggcggcc tcgacgcgag tgagtgtcgt ggttggggtg ctggacccag 180
agtgcctacc ctcgcctgcc tgggcctcag tttccacatc tgcacaatgg gggtgaccat 240
ccctgccctg ctggctgcca ggagcggctg tgagtcttca ggcgtggatg cagcctgggg 300
gaagccatag ggcgctttca caggcctggc cttcaccatg gcgggaggga gaccgcatct 360
gaagaggagt ttctccatca tcccctgctt tgtcttcgtg gagtcggtgc tgctgggcat 420
tgtgatcctg cttgcttacc gcctggagtt cacggacacc ctccctgtgc acacccaggg 480
attcttctgc tatgacagta cctacgccaa gccctaccca gggcctgagg ctgccagccg 540
agtgcctnct gctcttgtct acgcactggt cactgccggg cccaccctna cgatcctgct 600
gggagagctg gcgcgtgcct ttttcctgac caccttcacc gtccagtcat cggggagagc 660
accatcgtgt ctggggcctg ctgccgcttn acccccccant gcngaagctg gtccgctt 718

<210> 3346
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3346
gaaccccaag tccagtttct ggaagctggt gcggcacctg gaccgcgtgg atgccgtgct 60
ggtgacccac cctggcgccg acagcctccc cggcctcaac agcctgctgc ggcgcaaact 120
ggcggagcgc tccgaggtgg ctgctggtgg gggctcctgg gacgacaggc tgcgcaggct 180
catctccccc aacctggggg tcgtgttctt caacgcctgc gaggccgcgt cgcggctggc 240
gcgcggcgag gatgaggcgg agctggcgct gagcctcctg gcgcagctgg gcatcacgcc 300
tctgccactc agccgcggcc ccgtgccagc caaacccacc gtgctcttcg agaagatggg 360
cgtgggccgg ctggacatgt atgtgctgca cccgccctcc gccggcgccg agcgcacgct 420
ggcctctgtg tgcgccctgc tggtgtggca ccccgccggc cccggcgaga aggtggtgcg 480
cgtgctgttc cccggttgca ccccgcccgc ctgcctcctg gacggcctgg tccgcctgca 540
gcacttgagg ttcctgcgag agcccgtggt gacgccccag gacctggagg ggccggggcg 600
agccgagagc aaagagagcg tgggctcccg ggacagctcg aagagagagg gctcctggca 660
cccaccctag cctggcagga gcgcctgggg tggccgcaag gagcagcacg gctgagccca 720
cgagatgaga agagcaagac cccggagtaa gaaaccaaca tgtccgacac gngagncgga 780
ctttggcact aaaaatcagg acagccnagg cag 813

<210> 3347
<211> 703
<212> DNA
<213> Homo sapiens

0950369 "0 2 0 0 8 0 0

<400> 3347
agagcgcggc gcgaccggac gctgcgggcg gggaagagga tggagactgt ggcgtccgct 60
gcaacggttg gggctgcgcg tgagaaggtg gcggtgtagg cacctgcgct cggggaaggc 120
tggcggcggc ggccgagcca tggcgggaga ccccccttctc tgggctccct gaagtctcgg 180
ggagccgtga cccatgggat cgttgagcag ccgggtgctg cgccagccaa gaccagccct 240
tgcccagcag gcgcagggtg ccagggcggg gggctcggcc cggaggccgg acactggaga 300
cgatgcggcg ggccacggat tctgttactg tgcgggcagc cacaagcgca agcggagcag 360
cgggtccttc tgctactgtc accctgactc ggagacggac gaggatgagg aggaggggga 420
cgagcagcag cggctcctca acacccctcg aaggaaaaaa ttaaagagta catctaaata 480
tatttatcaa acattatttt tgaatggtga aaacagtgac attaagattt gtgctctagg 540
agaagaatgg agcttacaca aaatatattt atgtcaatct ggctactttt ctagtatgtt 600
cagtggttct tggaaagaat ccancatgaa tattattgaa ctggagattt ctgaccagaa 660
catggatgta gaaacacttn angttgcatt tggttactgt atc 703

<210> 3348
<211> 755
<212> DNA
<213> Homo sapiens

<400> 3348
accccacccg cttccggccg cggctcggtt ctcccgcctc cgcctccgcc gcggctcgtg 60
gttgtcccgc catggcactg tcgcgggggc tgccccggga gctggctgag gcggtggccg 120
ggggccgggt gctggtggtg ggggcgggcg gcatcggctg cgagctcctc aagaatctcg 180
tgctcaccgg tttctcccac atcgacctga ttgatctgga tactattgat gtaagcaacc 240
tcaacagaca gtttttgttt caaaagaaac atgttggaag atcaaaggca caggttgcca 300
aggaaagtgt actgcagttt tacccgaaag ctaatatcgt tgcctaccat gacagcatca 360
tcaaccctga ctataatgtg gaatttttcc gacagtttat actggttatg aatgctttag 420
ataacagagc tgcccgaaac catgttaata gagtgtgcct ggcagctgat gttcctctta 480
ttgaaagtgg aacagctggg tatcttggac aagtaactac tatcaaaaag ggtgtgaccg 540
agtgttatga gtgtcatcct aagccgaccc agagaacctt tcctggctgt acaattcgta 600
acacaccttc agaacctata cattgcatcg tttgggcaaa gtacttgttc aaccagttgt 660
ttggggaaga agatgctgat caagaagtat cttctgacag agctgaccct gaacttgcct 720
gggaaccaac agaaccnaan ccagaactng agcat 755

<210> 3349
<211> 746
<212> DNA
<213> Homo sapiens

<400> 3349
attctttgaa atctagtcac attttagtga tctttgtgat cacaacagtg atgggagttt 60
ttttttttt ttttttttt ttgaaacgga gtttcgctct tgttgcccag gctgcagtgg 120
caatggtgcg atcttggctc actgcaacct tcgcctcctg ggttcaagcg attctcctgt 180
ctcggcctcc cgagtagctg ggattacagg catgtgccac catgccgggc tgatttttgt 240
attttagta gagacggggt ttcaccatgt tggtcaggct ggtctccaac tcctgacttt 300
aggtgatccg cccgcctntg cctctcaaag tgctgggatt acaggcgtga gccaccgcgc 360
ccggccagtt acgggaattt ttaatggagt tttacccttt ttagctcttt tccacatcac 420
tacaggtcat cacatatact ttttacctta ctttttagcg tctcaaaaaa tagggagagc 480

09529800.050203

tctccctgaa cagtgcagag cccgtatccc tgatttccta ggctatttga tttctacatc 540
caggaacgta gggtcatatc cactgntctt gctttttctt cctaagaaag gagagaattc 600
ctcgcacata tatatcgttg gcttggcctt ccaaagcaaa gcaaaactaa actctggtga 660
ttttgcctgg gaatnctcgg ggcccctagt attggnaact tctttgaact gtgangagct 720
gctaatttgc aggtgacatg tgaaaa 746

<210> 3350
<211> 741
<212> DNA
<213> Homo sapiens

<400> 3350
atattttcag catcacattt taagaataat atgtgaaata caatatgttt tattagtcac 60
ctttggaaaa tacagtcttc cacaatctgg aaccacctct ttggttcaaa atgtgccatt 120
cttctgtaat gtgtgtgata aacttaaaaa aaatctgtat cctttatcct aatcatctta 180
cttggacatc atcctgaaac aaatgacaaa aacattcaca gttttatata caaagttatt 240
ggtaacaatg ttcttaatag aattcaatta gaaaacatat aaaggcaaag gtagagttat 300
ttgatgttat ggtttgaaag gattcccaca ccctcatgaa tattctttat tatgccagag 360
ggaacctaat tcccctgcct ttgagtgtgg gatggcattg atgagttact tgtaccacat 420
ataataggca ggaagtgatg gcacgtgaca ttggaaacaa cttcgtaaaa gtcaccgaga 480
ctcattcctt gctttctcct atgtctccca cctggcagga agacatttgc catcatgtaa 540
ggagagttct gcttagtgag gcattgacat ctccagccag cagtgccgtg agggangtgg 600
gcagctcaag cctcagtcaa accctgagat gaccatggtc ccactcaaca tctcagctgt 660
gaccatgtgg gagaattcaa gcctgagcca atcagnctaa ctgcttccan agtcctgact 720
ctnagaacca tgccagatta t 741

<210> 3351
<211> 708
<212> DNA
<213> Homo sapiens

<400> 3351
actttctaaa tcacagtgcc tgtggccgga tgacatggag ggagctccct gaccatagga 60
ggggttagag acacgacgcc cctctaccct cactcacagc agaggtggaa agctggagac 120
tgacccagtc gcagagcgca ccccactggg gacccccagc tcagccatgc tggcctgtct 180
gcagaggacc cagaacgccc cgggccaaca cctggcctgc ccgagcaaga gcctggagct 240
gcgcaagtgc gaggcggtgg ccagcgccat gcattcctcc cgctacccga gcccagcaga 300
actggacgcc tatgccgaga aggtggccaa cagcccgctg tccatcaaga tcttccccac 360
caacatccgt gtgccccagc acaagcacct cagccgcaca gtcaatggct atgacaccgg 420
tggccagcgc tacagccccc acccacagca caccgctggc taccagggcc ttctggccat 480
tgtcaaggcc gcggtttcct cctccagcac ggncgcacca gctgggcccg ccaaaagtgt 540
gctcaagagc gccgagggca agcggaccaa gctgtcaccg gccgccgtgc aagtgggcat 600
tgcgccctac ccagtgccca gcactctggg tcccttggcc taccccaagc cacctgangc 660
gcctggttca ccacccgggc tggccgcann cggcaattgg cggcttcg 708

<210> 3352
<211> 832
<212> DNA

0960126.0270800

<213> Homo sapiens

<400> 3352
ctgccagccg cgctgctgct gctcctcctg ctgtgggacc gctgaccgcg cggctgctcc 60
gctctccccg ctccaagcgc cgatctgggc acccgccacc agcatggacg ctcgccgcgt 120
gccgcagaaa gatctcagag taaagaagaa cttaaagaaa ttcagatatg tgaagttgat 180
ttccatggag acctcgtcat cctctgatga cagttgtgac agctttgctt ctgataattt 240
tgcaaacacg aaacctaaat tcaggtcaga tatcagtgaa gaactggcaa gtgtttttta 300
tgaggactct gataatgaat ctttctgcgg cttttcagaa agtgaggtgc aagatgtatt 360
agaccattgt ggatttttac agaaaccaag gccagatgtc actaacgaac tggccggtat 420
ttttcatgcc gactctgacg atgaatcatt ttgcggtttc tcagagagtg agatacaaga 480
tggaatgagg ctgcagtcag ttcgggaagg ctgtaggacc cgcagccagt gcaggcactc 540
tggacctctc agggtggcga tgaagtttcc agcgcggagt accaggggag caaccaacaa 600
aaaagcagag tcccgccagc cctcagagaa ttctgtgact gattccaact tcgattcaga 660
agatgaaagt ggaatgaatt ttttggagaa aagggcttta aatntaaagc aaaacaaagc 720
aatgcttgca aaacttatgt ctgaattaga aagctttcct ggcttcgttc cgtggnaaaa 780
aattcccttc caagcttccg actnacaaat caaagganac cgcgaaaggc gt 832

<210> 3353
<211> 831
<212> DNA
<213> Homo sapiens

<400> 3353
tcacttaccc attccataat tagtttcctt gtatgtaaaa tcaggggata ataatgtcaa 60
caaatagtta tctgcttaac attgttttat taaaaagcag gtatgttcgc atgaataaaa 120
caaccttccc ttttaaactc cttgtttggc atcctcaaac ctctcagctt gtttcagatg 180
ggaacttcaa cccaatatca ggtcacagtg cccaggttga tctgtactcc gtgtgggctc 240
tgaaagcatc acccctgcag aggctggaag ccctagtctt cccaggggat gccttgtctg 300
caggtactgc ccccagcctg cagtgaactc tggacctttt attgatcctg tgtgcatctg 360
gctccactct gataccagga agaatggggg ttgctggccc tggacttggt cctggacaaa 420
taaatgtgtt tgtcaaagcc ctttcctgac atcggttgtc tctagcccag gtggcactgt 480
ggagggtaat tagttctctt tattagaggg aacatcagga agctctgcgc tgctcaccgt 540
ggacacatgt aaaaagattt tgttaatgca gctgttactt gccttttcat tatgctaatg 600
ggcagcctgt aagaaatgta acttcctgtc actggcacca agcaacacct atcagacaaa 660
gcattggttc ttctcactgg tgataagtgt gacttgtggg gaccagcgat aggatgctca 720
tttttatccg ctaagtgcac aacgcttgta aaaaaccagc agtggncttg ttccacttga 780
cgtgacacta ggttaactgt tacattgacc actgntgcac ctttagactg n 831

<210> 3354
<211> 578
<212> DNA
<213> Homo sapiens

<400> 3354
agcgcgggct tgaccggcgt cggcccgccg cctccgctgc cgnttcgccc caatccggtc 60
cctctggccc ggcctgaccc ggtctggctt gttcgggctc agcggccgcg aggccgcagc 120
tcccgatgga aatcatatta tgtagaatac ttgggtgaca tctgcctgag agatctccaa 180

09529459.0972808

gaattacaga ttgagtctcg ctctgttgcc caggctggag tgcagtggtg caatctctgc 240
tcactgcaac ctccgtctcc cgagttcaag cagttctcct gcctcagcct cctgagtagc 300
tgggattaca gaagacaaaa atactaatgc atttgagaaa gcggtagttt tgggggggagg 360
gggaaaaagc aactgctttn ctgatctgca acttggctgg atgctaanat gtcagtggac 420
atgaatagcc aggggtctga cagcaatgaa gaggactatg acccaaattg tgaggaagag 480
gaagaagaag angangacga ccctggggac atanaggact attacgtggg agtagccagc 540
gatgtggagc agcagggggc tgatgccttt gatcccga 578

<210> 3355
<211> 760
<212> DNA
<213> Homo sapiens

<400> 3355
acaccatgtc aagtctgcac aagagccgaa ttgcagattt ccaggatgtc ctgaaggagc 60
cctcaattgc attggaaaag ctgcgggaac tcagctttag tggcatcccc tgtgagggcg 120
gactgcggtg cctctgctgg aagattctct tgaactacct tcccttggag agagcctcat 180
ggacctccat cctggccaag cagagggagc tgtatgccca gttcctgagg gaaatgatca 240
tccagcctgg cattgccaag gccaacatgg gtgtgtccag ggaggatgtg acttttgagg 300
accatccact caaccccaac cctgacagcc ggtggaacac gtacttcaag gacaacgagg 360
tgctgctgca gatcgacaaa gatgtccgga ggttgtgccc agacatttcc ttcttccaga 420
gggccactga ctacccttgc ctcctcatcc tggacccccа gaatgagttt gaaaccctc 480
gtaagagagt ggaacagaca acactgaaat ctcagacggt ggcccggaac cggagtgggg 540
tcacaaatca agagcagaac atcaagcctc agttctttgc cttccgctgg ctgacactgc 600
tgctgtccca ggagttcttg ctgcctgacg tcacccgcat ctgggactcc tcttcgcgat 660
gacaaccgct ttgacttcct cctcctcgtc tgctgcgcca tgctcatgct gatccgggag 720
canttgcttg gaaggggact ttactgngaa tatgcggntg 760

<210> 3356
<211> 824
<212> DNA
<213> Homo sapiens

<400> 3356
aagacgctag cgctgcgatg gcggaggccg tggagcgcac tgacgagctg gtccgggagt 60
acctgctctt ccgcgggttc acgcacacac tgcggcagct ggacgccgag atcaaggcgg 120
acaaggagaa ggggttccgg gtggataaga ttgtggacca gctgcagcag ttaatgcagg 180
tgtatgactt ggctgccctt cgggattatt ggagctactt ggagcgtcgg ctcttcagcc 240
gcttggagga tatatacaga cccacaatcc acaagctgaa aaccagcctg tttcgatttt 300
atcttgtcta cacaatccag acaaacagaa atgacaaggc tcaggagttc tttgcaaagc 360
aggccacgga actccagaac caggctgagt ggaaggattg gtttgtcctg cccttcctgc 420
catccccgga caccaacccc acctttgcta cctacttttc tcgacagtgg gctgacacct 480
tcattgtgtc cctgcacaac ttcctgagcg tcctgtttca gtgcatgcca gtccctgtga 540
tcctgaactt tgatgcggag tgtcagagga ctaaccaggt tcaagaagaa aatgaagttc 600
tgcgtcagaa gctttttgca ttgcaagctg aaatccaccg actgaagaaa gaggagcaac 660
agccagaaga ggaagaggcc ttggtccaac acaaattggc tncttatgtc ttcaacatgg 720
accgcctggg ggactcggaa cttgncatgg tgtgcaaccc aaggaatgcc ttcctttttc 780
cagtcacctt gtgtgggctt tctgncctcg ctggtggctt anaa 824

0956204695.0220800

0 0 0 2 0 3 8 0 - 0 2 0 5 4 6 0 0

<210> 3357
<211> 838
<212> DNA
<213> Homo sapiens

<400> 3357
gcggcgcgag cggtcggcgg cggcggaggc agtgtctccc ggtcgcgcgt ggaggtcggt 60
cgctcagagc tgctgggcgc agtttctccg cctgctgctt cggcgcggct gtatcggcga 120
gcgagcgagt tcccgcgagt tctcggtggc gctccccctt cctttcagtc tccacggact 180
ggcccctcgt ccttctactt gaccgctccc gtcttccgcc gccttctggc gctttccgtt 240
gggccgattc ccgcccgctt cctcctgctt cccatcgaag ctctagaaat gaatgtttcc 300
atctcttcag agatgaacca gattatgatg catcattatc acagaagaaa ttcgtgtcta 360
tagcttttaa ggacttgatt acatcatttt caagcctgat agttttggaa tcaccattag 420
agcttaagac acacctgcct tcatttcaac cacctgtctt cataccctga cgaagtgcac 480
cttttaacac tcctttgtcc ttggattact taagagttcc cagaaataca tttgccacca 540
acagagtagc caaatttata aggaaaaatg attcccaatg gatatttgat gtttgaggat 600
gaaaatttta ttgagtcttc tgttgccaaa ttaaatgccc tgaggaaaag tggccagttc 660
tgtgatgttc gacttcangt ctgtggccat gaaatggtag cacacagagc agtgctagct 720
tgctgcagtc cctatttatt tgnaatcttt aatagtgata gtgatcctca tggaattcta 780
cgttaaattt gatgactcaa tncagaactg tgaatcttgt gaatatgcct acactgnt 838

<210> 3358
<211> 812
<212> DNA
<213> Homo sapiens

<400> 3358
acatggcggc gggaagggag tgagccgccc cgcgcccccg ccgcgccctc agatggagaa 60
attagcatac aaagaaactg acttgtcaga agtcagagca aggtattggt ggatccaggg 120
ataaatccca aacttcttaa cccctagacc ggtttttagt ccattgacta tgcagcctaa 180
tgtgatagac tggagtgatg ttagaaaaca caaatatggt cacctatcag agtctgcatc 240
ccaatatcaa gaagctgctg acatcctgga tctaggtcat tttacctggg acaaatacct 300
aaaagaaaca tgttcagtcc cagcgcctgt ccattgcttc aagcagtcct acacacctcc 360
aagcaacgag ttcaagatca gtatgaaatt ggaagcacag gaccccagga acaccacatc 420
cacctgtatt gccacagtag ttggactgac aggtgcccgc cttcgcctgc gccttgatgg 480
gagcgacaac aaaaatgact tctggcggct ggttgactca gctgaaatcc agcctattgg 540
gaactgtgaa aagaatgggg gtatgctaca gccacctctt ggatttcggc tgaatgcgtc 600
ttcttggccc atgttccttt tgaagacgct aaatggagca gagatggctc ccatcaggat 660
tttccacaag gagccaccat cgccttccca caacttcttc aaaatgggaa tgaagctaga 720
agctgtggac aggaagaacc ctcatttcat ttgcccagcc ctattgggga ngttcgggct 780
tanaagtgct tgncacttct gatgggtggc aa 812

<210> 3359
<211> 878
<212> DNA
<213> Homo sapiens

<400> 3359
aaagatatgc tagttttgat tacgaagatg caggctacca gactgcagaa cttgtaaaaa 60
tggatattct actgaatgga aatactgtag aggagctagt aactgttgta cacaatgtga 120
aagcctatag gaaaaacgtt ttggcaaaat gttatggtgg tgatattacc cgaaaaatga 180
agcttttgaa gagacaagca gaagggaaaa aaaagctgag gaaaattggc aacgttgaag 240
ttccaaaaga tgcttttata aaagttctga aaacacaatc ttctaaataa ttggtgggaa 300
aacaaagaat tttcattgca atttgtaata tgctgacaac agaaagaaaa ttataaaatt 360
tgcttgttac tttcagggta ttcaggttca aataacctac tagtctttcg ttgaaaggga 420
gtagttagtg ggtaggcaag agcttagatt ttgaagccat gttgcctgtt ctcaaatatc 480
tgttccaacc actcactagt aaggtgaccg tggccagatt aacctttgtt tcctcttcag 540
taaaatcgag attatactac tacctacata agttgttgtt gtgaagatta aatgaggtaa 600
tacgttaaat attcagaggt gcaagacaca tagtaagcac tcaattgtaa ctacagttaa 660
gtccttaaat gccatcgaaa ggtcttagaa actgacttta agcaaaatga cacgtagcac 720
aatggtcttg aatgatgtca tttccttnaa gtggttgnaa catcgatgaa ggaaaaaaaa 780
attgggttat gccgtcattt cattttattt ntaattattt ttttggagac cagaatcttg 840
cccctggtcg ncccaagnct tggaaatgcc aatggggc 878

<210> 3360
<211> 797
<212> DNA
<213> Homo sapiens

<400> 3360
acggaagggg cgtgccggac cgaagtgcgc agactcggag gcatacttcc tttggtgacc 60
attcttcagt gcatgaagac agacagcatc cagaaccgaa cggcccgtgc cctggggaac 120
ttagccatgg aacctgagag ctgtggggac atccactgtg ctggtgctgt tcccctgctt 180
gtggagagcc tgacagcctg ccaggactcg cagtgcctac agagcgtggt gcgtgccctc 240
cgtaacctgg cagactcacc ccagcaccgc ctggccttgg cacagcaggg agcagtgcgt 300
ccgctggccg agctcctggc cactgcccca gatgctgcac tgaccttagc cctcgtccgt 360
gccctcctgg aactcagccg aggctgctcc cgggcctgtg ctgagcagct aagtctgggt 420
gggggattgg gcccactcgt cagcctggct tcccacccca agcgggcagt acgcgaggga 480
accattctga tcctcgccaa cctgtgtgcc cagggcctga ttcggcctgc actgggcaat 540
gctggtggcg tggaggtgct ggtagatgag ctccggcagc gccgggatcc taatggagct 600
agcccaacct nccagcagcc cctggtgcgg gctgtgtgcc tnctatgtcg tgaggccatn 660
aaccgggccc gactgcggga tgctggtggc ttggatctac tgatgggcct gctgcgggac 720
ccttgtgcaa acgcatggga cccttgtatt ggggcttgnc cttgtggggn ttctgnatga 780
aacttggggg ccctggg 797

<210> 3361
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3361
cagcttgtct tctctgtttg gctatcattg ttggctagtc agcaaaaata aatctacatt 60
agaggcattc agaagtccag tatttcgaca tggaacagat aagaatggat tcagcttggg 120
tttcagtaaa aacatgcgac aagtttttgg tgatgagaag aagtactggt tgctacccat 180
tttttcaagt ctaggtgatg gctgctcctt tccaacttgc cttgttaacc aggatcctga 240

09529800 - 09529800

acaagcatct actcctgcag ggctgaattc cacagctaaa aatctcgaaa accatcagtt 300
tcctgcaaag ccattgagag agtcccagag ccaccttctt actgattctc agtcttggac 360
ggagagcagc ataaacccag gaaaatgcaa agctggtatg agcaatcctg cattaaccat 420
ggaaaatgag acttaactct tcaagcaaga taaattcata ctttataaaa gtatcaatgc 480
tgtagatgga tggaagaggc ttcccacagg aaggtgccac cagtcagttg tgcctatgtc 540
cctttggctg gaaatgcaga atatgaattg attagttctc tccaagccat tgcttaaaat 600
ataacatgtt ttggatccaa tacacacatt gntacaacta acacaaattc ctattaaata 660
ttaaaagtag ttctggttta ttaatcaacg gggaaaacat cttcttcaaa aaacttggaa 720
taaatcaagg accagttttt acccaaatat atgggtagca cagtttatca catngaaact 780
ncattaatca tctggatttt ccgaatctgn aaa 813

<210> 3362
<211> 876
<212> DNA
<213> Homo sapiens

<400> 3362
gctcgccgcc cgcccgcccg acggagacgc agtcccagct atctgacttc atgtgaaaga 60
tggctaatgc agaagtgagt gtcccagtgg gggatgtggt tgtggtacct actgaaggaa 120
atgaagggga gaatcctgaa gacactaaaa cccaagtgat tttgcagtta cagcctgtgc 180
aacaagggat ttatgaagct gggtcggaga acaacacggc agttgtagca gtagaaactc 240
acacgataca caaaattgaa gaagggattg atacaggcac tatagaagca aatgaggata 300
tggaaattgc ttaccccata acttgtgggg agagcaaagc catcctcctc tggaagaagt 360
ttgtatgtcc aggaataaac gtgaagtgtg tcaagttcaa tgatcagttg atcagcccca 420
agcactttgt tcatctggct ggcaagtcca ctctgaagga ctggaagaga gctattcgtc 480
tgggtgggat catgctcagg aaaatgatgg actccggaca gattgatttt taccaacatg 540
acaaagtttg ctccaatacc tgcagaagca ccaaatttga tcttctgatc agcagtgcaa 600
gagctccagt gccaggacag cagacaagtg tggtgcagac acccacttcg gctgatggta 660
gcatcacgca gattgccatc tcagaagaga gcatggaaga ggcagggctg gaatggaact 720
cagctctnac cgctgctgtc accatggcca cggaggaagg tgtnaaagaa agactcagag 780
gaaattcaga ggacactttg atgntctgga aaggatactg atgtagggct gatggaagag 840
gttgctgcaa tttcngaagg aattgaggac tnctca 876

<210> 3363
<211> 906
<212> DNA
<213> Homo sapiens

<400> 3363
attatacaga tacagacctg aagaagtaga tattgatgcc aagttaagcc gattatgtga 60
acaagataaa gtggtgcatg ctctggaaga gaaacttcag caactccaca aggagaaata 120
cacgcttgag caagctttgc tatcagccag ccaagagata gaaatgcatg cagataaccc 180
agcagccatt cagacagtgg tgttacaaag ggatgattta caaaatggac tgcttagtac 240
gtgtcgagaa ctttctcgag ccactgccga attggaacga gcatggagag aatatgataa 300
gttagaatac gatgtaactg ttaccaggaa ccagacgcaa gagcagctgg atcaccttgg 360
tgaagttcag acggaatcag caggaattca gcgtgcacag attcagaaag aactttggcg 420
aattcaggat gtcatggaag ggctgagcaa acataagcag caaagaggta ctacagaaat 480
aggtatgata ggatcaaagc ctttctcaac agttaagtac aaaaatgagg gtccagatta 540

0952946.0702800

tagactctac aagagtgaac cagagttaac aacagtggca gaagttgatg aatctaatgg 600
agaagaaaaa tcagaacctg tttcagagat agaaacttca gttgttaaag gttcccactt 660
tcctgttgga gtagtccctt caagagcaaa atcaccaaca cccgaatctt cgacaatagc 720
ttcctatgta accttgagga aaactaagaa gatgatggat ctaagaacgg aaagacccag 780
aagtgcagtg gaacagctct gtttggctga aagtactcga cccaaggatg actgtggaag 840
aaccaatggg aaggaattgg aagacnttan caagcgtgcc tganggagaa gaaaaaaggg 900
ttaatt 906

<210> 3364
<211> 729
<212> DNA
<213> Homo sapiens

<400> 3364
aaaaaatgtt tgttgctggc tgaatggcaa tagatgtcta aggtggattc agtgtctggc 60
acactgagac acctccaaga aggagattga tgcatcaggt tcagtttaac ctggaatatc 120
tgactacccc tgaatccacc cagaaagggg gcccaacacc cttgtccatt tatgggtatt 180
ttttttcgaa gttattaagc atattccttt tccacgaacc tcttctgtac tttgattgta 240
ataggttggc tcttacaccc attccaaatg cagtttattt ttagacccga ttgcaaatag 300
tgatgtagtt ttaaccagta tggattagtt cagggatgaa ctgctccctc cagccttact 360
ggctctgatc cacagggttt tgttttgttt tgttttgttt tttgnttaag tcgagatata 420
aaaactgaac acgataacac ttactcttaa atcaagcatc aacactttat ccctgttaga 480
attctttgca tttntgtgtt tgtaacagaa acgccttaan acactatggt tngggaatat 540
aggaaactat gtgtgtccca aggaaatccc tgtaaattta actcacctac aaaaggcttt 600
ttccccgcct ttggttgtta accggcattc ctgaaagcca catgtgttta ttcattgggc 660
ttgatcttat cagcaaatag gatttctggg tttnatgact ttttgtctna ttttatntat 720
gcctacatt 729

<210> 3365
<211> 841
<212> DNA
<213> Homo sapiens

<400> 3365
ctctttaagg tgcccgaggc tcgcgggcgc tgcgctgagg ggacggcggg aggcgcggcc 60
tggcctcgca ctcaaagccg ccgcagcgcg ccccgggctc ggccgacccg gcggggatct 120
aggggtgggc gacttcgcgg gaccgtggcg catgtttcct gggagttact gatcatcttc 180
tttgaagaaa catgaagtta cactatgttg ctgtgcttac tctagccatc ctgatgttcc 240
tgacatggct tccagaatca ctgagctgta acaaagcact ctgtgctagt gatgtgagca 300
aatgcctcat tcaggagctc tgccagtgcc ggccgggaga aggcaattgc tcctgctgta 360
aggagtgcat gctgtgtctt ggggcccttt gggacgagtg ctgtgactgt gttgattgac 420
cctcctttca tttctgtcat gccacttgac aatgaaggaa ctgtatcagt tgacctatag 480
aatagcccac attccggatt tgactgcttc ctgtggaagt cctaccatac tgactgttct 540
gtcataaaca attttcatag gattatgtta aggtatgtgt aatcctcgaa attatagtga 600
cacaccttca acttcaaaga gcacagtgga ggagctgcat gaaccgatcc cttctctctt 660
ccgggcactc acagaaggag atactcagtt gaattggaac atcgtttctt tcctgttgca 720
gaagactttc acatcatgag aatctggttt cattttaga aactgtgaac caagncacac 780
caccagaatg tgtctgtccc anncaataat ggttcacgcg ccttatttcc agtggaccaa 840

0952948.0970800

g 841

<210> 3366
<211> 867
<212> DNA
<213> Homo sapiens

<400> 3366
gttctccgcc cccgccgccg ccattacgga gctcccagtg gttgattctt caccacactg 60
aaaccattag gaaaaatcct tgtggttaac agcagaggct tcagagtgta acctgtactc 120
gggcctagaa attatttaaa atggcgactg atacgtctca aggtgaactc gtccatccta 180
aggcactccc acttatagta ggagctcagc tgatccacgc ggacaagtta ggtgagaagg 240
tagaagatag caccatgccg attcgtcgaa ctgtgaattc tacccgggaa actcctccca 300
aaagcaagct tgctgaaggg gaggaagaaa agccagaacc agacataagt tcagaggaat 360
ctgtctccac tgtagaagaa caagagaatg aaactccacc tgctacttcg agtgaggcag 420
agcagccaaa gggggaacct gagaatgaag agaaggaaga aaataagtct tctgaggaaa 480
ccaaaaagga tgagaaagat cagtctaaag aaaaggagaa gaaagtgaaa aaaacaattc 540
cttcctgggc tacccttttct gccagccagc tagccagggc ccagaaacaa acaccgatgg 600
cttcttcccc acgtcccaag atggatgcaa tcttaactga ggccattaag gcatgcttcc 660
agaagagtgg tgcatcagtg gttgctattc gaaaatacat catccataag tatccttctc 720
tggagctgga gaagaagggg ntatctcctt aaacaagccc ttgaaagaga attaaattga 780
ggagtcatca aacaggttaa aggaaaaagg ngctttctgg aagttttggt gggggttcaa 840
aaatcaggaa aaacccctna gaaatnc 867

<210> 3367
<211> 846
<212> DNA
<213> Homo sapiens

<400> 3367
agcaggtttc gaatgctctt tacttccttt gtggagcaaa agaaaaaagc aggagtattt 60
gaacaaatca ctaagactca tggaacaatt attggcatta cttcagggat tgtcttggtc 120
cttctcatta tttctatttt agtacaagtg aaacagcctc gaaaaaaggt catggcttgc 180
aaaaccgctt ttaataaaac cgggttccaa gaagtgtttg atcctcctca ttatgaactg 240
ttttcactaa gggacaaaga gatttctgca gacctggcag acttgtcgga agaattggac 300
aactaccaga ggatgcggcg ctcctccacc gcctcccgct gcatccacga ccaccactgt 360
gggtcgcagg cctccagcgt caaacaaagc aggaccaacc tcagttccat ggagcttcct 420
ctccgaaatg actttgcaca accacagcca atgaaaacat ttaatagcac cttcaagaaa 480
agtagttaca ctttcaaaca gggacatgag tgccctgagc aggccctgga agaccgagta 540
atggaggaga ttccctgtga aatttatgtc agggggcgag aagattctgc acaagcatcc 600
atatccattg acttctaatc ttctgctaat ggtgatgtga attcttaggg tgtgtacgta 660
cgcagcctcc agggcaccat actgtttcca gcagccaacc cttttctcca tcacaactac 720
gaagaccttg atttaccggt aacctattgn atggtgatgt tttattctct tangcagtct 780
atatatgtta aaccaatcaa ggaacttact ctattcagng gaaacaatat catctctatt 840
gcttgg 846

<210> 3368
<211> 861

0050350 - 0050350

<212> DNA
<213> Homo sapiens

<400> 3368
gcggggcctc taccggcccg atggagcgcg cgggcgctac tagccgcggg ggccaagccc 60
ctggcttctt actgcggctt catactgagg gccgagccga ggcggcgcgg gtgcaggagc 120
aggacttacg gcagtggggg ctgacaggga ttcacctacg ctcttaccag ctggagggag 180
taaactggct cgcccagcgc ttccattgtc agaatggctg tatcctggga gatgagatgg 240
gcctggggaa gacctgccag gaagattaaa tggtgaaggg ccatttctga ttctttgtcc 300
cttgtctgtt ttgagcaact ggaaagaaga aatgcagaga tttgctccag gtctttcctg 360
tgtaacatat gcaggcgaca aggaggaaag agcctgcctt cagcaagacc tgaaacagga 420
gtcacgtttt catgtgctac tgactaccta tgagatttgc ttgaaagatg catcatttct 480
aaaatcattc ccttggagtg ttcttgttgt ggatgaagct cacaggttga aaaaccaaag 540
ctccctgctg cataagacct tgtcagagtt ctcagtagtc ttcagtctcc tgttgaccgg 600
aactcccatc cagaacagcc tccaagagct ctactccctc ctcagttttg tggagcctga 660
tctcttttcc aaggaagagg tgggagattt tattcaacgc taccaggata ttgagaaaga 720
atctgagtca gcaagtgaac tgcacaaact cttgcagcca tttcttgctt gaagccaatt 780
gaaaagctga ngtagcttcc agaactttcc caagaagacc agaaatngtg gatataccat 840
tggcattgtc aaccanttgc a 861

<210> 3369
<211> 854
<212> DNA
<213> Homo sapiens

<400> 3369
cattcaccaa caggatattt tttgccatgg tggattttga tgaaggctct gatgtatttc 60
agatgctaaa catgaattca gctccaactt tcatcaactt tcctgcaaaa gggaaaccca 120
aacggggtga tacatatgag ttacaggtgc ggggtttttc agctgagcag attgcccggt 180
ggatcgccga cagaactgat gtcaatatta gagtgattag acccccaaat tatgctggtc 240
cccttatgtt gggattgctt ttggctgtta ttggtggact tgtgtatctt cgaagaagta 300
atatggaatt tctctttaat aaaactggat gggcttttgc agctttgtgt tttgtgcttg 360
ctatgacatc tggtcaaatg tggaaccata taagaggacc accatatgcc cataagaatc 420
cccacacggg acatgtgaat tatatccatg gaagcagtca agcccagttt gtagctgaaa 480
cacacattgt tcttctgttt aatggtggag ttaccttagg aatggtgctt ttatgtgaag 540
ctgctacctc tgacatggat attggaaagc gaaagataat gtgtgtggct ggtattggac 600
ttgttgtatt attcttcagt tggatgctct ctatttttag atctaaatat catggctacc 660
catacagctt tctgatgagt taaaaaggtc ccagagatat atagacactg gagtactgga 720
aattgaaaaa cgaaaatcgt gtgtgtttga aaagaagaat gcacttgnat atttgnatta 780
cctctttttt caagtgattt aaatagttaa tcatttaacc caagaaaatg tgtantgcct 840
taaccagcaa tcct 854

<210> 3370
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3370

09529480.0-2800

attgaagatt aaacgttctc tcttcaacta ccatgacacg aggatccatg cctgcctcta 60
ctttattgcc cctactggac attcactaaa gtccctggat ctggtcacca tgaaaaagct 120
ggacagtaag gtgaacatca ttccaataat tgcaaaagct gacaccattg ccaagaatga 180
actgcacaaa ttcaagagta agatcatgag tgaactggtc agcaatgggg tccagatata 240
tcagtttccc actgatgaag aaacggtggc agagattaac gcaacaatga gtgtccatct 300
cccatttgca gtggttggca gcaccgaaga ggtgaagatt ggcaacaaga tggcaaaggc 360
caggcagtac ccctggggtg tggtgcaggt tgagaatgaa aatcattgcg attttgtgaa 420
acttcgagag atgctgatcc gcgtgaacat ggaggacttg cgagagcaga ctcacacccg 480
ccactatgaa ttgtaccgac gctgtaagct tgaagagatg gggttcaagg acactgaccc 540
tgacagcaaa cccttcagtc ttcaggagac atatgaagca aaaaggaatg aattcctggg 600
agaactgcag aagaaagaag aagaaatgag acaaatgttt gttatgagag tgaaggagaa 660
agaagctgaa cttaaggagg cagagaaaga gcttcacgag aagtttgacc ttctaaagcg 720
gacacaccaa gaagaaaaga agaaagtgga agacaagaag aaggagcttg aggangangt 780
gacaactttc agaagaagaa agccacggnt caa 813

<210> 3371
<211> 713
<212> DNA
<213> Homo sapiens

<400> 3371
cctgatattc tctccttctt ttgaagacct gcctccatcc atgagctgta tcttgatctg 60
tctgactgtc catgttttcc acctgcaacc atttgcatgt gtacagccta ctgtttgtct 120
ccagttttta aactgtacaa gttgtgtttc ttaatcttcc cttctgcctt gttctgggga 180
ggtggttatt catcatttgg aatcaccttt ccccctccca tgtgctttcc ttcatttgag 240
atcttttgac ctttggcttt atttgggagg gggaagggtg ataaagtttt ctgtttccct 300
ggttttcttt tgtactcctc tctgttgctt ccctcctccc attttcttgt ctattctgcc 360
gctgtgtggg cctgggctat gcggcagggc agatttccca tcagagctcc aacatgcccg 420
cagagtctgg aaagagattc aaacccagca agtatgtccc ggtctctgca gccgccatct 480
tcctagtggg agctacgaca ctcttctttg cctttacgtg tccaggacta agcctgtatg 540
tgtcacctgc agtgcccatc tacaatgcaa ttatgtttct ctttgtgttg gccaacttca 600
gcatggccac cttcatggac ccagggattt tccctcgagc tgangaggat gaggacaagg 660
aagatgattt ccgagctccc ctttacaaaa caagtggaga taaanggcat nca 713

<210> 3372
<211> 902
<212> DNA
<213> Homo sapiens

<400> 3372
aggagttcga gaccagcctg accaacatgg tgaaaccccg tctctactaa aaatacaaaa 60
attagctggg cgtggtggcg catgcctgta atcccagcta ctcaggagac tgaggcagga 120
gaattgctta aacctgggaa gcagaggttg cagtgagact agatcatgcc actgcactcc 180
actgccactg cctgggcaac agagcaagac tccatctcaa aaacaaacaa aaaaaatcac 240
agactcattt taaaggagca gcaacctaac caaatacaaa cttcatttga ttttaggttt 300
agaaattcta gttttatttt ggagaatcac tcagttttta atatcaatta aaatagtcct 360
caaaggaatg aagaggaagt ctaaataaat gaataaaact cattttcat tttatggtag 420
tatagaaagc attgatgtgt gtagagaaat taaaagacaa gagtggttta ctgtctatgc 480

0502349.0702800

acaaatgagt gcctatattt aaggctgcct ataccattac agtggcgtaa ttggtgattt 540
catagcatac agagaaacaa tgaaatcaaa gattaaatca ttaggttatg atggtcattt 600
gtaagattgg aaagtagtca aaaacccatg tgcaactttt tttcagcact ctaccattag 660
gctccttagg caagctgctt aacttccgtc agaagcaaag gtgtgggaga acaccattca 720
cctcagtagt aacttataaa aaccgtttta aagaaggaaa atgggcccca gcccccttagg 780
atccctgact ttcctgatat tctaaaccat gagaagtctt gggactttaa ctggactctt 840
ttaccagaag taacgtggtg gatgnatatt aatctttnca ccttgctttt gacccaaagt 900
cn 902

<210> 3373
<211> 862
<212> DNA
<213> Homo sapiens

<400> 3373
agcggcgggg agctggcggc agcggcggtg gcggtggctg agcagaggac ccggcgggcg 60
gcctcgcggg tcaggacaca atgtttgcac gaggactgaa gaggaaatgt gttggccacg 120
aggaagacgt ggagggagcc ctggccggct tgaagacagt gtcctcatac agcctgcagc 180
ggcagtcgct cctggacatg tctctggtga agttgcagct ttgccacatg cttgtggagc 240
ccaacctgtg ccgctcagtc ctcattgcca acacggtccg gcagatccaa gaggagatga 300
cgcaggatgg gacgtggcgc acagtggcac cccaggctgc agagcgggcg ccgctcgacc 360
gcttggtctc cacggagatc ctgtgccgtg cagcgtgggg gcaagagggg gcacatcctg 420
ctcctggctt gggggacggc cacacacagg gtccagtttc tgacctttgc ccagtcacct 480
cagcacaggc accaaggcac ctgcagagca gcgcctggga gatggatggc cctcgagaaa 540
acagaggaag ctttcacaag tcacttgatc agatatttga aacgctggag actaaaaacc 600
ccagctgcat ggaagagctg ttctcagacg tggacagccc ctactacgac ctggacacag 660
tacttgacag gcatgatggg gggtgccagg ccgggcccct gcgaagggct cgagggcttt 720
ggcttccggg caaccccngg cccctanctt tcagcttgca aagttccgac ctggggccaa 780
acttgggacc acgttggtng gaaaaatccc tgggtgggaa gaacccttga gccagggaag 840
cccccttgant ngctttaaca ag 862

<210> 3374
<211> 749
<212> DNA
<213> Homo sapiens

<400> 3374
tggcccatga gatgattgga actcaaattg ttactgagag gttggtggct ctgctggaaa 60
gtggaacgga aaaagtgctg ctaattgata gccggccatt tgtggaatac aatacatccc 120
acattttgga agccattaat atcaactgct ccaagcttat gaagcgaagg ttgcaacagg 180
acaaagtgtt aattacagag ctcatccagc attcagcgaa acataaggtt gacattgatt 240
gcagtcagaa ggttgtagtt tacgatcaaa gctcccaaga tgttgcctct ctctcttcag 300
actgttttct cactgtactt ctgggtaaac tggagaagag cttcaactct gttcacctgc 360
ttgcaggtgg gtttgctgag ttctctcgtt gtttccctgg cctctgtgaa ggaaaatcca 420
ctctagtccc tacctgcatt tctcagcctt gcttacctgt tgccaacatt gggccaaccc 480
gaattcttcc caatctttat cttggctgcc agcgagatgt cctcaacaag gagctgatgc 540
agcagaatgg gattggttat gtgttaaatg ccagcaatac ctgtccaaag cctgacttta 600
tccccgagtc tcatttcctg cgtgtgcctg tgaatgacag cttttgtgag aaaattttgc 660

0960260.0960260

ccgtggttgg acaaatcagt agatttcatt gagaaagcaa aagcctncaa tggatgtgnt 720
ctaatgcact gtttanctgg gatcttccg 749

<210> 3375
<211> 650
<212> DNA
<213> Homo sapiens

<400> 3375
ttttttaata gcatgtatgg ggttctgttc catgtctgtg ttgtggacat tccgcggcat 60
gaccgcgtga actgcacggt ggagctgcct cagggctgtc ggtcaggttg gtccagtgag 120
gggtgactgc agccggtcag gtgggcgagg agaagggggg ctgccccttt cctacctgtg 180
cttgaggggc cggaggcagg tgctgcctgg cagagctgtg ttaccgtctt ggcctcgggg 240
tctggtccac actctgtgct cccagccttg aggctgcagt aggactctga tctcacctgc 300
cagaagagag gcggggccgc gtcctcctgg cgtcaccggc gtcactgtca ttccttggtg 360
tctgtgctgg gcatggttgg cttgggggtc tgtggtttcc tgggccttgt ggcagggttt 420
ctcccgtggg agaatttggt gtggaaagca taggaggccc cttccgaggt tgacaccgtg 480
tcctccgcgg tgtttctcgc ctggtcgtct cgtcgtgtgg acgctgccgt tctggttctc 540
ggaggtgtgt ccttcgccgt gttggggtta tttgtctgng ttcctgcact tttcccgggc 600
tctgagctgg attgatgggg ccaagtctnc cccttccat cttgaggtcn 650

<210> 3376
<211> 707
<212> DNA
<213> Homo sapiens

<400> 3376
aactgaatgt gtcttaacct ctgtgttaca tcttggctgg cagagattta tgttacatga 60
gattgtcttg gtagcttgta gtgtggtcag gagaaagggg atggagcagt ggtgcatagc 120
tgcttactgc tcttataaac ggtatataaa ggttttacgg attttgaaaa tattttttt 180
tagaggtcaa aataaatacc attttagtgg caacagcttt gaactagaga ggtagatgta 240
ttaaagcagc atagaaccat aacttctaga taatgtagtt gccactagga gatattagaa 300
agttagaatg tatgtgtgta tttagttttt caataataat gaacatacac tttcaggagc 360
aaagtatggt tgagaaattg tggcagaaag aattttaaat gttagtcgaa gttgtctgta 420
gtttctttat taagctctga aaacacttcc aatgccagtt tgattctgag ggcttgggaa 480
gtgggatctc ccttgtggag cagctggagc tggctgggag ggagcctctc catgggtaat 540
ttattatgcc tgccctgctt cccccaggga gctgcttcag tgtgaaatga tgtgattgtc 600
gggggtgggg tgggaggang gccccttcag tcagggagtt gctcacatat tacacaggta 660
gcatcacgtg gacttcancg ctgactgtct agtagtgagt ccctgna 707

<210> 3377
<211> 773
<212> DNA
<213> Homo sapiens

<400> 3377
actgagcgct cggggccttt tcaaatcggg atccgttacc gcttccccgg cagccgccat 60
tgtcgcgctc ggagcccctc agctcaggcg gccgaggcgg aggcagcggc ggcgggatgg 120

cggacgccaa caaggccgag gtgcccgggg ccactggtgg cgacagcccg cacctgcagc 180
ccgcagagcc gccgggcgag ccgcggcgag agccgcaccc cgcggaggcg gagaagcagc 240
agccgcagca cagcagcagc tccaatggcg ttaaaatgga gaatgatgaa tcagcaaaag 300
aagagaaatc tgacttaaag gaaaaatcta caggaagtaa gaaggccaat agatttcatc 360
cttattcaaa agacaagaat tcgggcactg gagaaaagaa gggtccaaat cgtaacagag 420
ttttcattag caacatccca tatgacatga aatggcaagc tattaaagat ctaatgagag 480
agaaagttgg tgaggttaca tacgtggagc tctttaagga tgcggaagga aaatcaaggg 540
gttgtggtgt ggttgaattc aaagatgaag aatttgtaaa gaaagcccta gaaactatga 600
acaaatatga tcttagtgga agacccctta atattaaaga ggatcctgat ggagaaaatg 660
ctcgtagggc atcgcancga acaggaggat cattttcagg angacacgtt ccttgatatg 720
ggatcanggg ttgatgaatt taccactttc atacttcaat aattccaaac att 773

<210> 3378
<211> 708
<212> DNA
<213> Homo sapiens

<400> 3378
gtgctacccc ctccccccgg gtgctggctc catgtctgtg tgaccggcct caggggtaga 60
gtccaggccc gacgcggggc gggccagcgg cggcggcagc tgaggtgaga gacggcggcg 120
gcggcgcggg cacccggccc cccagcggga ggatgaagcg gcggaacgcc gactgcagta 180
agctccgccg ccccctaaag cggaaccgga tcaccgaggg catttacggc agtacatttt 240
tatacctgaa attcctggtg gtgtgggcac ttgtcctcct agcagatttt gtcctggagt 300
tcagatttga atacctgtgg ccattctggc ttttcatcag aagcgtctat gattccttca 360
gataccaggg actggccttc tcagtatttt ttgtttgtgt agcattcacg tcaaatataa 420
tatgcctgct gttcatcccc atacagtggc ttttttttgc tgctagcaca tatgtatggg 480
ttcagtacgt atggcacaca gaaaggggag tgtgtttgcc tacagtgtct ctctggatcc 540
tctttgntta tattgaagca gccattagat ttaaagatct caaaaacttt catgtagacc 600
tttgtcgtcc atttgctgct cactgtattg ggtaccctgt ggtaactttg gggtttggct 660
taaaagttac gtaagctaca aaatgcngnt aangaaacca aaagaagt 708

<210> 3379
<211> 710
<212> DNA
<213> Homo sapiens

<400> 3379
ctttgcagct gagactgggt ggagggagag gcgcggagac actggggctc tgacgagctg 60
gctgaggccc tctcagtagg ggggtcacgc ctcctggaac tcagggaccc caagtttctg 120
tgcattcagg gcggggctgg ccccatgccc tgtgcatagg ggcctggctg catcccagtc 180
gatcagccag aggcagcagc agtggactca tcaattgtgg aggaagccct ggggaccctg 240
gggaccttgc cgactctatt cccagccagc tcctaggaca agcctcagag ccaacacccg 300
ctcgaccctc tcccggcccc tccccttctt tgtcttttgc agatgatcgc cgggtgtcga 360
tcctttccc tccagtcagg gccaggcgtg gacgccgccg gaccgctgag actcggggca 420
cggtgaagca ctggccgggg tctggctggg tctggcgctc gggagccaga tggaggtggc 480
gataggggcc atgggagccg gcgccaagta gccggtggac ccccgcgctc gcacctctcc 540
cggcgcccgg gcgctcccca aggctgccat ggaggtgcct aacgtcaagg actttcagtg 600
gaagcgcctg gcgccactgc caaccgncgg gtctactgct ccctgctgga gaccgggggc 660

0002220-0946-0

cangtctatg ccatcggggg atgtgacnac aacggcgttc ccatggactg 710

<210> 3380
<211> 758
<212> DNA
<213> Homo sapiens

<400> 3380
aaaaattacg cgaagatgct aagataccag cttgtgaaga aagcctaagc cagaccccgc 60
cgagggtgac agggaccagt cctgctcaag accaggatca tccatccgag gaacaggggg 120
ggcagggttc ctgtagagag ccaggtgtta acccctgcct ctcccgtcta ggacgcctcc 180
agcagaagat gctgcttgcc tgcagagccc ccagcctgag gacacgggtg cagaaggagg 240
ggctgagtcc aagacgagct cagaaaacca gaagcctgaa actttatctg gaaacactga 300
aggtgccttc attagcagaa ctgcacagcc gcctctgaaa aggtacgtcc actcggcatg 360
gaggagtcgg cgtcccttac ccagttaata agatcaatga atgcgcaggt ctttcttctt 420
ctagcttcca cccacaaata aaatggttcc aaaaagaaga tgtcgtcatc ttaaagataa 480
gaataaggaa tgtaaaggac tacaagtgtc agtatttaag ggatagagtc gttttcagtg 540
ctngggtggg agacaaattt tacctggctg atctggagct gcggggcaac ataaggaaag 600
atgactgcca atgtgtgatt agaaacnatg aacctgtaat cactctggcc aaagagagaa 660
gggaggcatg gtgtcaccta ctcanacaga ggaccccaac gtggcttttg attttgatca 720
ctgggaagac tgttgaaagg acagccactt nccaaggn 758

<210> 3381
<211> 719
<212> DNA
<213> Homo sapiens

<400> 3381
aactgatgca attgacaaac gtgtccaggg ctaaagcaga agatgcactg tctgaaatga 60
agtctcagta ttcaaaagtg ttgaatgagt tgacccagct naaacaactg gtggatgcac 120
aaaaagagaa ctctgtctct atcacagaac atttgcaagt gataaccacg ctgcggactg 180
cagcaaaaga gatggaagaa aaaataagca atcttaagga acaccttgca agcaaggaag 240
tggaagtagc aaagctggag aaacaactct tagaagagaa agctgctatg actgatgcaa 300
tggtacctcg gtcttcctat gaaaaactcc agtcatcctt agagagtgaa gtgagtgtgt 360
tggcatcgaa attaaaggaa tctgtgaaag agaaagagaa ggtccattca gaggttgtcc 420
agattagaag tgaggtctca caggtgaaaa gagaaaagga aaatattcag actctcttga 480
aatccaaaga gcaagaagta aatgaacttc tgcaaaaatt ccagcaagct cangaagaac 540
ttgcagaaat gaaaagatac gctgagagct cttcaaaact ggaggaagat aaagataaaa 600
agataaatga gatgtcgaag gaagtcacca aattgaanga ggccttgaac agcctcttcc 660
agctctccta ctcaacaagc tcatccaaaa ngcagagtca gcagcttgga ngcgctgca 719

<210> 3382
<211> 773
<212> DNA
<213> Homo sapiens

<400> 3382
acatgcctcc ccagcccccg ctctgacgat gatggccacg cagaatgtcc cgcccccacc 60

0960204960 . 07.08.00

ctaccaggac agcccacaga tgacggcaac cgcccagcca ccctccaagg cccaggctgt 120
ccacatctct gccccctcag ctgctgccag cacacctgtg cccagtgccc ccatcgaccc 180
ccaggcccag ctggaggctg acaagcgagc tgtatacagg caccctcttt tcccgctcct 240
gacgctgctg tttgagaaat gtgaacaggc cacccagggc tctgagtgca tcacctccgc 300
cagctttgat gtggacatcg agaactttgt ccaccagcag gaacaggagc acaaaccctt 360
cttcagcgat gacccagaac tggacaatct gatggtgaag gcaatccagg tcctgagaat 420
ccacctgctg gagctggaga aagtcaatga actctgcaag gacttttgta accgttacat 480
cacctgcttc aaaaccaaga tgcacagcga caacctgctc aggaatgatc taggggggcc 540
ctactccccc aaccagccct ccatcaacct tcactcacag gacctcctgc agaattcccc 600
caattccatg tccggagtct ncaataaccc ccaggggatt gtggtcccag cctcagcgct 660
tcagcagggc aacatcgcca tgacaaccgt caacttacaa gttgtgtcan gtggagcctt 720
atccaaccgg gtaccatggt aaccttccan ggtcangtgg tcacccaagc aat 773

<210> 3383
<211> 814
<212> DNA
<213> Homo sapiens

<400> 3383
ggggcggaga gaggcgagca ccgggaaggg gagcgtgggg ccgctggaat gggtgaattt 60
aaggtccatc gagtacgttt ctttaattat gttccatcag gaatccgctg tgtggcttac 120
aataaccagt caaacagatt ggctgtttca cgaacagatg gcactgtgga aatttataac 180
ttgtcagcaa actactttca ggagaaattt ttcccaggtc atgagtctcg ggctacagaa 240
gctttgtgct gggcagaagg acagcgactc tttagtgctg ggctcaatgg cgagattatg 300
gagtatgatt tacaggcgtt aaacatcaag tatgctatgg atgcctttgg aggacctatt 360
tggagcatgg ctgccagccc cagtggctct caacttttgg ttggttgtga agatggatct 420
gtgaaactat ttcaaattac cccagacaaa atccagtttg aaagaaattt tgatcggcag 480
aaaagtcgca tcctgagtct cagctggcat ccctctggta cccacattgc agctggttcc 540
atagactaca ttagtgtgtt tgatgtcaaa tcaggcagcg ctgttcataa gatgattgtg 600
gacaggcagt atatgggcgt gtctaagcgg aagtgcatcg tgtggggtgt cgccttcttg 660
tccgatggca ctatcataag tgtggactct gctgggaagg tgcagttctg ggactcaacc 720
actgggaccc ttgtgaagag ccatctcatc gnttatgctg acgtgcagtc cattgctgta 780
ncttgaccaa gaagacngtt tctggtgggc acaa 814

<210> 3384
<211> 773
<212> DNA
<213> Homo sapiens

<400> 3384
aggcggtacc cggacgggtt cgtcccgggc tgtttcgcgt ccggcctgag gcggctgggg 60
ccgcgcaggt agtgtccctg cacttcttgc ccgggcgcgt gaggccagct ccgctgcgct 120
ggcctccagc ttccagccct cctcccctaa gccgccgcca tcatgctgct gcctgtgttc 180
accctgaaac tgcgccacaa aatcagcccc cgaatggtgg ccatagggcg ctacgacggg 240
actcacccgt gcctggcggc cgccacccaa acgggcaagg tttttattca taatcctcat 300
acacggaacc agcatgtcag tgcatccagg gtcttccaga gccccctggg atctgatgtt 360
tctcttctca acattaacca ggcagtcagc tgtctgactg caggcgtatt gaaccctgag 420
cttggctatg atgccctttt agtggggaca cagactaatc ttttggctta tgatgtctac 480

0050450-0050800

aataattcgg atttgttcta cagagaggta gcagatgggg caaatgcagt tgtgctgggg 540
acattgggag acatttcttc ccctcttgcg attattggtg gcaattgtgc tctgcaaggt 600
ttcaatcatg aaggaagtga tctcttttgg acggttactg gagacaatgt taattccttg 660
gccttgcgtg actttgatgg tgatggaaaa gaaagagctt cttgntggat ctgangattt 720
tgatatccga gtttttaaag gaagatgaaa attgtggcan aaatgaccga aac 773

<210> 3385
<211> 754
<212> DNA
<213> Homo sapiens

<400> 3385
aggccacata ggttttcaga gactcgcctg gcagaggcct ggagcgtcct gctgcgtgga 60
ctgtgggcac cgagccacca ggaggttgtt gatctcattc ttgctcactg gtccctgcca 120
gactggtggt gcctctctac tgtcgggcag ccccacctct gtgctgcccc atccacctac 180
agccctcatg cctgggccca gctggaggtt ctgacagggg ccccctgggg tggcatgcgg 240
acccttcagg gtgccccagg cgcagcacag gtctccagag acacaggcac cagggcgttc 300
agagctagtc ccctcgctgc tgttgactgt ccttgagcag ccccagggcc ggtttctcaa 360
cctcatttgc tcacctgagc aatgaagtga ggtgggctcc tggaactgca gcagccaccc 420
cccggggcca tcgtgaggct aagaatccag tgcagggtga gcaaccagcg accgctacaa 480
ggacagtgaa gagctagcac caggaccttg ggtagcccac ccgctggagg gagcgtgtgc 540
tgcaaaaagc aagagtgggc tttggaggcc aacggatgga gcggattcag tctgaggctg 600
ttccagccct tgcttaggat ccacctacct aggtctggaa atcgtatttc acttcagatg 660
ccttctcaga ggataaaata acccccggtg ggggagagta ctggaagang gctaattccc 720
ctggttttct tcccatgagc attaatgnca agng 754

<210> 3386
<211> 884
<212> DNA
<213> Homo sapiens

<400> 3386
aataagactc tatcaagatc catagcatct gaagttgtag ccaggcctgc ttcattgtct 60
aatgataaac tgatggaaaa gtcagagccc gttgaccagc gaagacatac tgcaggaaaa 120
gcaattgttg atagtagatc agctcagccc aaagaaacct cggaagagag aaaagctcgt 180
ctgagtgagt ggaaagctgg caaaggaaga gtgctaaaaa ggccccctaa ttcagtagtt 240
actcagcatg agcctgcagg acaaaatgaa aaaccagttg ggtctttttg gactaccatg 300
gcagaagaag atgaacaaag attatttact gaaaaagtaa acaacacatt ttctgaatgc 360
ctgaacttga ttaatgaggg atgtccaaaa gaagatatac tggtcacact gaatgacctg 420
attaaaaata ttccagatgc caaaaagctt gttaagtatt ggatatgtct tgcacttatt 480
gaaccaatca caagtcctat tgaaaatatt attgcaatct atgagaaagc cattctggca 540
ggggctcagc ctattgaaga gatgcgacac acgattgtag atattctaac aatgaagagt 600
caagaaaaag ctaatttagg agaaaatatg gagaagtctt gtgcaagcaa ggaagaagtc 660
aaagaagtca gtattgaaga tacaggtgtt gatgtagatc cagaaaaact ggaaatggag 720
agtaaacttc atagaaattt gctatttcaa gattgtgaaa aagagcagga caacaaacca 780
aaggatccac ccatgatgtt aaaccccccaa tncagaaacn aggacaagtt gcttaaatta 840
aatntaaggg gctctacgcc atacttgcaa agtgtgaaaa aaaa 884

0952946 - 07/2010

<210> 3387
<211> 817
<212> DNA
<213> Homo sapiens

<400> 3387
attcatcata gaagaacttt aaaattttga aaagcatgcc atattagagt aagaataacg 60
agttgtttac agtactttct gtagagtaat tagcttagaa aacttcttca gggtttctgc 120
ttgctctgtt atttttccac ctagaagaat agtaaaaagg aagtgctagc tgtggtttgg 180
tttgaacaga ccaacagcag agatgagatg aggagactgg aaagtaaatg ccagtagtat 240
tggtgaattt taggagcttt cgtttgaaga gttatcgttc cttgattagg ggatgtgacc 300
aaggaattac caactttaaa ggtggtcaca gaattagggc ttataaatgg acttctttca 360
gatgacattt ttctttgtga gacctgatca ggaaaataag tacagctttc atttcttgat 420
tgtccttctt aataatatct tagagtttca ataataatta gcttgctttc gaatatctgg 480
acttagacag tcttagcctt tggcctctca agggctctaa atctctatgc acaattttgt 540
gttttcattt tggtgtggaa aatctttgta aattttatcc tattgtcaga gtagtcatag 600
aaccataaaa ggataaagaa gcctgatcta gatctttgct gctgcttcag agaatctttt 660
cagagagaaa taaatgagtt gaatatcttt caagactaac attttctgaa actttaagaa 720
gaaaaaattt tctaacattg tgaacaggat taagtagcta ttttattaaa tgctttggat 780
tttaantgga ggnagttttt ttgnaaaccc ccgggaa 817

<210> 3388
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3388
atcagatgtt gggaccctta agtgttctgc acctggggag agttaggaac cacttaagga 60
gtgtctgttg cttgccaatc ttaaaatttt tagtttgcac ctgaatcagg ggctgtcaga 120
gtccagactg ctcttgaaat agaaaagact ggtcgttaaa ggcaggttcg ttgagtcttt 180
catcgttgag tgataccacc tctgcagatg gctcagtggg gcagccccgt accacagcct 240
gcccttgagg ttgtgtagtt tagataggtc acagagttgc tgggcctacc gcaggtctcc 300
tgaccctggt gcagttttac ttcaattaca accaccaaaa tagctacagt caaaaattcc 360
aaagttccta caccatcaac ctccacccca cttccgtcca aagtccactt agaggctctc 420
agttttggac cttagaaaca cttagggagc tttttaaaaa gatcgattct gtatttttag 480
tagagatggg gtttcaccca gctactcagg aggctgaggc aggagaatca cttgaaccgg 540
ggagttggag gttgcagtga gccgagatta tgtcactcca gcctgggcaa cagagtgaga 600
ctccgtctta ggaaaaaaaa aaagattgat tctggccggg cacagtggct cacgcttaca 660
gtcccagcac tttgagagac tcangcagga ggatcacttg agcttaggag tttgagacta 720
gcctgggcaa cccantgaga ccccgtatct acaaaaatta gccaggtgtt gtgacatgtg 780
cctgtggtcc cagcttcttc aanaggctta ngt 813

<210> 3389
<211> 768
<212> DNA
<213> Homo sapiens

<400> 3389

09629450.0970000

ggaaatatgt atcgtctccc tgccacccag gaggtggtga cgcagctgca gagccagatc 60
ttggagctgc agggggagct gaaggagttt aaaacttgta ataagcaact tcaccaaaag 120
ttaattctgg ctgaagcagt gatggagggg aggccaacgc ccgacaaaac gttgctgaat 180
gctcagcccc ctgtgggagc agcctaccag gacagcccag gagagcagaa aggaattaaa 240
accacatctt ctgtctggag agacaaggaa atggacagtg atcagcaaag aagctacgag 300
attgactctg agatttgccc acctgatgac cttgccagct tgccatcatg caaagaaaat 360
cctgaagatg ttctgagccc aacttcagta gctacttacc tgagttccaa gagtcagcct 420
tctgctaaag tcagtgtgat ggggactgat cagtcagaga gcattaatac ctcaaatgag 480
acagaatact taaaacagaa aatccatgac ttggaaactg agctggaagg ctaccagaat 540
ttcatatttc agcttcaaaa gcactcccag tgcagtgagg ccataattac agttttgtgt 600
gggacagaag gggcccagga tggcttgagc aagcccaaga atggttctga tggggaagaa 660
atgacctttt caagtttgca ccaagtgcga tacgtgaaac acgtgaaaat cctcggtccg 720
ntggccccan agatgattga cagcagggtg ctggagaacc tnaaacag 768

<210> 3390
<211> 871
<212> DNA
<213> Homo sapiens

<400> 3390
ccccgccttc tcgctgccca gccccgggga gggaggcggg gccgcgaccc cggcgcgggt 60
ggggcgaatg cgttcccagc gggtagcctg gggctggtgc agagttccaa gcccacggcc 120
ccggtcgcgg cctcgccgcc ctcccgcgcc ccgcgccggg agcgggccta gagcgctcgc 180
ctcgcccctc cgcgagcagg gctctggcgc ccgcccctgt ccgcaccgnt ggcagcctga 240
agagagtcgc tggccgtggt cgccgctagg taggatatat ctgcatcttg aaaggaagat 300
aaaacaaaag ccttctttgg aatagatgga tttttgtcac tttctgtgtg aactaaagtg 360
attcaatgtc tcttttggat tgcttctgca cttcaagaac acaagttgaa tcactcagac 420
ctgaaaaaca gtctgaaacc agtatccatc aatacttggt tgatgagcca acccttcct 480
ggtcacgtcc atccactaga gccagtgaag tactatgttc caccaacgtt tctcactatg 540
agctccaagt agaaatagga agaggatttg acaacttgac ttctgtccat cttgcacggc 600
atactcccac aggaacactg gtaactataa aaattacaaa tctggaaaac tgcaatgaag 660
aacgcctgaa agctttacag aaagcccgtg attctatccc acttttccc ggcatcccaa 720
tattacaact tattggacaa gttttcactg ttggcagctg ctttgggtta tttctcatta 780
tggctatggt taacaagtca actnttgagg actattttct gaagaatgat gaaacttaat 840
anaacatctc tttgagccta naggttgact t 871

<210> 3391
<211> 890
<212> DNA
<213> Homo sapiens

<400> 3391
actcagctgt gcgctctgat ttcgtgcgct tcctcgtcct tcatgttgga tggccagttt 60
ttcgtttgtg cgtcatcctc tacctgagaa atggtcgctt gcccctagtc tagacacgca 120
ttaaagggca gtatttaaag tcagttggca agcagtggaa taagattttt gtaaagaaac 180
cttgtgcagc atggattctc taccagatga atttttttgtg aggcatcctg ctgtggagga 240
tcagaggaag gaagaaactg agaataagct agaaaaatca tctggtcaac tgaacaaaca 300
ggaaaatgac atacctactg atcttgtccc tgttaaccta ctattagaag tgaagaagtt 360

0050250 - 0050250

attaaatgca attaatactc taccaaaagg tgtggttcct cacattaaga agttcttaca 420
agaagatttt tccttccaaa ctatgcagag agaagttgca gctaacagcc agaatggtga 480
ggaaattgtt cctgctttga ctttacgttt cttgattaca cagctagaag cagcacttag 540
gaacattcaa gctggcaatt ataccgcaca ccagattaat attggttatt atttgacatt 600
actgnttta tatggagtag cactcactga aagaggaaag aaagaggatt atacagaagc 660
tgagaataaa tttctggtga tgaagatgat gatccaagaa aatgaaattt gtgaaaactt 720
tatgtcttta gttattttgg acgtggntta ctgcgatgtg ctcaaaagag atntaatgga 780
ggactgctag aatttcataa aagcttacag gaaattggag acaaaaatga ccattggttg 840
acatagatcc tacngaagat gaagatttac ctacactttt aagacttctt 890

<210> 3392
<211> 723
<212> DNA
<213> Homo sapiens

<400> 3392
gtgaagatgg cggcagtggt ggaggtggag gttggaggtg gtgctgctgg ggaacgggag 60
ctggatgagg ttgatatgtc agatctctct ccagaagagc aatggagggt cgagcacgca 120
cgcatgcatg ccaagcaccg tggccatgaa gctatgcatg ctgaaatggt cctcatcctc 180
atcgcaacct tggtggtggc ccagctgctc ctggtgcagt ggaagcagag gcacccacgc 240
tcctacaata tggtgaccct ctttcagatg tgggttgttc ccctctattt cacagtgaag 300
ctgcactggt ggaggttcct agtgatctgg atcttgttct ctgctgtcac agcctttgtt 360
accttccgag ccacccgaaa acctctagta cagacaaccc caaggttggt ttataagtgg 420
ttcctgctaa tctataaaat cagctatgcc actggcattg ttggctacat ggctgtcatg 480
tttaccctct ttggtcttaa cttattattc aagatcaaac cagaagatgc catggacttt 540
ggcatctccc ttctcttcta tggcctctac tatggagttc tggaacggga ctttgcagaa 600
atgtgtgcag actacatggc atctaccata gggttctaca gcgagtcggg catgcctacc 660
aaacatcttt canacagtgt gtgtgctgtg tgtgggcanc agatctttgt ggacgtcant 720
gaa 723

<210> 3393
<211> 807
<212> DNA
<213> Homo sapiens

<400> 3393
gttccctgac tcggagtctt agtgtgtcgt tatttggaca agaggcacat tgacccaatt 60
tggagacgta ttttggaagg aggtgtgaaa aagacagcat gaactttacc ccaacacaca 120
cccctgtctg cagaaagcga acagttgtct ccaaacgtgg tgttgccgtc agtggtccca 180
ccaagaggag gggaatggca gattcactgg agtcaacccc cttgccttcc cccgaagatc 240
gtctggccaa actccatcct tctaaggagc tcctggaata ttatcaaaag aagatggctg 300
agtgtgaggc agaaaatgag gacttgctga agaaactgga actctacaaa gaagcttgtg 360
aaggacagca taaacttgaa tgtgatttgc agcagaggga ggaagagatt gctgaattgc 420
agaaagctct aagtgatatg caggtctgcc tcttccagga acgggaacat gttttacgcc 480
tctactcaga aaatgaccga ctgagaatca gggagctaga anacaagaaa aagattcaga 540
atctcttggc tcttgtggga acagatgctg gagaagtgac ctatttttgt aaggagcctt 600
ctnacaaagt caccattctc caaaagacta tccangctgt angtgaatgt gagcagagtg 660
aatcttcagc tttcaaagca gatcctaaaa taagcaaaag aagaccatcn agagagagaa 720

0050202-0050706

aagaaagtct tgagcattcc aaagagacat acagacactt catcctacag gtggnaaccc 780
ttgcaggctc aacttgggaa aaccnga 807

<210> 3394
<211> 778
<212> DNA
<213> Homo sapiens

<400> 3394
ttgtaataat actgtatgtt tatctttggc agctccaaaa gttctgtagt ttttacttca 60
ggcctttagt ttgaaaacta tgagtttttt caggttgttg aagcatcatc aatgattttt 120
taatgactga gagaattgtt atttatataa tgatcttagt acttaacatg tggtttccaa 180
tgccagtgac ggcagttctc agcagagaaa ttaacttttc cattaagcta taatgaaaag 240
aatcaataac ccttacttaa tcagatatct ataataccta ctgcagttgt tctcatttgt 300
attttaatac attacaagtt agtctgtaat ataatttaat gcatagcaag ttagtctgta 360
gtataatagt agttattgat ggttactcat ttttttaata acgtagtaaa atacactaac 420
aatattttca tccaaaaata aattcaaggt gtaaatcagc atatcttttt caacttggaa 480
tttatattct gccatgttgc tccaaagctt gttcacagtt aagacacaag atcgttggga 540
aatcttatac tatacctctg atgagcatta ttacactttt tctgaaagca ttcttctttg 600
gtagtctgat tacacctttc taatcttttt cttctatcta cttcattcat ttnttttttt 660
ctgcaactac tactttactt atacttataa actctgcatg acccggactt tgcatctcct 720
gnattacctt tgctaagtac atctgagtac cataccgnga aaatantttt tttccaga 778

<210> 3395
<211> 804
<212> DNA
<213> Homo sapiens

<400> 3395
tgtatagatg ttaagtgttt catgtggttt ttgtgtcatt gctatttatc aatagcaata 60
attttgcact gaaaactttt tatagttcaa aaattaagca tggactcccc agtatacttt 120
aactttcttt ctttcttttt tttttttttgg agacagagtc tcactgtcac ccaggctgga 180
gtgcagtggc atgatctcag tttatgcaac ttctgcctcc ccaggttcaa gcgattcttt 240
tgcctcagcc acctgactag ctgggattgc agcctgcacc accacacctg gctaaatttt 300
tgttgttgtc gttgagatac agtttcactc tgtcacccag gctggagtgc agtggcatga 360
tctcagctca ctgcaacctc tgccttctgg attcaagtga ttcttgtgcc ttagcctccc 420
aagtagctgg gattacaggc gtgcaccacc acgcccagtt gatttttgta tttttgatag 480
agacggagtt tcaccatgtt ggccaggctg gtctcgaact ctgggttcaa gaaatcctcc 540
caccttgcct cccaaagtgc tgggattaca ggtgtgagcc accacgcatg gccctgaacc 600
ttctcttttt aggaatacca aagttttcaa ctttttcagc tttagaattt gtaaatattt 660
ttgtagaata tcatatgact gtaattncag agtgttccaa cttggttatg atatatttgg 720
gtaaatttac aactgntctt ttatttgcca taatctgggt ataacactgg ttgtggnagg 780
gaaaggaaaa cntgcaaaac attc 804

<210> 3396
<211> 646
<212> DNA
<213> Homo sapiens

0508292.0007

<400> 3396
gaagatggcg gactcggtgg ctagccgatg aggaggccgc ggggggaacc cggcccccgg 60
gccccgagac cgactgaggg agcgacctgc gcagggcccg gggagtcatg taggggtggc 120
gcctgcgggg agggctgcgg gagggcagcg ggagctggtg ttagcggcag cggccacggt 180
ctcctggcgt ccctgggccg gggtgggtgt tggggccccc gacttcgccg actccgcgcc 240
atcgcaaagc ggtgcactcg ggctccacgc gcgccctgca aggtgggcgc tgcgttttca 300
tttcacgggt gaggagactt agagagacga agccacttgt ccaaggtcac gccgctggtg 360
agtgggagcg cccagcatgg aacccagcac cgtccagccg cggagcccgc gttccaccct 420
ctgtgccgcc gccgcctcct gtgggagagg gaggtggtcg ggagagtgca cgccggtgcc 480
gnctgggctc cagactgggc gcgaccacta acccggttaa tgacctcggg cttaacttaa 540
ccccttcgct gctctgggcc tgcgtttctc caccggtgaa atnagggtct tcatcaccca 600
acttcatgct tcnagtcctg ctctctgctc anaccttccc tgctcg 646

<210> 3397
<211> 802
<212> DNA
<213> Homo sapiens

<400> 3397
gtcagtcccc gcgcttttcg gaggctgcca gcgtcccaca ccagccgcag gtgaaaaccg 60
gcagaaagac attaagagat tttcctgcag tcactgctgg cagatgatag agccaggatt 120
tgaaagcagg cagcctggct ccagaccctg tgctcttaac tcccgttttg catcaagaac 180
agaatcctat gaaaggcttg tacagtgctt ggatagcagc atcaaggagc attgtgtaca 240
tgcagaagtg cacagtacct ggagtgaaac tgcttgtgtt cgatttctga taccattcat 300
aactggctgt gtgatctcaa aacctctaaa atgcagacct ccagctctag atctgtgcac 360
ctgagtgaat ggcagaagaa ttacttcgca attacatctg gcatatgtac cggaccgaag 420
gcagatgcat accgtgcaca gatattacgc attcagtatg catgggcaaa ctctgagatt 480
tcccaggtct gtgctaccaa actgttcaaa aaatatgcag agaaatattc tgcaattatt 540
gattctgaca atgttgaatc tgggttgaat aattatgcag aaaacatttt aactttggca 600
ggatctcaac aaacagatag tgacaagtgg cagtctggat tgtcaataaa taatgttttc 660
aaaatgagta gtgtacagaa gatgatgcaa gctggcaaaa aattcaaaga ctctctggtg 720
gaacctgctc ttgcatcant ggtaatncat taaggagggc cctggncttt gaaccttcct 780
aaaatttaat ggtttggggg ta 802

<210> 3398
<211> 733
<212> DNA
<213> Homo sapiens

<400> 3398
gcgccccggc cgggccactg ggccacaggc cacgcggcca cgcagtccga gcgggagccg 60
agccgggcgg ggcgagggca gctccgcctg gctcccacca tgagtgctga gcttaacgtg 120
cctatcgacc cctctgctcc tgcctgccct gagcccggcc ataagggcat ggattaccgg 180
gactgggtcc gccgcagcta cctggaactg gtcacctcta accaccactc ggtacaggcc 240
ctgtcgtggc ggaagctcta cctgagcagg gccaagctga aggcctccag caggacctcc 300
gccctcctct ccggctttgc catggtggcc atggtggagg tgcagctgga gacgcagtac 360
cagtacccgc ggccgctgct gattgccttc agcgcctgca ccacggtgct ggtggccgtg 420

0080205 2006-05-05

cacctgttcg ccctcctcat cagcacctgc atcctgccca atgtggaggc cgtgagcaac 480
atccacaacc tgaactccat cagcgagtcc ccgcatgagc gcatgcaccc ctacatcgag 540
ctggcctggg gcttctccac cgtgcttggc atcctactct tcctggccga ngtggtgctg 600
ctctgctgga tcaagttcct ccccgtggat gcccggcgcc agcctggccc cccacctggc 660
cctgggagta cacgggctgg cangccgcct ggtgtccacc attatcatgg tgccgtgggc 720
ctnaacttcg ngg 733

<210> 3399
<211> 716
<212> DNA
<213> Homo sapiens

<400> 3399
tgaggcgcgg gaggcccgcg ccccgcggct cgctgtgcgt gggagggcgc gagcgaacgc 60
gggcgaggag cggccgagcc gctgaagagg agctgggcgc cggccgcccg gccgcgctcg 120
gcccgcggat cgcctccgcc cggtcttcgc cggccccggc ccctggcgag atgccgtgtg 180
gggaggattg gctcagccac ccgctgggaa tcgtgcaggg attcttcgcc caaaatggag 240
ttaatcctga ctgggagaag aaagtaattg agtattttaa ggaaaagctg aaggaaaata 300
atgctcctaa gtgggtacca tcactgaacg aagttcccct tcattatttg aaacctaata 360
gttttgtgaa atttcgttgc atgattcagg atatgtttga ccctgagttt tacatgggag 420
tttatgaaac ggttaaccaa aacacaaaag cacatgttct tcattttgga aaatatagag 480
atgtagcaga gtgtgggcct caacaagaac ttgatttaaa ctctccacga aataccactt 540
tggaaagaca gactttctat tgtgttccgg tgcctgggga atctacgtgg gtaaaagaag 600
cctatgttaa tgcaaaccaa gctcgagtca gtccctcaac atnctacact tctagtcgcc 660
acaagangag ttttgaagat gatgaccatt ttggacctcc agccccaatt angcag 716

<210> 3400
<211> 711
<212> DNA
<213> Homo sapiens

<400> 3400
gagcatgtgc acgctggcca gctctgagtt ctcccatgag gctgtcaaga cgcacatcga 60
gacggtcatc aacgccctga agactgagcg ggacgtgagc gtgcggcagc gggccgtgga 120
cctcctctac gccatgtgcg accgcagcaa cgccccacag atcgtggccg agatgctgag 180
ctatctggag acagctgact actccatccg agaagagatt gtgctgaagg tcgccatcct 240
ggctgagaag tacgcggtgg actacacctg gtatgtggat accatcttga acttgatccg 300
aattgctggt gattacgtga gtgaagaggt gtggtaccga gtcattcaga tcgtcatcaa 360
ccgggacgac gtgcagggct acgcggccaa gactgtgttc gaggctcttc aggctcccgc 420
gtgccacgag aacctggtca aagtgggcgg ctacatcctg ggggagtttg gaaacttgat 480
agctggagac ccgagatcca gcccgctgat ccagttccac ctgctgcact ccaagttcca 540
cctgtgcagc gtccccaccc gcgcgctgct cctgtcacct acatcaagtt cgtgaacctc 600
ttcccggagg tgaagcccac catcaagacg tgctgcgcag cgacagccag cttangaacg 660
cagacgtgga gctgcaacaa cgtgctgtgg agtacctgcg gntnaacacc g 711

<210> 3401
<211> 846
<212> DNA

US20050260600A1

0052600.3450

<213> Homo sapiens

<400> 3401
gtcgccatgg cctccgtcgc ccaggagagc gcgggctcgc agcgccggct accgccgcgt 60
cacggggcgc tgcgcgggct gctactgctc tgcctgtggc tgccaagcgg ccgtgcggcc 120
ttgccgcccg cggcgccgct gtccgaactg cacgcgcagc tgtcgggcgt ggagcagctg 180
ctggaggagt tccgccggca actgcagcag gagcggcctc aggaggagct ggagctggag 240
ctgcgcgcgg gcggcggccc ccaggaggac tgcccgggcc cgggcagcgg cggctacagc 300
gcaatgcctg acgccatcat ccgcaccaag gactccctgg cggcgggtgc cagcttcctg 360
cgggcgccgg cggccgtgcg gggctggcgg caatgcgtgg cggcctgctg ctccgagccg 420
cgctgctccg tggccgtggt ggagctgccc cggcgccccg cgcccccggc agccgtgctc 480
ggctgctacc tcttcaactg cacggcgcgc ggccgcaacg tctgcaagtt cgcgctgcac 540
agcggctaca gcaagctaca gcctcagccg cgcgccggac ggcgccgccc tggcaccgcg 600
cgcgcctcgc cccggcagga aaaggatgcg ccttcactta gcaaggctgg gcaagatgtg 660
gttctgcatc tgccacagaa cggggtgggt ctagacggcc gcgaaagcac agatgaccac 720
gccatcgtcc aatatgaagt ggggcacttc tgcaggggga cccgtcagtg gacattgaag 780
gngncttcaa tcaaggaacc ctgaagcttg tcccacctta cagggganggg aaccttcaac 840
ctttca 846

<210> 3402
<211> 857
<212> DNA
<213> Homo sapiens

<400> 3402
ttgcaataca gaagagtgtc taaaaactgg atcacctggc aaaaaggaag agaaggccaa 60
gaacaaagaa tcactttgca tggaaaacag tagcaacagc tcttcagatg aagatgaaga 120
agaaacaaaa gcaaagatga caccaactaa gaaatacaat ggtttggagg aaaaaagaaa 180
atctctacgg acaactggtt tctattcagg attttcagaa gtggcagaaa aaaggattaa 240
acttttaaat aactctgatg aaagacttca aaacagcagg gccaaagatc gaaaagatgt 300
ctggtcaagt attcagggac agtggcctaa aaaaacgctg aaagagcttt tttcagactc 360
tgatactgag gctgcagctt ccccaccgca tcctgcccca gaggaggggg tggcagagga 420
gtcactgcag actgtggctg aagaggagag ttgttcaccc agtgtagaac tagaaaaacc 480
acctccagtc aatgtcgata gtaaacccat tgaagaaaaa acagtagagg tcaatgacag 540
aaaagcagaa tttccaagta gtggcagtaa ttcagtgcta aataccctc ctactacacc 600
tgaatcgcct tcatcagtca ctgtaacaga aggcagccgg cagcagtctt ctgtaacagt 660
atcagaacca ctggctccaa accaagaaga ggttcgaagt atcaagagtg aaactgatag 720
cacaattgan gtgggatagt gttgctgggg agctccaaga ccttcagtct gaaaggaata 780
gctcgccagc aggttttgat gccngtgtga gctcaagcag tagtaatcag ccngaccaga 840
cattctgnaa aagctgt 857

<210> 3403
<211> 808
<212> DNA
<213> Homo sapiens

<400> 3403
gactgctgtg ctagcaatca gggagactcc gtgggcgtag gaccctctga gccaggtgca 60

ggatataatc tcgtggtgcg ccgtttttta agccggttgg aaaagcgcag tattcgggtg 120
ggagtgaccc gattttccag cttttgctgc ttattcctct atctcacggg ttttgcacag 180
aaccaagagg cagtctctcc actgaatcaa tgaagaaaaa gaaaaggaaa agaaagcaca 240
ctattggaat cctaggaggc agattccagt tcttcttaac tgaacgattg gcaggcctcc 300
attgcttttg tggttgggaa ccagattgaa gatgatcttc tcatccaagc ccttaccgtg 360
gctgtccagg tccctcagcg taaactcttc agtatggtgt cgtggcaaga cattctccag 420
cagattaatg aaataaatac acttgttgga tctgcttcat ctaaaaaggc aaaaaaacct 480
gtaggtggta atgctccttt atattatgag gtatagtcag tcctgaccaa aattaaaaag 540
gaaaatatca gcagtcattc aaaaccaact gaaatgttct cgatgagaga gttctacgtg 600
taccatagat gccaagattc tcccagttgt gactaaatct gatacacaat tcctgatatg 660
aaactcattt tttaaacagt gccttgaatt aatagtcaat ttaatagaat tgtaagccct 720
tatattgggg ggtggccctt gtcagaatga aaaatggaaa actcatgctt cagagatagg 780
tncaaatnat atgtgaaaac ntttaaga 808

<210> 3404
<211> 874
<212> DNA
<213> Homo sapiens

<400> 3404
gagcagaatg caaaccaccc acaccggatt gaaatacaga acatttttga ggaagcccag 60
tccctcgtga gagagaaaat tgtgccattt tataatggag gcaactgcgt aactgatgag 120
tttgaagaag gcatccaaga tatcattctg aggctgacac atgttaaaac tggaggaaaa 180
atctccttgc ggaaagcaag gtatcacact ttaaccaaaa tctgtgcggt gcaagagata 240
atcgaagact gcatgaaaaa gcagccttcc ctgccgcttt ccgaggatgc acatccttcc 300
gttgccaaaa tcaacttcgt gatgtgtgag gtgaacaagg cccgaggggt cctgattgca 360
cttctgatgg gtgtgaacaa caatgagacc tgcaggcact tatcctgtgt gctctcgggg 420
ctgatcgctg acctggatgc tctagatgtg tgcggccgga cagaaatcag gaattatcgg 480
agggaggtag tagaagatat caacaaatta ttgaaatatc tggatttgga agaggaagca 540
gacacaacta aagcatttga cctgagacag aatcattcca ttttaaaaat agaaaaggtc 600
ctcaagagaa tgagagaaat aaaaaatgaa cttctccaag cacaaaaccc ttctgaattg 660
tacctgagct ccaaaacaga attgcagggt ttaattggca gttggatgaa gtaagtcttg 720
aaaaaaaccc ctgcatccng gaagccagga gaagagcatg atcgaggtgc aaactctgat 780
cacatatatt gacttgaagg aggccttgag aaaaagnaaa gcttgtttgc ttgtgangag 840
cacccatcca ttaagccgtn ttgaacgtcc ttgg 874

<210> 3405
<211> 887
<212> DNA
<213> Homo sapiens

<400> 3405
ttatgctgca ctttgttgtg aaatcaagaa attaaaatat gaggctgaaa ctaaatttta 60
caatggtctc ttgttttatg gagaaggagc tacagatgcc agcatggtgg aaggtgattg 120
ccaaattcaa atggggagat ttatttcatt cttacaggaa ctgtcttgct ttgttacgag 180
gtgctatgaa gtggtgatga acgtagtcca ccagttggct gccctctata tcagtaacaa 240
gattgcaccc aaaattatag agacaactgg agttcatttt cagactatgt atgagcactt 300
gggagaactg ctaacagttt tgctcaccct ggatgaaatt attgataatc atatcacact 360

0052035 : 0052035

gaaagaccac tggactatgt acaaaaggtt actgaaatct gtccatcaca atccttcaaa 420
atttggaatt caggaagaaa cattaaagcc atttgaaaag ttcttgctga agctagaagg 480
gcaattactg gatggaatga tattccaggc ctgtatagaa caacaatttg attctctcaa 540
tggaggagta tctgtgtcaa aaaatagtac ttttgctgag gaatttgcac atagtattca 600
gtcaattttt gcaaatgtag aagccaaact tggagaacct tctgaaattg accagagaga 660
caagtatgtt ggaatttgtg gactctttgt attgcacttt cagatttttc gaactattga 720
taaaaagttt tataagtctt tattggacat ttgtaagaag gtaccagcca tcactctact 780
gctaatatta tttgggttcc tgataatttc tgatccagaa atccacagct gccaactgta 840
gacagaaaag cttcagcctt aaatcacngg atcttctaca cagaagn 887

<210> 3406
<211> 860
<212> DNA
<213> Homo sapiens

<400> 3406
gtaaatatgt tatggtggtc tataaacgtg aaccagctgt ggagagggta atagaatttg 60
cagcaaagtt tgttacctca tttcaccaat cagatatgga agatgatgag gaagaggaag 120
atggtggcct tttaaattat ttgtttactt ttctcttaaa gtctcatgaa gcaaacagca 180
atgcagtgag atttagagtg tgcctgctca taaacaagct tttgggaagt atgccagaaa 240
atgctcagat tgatgatgat gtgtttgata aaattaataa agccatgctt attagattga 300
aagataagat tccaaatgtg agaatacagg cagttctggc gctttcacga cttcaggatc 360
ccaaggatga tgaatgccca gtggttaatg catatgctac tttgattgaa aatgattcaa 420
atccagaagt tagacgggca gtgttatcat gtattgcacc atcagcaaag actttgccaa 480
aaattgtagg gcgcaccaag gatgtgaaag aggctgtcag aaagctggct tatcaggttt 540
tagctgaaaa ggttcatatg agagctatgt ccattgctca gagagtaatg ctccttcaac 600
aaggtcttaa tgacagatca gacgctgtga aacaagctat gcanaagcat cttcttcaag 660
gctggttacg gttctctgaa ggaaatatct tagagttgct ccatcggttg gatgtagaaa 720
attcttctga agtggcagtc tctggtctca atgccttgtt ttcaataact cctctcatga 780
actggtnggg actctgtaaa accatgattg gcaggaaatt gattncagtg ggaaacattt 840
aactnctgaa attgctttgg 860

<210> 3407
<211> 895
<212> DNA
<213> Homo sapiens

<400> 3407
gttactcaca ttttgtgtgg aacatcacac atatcacata aaaaactata ttatgaacaa 60
ggacttgcta agaagagtct tggtcttgat gaattcaaag cacacttttc tggccttgtg 120
tgcccttcgc tttatgaggc ggataattgg acttaaagat gaattttata atcgttacat 180
caccaaggga aatctttttg agccagttat aaatgcactt ctggataatg gaactcggta 240
taatctgttg aattcagctg ttattgagtt gtttgaattt ataagagtgg aagatatcaa 300
gtctcttact gcccatatag ttgaaaactt ttataaagca cttgaatcga ttgaatatgt 360
tcagacattc aaaggattga agactaaata tgagcaagaa aaagacagac aaaatcagaa 420
actgaacagt aacagatttc gcagagatgc aaaagccttg gaagaggatg aagaaatgtg 480
gtttaatgaa gatgaagaag aggaaggaaa agcagttgtg gcaccagtgg aaaaacctaa 540
gccagaagat gattttccag ataattatga aaagtttatg gagactaaaa aagcaaaaga 600

0950450 - 070800

aagtgaagac aaggaaaacc ttcccaaaag gacatctcct ggtggcttca aatttacttt 660
ctcccactct gccagtgctg ctaatggaac aaacagtaaa tctgtagtgg ctcagatacc 720
accagcaact tctaatggat cctcttccga aaccaccaaa cttgcctacg tcagtaacag 780
ccaccaaggg aagtttggtt ggcttaatgg gattatncag atgatgaana ggaagatgaa 840
gaagaagaat cgtcccccag gaaaagaact tggcttggct cataaaatat ttntt 895

<210> 3408
<211> 842
<212> DNA
<213> Homo sapiens

<400> 3408
gatcaccatg acagatataa taacataata gtaacagaaa agtttgaaaa atgcaaatta 60
ccaaaatgtg agctcatggt tttggagaaa atggttccaa tagactcacc agatgcaggg 120
ttgccacaaa tcttcaattt gtaaaaaacg caatatctct gaaccacagt aaagttgaag 180
tgcaacaaaa ttaggtatgc ctgtatggaa acgcagagct cacacccttc tgatgaacag 240
acagaagtgt cagatccttt tctatgctag caaaggattt taagggtttg gaattctcta 300
aaagtgtaaa gctcttagga gggcgttact tggcaaagca gtgctttatc ccattctctt 360
gtttgcctgt tcaaacttcc cacccattgt agacccactt gctgtgttat tgcaggttaa 420
gcccccaaga ccctttctc tcacctttt tgttcacttc ccatcccctt tccttctcag 480
gtcatcctcc atgcccttct gatgtccaca tgtctcttca ttttcttctc aggcctcctc 540
tttctctcac catctaagtt attgaaattc ttgaaatcct aagcaggcct ggcactgaga 600
ggtaagcacc tgagagtgtc agtcttccct agataaatgg aactgtgtgc agatctggga 660
ctgctggaag ggtgtggggt agggatttaa ggatggcgca agtagggtgg ggctaaaaaa 720
gaccttggct tctttatata ggagcatcga gattaaaggg tgtgangtag gggttttaag 780
gatggccaag gtcaagtggg gcttaaaaaa ggaccttggg ctttctttta ttatngggan 840
cc 842

<210> 3409
<211> 848
<212> DNA
<213> Homo sapiens

<400> 3409
aaactttatg aggcagctgt gaagaaagtt cccaatagtg aggagtatca ctctcacctc 60
ttcatggcct atgccagagt gggtgaatac aagaaaatgc aacaggctgg catggctcta 120
tataagattg tccccaaaaa tccctactac ttttggtctg tgatgagctt aattatgcaa 180
tctatatcgg cacaggatga aaacctctca aaaacaatgt ttctgcccct tgctgagaga 240
atggtcgaaa aaatggtgaa agaggacaag atagaagctg aggctgaagt tgaactttat 300
tatatgaccc tggaacgttt gggaaagtac caggaggcct tggatgtcat cagagggaaa 360
ttaggagaga agttgacaag tgagattcag agtcgggaaa ataaatgcat ggctatgtac 420
aagaagctga gcaggtggcc agagtgcaat gcccttccc ggcgcctctt actaaaaaac 480
tcagatgact ggcagttcta tctgacttat ttcgattctg tctttcgact gattgaagag 540
gcctggagtc ctcctgctga aggtgaacac tctttagaag gagaagtaca ttattctgca 600
gaaaaagctg tgaagtttat agaagatcgg ataacggaag aatctaaaag ttctcgccat 660
ctccgaggac cacatctagc taaattggag ctgattaggc gtttacgaag tcaaggttgt 720
aacgatgagt acaaactggg tgatcccaga agaattaatg gtccagtatt ttaaaaagtt 780
tggcgataaa ccntggtggt ttacagaccc ttaaggtgtt tgttgacctc ttacctgntt 840

09/25/2003 10:47 9009

cacagngt 848

<210> 3410
<211> 902
<212> DNA
<213> Homo sapiens

<400> 3410
atgtaaatgg ctctagagtt agagtgactg tttgctcttc tgctttctgg aatgcagatg 60
acagtatgga aagaaagaat aatgattcta tctaatagga aaggatttct tctttctttt 120
ttaaagagtg ggtggatttt ctccctttg ttttgctttt attttcatgc tactaacata 180
tcttcagaag gaaatggcaa ctagtagatc agtaaaatta cgaaaacgat gcctgcaaaa 240
tttgaaggaa tgcaattctg atttgccatt tatcagggaa aactgaaagc atttttctta 300
taacttttt tctttttctt ttttttgga gggggaggc agggtcttgc tctgtccctc 360
aggctggagc ttagctcagt gcagcctcca actcctgggc tcaagcaatc ctcccacttt 420
agcctcctga gtagctggga ctacaggcgt gtgccagcgc gcctggctaa ttttaaaatt 480
tttttgtaga gacagagtct ccctctgttg cccaggctgg tctggaactc ctagcttcaa 540
atgatcctct cacctcggcc tcccaaaatc ctgggattcc aggcgtcagc cactgctctc 600
ggccctctta caccattttg tttgattgtc tagtccctgt ttctttttct ttctaatcct 660
tattcattta agcaaaacca tacattatct tttccagtcc tttcttgnat tcttactgnt 720
tttttaaaat aacttttgc cttaatagct cattgtcact aataacttct gngttctccc 780
agcagtgtta tacagaaggg caatgaaaac attggacatg accatgagtg cttcctttcc 840
ttactctang tttgtagtct ggtttaaata ggatagttcc tgcattctga aaacattggn 900
ct 902

<210> 3411
<211> 760
<212> DNA
<213> Homo sapiens

<400> 3411
cttcgcgcac ctcatggaat cccttctgca gcacctggat cgcttttccg agcttctggc 60
ggtctcaagc actacctacg tcagcacctg ggaccccgcc accgtgcgcc gggccttgca 120
gtgggcgcgc tacctgcgcc acatccatcg gcgctttggt cggcatggcc ccattcgcac 180
ggctctggag cggcggctgc acaaccagtg gaggcaagag ggcggctttg ggcggggtcc 240
agttccggga ttagcgaact tccaggccct cggtcactgt gacgtcctgc tctctctgcg 300
cctgctggag aaccgggccc tcggggatgc agctcgttac cacctggtgc agcaactctt 360
tcccggcccg ggcgtccggg acgccgatga ggagacactc caagagagcc tggcccgcct 420
tgcccgccgg cggtctgcgg tgcacatgct gcgcttcaat ggctatagag agaacccaaa 480
tctccaggag gactctctga tgaagaccca ggcggagctg ctgctggagc gtctgcagga 540
ggtggggaag gccgaagcgg agcgtcccgc caggtttctc agcagcctgt gggagcgctt 600
gcctcagaac aacttcctga aggtgatagc ggtgggcgct tgttgcagcc cgcctttgtc 660
ttgtcggccc caagaagaag tttggaaccc cggnattnca caaatcacct ggaaaagggg 720
aagcccaaag tgcttagttc ccactgggct ttnttggggg 760

<210> 3412
<211> 748
<212> DNA

09/02/2008 09:50:56 - 09/02/2008

<213> Homo sapiens

<400> 3412
ggcgcgcggc gagctgaggg tggcggcggt cgacatgttc caggtcccgg atagcgaggg 60
cggccgcgcc ggctccaggg ccatgaagcc cccaggagga gaatcgagca atctttttgg 120
aagtccagaa gaagccactc cttccagcag gcctaatagg atggcatcta atatttttgg 180
accaacagaa gaacctcaga acatacccaa gaggacaaat cccccagggg gtaaaggaag 240
tggtatcttt gacgaatcaa cccccgtgca gactcgacag cacctgaacc cacctggagg 300
gaagaccagc gacatttttg ggtctccggt cactgccact tcacgcttgg cacacccaaa 360
caaacccaag gatcatgttt tcttatgtga aggagaagaa ccaaaatcgg atcttaaagc 420
tgcaaggagc atcccggctg gagcagagcc aggtgagaaa ggcagcgcca gaaaagcagg 480
ccccgccaag gagcaggagc ccatgcccac agtcgacagc catgagcccc ggctggggcc 540
gcggcctcgc tctcacaaca aggtcctgaa cccaccggga ggcaaatcca gcatctcctt 600
ctactaagag aagccactgc tccacccgga gccagaccag aaactcaaga gatagggtag 660
ccatgttttc atttcctttt gnccaaatga accggggtgg gaaganggtt aagtcttatg 720
tgagcctggc tgnttaaccg tcttctgg 748

<210> 3413
<211> 756
<212> DNA
<213> Homo sapiens

<400> 3413
cgcatctgct gctgccgccg cagttgcgaa tgcagcatcg gcgcttagct gcctccgcgg 60
tgcagctaag gttcgtgtcg ctacccctg gcccttcgct cttgttgcct taaccccgcc 120
ggtggagccc gctcttctgg cctgttgagc ccgctccctc actgccacac agcaagttcc 180
gagaccatgg attcgggcag cagcagcagc gactcggcgc ccgattgctg ggaccaggtg 240
gacatggaat ccccggggtc ggccccgagc ggggatggag tctcctctgc ggtggccgag 300
gcccagcgcg agcccctcag ctcggctttc agccgtaagc tcaacgtcaa cgccaagccc 360
ttcgtgccta acgtacacgc cgcggagttc gtgccgtcct tcctgcgggg cccgactcag 420
ccgcccaccc tcccggccgg ctccggcagc aacgatgaaa cctgcaccgg cgcgggatac 480
ccttaaggta aaaggatggg acgggggggca cctgtggaac cttcccgaga ggaaccgtta 540
gtgtcgcttg aaggttccaa ttcagccgtt accatggaac tttcagaacc tgttgtagaa 600
aatggagagg tggaaatggc cctagaagaa tcatgggagc acagtaaaga agtaagtgaa 660
gcccaacctg ggggtgggtc ctcgggagat taagggcccc anaaaaaagt ggncnggaaa 720
tgatggagga aaaagaggaa attagaaaat ccaaat 756

<210> 3414
<211> 779
<212> DNA
<213> Homo sapiens

<400> 3414
atcaggggat ccccaaagaa agcaagggga ccaaggccgg gactgctggg gtgaaggtcc 60
gggaggctga gtaaggggac ggaagggcac aggccatgga aaggaatgac atcatcaact 120
tcaaggcttt ggagaaagag ctgcaggctg cactcactgc tgatgagaag tacaaacggg 180
agaatgctgc caagttacgg gcagtggaac agagggtggc ttcctatgag gagttcaggg 240
gtattgtcct tgcatcacat ctgaagccac tggagcggaa ggataagatg ggaggaaaga 300

0500250-050300

gaactgtgcc ctggaactgt cacactattc agggaaggac cttccaggat gtggccactg 360
aaatctcccc ggagaaagcc cccctccagc ccgagacgtc tgctgacttc tatcgtgatt 420
ggcgacgaca cttgccaagt gggccagagc gctaccaggc tctactgcag cttgggggtc 480
caaggctcgg ctgcctcttc cagacagatg tgggatttgg acttcttggg gagctgctgg 540
tggcactggc tgatcacgtg gggccggctg accgggcagc ggtgctgggg atcctatgca 600
gcctggcgag cactgggcgc ttaccctgaa cctaacctgc tgagcccggg cagagagaga 660
gagctgcaag ggcttgtttc aaaactgcaa gccatgggca accccagatc cgtgaangaa 720
gggctcactg ggaagaacag ggtctggaga acaatctggt ggcttcaaga aganganag 779

<210> 3415
<211> 863
<212> DNA
<213> Homo sapiens

<400> 3415
atgttctgtc gtctctcgca gtttacgcgg aagattcaga gcccgagtct gatggcgagg 60
ctggaatcga ggcggtgggc agcgcggctg aggagaaagg cggattggta tctgatgcct 120
atggggagga tgacttttct cgtctagggg gtgatgaaga tggttatgaa gaagaagaag 180
atgagaacag tagacagtcg gaagatgacg attcagagac tgaaaaacct gaggctgatg 240
acccaaagga taatacagaa gcagaaaagc gagaccccca ggaactcgtg gcctcctttt 300
ctgaaagagc tcggaacatg tcgcctgatg aaatcaagat cccgccagaa ccccctggca 360
gatgttcaaa tcacttgcaa gacaagatcc agaagcttta tgaacgaaag ataaaggagg 420
gaatggatat gaactacatt atccaaagga agaaagaatt tcggaaccct agcatctacg 480
agaagctgat ccagttctgt gccattgacg agcttggcac caactaccca aaggatatgt 540
ttgatcccca tggctggtct gaggactcct actatgaggc attagccaag gcccagaaaa 600
ttgagatgga caaattggaa aaggccaaaa aggagcgaac aaaattgagt ttgtgacggg 660
caccaaaaaa ggcaccacga ccaacgccac gttcaccacc actccactgg cagcacagct 720
tgttgcagat gctcagaaga gaaagagcaa gtgggattcg gttttccagt gacaacgata 780
gcccanccac catcttacca ncacagccac ccttgccact gttgtcacgg tcaccaccag 840
cgccagcggg tccaaaaccn cgg 863

<210> 3416
<211> 884
<212> DNA
<213> Homo sapiens

<400> 3416
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agttcctggg agaagccggg ctgcctcacg 60
aggcactagg aactacattt cccggaaagt actaaattta agaatgtttg gacaactcat 120
tccaggtcac ctatagccta tgagagagga agaatatatt ttgacaatta tcggcgctgt 180
gtcagcagtg ttgcatctga gccaagaaaa ctttatgaaa tgccaaaatg ttccaaatca 240
gaaaaaatag aggatgcttt attatgggaa tgcccagtgg gagatatact tcccaattca 300
tcagattata agtcctcact catagcactg actgctcata attggctact tcgtatatca 360
gcaactacgg gaaaaatcct tgagaaaata tatcttgcac cttattgcaa attcagatac 420
ttgagctggg acactcctca agaagtcatt gcagttaagt cagctcagaa cagaggctca 480
gcagtggccc ggcaggcagg cattcaacaa catgttttgc tgtaccttgc agtgttccga 540
gttctacctt tttcacttgt agggattcta gagatcaaca aaaagatttt tgggaacgtt 600
acagatgcta ccttgctcat ggaatactga ttgtgatgta cagctcagga ctggtcagac 660

US 2005/0260686 A1

tctatagctt ccaaaccatc gctgaacaga catgccacca ctgctctttg aggggcatcc 720
ctggaaaatg cttttcaaat tggaggccat ncttggcact acatcgtcac cctaatagga 780
agaaaccgaa aggagttttc catatttgng cctaaaagac aattcctggc aaaaaatggg 840
atccnggaaa tgggatgggg tctctaaaac tgactggact nttc 884

<210> 3417
<211> 906
<212> DNA
<213> Homo sapiens

<400> 3417
tatgcctgtt tttatgttta cctataattt tcatatagcc gtataaggat tgatttacca 60
ttttttgccc aacatgacaa ttctggctat gaaaattatg tttaaactgt gtatgatcta 120
ttttatgtgc tctatgttcc catttgtttg tttggtctgg acagtggttc tggaatgaat 180
tctatctagt aaattagtaa atgtgctgtt ttgtataaag catgataatt acttttttaac 240
agaagttcat ttttaaagat tactcccttt tctttctctc tttttttttg agacaatttc 300
tctcttgttg cctaggcagt gcagtggcgc gatctcagct ccctgcaact tctgcctccc 360
aggttcaagc gattctcctg ccttagcctc ctgagtagct gggtcagcca ccatggctga 420
ctcatttttt gtatttttag tagagaaggg gttttaccgt gttggccggg ctggtcttga 480
actcctgacc ttgggtgatc cacctgcctc agcctcccaa agtgctggga ttacaggcgt 540
gagctatccc gcccggtccc cttttcttta ttatcgaaga tattgtttaa aagaaagaaa 600
aagtaggtcc caataatata tgtgctattc aaaaaatgtg atcatttagg acattatcac 660
aagttgctat ggaaataact gaagacttcc tcaggagaag gaaagaaaat gaggaacata 720
atgatagagt cggggaactc ccactagctc acctganggg ggctcgatgc agctgaaata 780
ctgaatactg aaatactaga aaccaacaaa actggtttct agaattctnc anggatttgg 840
gcttgggaaa cttggtaaga atagttttta tttttgaaca ttcaacttgg gtcttcaaag 900
taatct 906

<210> 3418
<211> 795
<212> DNA
<213> Homo sapiens

<400> 3418
gcgcccagcc tgccagccgc gctgctgctg ctcctcctgc tgtgggaccg ctgaccgcgc 60
ggctgctccg ctctccccgc tccaagcgcc gatctgggca cccgccacca gcatggacgc 120
tcgccgcgtg ccgcagaaag atctcagagt aaagaagaac ttaaagaaat tcagatatgt 180
gaagttgatt tccatggaaa cctcgtcatc ctctgatgac agttgtgaca gctttgcttc 240
tgataatttt gcaaacacga ggctgcagtc agttcgggaa ggctgtagga cccgcagcca 300
gtgcaggcac tctggacctc tcagggtggc gatgaagttt ccagcgcgga gtaccagggg 360
agcaaccaac aaaaaagcag agtcccgcca gccctcagag aattctgtga ctgattccaa 420
ctccgattca gaagatgaaa gtggaatgaa ttttttggag aaaagggctt taaatataaa 480
gcaaaacaaa gcaatgcttg caaaactcat gtctgaatta gaaagcttcc ctggctcgtt 540
ccgtggaaga catcccctcc caggctccga ctcacaatca aggagaccgc gaaggcgtac 600
attcccgggt gttgcttcca ggagaaaccc tgaacggaga gctcgtcctc ttaccaggtc 660
aaggtcccgg atcctcgggt cccttgacgc tctacccatg gaggangagg aggaagagga 720
taagtncatg ttggtgagaa agangaagac cgtggatggc tacatgaatg aagatgacct 780
ggccagaagc cgtcg 795

09550450.00700

0050050 .0050060

<210> 3419
<211> 807
<212> DNA
<213> Homo sapiens

<400> 3419
ggagtttctc caccagcaac atggccgccg cctgagagga gagccgggcc gccgccgtct 60
ctgcagcccg cgggtaactg ggccgttgcc gccgtccgcg ctcggccccc gcggagagat 120
cgagctgaag gactgcgcgg ctggctctcc tctagtatgg ccaatgaaga ggatgaccca 180
gttgtacagg agatcaatgt gtacttggcc aagagtctgg cggaaaagct gtatctattt 240
cagtaccctg tgcgtccagc ctcgatgacc tacgatgaca ttccgcacct ctcagccaag 300
atcaagccca agcagcagaa ggtagagctt gagatggcca tcgacaccct gaaccccaac 360
tattgccgca gcaaagggga gcagattgcg ctgaacgtgg acggggcctg cgccgacgag 420
accagcacgt attcctcgaa gctgatggac aagcagacct tctgctcttc ccagaccacc 480
agtaacacat cccgttatgc cgctgcactc tacaggcaag gtgagctcca cctgacacct 540
ttacatggca tcctgcagct gcggcccagc ttctcctacc tggataaggc tgacgccgag 600
caccgggaga gggaggcggc caatgaggca ggggactctt cacaggatga ggcngaagac 660
gatgttaagc agatcacggt gcggttctcc ggcccggagt cagagcaggc ccgncagcgc 720
cgtgtgcant cctatgagtt cctgcaaaaa gaagccccca aaagaacccc tgggtccacc 780
ttgcattact atgggcctga ngggaca 807

<210> 3420
<211> 817
<212> DNA
<213> Homo sapiens

<400> 3420
tttgacaact cacagtcact ggatgctgct gaagaagagc cctctgagag aggaacagag 60
gaggaccctg tattctctgt tgagaattca gggagggact cagatgccct tagacttgaa 120
agtacggtgg ttgaggagag caatggttct gatgagatgg agaattcaga tgaaaccaaa 180
atgtcagaag aaatactggc tttggtggat gaatttcaac aggcatggcc tttggaaggc 240
tttgggggtg cactagagat gaaagggcgg cgtctagact tacaaggaat acgggtgctg 300
aagaaaggtc cccaggatgg agtggccaga agctcttgct atggagactg cagaagtgaa 360
gatgatgaag caacagaatg gattacattc caggtcaaac gtgtaaagaa acccaaagga 420
gatcataaga aaactcctgg gaaaaaagta gaaacaggtc agatagaaaa tggacatcgt 480
taccaagcaa acctagagat cactggcccc aaggtggcat ctcctgggcc acaaggaaaa 540
aaacgtgact accagcgtct gggatggccc agcccggacg aatgcctcaa actccgctgg 600
gtagagctga ctgccatcgt gagtacctgg cttgcagttt cttcaaaaaa cattgacatc 660
acagaacaca tagattttgc ccccctatac agcagccagc aatggacctc tttgcaatgg 720
caatctcccc acgagtatcc taccctggcc cttgcatggg gttccacccg accagctgac 780
tncacagggg agagcagtta cagaggnttn caaatct 817

<210> 3421
<211> 802
<212> DNA
<213> Homo sapiens

0050350 2005-03-03

<400> 3421
cagcgcgggc ccggagcagg gggaagggaa gtgcggctcg gtcggcgcgg gtggaggggg 60
cgtgaggccg ccctacggtg gccgtcgagg gacggcgcta cggctcccac gctaggccaa 120
acgcctccgg cggccgcgcc cgagagcccc ttcacctgca gggcgacccc agccggcgac 180
gcgtgaacca cgccctcagc cgccttgcca gcgcccccag ccgcgcgccc cagcaccatg 240
cggccgccct gcgcacggag ccccgaggga caggggcacc cgcaggcccg gcccctagca 300
ccgccggccg gccccgaggt ccgggacgcc ggcgccgccg cggagagggc accgggccga 360
cgcctccccc cagggtcagc tgcgggctcc caggcctagg cgcccatgac ccctacgcca 420
accgccgcct ggacaccgcc gccgccactg cgacctagcg ccgccgccgg ggcccaatgc 480
cggtcatgcc cattccgcgg cgggtgcgct ccttccacgg gccgcacacc acctgcctgc 540
atgcggctgc gggcccgtgc gcgcctncca cctggcccgc accaagtaca acaacttcga 600
cgtgtacatc aagacgccgc tggctgtacg gcttcatccc gcttcctact ctactttagc 660
ttgcaagcct gttcacttgc ggcgcttntg gggttgccgc ttggcccgcc cttcttcttg 720
ncttacagta cccttgggcg gtttcgccgt tccttggctt tgngcttttc caagcgcaaa 780
gcttgttcgg gtggcccccc tn 802

<210> 3422
<211> 726
<212> DNA
<213> Homo sapiens

<400> 3422
agcgggcgtg cggagcgggc gacagtggcg tgggatctgc ctctctgcga gcagctggga 60
gcggcggcgg cggcgccatg agcgggggca ccccttacat cggcagcaag atcagcctca 120
tctccaaggc ggagatccgc tacgagggca tcctctacac catcgacacc gaaaactcca 180
ccgtagccct tgccaaagtt cgatcctttg gtacagaaga cagaccgaca gatcgtccaa 240
taccacctcg agatgaagtc tttgaataca ttatattccg tgggagtgac attaaagacc 300
ttactgtttg tgagccacca aaaccacagt gttctttgcc tcaagaccca gctattgttc 360
agtcctcact aggctcatcg acttcttcat tccagtccat gggttcttat ggacctttcg 420
gcaggatgcc cacatacagt cagttcagtc cgagttcctt agttgggcag cagtttggtg 480
ctgttggtgt tgctggaagc tctttgacat cctttggaac agaaacatca aacagtggta 540
ccttacccca aagtagtgcg gttggttctg cctttacaca ggatacaaga tctctaaaaa 600
cacagttatc tcaaggtcgc tcaagccctc agttagaccc tttgagaaaa agcccaacca 660
tggaacaagc agtgcanacc ggcttnagcc cacttacctg gtccagcaac tgttgggaga 720
angagt 726

<210> 3423
<211> 779
<212> DNA
<213> Homo sapiens

<400> 3423
ggccttttt ttttttttt tggtttttat gtgtatttat taaaaaaagc aattacccga 60
ttaggctgac agaatgatta ggctgaccat taaaaggact ggcaacttta tcctcagagt 120
ttagaggtaa gtttgtaaga attcaggatg tttgtctaag attgcttgat actagggcaa 180
caagactgag agcagagggc actaaaaaga ctgtctaggg gttagacatc aattgtgttt 240
aagtctgaga tctgcccctt aggtaccata tgaccctgca caagtcatcg acccctccac 300
actccagtgt gtcatctgta atgaggatgg ggcactccct tccacactgc agcactgcgg 360

gaaccgagac aatgccatcg cagaggacct gcaggggaca ggctacttca ctcactcctc 420
tccttcccac tcttcagaga acaaggactt gtgctactgt attctcacag cactcactgg 480
cctgggaacc agctgtggga gccctatggg cctggtcatc aactctcaac tgcttgtgtg 540
cagctgtagg aaccctctga ggtgtggcag gtagaggatg gggtgggtgc ccaggcacac 600
tgctgacttt ctggagccct gcccaccccc aaccctctcc ttattactaa tgacatggga 660
acccacctgc tccactgtgc agncccaagt ctgatccaag tcangctcct gaatgtgagg 720
aaccgaacct gggggccaca gggaagtggg atcacttgaa aagctntaac cattggccg 779

<210> 3424
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3424
gatcgcgccc agcggagcta atcagattac ctggctagtg tttgcttgtt ctggagtgat 60
cttctgactg gaaaagaact atgtcatgga tcaaggaagg agagctgtca ctttgggagc 120
ggttctgtgc caacatcata aaggcaggcc caatgccgaa acacattgca ttcataatgg 180
acgggaaccg tcgctatgcc aagaagtgcc aggtggagcg gcaggaaggc cactcacagg 240
gcttcaacaa gctagctgag actctgcggt ggtgtttgaa cctgggcatc ctagaggtga 300
cagtctacgc attcagcatt gagaacttca aacgctccaa gagtgaggta gacgggctta 360
tggatctggc ccggcagaag ttcagccgct tgatggaaga aaaggagaaa ctgcagaagc 420
atggggtgtg tatccgggtc ctgggcgatc tgcacttgtt gcccttggat ctccaggagc 480
tgattgcaca agctgtacag gccacgaaga actacaacaa gtgtttcctg tatgtctgtt 540
ttgcatacac atcccgtcat gagatcagca atgctgtgag agagatggcc tgggggggtgg 600
agcaaggcct gttggatccc agtgatatct ctgagtctct gcttgataag tgcctctata 660
ccaaccgctc ttctcatcct gacatcttgg atccggactt tttggaaaaa gtgcggcttg 720
agtgacttct tactatggca agacctctca ctccttgcct ggtggttcca acccgttctg 780
nggncagaag tttncatttt gggaaccttt ttc 813

<210> 3425
<211> 906
<212> DNA
<213> Homo sapiens

<400> 3425
ttttaatggt gctcatatat actgtatttt ttgttgttta gttttactta ttgagagtgt 60
cacaacatga atcacataat catgattttt ttttttact tttactcccc aaattattca 120
tgtttcttag atcgtagtca ttgagaagtc ccaataactc taaacttttg agttataacg 180
tagtaaactt ctctttcatc tttgtgttag ctctgtagtc ttaacctgga ttttaatttt 240
tttgtttcca aagtcacaat tgaattattc ttagatacct taagccactg aattcagttc 300
tgtttgactg aaagcaaaac aacgtgacag tttattttca aacactaact tcttgatatt 360
ttgttatggt atatcttttt attaaatatt tattttgact aagctttcat aaaatatttg 420
aagctatttt aatcatcaag tatggaaaac aaattactat tgcattttcc tatatatgca 480
tatattatgg attaaccaga attgtatcat ttttggccta atgtctggat ataaaagata 540
attagcctac tatagtatta ataaattttt cagttggttt gggcaaattt aaacctgaaa 600
aataggttaa aaagtagtta caaattaaac ttactaattt atacctgatt ttttttcttg 660
aattaaagta cattttaaat gagctttata ataccttaaa aaggttggtc taatttaaaa 720
tatgaaagct ctggctatca tcctggggat agtaatttct aattatatag tatttcaaaa 780

0050503-0050600

ctatatattt tttagttcct ttggagataa cctaatttct aattatatat gtttcaaaaa 840
ccatatcctg gatttttttt aaagaatggg tttataaatn ggncataagg atncaagggc 900
tgcatt 906

<210> 3426
<211> 884
<212> DNA
<213> Homo sapiens

<400> 3426
gcagaggcct gcgggaagcc aagatggcgc ataggggttc tccaggctgc agttggcgcc 60
ttatcagtat ctaagcggag tgttttggaa ggagttaagg ggctgtggca aacgccctct 120
ccgccgtcat ggcccggcat cggaatgttc gaggctataa ctacgatgaa gattttgaag 180
atgatgatct ctacggccag tctgtagagg atgattattg tatttcgccg tcaacagctg 240
cccagtttat ttattcacgg cgtgacaaac cttccgttga gcctgtggaa gaatatgatt 300
atgaagatct gaaagaatct tccaattctg tttcaaacca tcagctcagt ggatttgatc 360
aagctcgtct ttattcatgc cttgatcaca tgagagaggt acttggagat gctgtgccag 420
atgaaatatt aattgaagca gttctgaaga acaagtttga tgtgcagaag gctttgtcag 480
gggttctgga acaagataga gtgcagagtt tgaaggacaa gaatgaggca acagtatcta 540
caggaaagat agcaaaagga aaaccagtag attcccagac atcgcgaagt gaatctgaaa 600
ttgtgccaaa agttgctaaa atgactgtat ctggaaagaa gcaaactatg ggatttgaag 660
tgcctggagt gtcttctgaa gaaaatggtc atagtttcca cacacctcaa aaaggaccgc 720
cattgaagat gccattgctt cttccgatgt tcttgagact gcttctaaat ctgctaatnc 780
accccacacg attcaagcat cagaagaagc agagttcaac ccagcaccgg tggaaaaagt 840
ctgcaagctg aggcacaaat agatgtnaag cggactggan aacc 884

<210> 3427
<211> 697
<212> DNA
<213> Homo sapiens

<400> 3427
accctcgggc tcgagacagc ggcgacgttt aaagctgagc gacccagtgc cactggagac 60
ggtcagcttc tccactcagg ctcctccagc ccgagccaga agacccctc ccccagaatt 120
ctgggggccg atggaaggga gccgagtcag atcgcgaggt acccagagcc gacagaccgg 180
agcgacaggg agttgccaga agccccgccc ctaggagtga tcggaaagcc tcacccatcc 240
gggtgaggaa cccggaggga ccgcctccgg gcggagcccg ccgaccatgg ctacgccccc 300
ggtggcgggt cccgcagctc tacgcttcgc cgccgcggct agctggcagg ttgtgcgcgg 360
acgctgcgtg gaacattttc cgcgagtact ggagtttctg cgatctctgc gcgctattgc 420
ccctggcttg gttcgctacc ggcaccacga acgcctttgt atgggcctaa aggccaaggt 480
ggtggagctg atcctgcagg gccggccttg ggcccaagtc ctgaaagccc tgaatcacca 540
ctttccagaa tctggaccta tagtgcggga tcccaaggct acaaagcagg atctgaggaa 600
gattttggag gcacaggaaa ctttttacca gcaggtgaag cagctgtcan aagctnctgt 660
ggatttggcc tcnaacttca ggtgaaactg ggttgaa 697

<210> 3428
<211> 898
<212> DNA

US 2003/0224000 A1

<213> Homo sapiens

<400> 3428
agggactttt gctcccacaa gtcctgcctc ggaggcgggg gagctggacc agcagccgcc 60
tggagcgtcc gagtcaccgt cgccggggct cccgcgctcc ccagaacggt gggacgcggg 120
gctcggcagc cgccagcgga acatggcgcc ctggacgctg tggcgctgct gccagcgcgt 180
cgtgggctgg gtgccggtgc tcttcatcac cttcgtggtc gtctggtcct actacgcgta 240
cgtggtggag ctctgcgtgt accacgttga tgagcgaaca atatgcaatg gaattgcccc 300
agaaaaagat gtagatggat ttcatattat caatattgga agattgtgcc ttgatcagca 360
ttctctcata cctgccactg ccagtgctgt ttgggaaata ataaaaagaa caggaattca 420
aacatttgga aaaaatgtgg ttgtggctgg aagatccaag aacgtaggga tgcctattgc 480
catgctttta cacactgatg gagagcatga acggccagga ggtgatgcaa ctgtgacaat 540
agctcacaga tacacccccca aagagcaact gaagattcat acgcagctgg cagatattat 600
catagttgct gcaggtattc caaagttgat tacgtctgat atggttaaag aaggtgctgc 660
tgtaattgat gtgggtatca actatgtcca cgatccaatg acaggaaaga caaaattagt 720
tggagaatgt ggacttnnaa cttgttaaaa agaaagctgg ctttattact tccagttcca 780
ggaaggtgtt ggaccccatt gacaatgggc aatgcttttt gaaaaacacc ccttttttggc 840
ancttaaaaa aatcatttac tntgatccca ttgaaagggt taaagccaac ttgaantt 898

<210> 3429
<211> 769
<212> DNA
<213> Homo sapiens

<400> 3429
taaactcggg ccgcggcggg gcgagcgagg cgggctccgg agggagctga cgcctgatga 60
tggcgcagtc caacatgttt accgtggctg atgtgttgag tcaagatgaa ctgcgcaaaa 120
agctatacca gacgtttaag gatcggggta tactggatac actcaagaca caacttcgaa 180
accagctaat tcatgagttg atgcaccctg tattgagtgg agaactgcag cctcggtcca 240
tttcagtaga agggagctcc ctcttaatag gcgcctctaa ctctttagtg gcagatcact 300
tacaaagatg tggctatgaa tattcacttt ctgttttctt tccagaaagt ggtttggcaa 360
aagaaaaggt atttactatg caggatctat tacaactcat taaaatcaac cctacttcca 420
gtctctacaa atcactggtt tcaggatctg ataaagaaaa tcaaaaaggt tttcttatgc 480
atttttttaaa agaattggca gaatatcatc aagctaaaga gagttgtaat atggaaactc 540
agacaagttc gacatttaac agagattctc tggctgagaa gcttcagctt attgatgatc 600
agtttgcaga tgcttaccct nagcgtatca agttcgaatc tttagaaata aagctaaatg 660
agtataagag agaaatagaa gagcaacttn gggcagaaat gtgtcaaaag ttgaagtttt 720
tttaaagatc cgngatncaa aaattaaaat ggaaccaaaa aaaaagttt 769

<210> 3430
<211> 911
<212> DNA
<213> Homo sapiens

<400> 3430
ctgaagctgc tgggcaaagg gaacattatc atcagcaccc ctgagaagtg ggacatactt 60
tcccggcgat ggaagcagcg cangaacgtg cagaacatca acctcttcgt ggtggatgag 120
gtccacctta tcgggggcga gaatgggcct gtcttagaag tgatctgctc ccgaatgcgc 180

09629469.072800

tacatctcct cccagattga gcggcccatt cgcattgtgg cactcagctc ttcgctctcc 240
aatgccaagg atgtggccca ctggctgggc tgcagtgcca cctccacctt caacttccat 300
cccaatgtgc gtcccgtccc cttggagctg cacatccagg gcttcaacat cagccataca 360
caaacccgcc tgctctccat ggccaagcct gtgtaccatg ctatcaccaa gcactcgccc 420
aagaagcctg tcattgtctt tgtgccgtct cgcaagcaga cccgcctcac tgccattgac 480
atcctcacca cctgtgcagc agacatncaa cggcagaggt tcttgcactg caccgagaag 540
gatctgattc cgtacctgga gaagctaagt gacagcacgc tcaaggaaac gctgctaaat 600
ggggtgggct acctgcatga ggggctcagc cccatggagc gacgcctggt ggagcaagct 660
cttcagctca ngggctatcc aggtggtggt ggcttctcgg agtctctgct ggggcatgaa 720
cgtggctgcc cacctggtaa tcatcatggg atacccagta ctacaatggc aagatccacg 780
cctatgtgga tacccatcta tgacgtgctt caaatggtgg gccacgccaa ccgncctttg 840
caggacgatg aaggggccct tggntcatta atgtgtcang gcttccaaga aggattcttt 900
aaaaagttct t 911

<210> 3431
<211> 889
<212> DNA
<213> Homo sapiens

<400> 3431
tgcaagggtg tacaactatg agcctttgac acagctcaag aatgtcagag caaattacta 60
tggaaaatac attgctctaa gagggacagt ggttcgtgtc agtaatataa agcctctttg 120
caccaagatg gcttttcttt gtgctgcatg tggagaaatt cagagctttc ctcttccaga 180
tggaaaatac agtcttccca caaagtgtcc tgtgcctgtg tgtcgaggca ggtcatttac 240
tgctctccgc agctctcctc tcacagttac gatggactgg cagtcaatca aaatccagga 300
attgatgtct gatgatcaga gagaagcagg tcggattcca cgaacaatag aatgtgagct 360
tgttcatgat cttgtggata gctgtgtccc gggagacaca gtgactatta ctggaattgt 420
caaagtctca aatgcggaag aaggttctcg aaataagaat gacaagtgta tgttcctttt 480
gtatattgaa gcaaattcta ttagtaatag caaaggacag aaaacaaaga gttctgagga 540
tgggtgtaag catggaatgt tgatggagtt ctcacttaaa gacctttatg ccatccaaga 600
gattcaagct gaagaaaacc tgtttaaact cattgtcaac tcgctttgcc ctgcattttt 660
ggtcacgaac ttgttaaagc aggtttggca ttagcactct ttggaggaag ccagaaatac 720
gcagatgacn aaaacagaat tncaattcgg ggagaccccc acatccttgn tggtggagat 780
ccagcctagg aaaaagtcaa atgctccagg cacgtgcaat gttgcccacc tggcgtgttt 840
gttggggaac acacgacccc ttggctgcgn acttttaaa anaagtccn 889

<210> 3432
<211> 818
<212> DNA
<213> Homo sapiens

<400> 3432
ttgggcgctt cgctgatggt gtcggtgagc gcgtttcccg cctgagcgca actagcggcg 60
ggtcgtgggc acctccaggc tcagacgtgc agcttctgga atacgaggcg tcagctgctg 120
gcctcatccg atccttctct gagcgtttcc cagaggatgg acccgagttg gaggagatcc 180
tcacacagct ggccacagcc gatgcccgat tctggaaggg ccccagtgag gccccatctg 240
gccaagcttg aggaagatgt gtggccttgc ccccaattcc atcagaccaa ggctgcaagt 300
ggccctccat tcgtcaatga ggccaattcg aagtggttgg atgcgcacta cgacccaatg 360

0960304.0942000

gccaatatcc acacctttc tgcctgccta gcgctggcag atttacatgg ggatggggaa 420
tacaagctgg tggtagggga ccttggccct ggtgggcagc agccccgcct gaaggtgctc 480
aaaggaccac tggtgatgac cgaaagcccg ctacctgctc tgccagctgc tgctgccacc 540
ttcctcatgg agcaacatga gccccggacc ccagctctgg cacttgcttc aggcccttgt 600
gtctatgtgt ataagaatct cagaccctac ttcaagttca gcctgcccca attgcctnca 660
aatcctctgg aacaagacct ttggaaccag gccaaagagg accgaatcga ccccttaacc 720
ctgaaggaga tgctggaaaa cattccggga gacggcagan gagcctttgt ccattcagtc 780
acttangttt ctgcaacttg gagcttaant gaaatgga 818

<210> 3433
<211> 808
<212> DNA
<213> Homo sapiens

<400> 3433
gcacattcta cctgaagcaa tggtttgtta cttagaaaat tatgaacctg aaaagttttc 60
tgagattttt ctaggagaat ttgatactcc agaagcaatc tggagcagtg aagtgaggcg 120
cctgatgata gagaagattg ctgcccatct cgcggatttc acacctcgtc ttcagagtaa 180
cacaagagca ctttatcagt attgccccat tcctataatc aactatccac aactcgaaaa 240
tgaactattt tgtaatattt attacctcaa acaactgtgt gatacactcc ggtttccaga 300
ttggccaatt aaagacccgg ttaagcttct aaaagatacc cttgatgcct ggaagaaaga 360
agtagaaaag aagccaccta tgatgtcaat agatgatgct tatgaagtgc ttaatctgcc 420
tcaaggacag ggaccgcatg atgagagcaa gattaggaaa gcttacttca gacttgcaca 480
aaagtaccac cctgataaga atccagaagg gagggacatg tttgaaaaag taaataaagc 540
atatgaattt ttatgtacca aatcagcaaa aatagtggat gggccagatc cagagaatat 600
aattttaatc taaaaacaca gagcatcctc ttcaacccgt cataaagaag atttacagcc 660
ttataaatat gcaggatacc ccatgcttat tcggactata acaatggaaa cttcagatga 720
cctnctttc tcaaaagaat caccattgtt gcctgcggct acagagctag ctttncatac 780
tgncaactgt tcaaccctca atgctgaa 808

<210> 3434
<211> 832
<212> DNA
<213> Homo sapiens

<400> 3434
gtcaagagga tcatccatgc atcatgtgga ctggaggctg caggagaatt ccagttttgg 60
tattccatgc cgacgctatt cttacaaagg acaacaatat tagagtaatt ggagaacgtt 120
atcatttgtc ttataagatt gtacgaacgg acagtcgcct agtacgcagc attctgacag 180
cccatggatt tcatgaagtt cacccaagca gcactgacta taacctaatg tggacaggat 240
cccacctgaa gcccttctta ctgcgcaccc tctctgaagc acaaaaagtt aatcactttc 300
ccaggtctta tgaacttacc cggaaggacc gactgtacaa aaacattatt cgaatgcagc 360
atacacatgg attcaaggct tttcacatcc tcccccagac cttcctcctg ccagctgagt 420
acgcggaatt ttgtaattca tattcgaagg accggggacc ttggatagta aaaccagtgg 480
catcttcaag ggggcggggc gtctacctga tcaacaatcc aaaccagatc tccctggaag 540
agaacatttt ggtctcccgt tacattaaca acccccctgct catagatgat ttcaagtttg 600
acgtgcgcct ctatgtgctc gtgacttcct atgatcctct tgncatctat ctctatgaag 660
aaggattggc tagaaaatgc aattggaaga tgggaaatac catggataaa agaagcttcc 720

0356205.00000

tatttatgtc aggtgctttg cagatttatt ggactctgac actattattt tanaatggcn 780
tttaatgatt tagaagactt agtttttta catgnatccc atgcttggaa tc 832

<210> 3435
<211> 848
<212> DNA
<213> Homo sapiens

<400> 3435
gcagaggtgc ggccggggag gcgcgcggag gctggagctg gaggcgcggc gccggtgagc 60
tgagaaccat gtgtgctcag tattgcatct cctttgctga tgttgaaaaa gctcatatca 120
acattcgaga ttctatccac ctcacaccag tgctaacaag ctccattttg aatcaactaa 180
cagggcgcaa tcttttcttc aaatgtgaac tcttccagaa aacaggatct tttaagattc 240
gtggtgctct caatgccgtc agaagcttgg ttcctgatgc tttagaaagg aagccgaaag 300
ctgttgttac tcacagcagt ggaaaccatg gccaggctct cacctatgct gccaaattgg 360
aaggaattcc tgcttatatt gtggtgcccc agacagctcc agactgtaaa aaacttgcaa 420
tacaagccta cggagcgtca attgtatact gtgaacctag tgatgagtcc agagaaaatg 480
ttgcaaaaag agttacagaa gaaacagaag gcatcatggt acatcccaac caggagcctg 540
cagtgatagc tggacaaggg acaattgccc tggaagtgct gaaccaggtt cctttggtgg 600
atgcactggt ggtacctgta ggtggangaa gaatgcttgc tggaatagca attacagtta 660
aggctctgaa acctagtgtg aaggtatatg ctgctgaacc ctcaaatgca gatgactgtt 720
ccagtccaag ctgaagggga aactgatgcc caatctttat ccttcagaac catacagatg 780
gtgtcaaatc cacattggct tgaacacctg gnctattatc anggaccttg nggatgatat 840
ctttactg 848

<210> 3436
<211> 880
<212> DNA
<213> Homo sapiens

<400> 3436
aatgctgccc gatggccctg ggtcctcgct gtggggcaat ccgggcttgc agacgagttt 60
tagaaagagc gttttcgcta cgtaaagcac attcgataaa ggatatggaa aatactttgc 120
agctggtgag aaatatcata cctcctctgt cttccacaaa gcacaaaggg caagatggaa 180
gaataggcgt agttggaggc tgtcaggagt acactggagc cccatatttt gcagcaatct 240
cagctctcaa agtgtgacag ccccaatgct gttcatgagg tggagaagtg gctgccccgg 300
ctgcatgctc ttgtcgtagg acctggcttg ggtagagatg atgcgcttct cagaaatgtc 360
cagggcattt tggaagtgtc aaaggccagg gacatccctg ttgtcatcga cgcggatggc 420
ctgtggctgg tcgctcagca gccggccctc atccatggct accggaaggc tgtgctcact 480
cccaaccacg tggagttcag cagactgtat gacgctgtgc tcagaggccc tatggacagc 540
gatgacagcc atggatctgt gctaagactc agccaagccc tgggcaacgt gacggtggtc 600
cagaaaggag agcgcgacat ccttcccaac ggccagcagg tgcttgtgtg cagccaggaa 660
ggcagcancc cgcangtgtg gagggcaagg ggaccttctg tcgggcttcc tgggcgtcct 720
ggtacactgg gcgcttcttg ctggaccaca gaaaacaaat gggtccagcc cttttctggt 780
ggcccgtttg gcgcctgctn tttaccaggc antgcaacca ccaagccttt caaaagcacg 840
gtcgttcanc acaacttcga catgacccca agtgggggcc 880

<210> 3437

0050250:5050250

<211> 775
<212> DNA
<213> Homo sapiens

<400> 3437
tagccagaaa agggggcggg aagggctgta gggtacttgt caattcgccg ccatgaacgt 60
ggtttttgct gtgaagcagt acatttccaa aatgatagag gacagcgggc ctggtatgaa 120
agtacttctc atggataaag agacgactgg catagtgagt atggtataca cacaatcgga 180
gattctacag aaggaagtgt acctctttga acgcattgat tctcaaaatc gagagatcat 240
gaaacacctg aaggcaattt gttttcttcg acctacaaag gagaatgtgg attatattat 300
tcaggagctc cgaagaccca aatacactat atatttcatt tatttcagta atgtgatcag 360
caagagtgac gtgaagtcat tggctgaagc tgatgaacag gaagttgtgg ctgaggttca 420
ggaattttat ggtgattaca ttgctgtgaa cccacatttg ttttccctca tatttttggg 480
ttgctgccag ggtcgaaatt gggatccagc ccagctatct agaacaactc aagggcttac 540
agctctcctt ttatctctga agaagtgtcc catgattcgt tatcagctct catcagaggc 600
agcaaagaga cttgcagagt gcgttaagca agtgataact aaagaatatg aactgtttga 660
attccgtcgg acagaggttc ctncattgct ccttatttta gatcgctgtg atgatgccat 720
caccccattg ttaaccagtg gacatatcan gncatgggtc cacgaactac taggc 775

<210> 3438
<211> 831
<212> DNA
<213> Homo sapiens

<400> 3438
acctgatgca gctgtttata gctcagaggc cagatatgag agaagaagaa ttagaagata 60
ttaaacagtt caagaaaaca accataagtt gttacttacg ttgcttagat ggccgctcct 120
gctggactac tttaataagt gccttcagaa tactattaga atctgatgaa gacagacttc 180
ttgttgtatt taatcgagga ttgattctaa tgacagagtc tttcaacact ttgcacatga 240
tgtatcacga agctacagct tgccatgtga ctggagattt agtagaactt ctgtcaatat 300
ttctttcggt tttgaagtct acacgccctt atcttcagag aaaagatgtg aaacaagcat 360
taatccagtg gcaggagcga attgaatttg cccataaact gttaactctt cttaattcct 420
atagtcctcc agaacttaga aatgcctgta tagatgtcct caaggaactt gtacttttga 480
gtccccatga ttttcttcat actctggttc cctttctaca acacaaccat tgtacttacc 540
atcacagtaa tataccaatg tctcttggac cttatttccc ttgtcgagaa aatatcaagc 600
taataggagg ggaaagcaat attcggcctn cgcgccctga actcaatatg tgcctcttgc 660
ccacaatggt ggaaaccagt aagggcaaag atgacgttta tgatcgtatg ctgctagact 720
acttcttttc ttatcatcag ntcatccatc tattatgccc agttgcaatc aactgtgaaa 780
aattactgga acattagtta actgagtggc ctanttgnct atgaaggttt g 831

<210> 3439
<211> 712
<212> DNA
<213> Homo sapiens

<400> 3439
aacgccgggc agggcggcgg gcgcgctcag tctggcggcg gctgccgtga gctgactgac 60
gttccgggaa cgccgcagca gcccgcgccg cccgcagcct agccgagccg cgccgcccgg 120

0050450.0002

gcctcgcccg cccgcctgcc cgccatggtg tcatggatca tctccaggct ggtggtgctt 180
atatttggca ccctttaccc tgcgtattat tcctacaagg ctgtgaaatc aaaggacatt 240
aaggaatatg tcaaatggat gatgtactgg attatatttg cacttttcac cacagcagag 300
acattcacag acatcttcct ttgttggttt ccattctatt atgaactaaa aatagcattt 360
gtagcctggc tgctgtctcc ctacacaaaa ggctccagcc tcctgtacag gaagtttgta 420
catcccacac tatcttcaaa agaaaaggaa atcgatgatt gtctggtcca agcaaaagac 480
cgaagttacg atgcccttgt gcacttcggg aagcggggct tgaacgtggc cgccacagcg 540
gctgtgatgg ctgcttccaa gggacagggt gccttatcgg agagactgcg gagcttcagc 600
atgcaggacc tcaccaccat caggggagac ggcgcccctg ctccctcggg ccccccacca 660
ccggggtctt ggcgggccan cggnaaacac cggcagccta anatgtccaa ga 712

<210> 3440
<211> 840
<212> DNA
<213> Homo sapiens

<400> 3440
agctggctgg gcggttagga gggcccgggg ccgagacgat ggctgaccac aaccctgaca 60
gcgactccac gccgcgcacg ctgctgcgac gcgtgctgga tacagcggac ccgcgcaccc 120
cgcggcgacc ccggagtgct cgggctggag cccggagagc cctgcttgaa acggcttccc 180
ccaggaagtt gagtggccaa acaaggacga tagccagagg gcgttcccat ggagccaggt 240
ctgttggcag atcggcccat attcaggcca gtgggcactt ggaggaacag acacctcgga 300
cgctgctgaa gaacatccta ctaactgccc cagaatcttc catcctgatg cctgagtcgg 360
tagtgaagcc agtgccagca ccgcaggcgg tccaaccctc cagacaagag agcagttgcg 420
gcagcctgga gctgcaactt cctgagctcg agccccccac aaccctggct ccaggtctgc 480
tggcccctgg caggaggaaa cagaggctga gactgtcagt gtttcagcag ggagtggacc 540
aggggctgtc tctctcccaa gagcctcaag ggaatgctga tgcctcttcc ctnccagatc 600
cctcaacctg acctttgcca cgcctcttca gccacagtca gtgcagaggc ctggcttggc 660
ccgcagacct tcagcccgcc gagctgtaga cgtgggtgcc tttttgcggg atctgcgaga 720
tacttcctgg cttcttcaaa cattgtgttg gaggacaccc agccgttctt ntaacccatg 780
gntggcttcc cccaacgtgt attacttcct tgnccttgac gccttacact ggggcttgaa 840

<210> 3441
<211> 890
<212> DNA
<213> Homo sapiens

<400> 3441
ggttaatgga ggaagagatg gaaggctcgt gccatgattt ggtactgggt catctgactg 60
tccatgcagt tagctacgca ttctgcagac ttcctccatc cccagctccc acagttacaa 120
aaagttcttt cctgctctga gttctgaaat gctcacattc ccagctccaa gaggattccc 180
aaaatgaatg tttaccttct cttacagttc agtctagcct tcacatcttg ggaggggtta 240
gagggggcag aggaaaggaa ctttagctgc ctaggtgcag tttaaagagg gtctaggtac 300
tgtggctctc agcagccttt gaccctgggg ccactctctt catcttatgg aggacaaggc 360
ctttggttcc ctggaggttc actgaaaatc actgacatga ggcagattga ttaataggat 420
aaaagtcaca caaatttatt taatgtgagt acacatgaac cttcaaaatg aagacccaaa 480
gacacagggg aaattgtcca tttttatggt tgggtacaac aaagtatgga cagccatgta 540
gaaatatgat tgaacaaaaa gggtatgatc taatgctaat agactgagtg gggaaaccaa 600

0052-0155-0202-0

gcaaggcctg cctgtctgga ttcttcttgg cctctctgag catgcattcc tctgtgaacc 660
cagaaaatct gagacagctc tnagtccaga aagtttattt tgccaagttt ganggccacc 720
tgtgacacaa cctcaggaag tcctgatgac atgtgcccaa gtggccgggg cacagcttgg 780
tttatacatt tanggagaca tgagacacat caattatgta gaagtcctta cttttcagaa 840
gatgngacac taaccagccc tacttcagta cagtantgca acaatgtgat 890

<210> 3442
<211> 849
<212> DNA
<213> Homo sapiens

<400> 3442
agtcgaggta tcttctcccc aaccactgct cttattttaa ttattgcaga cggaagttga 60
agactattga catagtaaat agctctgggt ggcttgaaac gaaagtttaa ctttgcggac 120
aaacaggact tattgtaggg ggtggtcaaa atagtcccgg cggggcgggg ccatgacccc 180
tgacgtcgcc ggtccggcgc gcagttcagt ttggcggttc cggtaccgct ctcacattgg 240
ggcgggatgt gggagcggct gaactgcgca gcagaggact tttattctcg tctccttcag 300
aaatttaatg aagaaaagaa aggaatccgt aaagacccat ttctctatga ggctgatgtc 360
caagtgcagt tgatcagcaa aggccaacca aacccttga aaaatattct aaatgaaaat 420
gacatagtat tcatagtgga aaaagtgcct ttagaaaagg aagaaacaag tcatattgaa 480
gaacttcaat ctgaagaaac tgccatatct gatttctcta ctggcgaaaa tgttggacca 540
cttgctttac cagttgggaa ggcaaggcag ttaattggac tttacaccat ggctcacaat 600
cctaatatga cccatttgaa gattaatctg ccagttactg cccttcctcc cctttgggta 660
agatgtgaca gttcagatcc tgaaggtact tgttggctag gagctgagct tatcacaaca 720
aacaacagca ttacaggaat tgncttatat gtggcagttg taaagctgat aaaaattatt 780
ctgtaaatct tgaaanctaa aaanttcccc agaaaagaca tcacttgcta ctgtacatcc 840
aangctttg 849

<210> 3443
<211> 802
<212> DNA
<213> Homo sapiens

<400> 3443
gggccgggcc ttcgggcccg aggcggcggc ggcggtataa agccggcgac tgggagcatg 60
taatgtcgga atgcggaggc cgcggcggcg gcagcagcag cagcgaggac gccgaggacg 120
agggaggggg cggcggcggc cccgcgggct cagactgcct cagctcgagc ccgaccctgg 180
ccacagcgtc ctcggcgggc cggctccgtc gcgggctgcg tggcgccttc ctcatggcgc 240
gccagcggcc cgagctgctc tgcggggccg tggcgctcgg ctgcgcgctg ctcctcgccc 300
tcaagttcac ctgcagtcga gcaaaagatg tgataatacc agcaaagcca cctgtcagct 360
ttttctcctt gaggtctcca gtccttgacc tcttccaggg gcagctggat tatgcagagt 420
acgttcgacg ggattcagag gtggtactgc tcttcttcta tgcccccttgg tgtggacagt 480
ccatcgctgc cagggcagaa attgagcaag cagcaagtcg gctttcagat caggtgttgt 540
ttgtggcaat taactgttgg tggaaccagg ggaaatgcag aaaacagaaa cacttctttt 600
attttcctgt aatatatctg natcatcgga gttttggacc aatcgaatac aaaggcccca 660
tgagtgctgg ttacattgag aagtttgtcc ccccggtgat gaaaccactt ctctacatcc 720
catcttcaat tcagaattac tagaattttc ttcttcaaac ttacnaaccc tgggantact 780
tcggggtacc tttnaagttc aa 802

0050205.0050205

<210> 3444
<211> 868
<212> DNA
<213> Homo sapiens

<400> 3444
agaatgccta tgagacacag gaagaaggca gcagacaaga atcttccctg ccgtccttta 60
gtatgtgcag tactggacct gatggtagag tttattgtaa cacacatgat gaaggagttt 120
cctatggatc tctatatacg ctgcatccag gtagtacaca aactgctctg ctaccagaag 180
aagtgtcggg tacgcctgca ttacacctgg cgggagctct ggtcagcctt gataaatttg 240
ctgaagttcc ttatgtcaaa tgagactgta cttttggcca aacacaacat ttttacatta 300
gcccttatga ttgtgaacct atttaatatg tttatcacat atggcgacac atttctgcca 360
acccccagca gctatgatga actttactat gagattatcc gcatgcacca gagctttgac 420
aacctctact ccatggtcct gaggctttct accaatgcag gccagtggaa ggaagcagct 480
agcaaggtga cccatgcatt ggttaatatc agagccatca tcaaccactt taaccccaaa 540
attgagtcct acgctgctgt gaatcacata tcccaactgt cagaggagca ggtgctggag 600
gtggtgagag ccaactatga cacgctcacg ctgaagctgc aggatggcct ggaccagtat 660
gagcgctact cagagcagca caaggaagct gccttcttca aagagctggt tcgatccatt 720
agcaccaacg tccggagaaa cctggtcttn cacacacttc agcccaagaa gtcctgcttc 780
aaaggagttc ttncactatc tcctggaggc cacgccttac ctganccagc cctttggact 840
ggcccttacc ccattgaagg atcatngg 868

<210> 3445
<211> 862
<212> DNA
<213> Homo sapiens

<400> 3445
agaccggcgc gtgaggaacc taccggtacc ggccgcgcgc tggtagtcgc cggtgtggct 60
gcacctcacc aatcccgtgc gccgcggctg ggccgtcgga gagtgcgtgt gcttctctcc 120
tgcacgcggt gcttgggctc ggccaggcgg ggtccgccgc cagggtttga ggatggggga 180
gtagctacag gaagcgaccc cgcgatggca aggtatattt ttgtggaatg aaaaggaagt 240
attagaaatg agctgaagac cattcacaga ttaatatttt tggggacaga tttgtgatgc 300
ttgattcacc cttgaagtaa tgtagacaga agttctcaaa tttgcatatt acatcaactg 360
gaaccagcag tgaatcttaa tgttcactta aatcagaact tgcataagaa agagaatggg 420
agtctggtta aataaagatg actatatcag agacttgaaa aggatcattc tctgttttct 480
gatagtgtat atggccattt tagtgggcac agatcaggat ttttacagtt tacttggagt 540
gtccaaaact gcaagcagta gagaaataag acaagctttc aagaaattgg cattgaagtt 600
acatcctgat aaaaacccga ataacccaaa tgcacatggc gatttttaa aaataaatag 660
agcatatgaa gtactcaaag atgaagatct acngaaaaag tatgacaaat atggagaaaa 720
gggacttgag gataatcaag gtggccagta tgaaactgga ctattatcgt atgaatttgg 780
natttatgat gatgatcctg aaatcnttac cattggaaag aagagaattt gagctgtggt 840
naattttgaa aactggggtt gg 862

<210> 3446
<211> 867
<212> DNA

WO 2005/045043 PCT/US2004/036450

0020030655-D2

<213> Homo sapiens

<400> 3446
ttatagatat attccatgaa tataatcaga ctcttactcc tgtacttcta gaaatgatgc 60
aaacacttca aggacccaca aatgtggaag atatgaatgc actgttaatc aaagatgctg 120
tgtataatgc tgttggatta gctgcttatg agctctttga cagtgttgat tttgatcagt 180
ggtttaaaaa ccagcttctt ccagaattac aagtcattca caataggtat aagccattgc 240
gacgcagggt gatttggctc atcggtcagt ggatttctgt gaaattcaag tctgacttaa 300
gacccatgct ttatgaagca atctgtaact tgcttcaaga tcaagattta gtggtccgta 360
ttgaaacagc tacaactttg aagttaactg ttgatgattt tgaatttaga acagatcagt 420
ttctaccgta tttggaaacc atgttcacac tacttttca gttactgcag caagttacag 480
aatgtgacac aaagatgcat gttttgcatg tcctttcttg tgtgatcgaa agagtcaaca 540
tgcagatacg accatatgtg ggatgtttgg tacaatattt gcccctcctt tggaagcaga 600
gtgaagaaca caatatgttg agatgtgcta ttttgacaac acttattcat cttgttcagg 660
gattaggagc agacagcaag aacctgtccc tttcctgctc ccagttattc aactgagtac 720
agatgtttca cagcctccac atgtttatct tctggaagat ggtttagaat tatnggtcag 780
taactttggg aaaacagtcc atgtnttaca cccagaattg cttcgnatat tttcaagaaa 840
tatggtcacc ccttttttgg acttaag 867

<210> 3447
<211> 738
<212> DNA
<213> Homo sapiens

<400> 3447
ggtggcgggt ggctggcggt tccgttaggt ctgagggagc gatggcggta cgcgcgttga 60
agctgctgac cacactgctg gctgtcgtgg ccgctgcctc ccaagccgag gtcgagtccg 120
aggcaggatg gggcatggtg acgcctgatc tgctcttcgc cgaggggacc gcagcctacg 180
cgcgcgggga ctggcccggg gtggtcctga gcatggaacg ggcgctgcgc tcccgggcag 240
ccctccgcgc ccttcgcctg cgctgccgca cccagtgtgc cgccgacttc ccgtgggagc 300
tggaccccga ctggtccccc agcccggccc aggcctcggg cgccgccgcc ctgcgcgacc 360
tgagcttctt cgggggcctt ctgcgtcgcg ctgcctgcct gcgccgctgc ctcgggccgn 420
cggccgccca ctcgctcagc gaagagatgg agctggagtt ccgcaagcgg agcccctaca 480
actacctgca ggtcgcctac ttcaagatca acaagttgga gaaagctgnt gctgcagcac 540
acaccttctt cgtgggcaat cctgagcaca tggaaatgca gcagaaccta gactattacc 600
aaaccatgtc tggagtgaag gaggccgact tcaaaggatc ttgagacttc aaccccatat 660
tgcaaagaan tttcgacttg ggaagtgccg acttcttact taaganggaa caagccacan 720
ggaaagcttg tggcccca 738

<210> 3448
<211> 715
<212> DNA
<213> Homo sapiens

<400> 3448
tcgcgcgcgc cgccgccccg cgctgctgaa gctggcgtcg ctgccgccct cgtgccacgc 60
accgccgcac gcgctggagc aggaggagac gccgctgtga cgccgccggc gggaagggtc 120
cgcgcgccat ggctggccgc tcgcgccctt tcccaccgct gccgggaaac cgaggctcgc 180

cccaaacgga tttgcgtgaa accagcccaa ggttccgggc ccccccaacc gagccccgcg 240
cccggggact gactcgggga ccgactcagg gacctcccga gcgccaggac tcagggcccg 300
acctgcagcg gctgcaggcc cagcgcccgc aagcggcctg ggccgagcgc cgtttccagg 360
ccctcgccag gtctttgaac tgcaggtaaa gtggcaggaa cgtcttccgt ctgctcagcg 420
tttggggatt tagactccta aagccagtac ctgccccgtt tccccccccag gttccgtcct 480
gcccgcgccc ggtctcaggg tggcggcccc ggacacggnc cgtccccaca gacgaggtct 540
ccggcctgag ctgtcgcacc tggcgcggag gtcgcccggg gtgccctggc tgggtgagag 600
gtggcctggc gggccggagc ttgccaagaa ttacgggcag tccttaagtg gatggtgggg 660
cccaacaagc ttgttctgtc cccttaacaa accaggggnc cccccnnggg gccca 715

<210> 3449
<211> 775
<212> DNA
<213> Homo sapiens

<400> 3449
aagataaatg cggtacgtgc aatagttcct aataagagca acaatgaaat tatcctggtt 60
ttgcagcact ttgataactg tgtggacaaa acagtacaag cattcatgga aggtagtgcc 120
agtgaagtac tcaaagaatg gacagtaaca ggcaagaaaa agaacaaaaa gaagaaaaac 180
aaaccgaaac ctgccgcaga accaagtaac ggcatcccag attccagtaa atcagtttcc 240
attcaagagg aacagtctgc gccttcctca gagaaaggtg gtatgaatgg ctaccatgtc 300
aatggtgcca tcaatgacac tgagtctgtg gactcactca gtgaaggttt ggagacactt 360
tcaatagatg ccagagaatt ggaggatccc gagtctgcca tgctagatac gctggataga 420
acaggatcca tgctgcagaa tggtgtctct gattttgaga ccaagtcttt gactatgcac 480
tctattcaca attctcaaca acccaggaat gctgccaaat ctctctcaag acctaccaca 540
gaaactcagt tttcaaatat ggggatggaa gatgttcccc tcgccaccag taaaaagcta 600
agttccaata ttgaaaaatc tgtaaaagac cttcagcgct gcacagtgct cttgcacggt 660
atcgagttga gttaagaaga natggatgcc tccattagaa aatgaacaag cctttgtgat 720
tganactgtt atggtcagaa tggcgtnttc tgatggcaag tgaactgaac atgga 775

<210> 3450
<211> 734
<212> DNA
<213> Homo sapiens

<400> 3450
agctcgttcg ccgcactttg gaggcttcgg ctgcccctcc gacccacgta gggcccggac 60
ccgggcctcc ttgtgaacag cgtgccggct tcgccccacg ggttcaccgg ctggctgggc 120
ttcaagcgcc gaggccgccg cagtgacccc gccccgggc cgaggatgtg aggcgggccg 180
ggcgtcccca caccgggccc gggcgccggg agtgggcgtc tgggcagcgc caggcgatgg 240
ccctgctgct ggtgctcctc gcctcttggg gcctggggca gtgaggggc cggcgggcgt 300
gggccgagtg gccgcgggcg ccatggaggg ggtgctgtac aagtggacca actatctgag 360
cggttggcag cctcgatggt tccttctctg tgggggaata ttgtcctatt atgattctcc 420
tgaagatgcc tggaaaggtt gcaaagggag catacaaatg gcagtctgtg aaattcaagt 480
tcattctgta gataatacac gcatggacct gataatccct ggggaacagt atttctacct 540
gaaggccaga agtgtggctg aaagacagcg gtggctggtg gccctgggat cagccaaggc 600
ttgctgactg acagtaggac ccanaaggag aaagagtttg ctgaaaacac tgaaaacttg 660
aaaaccaaaa tgtcagaact aagactctac ttgtgacctc cttgntnaag caaagtagga 720

0056456.0002

taaaacaaaa ngaa 734

<210> 3451
<211> 664
<212> DNA
<213> Homo sapiens

<400> 3451
cagaacaggg aaatgtggtg tttaccagtg caatagatgg gtggggcttt ggaattgagc 60
acttcgccag aatctacagt caaaaaattg gcatcaaaaa ggaagttctt atgaaaacct 120
tgtggggaga ttactatata aatatgaagg ctaaaaagat catgaagggt gatcaggcca 180
aaggaaagaa acctttattt gtacagttga tcctggaaaa tatatggagt ttgtatgatg 240
ctgttttgaa aaaggacaaa gacaaaattg ataaaatagt gacttcttta ggattaaaaa 300
ttggagcccg ggaggcacga cattcagacc ctaaagttca gatcaacgcc atttgcagtc 360
agtggctacc catatcccat gctgttcttg ctatggtgtg tcagaaactt cctagtcccc 420
ttgatattac agctgagaga gtggagagac tgatgtgcac aggatcacaa acttttgact 480
cttttccacc agaaactcaa gcactgaaag cagcttttat gaaatgtgga agtgaggaca 540
ctgctccagt tattatattt gtttccaaaa tgtttgcagn tgatgctaag gccttgcctc 600
agaataaagc caaggcctct cactcaagaa gaaattgctc anagacntga gcctgcaaga 660
caaa 664

<210> 3452
<211> 793
<212> DNA
<213> Homo sapiens

<400> 3452
tgttcattga agaacaggcg gctggaattg ggaagagtgc caaaatagtg gttcatcttc 60
acccagctcc tcctaacaaa gaacctggcc cattccagag tagtaagaac tcctacatca 120
aactctcctt caaagaacat ggccagattg agttttacag gcgtttatca gaggaaatga 180
cacaaagaag atgggagaat atgccagttt cccagtcatt acaaacaaat agaggacccc 240
agccaggaag aataagggct gtaggaattg taggtattga aaggaaactg gaagaaaaaa 300
gaaaagaaac tgacaaaaac atttctgagg cctttgaaga cctcagcaaa ctaatgatca 360
aggctaagga aatggtggaa ttatcaaaat caattgctaa taaaattaaa gacaaacaag 420
gtgacatcac agaagatgag accatcaggt ttaaatccta cttgctgagc atgggaatag 480
ctaacccagt taccagagaa acctacggct caggcacaca gtaccacatg cagctggcca 540
aacaactggc tggaatattg caggtgcctt tagaggaacg agggggaata atgtcactca 600
cggaggtgta ctgcttagta aaccgagctc gaggaatgga attgctctca ccagaagatt 660
tagtgaatgc gtgcaagatg ctggaagcac tgaaattacc tctcaggctt ccgtgtgttt 720
gcagtggccg tcatggtaat tgagcttcag tctccaagga agangaaatg gtggncttgg 780
ncctggagac aag 793

<210> 3453
<211> 770
<212> DNA
<213> Homo sapiens

<400> 3453

0956450.00280

atgtgaccac actgaattta atgcatttct tgatttgaag aactccctaa atgaagtaaa 60
aaacctactg agtgataaga aactggatga gtggcatgag cacactgctt tcactaataa 120
agcagggaaa atcatttctc atgttagaaa atctgtgaat gctgaacttt gtactcaagc 180
atggtgtaag ttccatgaga ttttgtgcag ctttccactt attccacagg aagctttca 240
gaatggaaaa ctgaattctc tacacctttg tgaagctcca ggagctttta tagctagtct 300
caaccactac ttaaaatccc atcggtttcc ttgtcattgg agttgggtag cgaatactct 360
gaatccatac catgaagcaa atgacgacct catgatgatt atggatgacc ggcttattgc 420
aaatacctg cactggtggt actttggtcc agataacact ggtgatatca tgaccctgaa 480
attcttgact ggacttcaga atttcataag cagcatggct actgttcact tggtcactgc 540
agatgggagt tttgattgcc aaggaaaccc aggtgaacaa gaagctttag tttcttcttt 600
gcattactgt gaagttgcac tgctctgacc actcttggaa acggtggctc ttttggtcta 660
aagatgttta ctatgtttga acattggtcc ataaacttga tggacctgct taactggtgg 720
ttttgaccca agnnccatgt tttnaaacct ggttcttagc caaggcaggg 770

<210> 3454
<211> 753
<212> DNA
<213> Homo sapiens

<400> 3454
tttccatggg gctctcaagg aatgagaagt caagatcaca tccaagttag caagcagcac 60
attaataatc agcaacagcc acctcaacta cgttggagaa gcaattctct caataatggc 120
cagccgaaaa gtacgcgctg ccaggcatct gcctccgcgg agtcattaaa ctcccacagt 180
ggtcacccca ctgctgatgt acagactttc caggcaaagc gccatattca tcaacaccgt 240
cagtcttact gtaattataa cactggaggt cagttagagg gcaatgcagc cacttcctat 300
cagaagcaga ctgacaaacc cagccactgt agccagtttg tgacacctcc gcggatgagg 360
agacagttct cagcacccaa tctcaaagct ggtcgagaaa ccacagtata aatcagttac 420
tggacaaact tgaaatcatg gtggaagaaa cagacagtgt tagctcatga tttgatttgg 480
ttctaccttt ggccttgagt tcttattatt tacattataa atattaactg gttttatatt 540
gttaagacaa aacactggta aaagtttcaa cacctncctt ttgcttgtat accataaatg 600
ggcagtttct gaaattttgg ataaagcatc aagactcctt tttctgaaac gttcctnctt 660
ttttagtgcc taattaatat acttacttac acagacttgn cccatcttga tgtaagttgg 720
tatggtttta taatgcctat naattaatct gac 753

<210> 3455
<211> 777
<212> DNA
<213> Homo sapiens

<400> 3455
attttaccca gcccctgttc aagatggagt tgctgtggtt cacacatctc tgacaaaaat 60
acagggctat tcggagtcac cagacctgga gtttgagtat gctgacacag acaagtgggc 120
tgcagagctc tcggagcttt acagctacac ggaagggcca gaattcctga tgaatcgaaa 180
atgctttgag gaggacttcc ggatccatgt gacagacaag aagtggactg agctggatac 240
caaccagcac cggacccatg ccatgaggct cctggatggc ttggaagtca ctgccaggga 300
gaagagactc aaggtggctc gagcaattct ctatgttgct caaggcacgt ttggggagtg 360
cagctcggag gcagaggtgc agtcctggat gcgctacaac atctttctcc tcctggaggt 420
gggcacgttc aatgctttgg tggagcttct gaacatggaa atagacaaca gtgccgcctg 480

0056205 - 0056205

cagcagtgct gtgaggaagc ctgccatctc cctggctgac agcacagacc tcagggtcct 540
gctcaacatc atgtacctga tagtggagac cgttcatcag gagtgtgagg gtgacaaggc 600
tgagtggagg accatgcggc agaccttcag agccgaactg ggctccccgc tgtacaacaa 660
tgagccattt gccatcatgc tgnttgggat ggtgaccaaa ttttgcagtg gtcacgcccc 720
tactttccat gaanaaagtc tcttgctgtc tggaaacagt attgtgcacn ctaggcg 777

<210> 3456
<211> 902
<212> DNA
<213> Homo sapiens

<400> 3456
cttcatggac acccacacag attcactgga gagcaaagcc taccagagtc cctgtcagca 60
gcactgtttc tagaagcttc cacatgagca gacagcatgg agtcctgggg gctaatgaag 120
cagcaatgtc agcatgagca caggcaggga gaggcaagag gagcagagta aaggggaacg 180
ttctcttcat tcttccacct gcctgtcccc cagccgacac gtcccttccg ttccctgcaa 240
ggccatttcc agggaggctt acgaagacag cagatgatgg tgatggaagg agtctgggtg 300
ctgagctgtg ccatggacct ggagagaaac tgagtccgag ggatgtcaac atgccaagtc 360
catggaaata tcagtgggct ggaattctag ctgcctgaaa gaagacattc ctcacacaag 420
acctcacaat catatccatg gaattatagc actgggctct ccagatggtg ctacaggaag 480
acctccagaa atttgacgat cctctattca aggccctacc acagagacac acaggaacgg 540
aactcagaat cacaaacaaa gaaactttga tccaagaaag aaaatgatct ttaaaaagac 600
cctcgtttca tgctggccga tgctgagaaa atctgctctg aaggatattt ggagacactg 660
attaaaaggt agtaccatca ccacatattt aacttccccc tctttttcct ctgcttctag 720
gagtagagaa accaacaaaa ccaaccggag agagatggtt tcaaacaatc tgtcccccac 780
cccaccacta ttcacacctt tcacaagggc ccagccacaa agccagtgca acatgacatc 840
aatcattaag caaagtggaa aatggttgtc ccantgggan ggggaattct tcgngttacc 900
ta 902

<210> 3457
<211> 789
<212> DNA
<213> Homo sapiens

<400> 3457
gctcgcagac tccggagtcg ccaacatgtc gaccgccatg aatttcggga ccaagagctt 60
ccagccgcgg cccccggaca agggcagctt cccgctggat cacttaggtg aatgtaaaag 120
ctttaaagag aaattcatga agtgtcttca taacaataat tttgaaaatg ctttgtgcag 180
aaaggaatca aaagaatatt tagaatgcag gatggagaga aaattgatgc tacaagaacc 240
attggagaaa ctgggatttg gagacttgac tagtggaaaa tcagaggcaa aaaaatgaat 300
tttgatgaga agacccctgg gccgtgttca gtggtctctc aggacggagg gcatcatcct 360
gcctcttagg ttggctgagg cctgcgtgtg gtgtccttag aaatgggctt cgaatagaag 420
ctccagccct gtgggggcgt ctcctgggta gggagtggcg tcccgttttc ccttaggagg 480
gtgtttctgc attgaacccc tgagtgggac ggcgttcccg gcaaagctgg gagggaggcg 540
agcgtggggc aagacccttg tcttcgaggc cggggccctc ttgtatgggg cggttttatg 600
ttgcagtcct ctgatacttt ctgagttcaa agaggtaaat gtataaattt cagtcccttc 660
tgaacacaga tatcatcaga aaattaccat tccctancag gatgttttcg tgtttgnatt 720
cgtatatgcc agttcatttc ctttgaaaaa aaaaaaaaag tggaccccaa agtnggaagt 780

0962945.0320000

gagaacctt 789

<210> 3458
<211> 772
<212> DNA
<213> Homo sapiens

<400> 3458
attttgggct tcgcttccac cgcaccagcc ggcctaccca gtccttccgg tatcgcgttg 60
ctcaggggct tttcaaccct ctgtcagtcg gaaaaccatc gccgaggccg tgggggggact 120
cctatccatg gtgttgaagc gtcgagccga ctagggaacc tccttccccg ccaggatgga 180
agtcgcatca gtcgccgcct attgcgcggg ctgttcttcc ctgtgttctg ccgcccgctg 240
ccgcattcgc tgccctctgt ggcttttctg ctggctcgaa gatcggcctg gagcagcgac 300
gccaccgctg ggcaaggccg agactctgta ggcttcctcc gaatcccgtc gacctccagc 360
cgctgagcgc cgcggcccta cctgagagac tgtcaagaaa aaggagatgg agccggggac 420
aggcggatcg cggaaacggc ttggccctcg ggcgggcttc cggttctggc cacccttttt 480
ccctcggcga tcgcaagcag gctcttctaa gttcccgacg cctcttggcc cggaaaactc 540
cgggaacccc acactgcttt cctctgccca gcccgagact cgggtcagtt actggacgaa 600
actgctctcc cagctccttg cgccgctccc cggattgctt canaaggtgc taatttggag 660
ccaacttttc ggtggaatgt ttccgaccag atggctagat tttgctggag tctacaagcg 720
ccctgagagc cctgaangga cnggagaaac caagccggcc ccacaagngc aa 772

<210> 3459
<211> 760
<212> DNA
<213> Homo sapiens

<400> 3459
atttctacga cttttctctc agctgaggct tttcctccga ccctgatgct cttcaattcg 60
gtgctccgcc agccccagct tggcgtcctg agaaatgctc ccaatatgga acatgtacta 120
gcagttgcca atgaagaagg ctttgttcga ttgtataaca cagaatcaca aagtttcaga 180
aagaagtgct tcaaagaatg gatggctcac tggaatgccg tctttgacct ggcctgggtt 240
cctggtgaac ttaaacttgt tacagcagca ggtgatcaaa cagccaaatt ttgggacgta 300
aaagctggtg agctgattgg aacatgcaaa ggtcatcaat gcagcctcaa gtcagttgcc 360
ttctctaagt ttgagaaagc tgtattctgt acgggtggaa gagatggcaa cattatggtc 420
tgggatacca ggtgcaacaa aaaagatggg ttttataggc aagtgaatca aatcagtgga 480
gctcacaata cctcagacaa gcaaacccct tcaaaaccca agaagaaaca gaattcaaaa 540
ggacttgctc cttctgtgga tttccagcaa agtgttactg tggtcctctt tcaagacgag 600
aataccttag tctcagcagg agctgtggat gggatattca agtctgattt tggattccac 660
tggctctact ttatttgcta attgcacaga cgatacatct acatgtttaa tatgactggg 720
ttggaagact tntccagngg ctattttcaa tgggcacccn 760

<210> 3460
<211> 713
<212> DNA
<213> Homo sapiens

<400> 3460

0960340.0020

ttactggata tcaagatgac taagaaatag cacttgcctt gaaggagctt ttctatttga 60
ggaaaaagac atgtatataa ataactgcaa acagaatgaa acaagtgtta tgtagatcta 120
catacagtga catgccatgg gaatgctgaa cactgagcaa cagtttcaac tagcgaattg 180
gcacaggaaa catgaaaaat aagcgtattt tcaatatgac aagaatggtc atttctggat 240
ataagaacaa gagagaagtc atgggtatat ggaaaggcat ggactcttca aggaagagca 300
agtagtctaa tgtagatgct gtataggaat ctggggacaa agggacagat aagtggtgta 360
gacaaagagg ctggaaatag ggttatgggc tagatcatga gtgacctgta agcattagga 420
gttttgattt attttggaat aagaaacatt tatggctttt gagaaggaaa attacacaag 480
ggaaaagaaa ggatttttat tttttatttt tatttttgga gagatgagat ctcactatgt 540
tgcccaggct ggtcttgaac tcctgaactc aagcaatcct cccggctcgg cctctgaaac 600
ttctaggatt ataggcgtga gccactacgc ccagccagga ttatgttttt ttatgggagg 660
gatgagaata ttggtanggt gggtagagga ttaatganag agaattgnat atg 713

<210> 3461
<211> 675
<212> DNA
<213> Homo sapiens

<400> 3461
agcgattctc ctgcctcagc cttccgagta gctgggatta caggcatgca ccaacacgct 60
cagtgtttaa ctgctgaaga gatcttttcc cttcatggct tttcaaatgc tacccaaata 120
accagctcca aattctctgt catctgtcca gcagtcttac agcaattgaa ctttcaccca 180
tgtgaggatc ggcccaagca caaaacaaga ccaagtcatt cagaagtttg gggatatgga 240
ttcctgtcag tgacgattat taatctggca tctctcctcg gattgatttt gactccactg 300
ataaagaaat cttatttccc aaagattttg acctttttg tggggctggc tattgggact 360
ctttttcaa atgcaatttt ccaacttatt ccagaggcat ttggatttga tcccaaagtc 420
gacagttatg ttgagaaggc agttgctgtg tttggtggat tttacctact tttcttttt 480
gaaagaatgc taaagatgtt attaaagaca tatggtcaga atggtcatac ccactttgga 540
aatgataact ttggtcctca agaagaaact catcaaccta aagcattacc tgccatcaat 600
ggtgtgacat gctatgcaaa tcctgcntgg cccagaagct tatgggncat tttccatttt 660
tggataatgg tcang 675

<210> 3462
<211> 814
<212> DNA
<213> Homo sapiens

<400> 3462
gattcacgta gaccttgtca ggaaattggt cactatccat ctaggcccta gaagtgagag 60
gaggaatctt acgaactcat tttctagttg ctttgtattc aaatcttagt tgttaattat 120
cttgttctag taatcaccta aaatattaga cacttaaaat gttggggaaa cgtaagcgtg 180
tggtgttgac aattaaggac aagcttgaca ttattaagaa acttgaggaa ggcatctctt 240
tcaaaaaact ttccgtggtg tacggaattg gtgaatccac agttcgtgat attaaaaaga 300
acaaagaaag gattataaac tatgcaaaca gttcagatcc taccagtgga gtatccaaac 360
gtaaatctat gaagtcatca acatacgagg agcttgatag agttatgata gagtggttta 420
accaacagaa aacagatggg attccagtgt ccggaacgat ttgtgcaata caagccaagt 480
tctttttga tgctttggga atggaaggtg attttaatgc atcgtcaggc tggctaactc 540
gatttaagca gcgccatggt attccaaagg ctgctggtaa aggaacaaaa ttaaaaggag 600

US 2003/0170809 A1

atgaaactgc tgccagagaa ttttgtggta gctttcagga atttgttgaa aaagagaatc 660
tacaccagag caaatttatg gtgctgatca aactggattg gtttggaaat gtctaccatc 720
aaggacatta actcttgaaa ctgaccaaag tcttntgggt gtaggtcaag ccnaagaggg 780
gaatcatcat tatggggttg cncaaatgcc caca 814

<210> 3463
<211> 867
<212> DNA
<213> Homo sapiens

<400> 3463
aactgggctt ggcttcctca agcaaaagtt ccctttctg aagaaataag aaatttgatt 60
ctaccatata tttctgacat gaactttgtg caagatttat gtgaagatct ctatgaactt 120
tttaagactg acaaaggatt tgacaaagcc acttttgaaa gtcagatgtc tgtgatgagg 180
ggtcagatct taaaccttac tcaggcattg agagacggga agagtccttt ccagctagta 240
cagatacctt gtgtgattgt ggaacgcagt caaggtggaa gtcagggtcg gattgtccac 300
ctgagcaatt cctttaccca gactgtcaat tgcaggaagc catttttttc ctcctggtag 360
taaatgtcag agtaagagaa acaaactgtt tagaattatc atgttttaa aacatcatag 420
taatataaat ctgctgttag gagctccagt tgctaaaacc tcaatttaag tctttaaaag 480
gttgtatttt gaatgtaacc aaaagtttac agtttttgt ccaaatatta aatttctatt 540
tcagggaaga agtgctatat ctcctatatt gtatttttgt agaaaatttg tattttatgt 600
tgttgttagt ttaaaaggta attttacaca tgctggaatg actgtaatta ctctagaatt 660
ccaagtagaa tacaataact tttaatattg agaagaatgt tcatgctaat tcttcttaca 720
ttacaaaagg cctttgagga tgcctacgtc tgaaattgct cttacgaact ttaataaaat 780
ggttagctaa tagaaaaaca ggtnagaata aagcaatggt gncttaattc aaaagctgct 840
atttagaatt ggataagnct tctaaag 867

<210> 3464
<211> 754
<212> DNA
<213> Homo sapiens

<400> 3464
actaagccca ggccaggttg ctgtgctggc tcatcctcct tagaaagata tgcaacctcc 60
aatgagttcc ctgatgatgc cctgaacttc atcaagacgc acccgctcat ggatgaggca 120
gtgccctcca tcttcaacag gccatggttc ctgagaacaa tggtcagatg cagctatgat 180
ggagtcgaag acaaaaggat catgggcatg cagctggaca gagcaagcag ctctctgtat 240
gttgcgttct ctacctgtgt gataaaggtt ccccttggcc ggtgtgaacg acatgggaag 300
tgtaaaaaaa cctgtattgc ctccagagac ccatattgtg gatggataaa ggaaggtggt 360
gcctgcagcc atttatcacc caacagcaga ctgacttttg agcaggacat agagcgtggc 420
aatacagatg gtctggggga ctgtcacaat tcctttgtgg cactgaatgg gcattccagt 480
tccctcttgc ccagcacaac cacatcagat tcgacggctc aagaggggta tgagtctagg 540
ggaggaatgc tggactggaa gcatctgctt gactcacctg acagcacaga ccctttgggg 600
gcagtgtctt ccataatcac caagacaaga agggagtgat tcgggaaagt tacctcaaag 660
gccacgacca gctggttccc gtcacccttc ttggncattg cagtcatcct ggctttcgca 720
tgggggccgc ttntcggcat taccgntact gggt 754

<210> 3465

0050204950

<211> 808
<212> DNA
<213> Homo sapiens

<400> 3465
atccttatgg cagcatgagg aaagctccag ggagtgatcc cttcatgtcc tcagggcagg 60
gccccaacgg cgggatgggt gacccctaca gtcgtgctgc cggccctggg ctaggaaatg 120
tggcgatggg accacgacag cactatccct atggaggtcc ttatgacaga gtgaggacgg 180
agcctggaat agggcctgag ggaaacatga gcactggggc cccacagccg aatctcatgc 240
cttccaaccc agactcgggg atgtattctc ctagccgcta ccccccgcag cagcagcagc 300
agcagcagca acgacatgat tcctatggca atcagttctc cacccaaggc acccccttctg 360
gcagcccctt ccccagccag cagactacaa tgtatcaaca gcaacagcag gaaccccgga 420
ggcatggcgg gtaatgatgt ccctcaagtc tggtctcctg gcagagagca catgggcatt 480
agataccatc aacatcctgc tgtatgatga caacagcatc atgaccttca acctcagtca 540
gctcccaggg ttgctagagc tccttgtaga atatttccga cgatgcctga ttgagatctt 600
tggcatttta aaggagtatg aagtgggtga cccangacag agaacgctac tggatcctgg 660
gangttcaac aaggtgtcta gtccaacttc catgganggt ggggaagaag aagaagactt 720
ctaggtccta aactagaaga ngaagaagaa gaggaagtag ttgaaaatga tgaggagata 780
gcctttttang caaggacaan ccacttta 808

<210> 3466
<211> 791
<212> DNA
<213> Homo sapiens

<400> 3466
tatttccatg caagtggaag acggtaccgt ctccccacat ttgagaagac tgttttgcat 60
cactctttgc tattgaagga agcagtgatg gtgaatttcc ttctgtttgg gttccttgtg 120
tctataactt cctttgtggt aaagccatca ggaagaatag tgggagtggg gtatatggtc 180
agggtgctca tatcctgctt tagcctagct gcttcttacg gagtgcaagg gagaactctg 240
agaagcagta tgtaaatacc agggagctga ttgctgaata ttgtggtctc atctgaatat 300
tgtggtctca tctaaatatt gacaccaggc aatgaagcag aaatagagta tgtgtccctt 360
tatgcgtggg taacttaagc ttctgtcatg tgggaagggg gaccgaatct tccctgggag 420
gaaggctcca aattctcact acttctgtgt tacttgaagg gggaagcata aggaacccag 480
tttgaaggca acattgtgtg ccatgaatct gcttattaat caacatgcct tgttaatgtc 540
ctctgccctg aacagccctt actcagttct catttggaaa gttatttttt ggggttacat 600
cctgtttgtt tcagaattta aaaccctnca tggtgggtca cttgaggtca ggagttcaag 660
attagcctgg ccaacttagt gaaactccgg ctctgctgaa gatgcaaaaa ttagccaggt 720
gtggcacacg cctgtaatcc cagttncctt ggangcccag gcaggagaat cnctttgaac 780
cctgggaggc a 791

<210> 3467
<211> 850
<212> DNA
<213> Homo sapiens

<400> 3467
tgtggggcct tatatccagg ttcccagtgc cggaagcttt cctgtgctgg gggaccctat 60

aaagccccag tctctcagta ttgcctcaaa tgctgctcat ggaagatcca aatccgctaa 120
tgatggaaac tggccaacat taaaacagaa ttctagctct tccgtgaaac cagtgcaggt 180
ggccggtgca gactggaagg atccgagcgt ggaggggtct gtcaagcagg gcactgtctc 240
cagccagcct gtgcccttct cagcactggg acccacggag aagccgggca tcgagattgg 300
taaagtgcca cctcccatcc cgggtgtagg caagcagctg cctccaagct atgggacata 360
cccaagtcct acgcctctgg gtcctgggtc ggcaagctcc ctggaaagga ggaaggaagg 420
cagcttgccc aggcccagtg caggcctgcc aagtcgacag aggcccaccc tgctgcccgc 480
cacaggcagc acccccagc caggctcctc acaacagatt cagcagagga tttccgtacc 540
gccaagtccc acgtacccgc cagcgggacc acctgcattt ccagctgggg acagcaagcc 600
tgaactccca ctgacagtgg ccattaggcc tttcctggct gataaagggt caaggccaca 660
gtcttccagg aaaggacccc agacagtgaa ttcaagttcc atatactcca tgtaccttca 720
gcaagccaca ccacctaaga attaccagcc cggnagcaca caagcgcctt aaataatcag 780
ttaaagcagt gtatggtaag cccgtttacc ttcgggttca acctttcatc gccgntgccg 840
ttnttacggg 850

<210> 3468
<211> 820
<212> DNA
<213> Homo sapiens

<400> 3468
aatataatga agaagtggct gacttaaaga taaagcgatc taaacttcat gaacaagttt 60
tagatttggg cctgacatgg aagaagataa taaaattttt gaatgaaaaa ctggagaaga 120
gtaaaatgca aagtataaat gaagacttaa aagatatatt acatgctgca aagcagatag 180
aagtgaattg tccattccag aagaggaggc tggatggaaa agaggaggat gagaagatga 240
gcagagcttc tgacagattc agaggactaa gatgacaaaa atgactaaaa tggacaaaag 300
aagaaataga aaatctgaat atttgactat taaaggaatt taatctgtaa ttaaaaacct 360
taagtacaaa gaaatctata tgctatgatg gctttaatgg agaatgtcat aatgtcattt 420
aaaaaggtat gagagtacta ttgtagatta aaagaggtta aaggcatata ataatcaaaa 480
tgtaatgtat gatccttgat tgactcttga atcagaaaaa aattacgtat ttttggggcc 540
gttggagaaa tctgaatatg ggctggacat cattaggtaa tattagatct caggtgtgat 600
aatgttgtgg ctatgtaaga ggatatccta aatctcagga gaagcatact gcagtatata 660
tagtggtatc tcatgaagat taaaatgtct gtcaaatgtg tcagcnaaag aaatacacat 720
gatgtgtgtg tgtgatcaag tgtttatnat ggagtgggat taataaatat gagaaagata 780
ggggtgaatt tggttggnaa gtaataaang gttaaaaatt 820

<210> 3469
<211> 645
<212> DNA
<213> Homo sapiens

<400> 3469
gcaggggcca gacccggacg gctccagagc ctccagagcc tccgggtctg ggcggcgctt 60
cggctcctcc cgagccgcct gctagccccg cgccgcactc catccccaca ggctggggac 120
gggcccggtg cggctgtgtg ggttcgggag cggagttgca gaatccaagg acccattttg 180
ttctttctcc gcactgcttt atgggaggca ttatggcccc caaagacata atgacaaata 240
ctcatgctaa atccatcctc aattcaatga actccctcag gaagagcaat accctctgtg 300
atgtgacatt gagagtagag cagaaagact tccctgccca tcggattgtg ctggctgcct 360

0503503.0204000

gtagtgatta cttctgtgcc atgttcacta gtgagctctc agagaagggg aaaccttatg 420
ttgacatcca aggtttgact gcctctacca tggaaatttt attggacttt gtgtacacag 480
aaacggtaca tgtgacagtg gagaatgtac aagaactgct tcctgcagcc tgtctgcttc 540
agttgaaagg tgtgaaacaa gcctgctgtg aattcttaaa aaagtcaant ngacccctct 600
aattgccttg ggtattangg aattttgctt gaaaccccac aattg 645

<210> 3470
<211> 792
<212> DNA
<213> Homo sapiens

<400> 3470
agtgggctct gcggataact cagacgccat taagctgggg aatccaaact ctaaaagaag 60
gacgcatttt aggtaagatc tagtggctag atcttcaggg tgggcttcgt tcttgtggaa 120
atcagtcaag aaagatcgga ttcgcggtta tttatgcaaa tcatctgggt ggattgtgta 180
cggagtcaaa ctgcgccttc tggaccgggt ctgaacaatg gagactgcgc tagcaaaaac 240
gccacagaaa aggcaagtta tgtttcttgc tatattgttg cttttgtggg aggctggctc 300
tgaggcagtt aggtattcca taccagaaga aacagaaagt ggctattctg tggccaacct 360
ggcaaaagac ctgggtcttg gggtggggga actggccact cggggcgcgc gaatgcatta 420
caaaggaaac aaagagctct tgcagcttga tataaagacc ggcaatttgc ttctatatga 480
aaaactagac cgggaggtga tgtgcggggc gacagaaccc tgtatattgc atttccagct 540
cttactagaa aatccagtgc agtttttca aactgatctg cagctcacag atataaatga 600
ccatgcccca gagttcccag agaaggaaat gctcctaaaa atcccagaga gcacccacca 660
gggactgngt ttccttaaaa atagcccagg actttgacat aggtagcaac actggtcana 720
actacacaat caagcccaaa ntcacacttt catggtgcta cgcataatcg ccgganatgg 780
cagaaaatcc ca 792

<210> 3471
<211> 841
<212> DNA
<213> Homo sapiens

<400> 3471
tttcctgcat tgcatcatca tagcttttaa tataatgcta cagaatcata tccacattag 60
gttagagttc agatatttgg atatgaatac ctaacctagc catatccatg gccatctctg 120
ttcttttcag caatgttttc catattatat tagcaatgac agaaacagaa caagccaaga 180
tccagtcagt tcttgggagc ttgtctagag caccaagtaa tgaaatagcc aggtagtggg 240
atgactgtac ctttaaaaat acataattta gtttgcaagc tatattatgc tactttctat 300
tttccttgtt actttatagc aattcatttt accctcacaa agtcaattta gaaccttatc 360
attaactggg atgtgtagtg atatttttgg gcctctgggt ttcatgtgtt aatacgagga 420
atatttattt aaaatagatt tatttagagg aggcacagtg ttgttgatct gtgtgacacc 480
acccatattt ttaaaaacct ttgtatgttt ctctaaattt gttgttgact gaatataata 540
gaccctacca taattcgtca aatatcactg attagttaca tcctttgtgt gagattagct 600
gtaaagtata ctgctcttat tcttattcag aatagttaat tggtagccaa aaatacatgt 660
atcacagatg ttaggtccga atttaaacag cacagtcaag tgctatggaa gtttttctgn 720
taaattagta gattaaagaa ttctatccct aagcatgggg agcanccgtt ttcctttggg 780
aggtaggact ctatctaatg gaacagtgcc agttcacact ttggacttaa aatggnctnt 840
a 841

US 2003/0224360 A1

0020070045290

<210> 3472
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3472
ataacccgtg tcttcaaaac catctaccat gaagctaaaa cataccatca accctattct 60
tttatatttt atacattntc taatatcact ttatactatt ttaacataca ttccgtttta 120
ttttttctcc gagtcaagac aagaaaaatc aaaccgaatt aaagcaaagc ctgtaaattc 180
aaaacctgat tctgcataca gatctgttaa tagtttggat ggtttggctt cagtattata 240
ccctggatgt gatactttag ataaagtttt tacatatgca aaaaacaaat ttaagaacaa 300
aagactcttg ggaacacgtg aagttttaaa tgaggaagat gaagtacaac caaatggaaa 360
aatttttaaa aaggttattc ttggacagta taattggctt tcctatgaag atgtctttgt 420
tcgagcctt aattttggaa atggattaca gatgttgggt cagaaaccaa agaccaacat 480
cgccatcttc tgtgagacca gggccgagtg gatgatagct gcacaggcgt gttttatgta 540
taattttcag cttgttacat tatatgccac tctaggaggt ccagccattg ntcatgcatt 600
aaatgaaaca gaggtgacca acatcattac tagtaaagaa ctcttacaaa caaagttgaa 660
ggatatagtt tctttggtcc cacgcctgcg gcacatcatc actggtgatg gaaagccacc 720
cgacctggtc ccgagttncc caagggcatc attgtgcata ccatggctgc antgggaagn 780
cctgggagcc caaggccagc atgggaaaac cca 813

<210> 3473
<211> 822
<212> DNA
<213> Homo sapiens

<400> 3473
acatcagcat cagcaggaca ggctcctgag gacccctcag gccctggcac aggcccctct 60
gggacttgtg aggctccggt agctgtcgtg accgtgaccc cagctccgga gcctgctgaa 120
aactctcaag acctgggctc cacgtccagc ctgggacctg gcatctctgg gcctcgaggg 180
caggccccgg acacgctgag ttacttggac tccgtgagcc tcatgtctgg gaccttggag 240
tccttggcgg atgatgtgag ctccatgggc tcagattcag agataaacgg gctggccctg 300
cgcaagacgg acaagtatgg cttccttggg ggcagccagt actcgggcag cctagagagc 360
tccattcccg tggacgtggc tcggcagcgg gagctcaaat ggctggacat gttcagtaac 420
tgggataagt ggctgtcacg gcgattccag aaggtgaagc tgcgctgccg gaaggggatc 480
ccctcctctc tcagagccaa agcctggcag tacctgtcta atagcaagga acttctggag 540
cagaacccag gaaagtttga ggagctggaa cgggctcctg gggaccccaa gtggctggat 600
gtgattgaga aggacctgca ccggcagttc cctttccacg agatgtttgc tgctcgaagg 660
ggggcatggg caacaaggaa cctgtacccg aatncttgaa ggccttacac cattntaccc 720
gggccttgac caaaggggtt acctggccaa ggcccaaggc ccccccgtgg gctttgcngg 780
tccctggctt aatgccacat tgcccttgcn ggaancaagg cc 822

<210> 3474
<211> 638
<212> DNA
<213> Homo sapiens

<400> 3474
caatgaaaac ctctaaaatt ggaccatact accacagttt atgtatgcta tagaatttat 60
tttgagattg ataacatact ttagaggtgg tatggatcaa caaatggacc cacagatttt 120
tcttatatgt taagtgaaca gagacatagg aaactcatag aaaaagaaac taaatgaaga 180
atttggttcc catattgatg ttataataga tgatcattat accttgaccc tctttctctg 240
gttctgattg aagattgaga ctttggaaga gaaataatat gaaaaatggt aactgattat 300
cagacgacgt tattcagaaa aagattttat tttctggaga gtgacctaag atcccttgaa 360
taatagattt ctgtgcttca tctcacagga attaaaagaa tttattcacc tggtaacttg 420
atcatcagat caagatttta ttcacaaaat gttggagaag acagaaaaat atcagtaaaa 480
ttctaaaact ggatatgatg gaggttatca cataaaatag atgatataag gcagttgaca 540
aggtgcccat gattatgtag tagtaaatac tgggaagaag gatgtgttca aaggccgttc 600
cttggggnct caggttcctt accattnttg aaanttaa 638

<210> 3475
<211> 788
<212> DNA
<213> Homo sapiens

<400> 3475
ctacgttgtc ttttcacttc tctggggagg agtgatctgg ccgttcctca actaccagag 60
gatgtactac gtgttcatcc agatgctgtc cagcgggccc gcctggctgg ccatcgtgct 120
gctggtgacc atcagcctcc ttcccgacgt cctcaagaaa gtcctgtgcc ggcagctgtg 180
gccaacagca acagagagag tccagaatgg gtgcgcacag cctcgggacc gcgactcaga 240
attcacccct cttgcctctc tgcagagccc aggctaccag agcacctgtc cctcggccgc 300
ctggtacagc tcccactctc agcaggtgac actcgcggcc tggaaggaga aggtgtccac 360
ggagccccca cccatcctcg gcggttccca tcaccactgc agttccatcc caagtcacag 420
ctgccctagg tcccgtgtgg gaatgctcgt gtgatggatg gtcctaagcc tgtggagact 480
gtgcacgtgc ctcttcctgg cccccagcag gcaaggaggg gggtcacagg ccttgccctc 540
gagcatggca ccctggccgc ctggacccag cactgtggtt gttgagccac accagtggcc 600
tctgggcatt cggctcaacg caggagggac attctgctgg cccaccctgc gcgctgtcat 660
gcagaggcca ttcccccagg cctgtgtctt tcacccacct gccatcattg gcctttgctg 720
gcactgggga gagaagaacc cgtccangga cccatggtgg nccacatgtg gattgccaca 780
tgctgntg 788

<210> 3476
<211> 696
<212> DNA
<213> Homo sapiens

<400> 3476
aaaatatgaa ggcaaaggaa atacatgtga cttaatgaac ctcacacaaa ctgaaggttg 60
aagtcaggct ccggggcttt ttcctggact tatcctctgt tttcccctgt gtacttgggc 120
aaggatcttc acctgtgtct tagtatcgat ttttatgaat cagtactgat ggagtatatg 180
tgtgtttaat ggtgaatatt aaccatagaa gggctgagtg ctcctcccca tcttgggact 240
cataatctgt gaaataaaac agtctgggcc tccctgcccg ggtagcatca ggatagacag 300
atgaagagaa gagaaagtaa tgtgtcttgg gcatcttctg tatgccaggc accatgccag 360
aggctttaag tacttcatct tacttgactc ctcagatggc cctgttagaa gcctatttta 420
tgcaaaagga aactgtagct gggggtaagt aacttgccaa ggggtcacac agctagaaag 480

0050345-0070800

cggtggaccc tagatgcagg cgcagccatt cagaccccac agtccacatt cctttgagcc 540
agtccattga gggtcctcaa ggaatgtggc gggtcccctg gtctcgctcc cccgcagatc 600
ttgcatctca gcatgcgcct accacatcag ttgacattag cacagctttt ncattaggag 660
aacgaagtga aactnctggt anaacggatg atggct 696

<210> 3477
<211> 802
<212> DNA
<213> Homo sapiens

<400> 3477
gctggaagag cagcggcccg agccggggcc atggcgaagc tgctgagctg cgtcctaggc 60
ccccggctct acaaaatcta ccgggagagg gactctgaaa gggccccggc cagcgtccct 120
gagacgccaa cggcagtcac tgccccccat tccagctcct gggatacgta ctatcagccc 180
cgtgccctgg agaaacatgc tgacagcatc ctggcactgg cttcagtatt ctggtccatc 240
tcttattact cctctccctt cgccttcttc tacttgtaca ggaaaggtta cttgagtttg 300
tccaaagtgg tgccgttttc tcactatgct gggacattgc tgctacttct ggcaggtgtg 360
gcctgcctcc gaggcattgg ccgctggacc aacccccagt accggcagtt catcaccatc 420
ttggaagcaa cacatcggaa ccagtcttca gaaaacaaga ggcagcttgc caactacaac 480
tttgacttcc ggagctggcc agtcgacttc cactgggaag aacccagcag ccggaaggag 540
tctcgagggg gcccttcccg ccggggtgtg gccctgcttc gcccanagcc cctgaccggg 600
ggacaagcaa gacacccttc tnaaccgggt taagaagctt gncttgtcag atcaccagct 660
acctggtggc gcacacccta gggcgcccga tgctggattc aggctntggg gacctgctgc 720
anaaagccct tatgcctggg cttgttgaag ggcaggcccc actggtggaa aaatgtaatg 780
ggcccccggc naaacttgtt gg 802

<210> 3478
<211> 873
<212> DNA
<213> Homo sapiens

<400> 3478
tcatttgtaa tgtaaagatc agttatatat atatatttgt aatgagagca agtatatact 60
cattatagaa tcaatttaag aagtttaaaa taacccagag tagaatttct atatctagtc 120
ttggtttttt tcatgaatat ttgcaagtaa ttaccattaa attcacacat gaaagattaa 180
tctgaaagat cagagaccat gttattcctg accacgatag aactgctcct gtggtttggg 240
acaagtaata aaacaactgc ttgagttttg tttgtaaaat acataattaa tatttgacct 300
acctcaaaat gtattgagga tctgtgaaat gctaagtgcc caaaataaaa tattgctgat 360
tgtcttttta ttaaaagtaa atttcctcat taagccaacc tgccttctgt aagtcacagt 420
gcttaaatct caggattttt cattaggaga gacctgtcgt taaggatttg taggtataat 480
tgcttagcct ccattattgg tgcttgggat agagaggttt tagatttttg ttttttttt 540
tgttctgcct caaagctcag tttattgaag acatttgtaa gctattggat catcacttga 600
atcaagattt tgactagtga gcttaattgt ccatttctta caatttcaaa gttacagtct 660
cagaaatggn taattttaat aactgtccta tcataaatta atgttggaat aaattgaagt 720
tggtgataaa tacttcatga aaactaaagt ctgaaataaa ttacttggtt tatgtccaat 780
agctactacc atttgataga acagnttttg ganggaacca tttcattctt ggaaccccag 840
catctgacat gggtcttcan caagtttgga ata 873

0956545.0072800

<210> 3479
<211> 807
<212> DNA
<213> Homo sapiens

<400> 3479
cctttattat acagaagcag gatctatgtt ttttactctt tttgcgtatt tgatgtgtct 60
ttatggaaat cataaaactt cagccttcct tggattttgt ggcttcatgt ttcggcaaac 120
aaatatcatc tgggctgtct tctgtgcagg aaatgtcatt gcacaaaagt taacggaggc 180
ttggaaaact gagctacaaa agaaggaaga cagacttcca cctattaaag gaccatttgc 240
agaattcaga aaaattcttc agtttctttt ggcttattcc atgtccttta aaaacttgag 300
tatgcttttg cttctgactt ggccctacat ccttctggga tttctgtttt gtgcttttgt 360
agtagttaat ggtggaattg ttattggcga tcggagtagt catgaggcct gtcttcattt 420
tcctcaacta ttctactttt tttcatttac tctcttttct tcctttcctc atctcctgtc 480
tcctagcaaa attaagactt ttctttcctt agtttggaaa cgtagaattc tgtttttgt 540
ggttacctta gtctctgtgt ttttagtttg gaaattcact tatgctcata aatacttgct 600
agcagacaat agacattata ctttctatgt gtggaaaaga gtttttcaaa gatatgaaac 660
tgtaaatatt tggtagttcc agcctatata tttgctggnt ggagtacagc tgactcattg 720
aaatcaaggc aatttttttg gaatttaatg gttttcatat gcctgggtca ctggtatagg 780
ttcctcagaa actggtggga attcnnn 807

<210> 3480
<211> 700
<212> DNA
<213> Homo sapiens

<400> 3480
gtcgccgcgc ggccgccggt gagccgcatg gagccccggg cggcggacgg ctgcttcctg 60
ggcgacgtgg gtttctgggt ggagcggacc cctgtgcacg aggcagccca gcggggtgag 120
agcctgcagc tgcaacagct gatcgagagc ggcgcctgcg tgaaccaggt caccgtggac 180
tccatcacgc ccctgcacgc agccagtctg cagggccagg cgcggtgtgt gcagctgctg 240
ctggcggctg gggcccaggt ggatgctcgc aacatcgacg gcagcacccc gctctgcgat 300
gcctgcgcct cgggcagcat cgagtgtgtg aagctctcgc tgtcctacgg ggccaaggtc 360
aaccctcccc tgtacacagc gtccccctg cacgaggcct gcatgagcgg gagttccgaa 420
tgtgtgaggc ttcttattga cgtcggggcc aatctggaag cgcacgattg ccattttggg 480
acccctctgc acgttgcctg tgcccgggag catctggact gtgtcaaagt gctgctcaat 540
gcaggggcca acgtgaatgc ggcaaagctt catgagactg cccttaccac gcggccaagg 600
tcaagaatgt tgacctcatc gagatgctta tcgagtttgg cggnaacatn taccccggga 660
caaccgcggg aagaaccgtc tgactacacg tggancaaca 700

<210> 3481
<211> 891
<212> DNA
<213> Homo sapiens

<400> 3481
gcatgcgctg tggctaatgc cgtaggctcc ttcagggctg agccatcccg cgtgtcttgc 60
gctcggtgga aatgcccagc cgagggacgc gaccagagga cagctctgtg ctgatcccca 120

0956945.0720

ccgacaattc gaccccacac aaggaggatc taagcagcaa gattaaagaa caaaaaattg 180
tggtggatga actttctaac cttaagaaga ataggaaagt atataggcaa caacagaaca 240
gcaatatatt ctttcttgca gaccgaacag aaatgctgtc tgagagcaag aatatattgg 300
atgaactgaa aaaagaatac caagaaatag aaaacttaga caagaccaaa atcaagaaat 360
agtcaacctg atttcacata acaatgtgtg gcatttgttg ttctgtaaac ttttctgctg 420
agcatttcag tcaagattta aaagaggact tactatataa tcttaaacag cggggaccca 480
atagtagtaa acaattgtta aagtctgatg ttaactacca gtgtttattt tctgctcacg 540
tcctacactt gaggggtgtt ttgactaccc agcctgtgga agatgaaaga ggcaatgtgt 600
ttctatggaa tggagaaatt tttagtggaa taaaggttga agctgaagag aatgacactc 660
aaattttgnt taattatctt tcctcctgta agaatgaatc tgagattttg tcactcttct 720
cagaagtaca aggtccctgg catttatata ttatcaagca tctagtcatt atttatgggt 780
tggtagggat ttttttgggc gccgaaactt gcttttggca ntttagtaat ttgggccaag 840
aagttctggc tntntttaat tgggacccca acattttgga ttggcaaatc a 891

<210> 3482
<211> 877
<212> DNA
<213> Homo sapiens

<400> 3482
atcttgtctt gttcccgaag aagtagaagc atcgaaagcg ttggagaggt gttaccggaa 60
cggcggcgac aagggtgttc ccgaactaga gtggggcata cataatcttg ctgctatgct 120
tcgaagctgt agtctgaatc aacctaagtt ttaaacagaa ggtgaacctc tgagatagaa 180
aatcaagtat attttaaaag aagggatgtg ggatcaagga ggacagcctt ggcagcagtg 240
gcccttgaac cagcaacaat ggatgcagtc attccagcac caacaggatc caagccagat 300
tgattgggct gcattggccc aagcttggat tgcccaaaga gaagcttcag gacagcaaag 360
catggtagaa caaccaccag gaatgatgcc aaatggacaa gatatgtcta caatggaatc 420
tggtccaaac aatcatggga atttccaagg ggattcaaac ttcaacagaa tgtggcaacc 480
agaatgggga atgcatcagc aacccccaca ccccccctcca gatcagccat ggatgccacc 540
aacaccaggc ccaatggaca ttgttcctcc ttctgaagac agcaacagtc aggacagtgg 600
ggaatttgcc cctgacaaca ggcatatatt taaccagaac aatcacaact ttggtggacc 660
acccgataat tttgcagtgg ggccagtgaa ccagtttgac tatcagcatg gggctgcttt 720
tggtccaccc gcaaggtgga tttcatcctc cttattggca accaggacct tcaggacctt 780
caacaccttc ccagaatcga agagaaaggc nttatcattc agggtcgcac gttcacctat 840
tgactttctg ggaagcagga ncctnccaaa ttgccca 877

<210> 3483
<211> 684
<212> DNA
<213> Homo sapiens

<400> 3483
acacttcagc cacagaaggg aggggttttc cggcatcagg gttggcaact gagtcagatg 60
gagggaatgg ctccagccaa aacaactcgg gcagcattcg ccatgagctt cagtgtgacc 120
tgagacgctt ctttctggag tatgaccggc ttcaggagct ggatcagagc ctgagtgggg 180
aagctcccca gacccaacag gcccaggaaa tgctcaacaa taacattgaa tctgagaggc 240
caggcccttc ccaccagccc accccacaca gcagtgagaa caactccaac ctgtcccgtg 300
gccacctgaa tcgctgtcgt gcttgccaca atctcctgac cttcaacaac gataccctgc 360

0302303.0297000

gctgggaaag aaccacacct aactactcct ctggcgaggc tagttcctct tggcaggtcc 420
ccagctcctt tgagagtgtg ccatcaagtg gcagccagtt gccacctctc gagcggactg 480
agggccaaac gcccagctcc agcaggctgg agttgagcag ctctgctagt ccgcaggagg 540
agaggactgt gggggtggcc tttaaccagg agacaggcca ctgggaaaga atttacaccc 600
agtccagcag atctggaact gtgtcacagg aggccttaca tcangatatg cctgangaga 660
gctctganga ggattcactc agga 684

<210> 3484
<211> 732
<212> DNA
<213> Homo sapiens

<400> 3484
gtcttctcgg tcacgttttc tgttatattt gcctatgtag ctgatgtcac tcaggagcac 60
gagcgaagta cagcttatgg atgggtctca gccacctttg cggctagtct tgtcagcagc 120
ccggccattg gagcatatct ttctgccagt tacggagaca gcctcgttgt gctggtggcc 180
acagtggtgg ctcttctgga catctgcttc atcttagtgg ctgttccaga atctctgcct 240
gagaaaatga gaccggtttc ctggggagct cagatttctt ggaaacaagc agacccttt 300
gcgtcgttga agaaagttgg aaaagattct actgtcttac taatctgcat caccgtgttt 360
ctttcatacc ttcctgaagc tggacagtat tcaagttttt ttctctatct caggcaggtc 420
ataggttttg gatctgttaa aattgcagca ttcatagcta tggtaggaat tctgtctatt 480
gtggctcaga cggcctttct tagcatcttg atgagatcat taggaaataa gaatactgtc 540
ctccttggct tgggcttcca gatgctccag ttagcctggt acggttttgg atcacaggcc 600
tggatgatgt gggcagcagg gaccgtggct gccatgtcca gcatcacgtt tccngcaatc 660
agtgccctcg tcactcggaa tgcanagtca gatcancaag gagttgccca ggggatcata 720
actggaataa ga 732

<210> 3485
<211> 724
<212> DNA
<213> Homo sapiens

<400> 3485
tcagggagcc cttaatgcct cagaaaccac acccaaagaa cttcggatca agagacaaaa 60
ctcctcagat agcatctcaa gcctcaacag catcactagc cattccagca tcggcagcag 120
caaggatgct gatgcgaaaa agaagaaaaa aaagagttgg cttcgaagtt ccttcaacaa 180
agcgttcagt ataaaaaagg ggcccaagtc agcttcctca tactcggata tagaggagat 240
tgctacaccc gactcttcag ccccctcatc ccccaaacta cagcatggtt ctacagagac 300
tgcttcaccc tccatcaagt cctccacctc gtcctccgtg ggcactgatg tcaccgaggg 360
ccctgctcac ccagcccccc acactaggct gttccatgca aatgaggagg aggagccaga 420
gaagaaggag gtatcggagc tgcgctctga gctatgggag aaggaaatga agcttacaga 480
catccgcttg gaggccctca actctgccca ccaactggat cagcttcggg agaccatgca 540
caacatgcag ttggaggtgg acctgctgaa agcagagaat gaccgactga aggtagcccc 600
aggcccctca tcaggctcca ctccagggca ggtccctgga tcatctgcat tatcttccca 660
cgccgttcct aggnctggna cttacccatt ccttngggcc cagtctttgc agacacagac 720
ctgt 724

<210> 3486

0962948.0720

0050450 2005-05-20

<211> 669
<212> DNA
<213> Homo sapiens

<400> 3486
aagggctact ccgggatcta cggacccggg ttcccctggc gtaggtcggc cctcggccgc 60
agggtgaggc tgggcatgca gccgggaccc cgggcgtcct gtcccgttcc tgcgcggcga 120
ctgcggcccc ggcgccctct ctgggcagct ccgcgcccgc agcctcgcgt ctcccgagat 180
tgtgcggctg taagcaacac aggttcgcgg cccgactcac tgcaccgaga cgctgagggc 240
tgcagcagaa acagtttaat agccagagag gggaggacac cccagatccg cctccctgag 300
ggatttgggg tctggacggg ggcggctggg tgtagggtcg ttggttggtg gggaagtgag 360
gggtgaatcc tgggacagga ggtgaagaaa ccgcattctg ctgaatgggc tccctcgttg 420
ggacttcaac ctgattggcg ccagcctttg ctgggattca ggatctgaga actccggcga 480
ctcttgagca gttctcagag atcttatccc caggcacaat ggggaagccg gcggtcagcg 540
tctgctgtga cctgactctc agggaggcgg ccccttgagg cancggggct ganggcacct 600
ggttaatatc taactgcaat ctcgncttca gcctgctcgc aattcctgtg aacccggctc 660
atggcttta 669

<210> 3487
<211> 908
<212> DNA
<213> Homo sapiens

<400> 3487
ctattcagta ccaataccag gataacataa aagagctaga attagaagtc atcaatctgc 60
aaaaggaaaa ggaagaattg gttcttgaac ttcagacagc aaagaaggat gccaaccaag 120
ccaagttgag tgagcgccgc cgcaaacgtc tccaggagct ggagggtcaa attgctgatc 180
tgaagaagaa actgaatgag cagtccaaac ttctgaaact aaaggaatcc acagagcgta 240
ctgtctccaa actgaaccag gagatacgga tgatgaaaaa ccagcgggta cagttaatgc 300
gtcaaatgaa aggagatgct gagaagttta gacagtggaa gcagaaaaaa gacaaagaag 360
taatacagtt aaaagaacga gaccgtaaga ggcaatatga gctgctgaaa cttgaaagaa 420
acttccagaa acaatccaat gtgctcagac gtaaaaacgg aggaggcagc agctgccaac 480
aagcgtctca aggatgctct ccagaaacaa cgggaggttg cagataagcg gaaagagact 540
cagagccgtg gaatggaagg cactgcagct cgagtgaaga attggcttgg aaacgaaatt 600
gaggttatgg tcagtactga ggaagccaaa cgccatctga atgacctcct tgaagataga 660
aagatcctgg ctcaagatgt ggctcaactc aaagaaaaaa aggaatctgg ggagaatnca 720
ccttctaaac ttcggaggcg tacattctcc ttactgaaat gcgttggtca agtttcggag 780
tcagaagatt ctattccaag cagaattgaa gccttaagac tgaaatggaa ttcaggatgc 840
tcaaaatggt tgcctacaca gaaacttgtt ggatgcagaa agtgaagacc ggacccaaac 900
aaccgctg 908

<210> 3488
<211> 860
<212> DNA
<213> Homo sapiens

<400> 3488
cactgtatgc tgtgtggaca tgcatttcat gtggctgtgt ggtaagaatt acagcttaca 60

tatggcttgg acccacatcc gaggaatctg atgttcactt ataccagaac attatcttgc 120
tatttatgaa attatttaaa cgttcaaaag attgttttta acatggttta atttcccaaa 180
aactacagtt ttttttctta gcatgctatt caggtaaaca gtcttataat aaagcatgtc 240
ccattgtcaa gaaacataaa gtggtgtgaa taccactgaa aatatatata tagtatcttc 300
tgtaaataat agtacctgtg tgaataagga ataggcttgc ctcccagcca ggcaatttcc 360
tgagggcaca ctaatgatat cccctgagtt gctaagttga tgctgagaca ttttgctggg 420
aattagtcat ggcatgatct ctttcagact ccctgaatac catttagtcc cgtaacagtg 480
ctcacaactc atgtgctaat gaatcacaaa ggctttaact agctcccagg ttgtagcctt 540
cgcaggatct agtttatttg ccacatctct ttatgaacat atagcgattc gcagatctct 600
ctattcacgg agaggaaggt gttttgcttc tgtagatctc aaggtactat tttgtggctc 660
tcancaggaa gtagaattgg tcctaaatgt gtgctgaatg angacatgat gtcccttctg 720
gtgccaggac acattctgca tggcattctg tgaaaggcat cctgctgagg ataatgccag 780
gagcagcaca tttanggtaa tttgctaaac tttcagatgc ntataaattc ctcttttccc 840
ctgaacttac cattcagagn 860

<210> 3489
<211> 795
<212> DNA
<213> Homo sapiens

<400> 3489
aatccccgcc atgtgggggc tcctgctcgc cctggccgcc ttcgcgccgg ccgtcggccc 60
ggctctgggg gcgcccagga actcggtgct gggcctcgcg cagcccggga ccaccaaggt 120
cccaggctcg accccggccc tgcatagcag cccggcacag ccgccggcgg agacagctaa 180
cgggacctca gaacagcatg tccggattcg agtcatcaag aagaaaaagg tcattatgaa 240
gaagcggaag aagctaactc taactcgccc caccccactg gtgactgccg ggccccttgt 300
gacccccact ccagcaggga ccctcgaccc cgctgagaaa caagaaacag gctgtcctcc 360
tttgggtctg gagtccctgc gagtttcaga tagccggctt gaggcatcca gcagccagtc 420
ctttggtctt ggaccacacc gaggacggct caacattcag tcaggcctgg aggacggcga 480
tctatatgat ggagcctggt gtgctgagga gcaggacgcc gatccatggt ttcaggtgga 540
cgctgggcac cccacccgct tctcgggtgt tatcacacag ggcaggaact ctgtctggag 600
gtatgactgg gtcacatcat acaaggtcca gttcagcaat gacagtcgga cctggtgggg 660
aagtaggaac cacagcagtg ggatggacgc agtatttcct gccaattcag acccagaaac 720
ttcagtgctt gaaccttctg ccggagcccc aagtggnccg cttcattcgc ctgnttgncc 780
caaaacttgg cttca 795

<210> 3490
<211> 844
<212> DNA
<213> Homo sapiens

<400> 3490
gttgccatgt ttgctctgcc cctggggtgg aggccagagg agatgcttac caggcctgag 60
accttgagag ttcacccagg gtttgtacgc tgccacccag ggttcccaag gtttctccca 120
tctggtcaga tgtcgaacac aaaatgtggg cattctgcac ggaaggaaag atcaggcttc 180
tcttgctgag tgtgtgaaga cagggagagc caggccccag cagatgcggc ctagcacact 240
ctgatttggt tttgtgggga gggcccagga acttgggggt ggtcttggca ttcagagctg 300
gtgctaaaaa cccagagcag aagcagggag aagggagtga ggatgggaca gagaagagcg 360

US20050287600

accactgggg atcagaacag cttttcaggg gccaccttgc agcctaagat aatgccgttt 420
cagggcctgg gcctgctgtg agagccagaa tgaagcatgt gcaagattgg aatgtgagaa 480
gaactgtggg gggaaaccag ttttaattaa gtggaagtgc tttgtgcttg tgctgaagtt 540
gcctgggcct cctgcagctc tggacctcac tggagcggnc ccgccctgcc cttgcctgcc 600
tttcttttat gctgatgctg gtgggctttt tcctgcttca ggatccatgt aagggactga 660
ccaggttcat ccagccttaa ctggttcctg caacccactt ttaggtcttc caccangggc 720
ctattgtgct gtcttcctgt gaccagcaga tcctgtaagg gggtgatcct aattcttggg 780
gctctttgca gcaagangag aacgttcttt ttcttgaaca aggtgggncc ggttnccttg 840
ggaa 844

<210> 3491
<211> 902
<212> DNA
<213> Homo sapiens

<400> 3491
aaatcaactt ggattaacct ttcagttacc tctgccagaa ctggagatat ttcaaggtga 60
agggaagatt tatgaatgta atcaagttca aaagttcatc agccacagtt cttcagtttc 120
gccacttcaa agaatttact ctggggtcaa aacccacata tttaataaac ataggaatga 180
ttttgttgat tttccattgc tgtcacaaga acagaaagca cacattagga gaaaacctta 240
cgaatgtaat gagcagggca aagtcttcag agtgtcttca agccttccta atcatcaagt 300
aatccacact gcagataaac ctaacagatg tcatgaatgt ggtaaaaccg tcagggacaa 360
gtcaggcctc gcagaacatt ggagaattcg tacaggagag aaaccttaca aatgtaaaga 420
gtgtggcaag ctcttcaatc gaattgcata ccttgcacga cacgagaaag tgcatactgg 480
agagagtcct tacaaatgta atgagtgtgg caaggtcttc agtcgaatta cataccttgt 540
acgacatcag aaaattcata ctagagagaa acctcataaa tgtaacaaat gtggcaaggt 600
ttatagtagc agttcatacc tagcacaaca ttggagaatt catacaggag agaaacttta 660
caaatgtaat aaatgtggca aagaatttag tgggcattca agcctnacca cccatctgtt 720
aatccacact ggagagaaac cttacaaatg taaagaatgt gacaaagctt ttaggcacaa 780
gtctcctgac agtcatcaga gaaatcatat gggagagaaa ccttataatg tcatgaatgt 840
ggcaaagtct ttactcaggt tcacatcttg cacgacntcn gaaaattccc ctggagagaa 900
cc 902

<210> 3492
<211> 692
<212> DNA
<213> Homo sapiens

<400> 3492
acccggcctg ccccgcggca agatggcggc ctgaacgcat ctggcagcgg cggaaagctt 60
agatcagcct ttccacagct gttagcagca tctgccccaa tttcagctga agattcaggt 120
gccccaggga ctggaagaaa ttacagtgcc tacttggaaa gaagaagaga tagcgacttg 180
ccccagtcca accccagagc gggagctgtg gctaaaggaa gtggaggggc cgtgggatgc 240
ggagagccga gggctaactc ccggacagcg gaacagagag agctgccgac aaacagacgt 300
ccagagtcct tctggccaca tctctgagcc tgcctccttc ttgcttctca gcaggcggag 360
gagccgtcac ctcccagaat gactagtgcc gcccctgcta agaaacccta ccgtaaggca 420
ccaccagagc atcgggagct gcgtttggaa attcctggat cccggcttga gcaggaggaa 480
cccctgactg atgcagaaag gatgaagctc ttacaggagg agaatgaaga gcttcgccgg 540

0962034.0042000

cgcctggcct ccgccaccag acgcactgag gccctggaac gtgagctgga aattgggcag 600
gactgcctgg agctggagct gggccagagc cncgaggagc tggacaaatt taaggataaa 660
gttccgcang ctgcagaaca gctacacggn tt 692

<210> 3493
<211> 739
<212> DNA
<213> Homo sapiens

<400> 3493
acacaatggt gagaagccct atgaatgtna tgaatgtgat aaagccttca gtgtgctttc 60
ttcccttgtt caacatcaga gaatacataa tggagacaaa ccctatgagt gtcacaaatg 120
tgggaaggcc tttagccagg ggtnacacct tattcagcat canaggagtc acattggtga 180
gaaaccctat gagtgtaatg agtgtgggaa aacctttggg cagatatcca ccctaattaa 240
gcatgagaga acacacaatg gagagaagcc ctatgagtgc agtgactgtg ggaaggcctt 300
cagccagagt gcacacctta tccaccatca aagaattcac actggagaga atccctatga 360
gtgcagtgaa tgtgggaagg ccttcaatgt ttgttcctct ctcattcagc atcacagaat 420
tcatactggt gagaaacctt atgaatgtag tgactgtggc aaggcgttca gtcagcattc 480
acaatttatc caacatcaga gaattcacac tggagagaaa ccctacatgt gcaatgagtg 540
tgagaaatcc ttcantgcat gcttatccct tatccaacac aagagaattc acactggata 600
gaaaccctat gtatgtgcca aatgtggaaa atccttctga caaagctctn accttattca 660
acatcagaga attcacagtg gggagcaacc tcatacgtgt aatcgatgtt gaaaaaacct 720
tnagtttnga gaataactc 739

<210> 3494
<211> 724
<212> DNA
<213> Homo sapiens

<400> 3494
attctgcaag gccgtggaaa caaagggagg aactgtttgt agccctcgtc cagacgcccc 60
aaacaaacaa tggagaagga aaggcaagcg acttgtccag agccactctg tcaaaagggg 120
acttgagtcc tcagggctgt tgactccaaa gctgacaagc aggtggcatt cttcttcaga 180
gcagggcaag tgtaattctg gaccaatgtg tgattctgag accagaccaa ccaactgaag 240
gagccaagtt acaccctgtt taaccctgcc ttcaaaggga cgactctgta agattctctg 300
ctacttattc aagttgacac gatgcccttc acactccacc tgaggtcccg ccttccctct 360
gccataagga gtttgattct acaaaagaaa ccaaacatca gaaatacatc cagcatggct 420
ggagagctcc gaccagccag cctggtggtc ctgcccaggt cccttgctcc agcttttgaa 480
agattctgcc aggtcaacac tggtcctcta cccctgctgg gccagagtga gccagaaaag 540
tggatgctgc cccctcaagg tgctatctca gagaccagga tgggccatcc ccagttctgg 600
aaatacgagt tcggtgcctg caccggtagc ctggcttcgc tggagcagta ctcggagcan 660
ctgaaggaca tggtggcctt cttcctgggc tgcagcttct cctggangan gccttggaga 720
aagc 724

<210> 3495
<211> 910
<212> DNA
<213> Homo sapiens

0060-0504-0050-0-WO-00

<400> 3495
gtgccacgtc ccaagtgcta cgcggaggat tagagcaggc ggtgcgctgg gggcgggagc 60
agcgcggagc ccggctcggc cacaccgatc gcccgccgcc atgggctcct cgcaaagcgt 120
cgagatcccg ggcgggggca ccgagggcta ccacgttcag cgggtacaag aaaattcccc 180
aggacacaga gctggtttgg agcctttctt tgattttatt gtttctatta atggttcaag 240
attaaataaa gacaatgaca ctcttaagga tctgctgaaa gcaaacgttg aaaagcctgt 300
aaagatgctt atctatagca gcaaaacatt ggaactgcga gagacctcag tcacaccaag 360
taacctgtgg ggcggccagg gcttattggg agtgagcatt cgtttctgca gctttgatgg 420
ggcaaatgaa aatgtttggc atgtgctgga ggtggaatca aattctcctg cagcactggc 480
aggtcttaga ccacacagtg attatataat tggagcagat acagtcatga atgagtctga 540
agatctattc agccttatcg aaacacatga agcaaaacca ttgaaactgt atgtgtacaa 600
cacagacact gataactgtc gagaagtgat tattacacca aattctgcat ggggtggaga 660
aggcagccta ngatgtggca ttggatatgg gtatttgcat cgaataccta cacgcccatt 720
tgaggaagga aagaaaattt ctcttncagg acaaatggct ggtacaccta ttacacctct 780
taaagatggg tttacagang tccaacttgt cctcagttaa tcccccgtnt ttgtcaccac 840
caggaactac aggaattgaa ccnaatcttg actggacttt ctatttactt aactccccag 900
nttgtcaata 910

<210> 3496
<211> 761
<212> DNA
<213> Homo sapiens

<400> 3496
aaaactcttc tcagacccgg gagcgtccgg gacgcggagc ccggagctgg ggcgacgagg 60
cgattgcggg ggcctgggct agctgctggc taccaatatt ctactttctg tctctatgta 120
tgtgactacc ctggttacct catataatct ccctggaaaa ggagacatga atgtctgcaa 180
tgatacttcc tgacaagaag ttgatacaag aaaaggaaag gagattaaca gctagtgagc 240
agaatttcga acagcaggat ttcgtatttt ttgcttccaa ctgcacactt ccgtttccca 300
cttttaaatc agagatacct acactcaaaa cccagacaag gcaaaaggat acctttcttg 360
tatatttttt gagatcgaag aaacgacaat gtccaggaaa cagaaccaga aggattcatc 420
aggattcatt tttgatttgc agtccaatac cgtactggcc cagggaggag cttttgagaa 480
catgaaagag aagataaatg cggtacgtgc aatagttcct aataagagca acaatgaaat 540
tatcctggtt ttgcagcact ttgataactg tgtggacaaa acagtacaag cattcatgga 600
aggtagtgcc agtgaagtac tcaaagaatg gacagtaaca ggcaagaaaa agaacanaaa 660
gaagaaaaac aaacccgaaa cctgccgcag aaccaagtaa cggcattcca gattccagta 720
aatcaagttt ncattcagan gaacagtctg cgccttnctc a 761

<210> 3497
<211> 893
<212> DNA
<213> Homo sapiens

<400> 3497
agtcaggaca agatgaaaag aaaaacatcc aaaagaagtg aaattggtga cagaatgaga 60
ggagcaaagc ataccagtgt agtaagtgga atgtttgaat gactttgcca ggtcagagca 120
agtaatattt ctgtatctga gtttttgttt gtgttttgat aaggctaatg aaattgcatt 180

0502506 : 20200800

ccaggtaggg gttaacgtca aatttccatg gctggtagct gtgcttttgg catatcacag 240
tgttgtgtca ctactacaag gtaaagcatc tacagcggag aatgagcttg aaaatgagag 300
acctattgtg aataaatatg cccatgagag catatttaat aagcctctat aacatgcagc 360
caaaccagac attcactcct gcagagaaat gttgccctgg agaaaaagag atatataaag 420
ataggctatc acccttcttt tgctgcagta ctaagcatag caagaaatta gaatcattta 480
cattggaaat ttgaaaattc cctttatata cacaacttta ctgtgtataa ataaaaaata 540
tttattaatg cagtgatgtc cgtcaggttg ttttaggaat ggcttctgca attagaaaaa 600
tagcttgcta gaatgtaaat gttctgttac tggtaaatgt actgcacaca ttcattggcg 660
ttaaaacaag tgagtagcct tttttacctg ccagcagcat ggcttgtgtg cagccactag 720
gctgagacaa taaattacca aaaattataa tgtccgagct gaaaatgctc agtacattat 780
gtggcatatt ctggatgtga tgagaaatct cattggcatt tgggacactg gcatnccana 840
agtaatccac actgctttgc aaaagcaaag tgactggtca nattgaccgg acc 893

<210> 3498
<211> 827
<212> DNA
<213> Homo sapiens

<400> 3498
gtactacctt cggtctaggc agcggaggca gccgcgaccc caggaaaccg aggaaatgaa 60
gacgcgaagg actacccgcc ttcagcagca gcactcagag cagcctccgc tacagccgtc 120
tcctgttacg accaggagag ggctgcggga ctctcattcc tctgaagagg atgaagcatc 180
ttcccaaact gatttaagcc aaacgatctc aaagaaaact gtcaggagca tacaagaggc 240
tccagtgagt gaagatcttg taatcaggtt acgtcgaccc cctctaagat gcccaagata 300
tgaagccacc agtgtccaac agaaggtcaa tttctctgaa gaaggagaaa ctgaagaaga 360
tgatcaagac agctctcaca gcagtgtcac tactgttaag gccagatcca gggattctga 420
tgaatctgga gataaaacca ccagatcatc tagtcaatat atagaatcat tttggcagtc 480
atcacaaagt caaaacttca cagctcatga taagcaacgt tcagtgctaa gctcaggata 540
tcaaaaaact ccccaggaat gggccccaca aactgcaaga ataaggacca ggatgcaaaa 600
tgacagcatt ctgaaatcag agcttggaaa ccagtcacca tcaacctnca gccgacaagt 660
gactggacaa ccccaaaatg catcttttgt caagaggaac cggtggtggc tacttcctct 720
gatagctgct cttgcctctg ggagtttttg ggtctttagt actnctgagg tagaaaccac 780
tgntggtcaa gagttncaga acccgatgaa tcaacttaag aataagt 827

<210> 3499
<211> 681
<212> DNA
<213> Homo sapiens

<400> 3499
agtgtgccag gctggaggcg gcagcggttg gaggcttcgc ccggctttgc agcggggact 60
tcggcggcgg cgcctcaggc acctcggccc ggacacgatg aggcgagtgg tacgacagag 120
caagtttcgg catgtatttg ggcaagcggt gaaaaatgac cagtgctatg atgacatccg 180
ggtttctcgt gtgacctggg atagttcctt ttgtgctgtc aatcccagat ttgttgccat 240
aatcatagag gcaagtgggg gaggagcgtt ccttgtcctc cctctgcaca agactggtcg 300
aattgacaaa tcttacccta cagtatgtgg ccacacagga ccagtgctgg acatagactg 360
gtgcccacat aacgatcagg tcattgccag cggttcagag gactgcacgg tcatggtatg 420
gcagatccca taaaatggac tcacccttc cctgactgaa cctgtggtga ttttggaagg 480

US20050250000A1

ccactcaaag agagtcggca tcgtggcttg gcatccaacg gcccgcaatg tgcttcttag 540
ngcaagctgt gataatgcca ttatcatctg gaatgtggga acaggggaag cccttataaa 600
cttggacgat atgcattcag acatgattta cantgcgagc tggaacccgn aatggcaggt 660
ctgatctgcn cagcttccaa a 681

<210> 3500
<211> 774
<212> DNA
<213> Homo sapiens

<400> 3500
gacaccagta gcttccaggg atatttgagg caccatccct gccattgccg ggcactcgcg 60
gcgctgctaa cggcctggtc acacgctctc cagagagcta cgggagggcg ctgggtaacc 120
tctatccgag ccgcggccgc gaggaggagg gaaaaggcga gcaaaaagga agagtgggag 180
gaggagggga agcggcgaag gaggaagagg aggaggagga agaggggagc acaaaggatc 240
caggtctccc gacgggaggt taataccaag aaccatgtgt gccgagcggc tgggccagtt 300
catgaccctg gctttggtgt tggccacctt tgacccggcg cgggggaccg acgccaccaa 360
cccacccgag ggtccccaag acaggagctc ccagcagaaa ggccgcctgt ccctgcagaa 420
tacagcggag atccagcact gtttggtcaa cgctggcgat gtggggtgtg gcgtgtttga 480
atgtttcgag aacaactctt gtgagattcg gggcttacat gggatttgca tgacttttct 540
gcacaacgct ggaaaatttg atgcccaggg caagtcattc atcaaagacg ccttgaaatg 600
taaggcccac gctctgcggc acangttcgg ctgcataagc cggaagtgcc cggccatcag 660
ggaaatggtg tcccaattgc acgggaatgc tacctcaagc acgactgtgc gccgnttgcc 720
cangagaaca cccgggtgat atgganatga tccatttcaa ggactttgtt gctt 774

<210> 3501
<211> 790
<212> DNA
<213> Homo sapiens

<400> 3501
ctgagtcttt cggcctgggt ggaggacgcg gctgcttcaa gtccttggct ctgatccagg 60
ccacagattc caggattcta caggcaggaa acatcttaga aatcagggtt gggcaggcag 120
gagccaggag agtagctaca atgacttcac cagtactggt ggacatacga gaagaggtga 180
cctgccctat ctgcctggag ctcctaacag aacccctgag catagactgt ggccacagct 240
tctgccaagc ctgcatcaca ccaaatggca gggaatcagt gattggtcaa gaaggggaaa 300
gaagctgccc tgtgtgccag accagctacc agccagggaa cctgcggcct aatcggcatc 360
tggccaacat agtgaggcgg ctcagagagg tagtgttggg ccctgggaag cagctgaaag 420
cagttctttg tgcagaccat ggagaaaaac tgcagctctt ctgtcaggag gatgggaagg 480
tcatttgctg gctttgtgag cggtctcagg agcaccgtgg tcaccacacg ttcctcgtgg 540
aggaggttgc ccaggagtac caggagaagt ttcaggagtc tctaaagaag ctgaagaacg 600
aggagcagga agctgagaag ctaacagctt ttatcagaga gaagaagaca tcctggaaga 660
atcagatgga gcctgagaga tgcaggatcc agacagagtt taatcagctg cgaaatatcc 720
tagacagagt ggaancaacc gggagctgaa aaagcttgga acanggaaga gaagaagggg 780
ctnccaattt 790

<210> 3502
<211> 748

US20020150909A1

<212> DNA
<213> Homo sapiens

<400> 3502
tttagcagtc tgtgatgatc agcaaaaaag cacataaagt aaaaattagt tgaccatgct 60
aaattcaatt ctggaatttt tttttatttg ggcatttcta gaacttttta catttgaaag 120
tacatgatga gtattagtaa cgatgactta tgtataatca gaatctttat gacaatttag 180
ttttacaagg tcaaaagaga tgagtttgct aaacccagct gtgatacctc agttggaaag 240
ggaattcaaa ggtatgcttt gtagaacaga aaagtatagt tttttttca tgaactttaa 300
tcattttctg ttttcctct atgtgagtca gctacaaaag tggtctaatt tttacaacag 360
tagaacttcc tccttttcta ctgtaatctt cccactgact ttactgcaca ggtatgaaat 420
actagtgtat tggatcttca gtaacctttt tatttcctag atgattgaaa tataggtatt 480
tactccattt aaaccaggtg ataagatgat gtaaatactc agggagggta ttaacttgtt 540
acttttgctc gtttggggtg taaagtgcca tgactgaata atcttcaatt catgattcta 600
gagtaagttt aatttggaaa aaggggcttc acacatggtg ggtggttgaa cattggattc 660
ttttatctta aaaaggatga aaaatgtttt gggggactga tcattttatc ttactggaat 720
atgaattggn tnatgnatct ctactggc 748

<210> 3503
<211> 717
<212> DNA
<213> Homo sapiens

<400> 3503
cccgggacgt ttggtgcgtc ttctaagggc gtgggcgagt ttacgcgggc cagttgttgc 60
tggtcgcatg ggagctgctg ctaaataatt tctgctcagc catgtcgccg gctccagatg 120
cagccccggc tcctgcgtcg atctccctgt ttgacctcag cgcggatgct ccggtctttc 180
agggcctgag cctggtgagc cacgcgcctg gggaggctct ggcccgggct ccgcgtactt 240
cctgttcagg ctcaggggag agagaaagcc cagaaagaaa gctactccag ggtcctatgg 300
atatttcaga gaagttattt tgttcaactt gtgaccagac cttccagaac caccaagaac 360
agagggaaca ttataagctt gactggcatc ggtttaacct aaagcaacgt ctcaaggaca 420
agcctctcct gtctgccctg gactttgaaa agcagagctc cacaggagat ctttccagca 480
tctcgggatc agaagactca gactcagcca gtgaggagga cttgcagaca ctggatcggg 540
agagggctac atttgagaag ttgagccgac ccccaggctt ttaccctcat cgagttcttt 600
tccagaatgc ccagggccag tttctttatg cctaccgctg tgtcctaagc cctcatcagg 660
atcccccaga agangcagaa ctgctgctac agaacctgca aaagtanang tcccaga 717

<210> 3504
<211> 693
<212> DNA
<213> Homo sapiens

<400> 3504
cacatccggg agtcgctgcc ggccctacgt agcaaactac agagccagct gctgtccctg 60
gagaaggagg tggaggagta caagaacttt cggcccgacg accccacccg caaaaccaaa 120
gccctgctgc agatggtcca gcagtttggg gtggattttg agaagaggat cgagggctca 180
ggagatcagg tggacactct ggagctctcc gggggcgccc gaatcaatcg catcttccac 240
gagcggttcc catttgagct ggtgaagatg gagtttgacg agaaggactt acgacgggag 300

0956456.0072600

atcagctatg ccattaagaa catccatgga gtcaggacgg ggctcttcac ccccgacatg 360
gcctttgaag ccattgtgaa aaaacagatt gtaaaactca aagagccgag tttgaagtgt 420
gttgatctcg tggtctcaga gctggccacg gtcataaaaa agtgtgccga gaagctcagt 480
tcctaccccc ggttgcgaga ggagacagag cgaatcgtca ccacttacat ccgggaacgg 540
gaggggagaa cgaaggacca gattcttctg ctgatcgaca ttgagcagtc ctacatcaac 600
acgaaccatg aggacttcat cgggtttgcc aatgcccagc agangagcac gcactgaaca 660
agaagagagc catncccaat cangtgatcc gca 693

<210> 3505
<211> 851
<212> DNA
<213> Homo sapiens

<400> 3505
gacggcgggt gcccgcgcct cagagttact gatttattct tgagattcct ctactctcgt 60
tatctgacct catggatgaa cttcaggatg ttcagctcac agagatcaaa ccacttctaa 120
atgataagga acatgatata gaaacaactc atggtgtggt ccacgtcact ataagaggct 180
tacccaaagg aaacagacca gttatactaa catatcatga cattggcctc aaccataaat 240
cctgttccaa tgcattcttt aactttgagg atatgcaaga gatcacccag cactttgctg 300
tctgtcatgt ggatgcccca ggccagcagg aaggtgcacc ctctttccca acagggtatc 360
agtaccccac aatggatgag ctggctgaaa tgctgcctcc tgttcttacc cacctaagcc 420
tgaaaagcat cattggaatt ggagttggag ctggagctta catcctcagc agatttgcac 480
tcaaccatcc agagcttgtg gaaggccttg tgctcattaa tgttgaccct tgcgctaaag 540
gctggattga ctgggcagct tccaaactct ctggcctgac aaccaatgtt gtggacatta 600
ttttggctca tcactttggg caggaagagt tacaggccaa cctggacctg atccaaacct 660
acagaatgca tattgcccaa gacatcaacc aagacaacct ggagctcttc ttgaattcct 720
acaatggacc canagaccct gganaccgaa agaccccata ctggggccca aaatggttac 780
ccaatcaaaa acctttaaag gggtctacct ttacctgggg ggtaggggga caaatttnnc 840
ctgcaatttn a 851

<210> 3506
<211> 692
<212> DNA
<213> Homo sapiens

<400> 3506
taggagaatt acacatatct caggtacttt agaagatgaa gatgaagatg aagataatga 60
tgacattgtc atgctagaga aaaaaatacg aacatctagt atgccagagc aggcccataa 120
agtctgtgtc aaagagataa agagactcaa aaaaatgcct cagtcaatgc cagaatatgc 180
tctgactaga aattatttgg aacttatggt agaacttcct tggaacaaaa gtacaactga 240
ccgcctggac attagggcag cccggattct tctggataat gaccattacg ccatggaaaa 300
attgaagaaa agagtactgg aatacttggc tgtcagacag ctcaaaaata acctgaaggg 360
cccaatccta tgctttgttg gccctcctgg agttggtaaa acaagtgtgg gaagatcagt 420
ggccaagact ctaggtcgag agttccacag gattgcactt ggaggagtat gtgatcagtc 480
tgacattcga ggacacaggc gcacctatgt tggcagcatg cctggtcgca tcatcaacgg 540
cttgaagact gtgggagtga acaacccant gttcctatta gatgaggttg acaaactggg 600
aaaaagtcta cagggtgatc cacagcagct ctgcttgang tgttggatcc tgaacaaaac 660
cnttacttca cagatcatta tctaaatggn gg 692

0960450.0020800

<210> 3507
<211> 681
<212> DNA
<213> Homo sapiens

<400> 3507
ttgttaactt tgtcaaagat caggttgttg taggtttttg gctttatttc taggttctct 60
actttgtttc atttgtctat gtgtctgttt ctataccagt accatgctgt ttttgttact 120
gtactcttct agtatagttt gaagttaggt agagtgacac ttccagcttt ttttttttt 180
tcttaaggtt ggcttggcta tttgggctct tttttggttc catatgaact ttaaaagttt 240
ttatttttct aattctctga agaatgtcag tagttcaatg ggaatagcat tgaatctatg 300
aattacttag ggccatatgc ccatattcat gatactgatt cttcctctcc atgagcatgg 360
aatatttctc catctgtttt gtgtccactc tgatttctct gagcagttgt ttgtggttct 420
ccttgaagag gtccttcact ttctttctta gctgtattcc taggtatttt tttctctttg 480
tagcaaatgt gaatgaaagt tcattcatga tttgtctccc tgcttgcctg ttgtttgtgc 540
atgggaatgc tagctacttt tgcacattga ttttatatcc tgagattttg ctactggtgc 600
ttatcacctt aagaagcttt gggcctgana caatgangtt ttctanatgt aggatcaggt 660
catctgcaaa caaagataat t 681

<210> 3508
<211> 702
<212> DNA
<213> Homo sapiens

<400> 3508
atatggagaa gagccaagag gagatggatc aagcattagc agaaagcagc gaagaacagg 60
aagatgcact gaatatctcc tcaatgtctt tacttgcacc attggcacaa acagttggtg 120
tggtaagtcc agagagttta gtgtccacac ctagactgga attgaaagac accagcagaa 180
gtgatgaaag tccaaaacca ggaaaattcc aaagaactcg tgtccctcga gctgaatctg 240
gtgatagcct tggttctgaa gatcgtgatc ttctttacag cattgatgca tatagatctc 300
aaagattcaa agaaacagaa cgtccatcaa taaagcaggt gattgttcgg aaggaagatg 360
ttacttcaaa actggatgaa aaaaataatg cctttccttg tcaagttaat atcaaacaga 420
aaatgcagga actcaataac gaaataaata tgcaacagac agtgatctat caagctagcc 480
aggctcttaa ctgctgtgtt gatgaataac atggaaaagg gtccctagaa gaagctgaag 540
cagaaagact tcttctaatt gcaactggga agagaacact tttgattgat gaattgaata 600
aattgaagaa cgaaggacct canaggaaga ataaggctag tccccaaagt gaatttatgc 660
catncaaagg atcagttact ttgtcagnaa atccgcttgc ct 702

<210> 3509
<211> 597
<212> DNA
<213> Homo sapiens

<400> 3509
aaactgggaa agttgctggg ccagctcctt tgtttccagt ctgagcgttg cgttcggttt 60
cccgagggtc ttctgaggca ccgcggctgc gggcttctga gttcccggct ctccgcaggg 120
aagcctcctc ttcgtacctc gttttttggc tcgtgggggg tcctcccacc gctggccgac 180

0952350.0702000

gcagccagca tgtccggggt gcgcgcagtg cggatcagca tcgaatcggc ctgcgagaag 240
caggtccatg aggtgggcct ggatggcacc gagacgtacc tgcccccgct gtccatgtcg 300
cagaatctgg cgcgtctggc ccagcggata gacttcagcc agggttcggg ctccgaggag 360
gaggaggcgg cggngaccga gggggacgcg caggactggc cgggcgccgg gtccagcgca 420
gaccaggacg acgaggaagg agtggtaaaa tttcagcctt ccctttggcc ttgggactca 480
gtgaggaaca atttgagaag tgccctgaca gagatgtgtg ttctctatga tgttctcagt 540
attgttaggg ataaaaaatt tatgactctt gatcctgnct ctcangatgc acttnct 597

<210> 3510
<211> 621
<212> DNA
<213> Homo sapiens

<400> 3510
aacaatggag ctgctgcagg atgtgagtga tgtcacagaa aggagtgagt tctggaccct 60
gaggaagcca gaagctctcc ctacaaagct gagaagtatg ttccgagccc cagatctgaa 120
aaggatgctg cgagtgtgta gaggggagat gaaatggcca ggtgacatcc tcacaggatt 180
cctcaccatt cccctcaatg tagtaaggag agagatacca gacatgagac agttggtcct 240
attcaacatt attgactctt ttcatcatta cagagctgac agatgtccaa agctactggg 300
ttgacgtgac cctgaatcca cacacagcta atttaaatct tgtcctggct aaaaaccgga 360
gacaagtgag gtttgtggga gctaaagtat ctggaccttc ctgtctggaa aagcattatg 420
actgtagtgt cctgggctcc cagcacttct cctctggtaa gcattactgg gaggtagatg 480
tggccaagaa gactgcctgg atcctanggg tatgcagcaa ttcactggga cctacattct 540
ctttcaacca ttttgctcaa aatcacagtg cttactccag gtatcagcct canagtggat 600
actgngtgaa tggggntaca g 621

<210> 3511
<211> 774
<212> DNA
<213> Homo sapiens

<400> 3511
actcaggacc cagcgggggc agcgcgatga ggcgggtgac cctgttcctg aacggcagcc 60
ccaagaacgg aaaggtggtt gctgtatatg gaactttatc tgatttgctt tctgtggcca 120
gcagtaaact cggcataaaa gccaccagtg tgtataatgg gaaaggtgga ctgattgatg 180
atattgcttt gatcagggat gatgatgttt tgtttgtttg tgaaggagag ccatttattg 240
atcctcagac agattctaag cctcctgagg gattgttagg attccacaca gactggctga 300
cattaaatgt tggagggcgg tactttacaa ctacacggag cactttagtg aataaagaac 360
ctgacagtat gctggccctc atgtttaagg acaaaggtgt ctggggaaat aagcaagatc 420
atagaggagc tttcttaatt gaccgaagtc ctgagtactt cgaacccatt ttgaactact 480
tgcgtcatgg acagctcatt gtaaatgatg gcattaattt attgggtgtg ttagaagaag 540
caagattttt tggtattgac tcattgattg aacacctaga agtggcaata aagaattctc 600
aaccaccgga ggatcattca ccaatatccc gaaaggaatt tgtccgattt ttgctagcaa 660
ctccaaccaa gtcagaactg cgatgccagg gtttgaactt cagtggtgct gntctntctc 720
gnttggacct tcgatacatt aacttcaaaa tggccattta accgttgaat cttg 774

<210> 3512
<211> 873

09529469.027800

0956203-020200

<212> DNA
<213> Homo sapiens

<400> 3512
gctgtgaggc tcggagtcgc cggaggagcc agtatctgtg tcgccgccgc ccgcggcgtc 60
cccggtttgg tgctgcggcg cccaccttcg ggaggatcag tatctggcac caattctgac 120
ccagtcattt gtgatccctg gctcttgtga tatgctgaag atttccaggc agtttttgtg 180
gaacacctcc ccgtccagct ctaatcaagc accatataaa caagaaattg cctggtcaaa 240
tctgtgagga ctgtattctg actgccaaag agatcaatac tgacaccaga atggcagcta 300
ctctcaagtc attaaaactt gtaagatacc gagcattttg cagtccttct gcctttggtg 360
cagtccgaag tgtgtcatac tggaatgtga gcagcacaca gcatggggga caggaccctc 420
cagaacacat tagcctctgc cattctgcca aaaaagttaa gaacatatgt agcaccttct 480
cttctcggag aatcctgaca accagcagtg cccacccagg tttggaattc agcaagactt 540
cttcctctaa ggccagtaca ttgcagctgg gctcacccag ggccacagga gttgatgaag 600
aggacgtaga agtgtttgat tcctttgaaa acatgcgagt tttcctacag ctaagaccag 660
aataccgtgt tcacagctat aatgcatctg agacttctca gctcctgtct gtttcagaag 720
gtgaactaat tttgcacaaa gtcagagtta atcaaaataa tcttcaggct caaagtcatt 780
ggtgattatt tgngtaaagc tgagctcttt gccttgcaga gcaacattnc tgtcttgctt 840
ggcaataccc agctttgctt cttgcttttg ncc 873

<210> 3513
<211> 879
<212> DNA
<213> Homo sapiens

<400> 3513
acttaaatat aagtttattc taactaatcc caatatgtgg cctcaaaaca taagtccata 60
aatgtcattt ctaagattat tttacataaa tactcaaatt tgttgtcatt tttgtagcca 120
aagctaagta gaggatgggg cctgtgaatt tagaaccatc ctagtgataa atatcaaata 180
tttagataaa aacctaaata tttacccctc tagctttatg gagccattaa ataataacat 240
ttttctcctt ctcttcatag agtttataga caaaactaga aaattcaggt atttggtata 300
tacttttttg ttttttttga taccatcttg gtcttgtcac ccaggctgta gtgcagtggc 360
gtgatctcgg ctcattgcaa cctccgcttc ccgggctcaa gcgattcccc tgtcccagcc 420
tcctaagtag ctgggactac aggcacatgc caccacgcct ggctaatttt ttgtattttt 480
agtagagacg gggtttcacc atgttggcca ggttggtctt gatctcctga cctcatggtc 540
tgcccgcctc ggcctcccta agtgttggga ttatggctgt aagccatgtc atttcactct 600
cttaatggtg tcttttggtg aaaagaagtt cataatttca tgtagtccag tttatccatt 660
ttgntttcta tatgtttagc agtttttttgt gtcctgttta gaaaattttt gcctattcca 720
aaatcatgaa atttaagttc ttcacccctg ttgaaattat aatattaagg cagaaaagac 780
tcttcattct gatctggtgg gttcttagcc ttttgcaagt ccaggaaccc tgtgaaaatc 840
tgactagaac tntggacgcc ctgnacanaa gtgcaccct 879

<210> 3514
<211> 892
<212> DNA
<213> Homo sapiens

<400> 3514

caccgtccgg cagactactc tcccccatgg cggacttcgc tgggccgtct tctgccggcc 60
gcaaggccgg ggctccccgc tgctctcgaa aagccgcagg tactaaacag acaagtactt 120
tgaaacaaga agatgcttct aaaaggaaag ctgaactaga agcagctgtg agaaagaaga 180
ttgaatttga gagaaaagct ctacatattg ttgaacagct tttagaggag aatattacag 240
aagagttcct aatggagtgt gggaggttca ttacacctgc tcactacagt gatgtcgtgg 300
atgaacgttc tattgtcaaa ctctgtggtt atcctttatg tcagaagaag ctgggaattg 360
taccaaaaca gaaatataaa atttctacca aaaccaataa agtctatgat attactgaaa 420
gaaagtcttt ttgcagcaat ttttgttatc aagcatctaa gtttttttgaa gcacaaattc 480
ccaaaactcc agtatgggtt cgagaagaag agaggcatcc tgattttcaa ctgctaaagg 540
aagaacaaag tggccattct ggagaagaag tacagttatg cagtaaagcc attaaaacat 600
cagatatcga caatcctagc cactttgaaa agcaatatga atctagttct tctagcactc 660
acagtgatag tagcagtgac aatgagcaag actttgnttc ctccattcta ccaggaaaca 720
gaccaaattc aacaaatatt agaccacagc tgcaccaaaa aagcataatg gaaaaagaaa 780
gctggtcaca aagctaactt ccaaaacacca aggaccaagg aacaggacag tagtagatgt 840
cacttgacca nttaggcnaa ttgcaaattn gatagtcagg gagaaaagat gc 892

<210> 3515
<211> 786
<212> DNA
<213> Homo sapiens

<400> 3515
aatggtcctc tacagatatg aaactggttc tggagtgaga tgagctcggc tggggacgct 60
acttgagaag gcctttcccc acagggtgac ttaaatgtcc caggctggag ggtggagtga 120
gaagtggatg cccccagggc tctgggtcac actccaggat gacttctcgg aaccagctgg 180
tgcagaaggt gctgcaggag ctgcaggaag cagtggagtg cgaaggcctg gagggtctca 240
taggtgcttc cttggaggcc aagcaggtcc tgtcttcctt cactctcccc acctgccggg 300
agggaggccc tggcctccag gtgctggaag tggactcggt ggccctgagc ctgtatccag 360
aagatgctcc acggaacatg ctgccgctgg tgtgcaaggg ggagggcagc ctgctgttcg 420
aggcggccag catgctgctg tggggtgacg caggcctcag cctggagctg cgggcccgca 480
ccgtggtaga gatgctgctg cacagacact actacctcca gggcatgatc gactccaaag 540
tgatgctgca ggccgtgcgc tactccctat gctctgagga gtcccctgag atgaccagct 600
tgccccccgc cacgctggag gccatcttcg atgccgacgt caaggcctnc tgtttcccca 660
gcagcttctn caacgtgtgg cacttgtatg ctctcgcctc tgccttcagc ggaacatcta 720
cttcatctac cccatccgca accttcaaga tccggncctt acttnaaccg ggtcantccg 780
ggcccc 786

<210> 3516
<211> 849
<212> DNA
<213> Homo sapiens

<400> 3516
ctataatcag tataaaaacc tgttactgaa atattttata gggcccatct cagttcagac 60
tagccacatt taagtgcttc atagccacat gtggctcatg gccatccata tttggacaat 120
gtactttaga ctattgcatc tgtatactct tgtgccgtca gctgggggt ggggtgtgtg 180
tgcgtgtata ccaaggcagt gagcatctga gctttgaacc tcaaagacca aaatgccctg 240
cccattttcc tgcttatcag ctgaggaatc tttacccaca ttgacacatg ggcttgttct 300

0956946 - 0956946

gacccaagtg catgcaggct tccagagcag attcagaggc ctaacttagt cctttagctt 360
tcctcccagc acagaactcc caaggttatc tgaagtaggc cttgcctaga gagactgagt 420
tttcaagttg tcagttttcc caaattgtcc tcaagcatct tcctctggaa tcaccttact 480
gtttagtaaa cattcagagg acttgctaca catctgggca gtctgcattg taattcatat 540
gtgtttacac atttgtgtct tcatctgcta aagcaccttt gaaccatatt gtaattcata 600
atatctgaag caattattat gaattgtagt aattcataat attgaagcga ttcataatat 660
ctgaagcaat ccccagatac gggttaggca tggccctgct ctgagcagga tggcaaaagt 720
ggcaagtccg tgacgcaacc cttggtaccc caggctatta ctaaatggtg gtggtggntt 780
tatcttaatt aaaaatgaca tnaccaacaa tgggnccttt tcctggctgg ccaggaaaaa 840
gtttttgta 849

<210> 3517
<211> 857
<212> DNA
<213> Homo sapiens

<400> 3517
catgttggac gtggtcagca caggggccgg caccacgggg ttatcgaagc agctgtcaag 60
atgctggggt ccctggtgtt gaggagaaaa gcactggcgc cacggctact cctccggctg 120
ctcaggtccc caacgctccg gggccatgga ggtgcttccg gccggaatgt gactactggg 180
agtctcgggg agccgcagtg gctgagggta gccaccgggg ggcgccctgg aacatcgccg 240
gccttgttct ccggacgtgg ggcagccacc ggggggcgcc agggaggacg cttcgatacc 300
aaatgcctcg cggctgccac ttggggacgc cttcctggtc ccgaagaaac actcccagga 360
caggacagct ggaacggggt ccccagcagg gccggactgg gcatgtgcgc cctggccgca 420
gcgctggtgg ttcattgcta cagcaagagt ccgtccaaca aggatgcagc cctgttggaa 480
gctgcccgtg ccaacaatat gcaagaagtc agcaggctgt tgtcagaagg tgcagatgtc 540
aatgcaaagc acagacttgg ctggacagca ctcatggtgg cagccatcaa ccgaaacaac 600
agtgtggtac aggtcctgct tgctgctggg gctgatccaa accttggaga tgatttcagc 660
agtgtttaca agacttgcca aggaacaggg aatccattct ttggaggtcc tgatcacccg 720
anaggatgac ttcaacaaca ggctgaacaa ccgggccagt tttaanggct tgaacggcct 780
tgcactatgc tggtctttgc tgatgactac cggacttggc aaggaacttg nttgatggaa 840
gaacccaanc cccttgc 857

<210> 3518
<211> 826
<212> DNA
<213> Homo sapiens

<400> 3518
ctttcacttc agggagtctg aattagatgc gcttcttccc attcctccct ctaattacaa 60
caagcttgga cgttacatac agaacaaaca gaaggagtct ctgaaagatg aagagaaggc 120
aagtaagcta cagacttcac aatgtaagga ataatatggt ggtgagttac atttgtgatt 180
ttttttgtc tcatatccca taatatctca tatctcataa tcagttagaa agcacaatgg 240
aaaagtattc cactgccaat ggtgttagag aactgctcac aaattcaaca gaaatgcaca 300
gataccaaag cagaaaggac aataaacaag agtcttcatg gtcaaaagat tagaagctgc 360
agctttcaat gggagggaca ggttctggac cacactgcag tgcttttctg ctttctgtgc 420
tttcccactc tagagctgaa gaaggtaacg accccaaaat gtcaatatac gtagaccaaa 480
aaccagcccc aataaaagtc tgctctctct agccaaagga ctacagtagg gcagcccagc 540

0962945.0972000

aagacagaaa accttcagac aacctacccc agccaaacac taccaaaaaa agtaaagtga 600
gccatcaccc aatccacatc agtaaaaact aagtggaaag tccagacttt cacctcaaga 660
ggttgcgaca agctactcca ataccctgc tgggatagtg tcacagaagg ctaaataagg 720
agctgtaatg gtgattcccc ttcagaagtn aagagtccgt acctgctatt ttcagagaga 780
ccacatggna agcctanatt tcaacaccta cccagcatta atgagg 826

<210> 3519
<211> 894
<212> DNA
<213> Homo sapiens

<400> 3519
gtgaacgggt tgtgggacct gtcgctgtgt gggggctgtc gagcactccc cagaacgtaa 60
caaatcctca ggggaactga tgggcggtcg cgcgggcact gggtcctcca caccctggag 120
agccgttttc cgttgccact cggctctggc cggggtcaca ttctgcagca tgtctgttca 180
ttcccctggg cggggccctg caccgactcc agcccagccc ctgctccctc tgcggggaac 240
gtggccccag gcagtgctgg gccattggct gtcagtgctg gtcctggcgg ctgcattccc 300
agtccccttg gtctctgtga cagtgggcgg ggccggccct cccaggatct gacggcgcag 360
gtcctccccct tctgtgtcct gcagatggac acccgctccg ggagccagtg ttccgtcacc 420
ccagaagcca tactcaataa tgaaaagctg gtcttgccgc cccgcatctc cagagtgaac 480
ggctggtcgt taccctgca ctacttccag gtggtgacct gggctgtctt cgtgggcctt 540
tcctcggcca ccttcgggat cttcattccc ttcctgcctc acgcgtggaa atacattgcc 600
tacgtggtga ccgggggggat cttctcgttc cacctcgtcg tccacctgat cgcgtnctgc 660
atcgacccgg ccgacttcaa tgtcagactc atgaagaact attctcagcc catgccctct 720
tngacagatc aaaacatgca cacgtgatcc agaatcagtt cttgncacct gtgcaaggtc 780
accgtgaaca agaaaaccaa acactgcatt tcctgccaat aaagtgtgtg tcccggnttt 840
gaccaccaat tgnaaatggg atcaacaact tgcttgggaa agccggaaat tntt 894

<210> 3520
<211> 805
<212> DNA
<213> Homo sapiens

<400> 3520
agaaaagcgc cggacgccgg ggtgatcatg gacgcttgac aacctgcggg caggcgccgg 60
gaggccgagc cagcgactaa gaggaccgag aggtggcgtg gacagatttc aaggccagag 120
aatggcaggg gaacagaaac cctcaagtaa tctcctggag cagtttattt tactagccaa 180
aggtaccagt ggctcagccc tcactgctct cataagccag gtcttagagg ctcccggagt 240
gtatgtcttt ggagaacttc tggagctggc caacgtgcag gagccaacaa ggagagcctg 300
ccagaactga gcacagctca gcagaacaag ctgaagcatc ttaccatcgt gagcttggca 360
tcaagaatga agtgtatccc ctactccgtg ttgctgaaag acctggagat gcggaatctc 420
cgggaactag aagaccttat cattgaggct gtctacactg acatcatcca gggcaagctg 480
gaccagcgaa accagctgct ggaagtggat ttctgcattg gccgtgacat ccgaaagaag 540
gatatcaata atattgtcaa gaccctgcat gaatggtgtg atggctgtga agcagttcta 600
ctgggcatcg agcagcaagt tctgagagcc aaccagtaca aagagaacca caaccgaact 660
cagcagcagg tagaagcaga ggttaccaac atcaagaaga cactcaaagc caccggatcc 720
tcctcggctc aggagatgga gcancagctg gctgaacggg aatgtccccc ttacgctgag 780
caaaagcagn ccaccaagaa natgt 805

US 2005/0059000 A1

0050345.0-2020-03-20

<210> 3521
<211> 724
<212> DNA
<213> Homo sapiens

<400> 3521
gagggcgctt ccggcacagc ggaactccgg gtgccggttg aggttgctgg tgggcctgct 60
ctggtggtct tggatgaggc cccatgagcg cggcgcccct ggtgggctac agcagcagcg 120
gctccgagga tgagtccgag gacgggatgc ggaccaggcc gggggatggg agccaccgtc 180
gtggccagag ccccccttccc aggcagagat ttccagtacc tgacagtgtg ctgaacatgt 240
tcccgggcac cgaggagggg cctgaagatg acagcacaaa acacggggga cgggtgcgca 300
ccttccccca cgagcgaggc aactgggcca cccacgtcta tgtaccatat gaagccaagg 360
aggagttcct ggatctgctt gatgtgttgc tgccccatgc ccagacatat gtcccccggc 420
tggtaaggat gaaggtgttc cacctcagcc tgtcccagag tgtggttctg cgccaccact 480
ggatcctccc cttcgtgcag gctctgaaag cccgtatgac ctccttccac agattcttct 540
ttactgccaa ccaggtaaag atttacacca atcaagagaa aaccaggacc tttattgggc 600
ttgaggtcac ttcanggcat gcccagttcc tggacctggt ttcagaggtg gacagagtca 660
tggaggaatt caacctnacc actttctacc angatccttt ttttccaccc cagcctggcc 720
tggn 724

<210> 3522
<211> 842
<212> DNA
<213> Homo sapiens

<400> 3522
ttttgtacct gactccctga ccgatttgta ttttttatat acaactagaa ggaagtcaca 60
agattgcctt ctacagtgtg ccatttccaa atggatctgt tgttggagga aactggttgc 120
tagtcaatgt tctatattta atgaatgtgt gataaatcat cctgtaatca gtatggagta 180
acctgttttt gtagtttgga tgaatatgtc ctgagaaatt tccatccact ttggttcagc 240
ggacatcaag gtagtaataa taatttttcc tccacaggtc cctccactca tatggcctct 300
ccctccccag ctagtggagg ggaagcagtc tggacttaga aaggaaatag gtggtctgtc 360
ataggggctt tcattagagt taaacttcat agagtcaact gtttcatcat catagtgagc 420
ccagagagcc actgcccagc agcatgctca caccacctac cctagtgtag gtaataggtc 480
tacgctagga ccccgtgctg ggctctcagc ccatcatgag attttggtgg atttaatggc 540
aggtaggaac ttatttatag tggattgata attgctttat aattccttgg taatgacagc 600
tcagggaagg tttcacaagg tcatgatcag gagacttgaa ttggtactgg atgtaggaat 660
tgtttcactg ctcttaactt gctcaaactg gggcangttn caggaacttg aactaaaaat 720
atctatttaa gcctctctct ctttctctct tcccaacttt tttctgaaag ccttgatttc 780
tgtagacaga ctatggnttt tggcatgttg ggtcaanacn ggttctatag gaaatcttgc 840
ac 842

<210> 3523
<211> 850
<212> DNA
<213> Homo sapiens

<400> 3523
ataatgttac cagtcagagt tggcagccac agacttatca gatctgtctg gttgatccag 60
tgtctggaag tgtgaaaaca gtgaacgttc ccttccattt agcactgagt gataagaaga 120
gtgaacgagc caaggatatg cacctagtga agaaactagc agccttactg aaaacaaaat 180
ctcccaatct tgatttggtt gaaacagaaa taaaggaatt aattcttgat attaaatacc 240
ctgcaaccaa aaaacaagct ttggaaagca ttttggcaag tgaacgttta ccattttctt 300
gccttagaaa catcactcag actttaatgg acactttaaa aagtcaagaa cttgagtctg 360
ttgatgaagg attgctacag ttttgtgcca ataaactaaa actgctgcaa ctctatgagt 420
ctgtcagtca attaaattcc cttgattttc atttagacac accattctct gataatgact 480
tggctctgtt actaaggctt gatgaaaaag aactgcttaa gctccaggca ttactagaga 540
aatataagca agagaacacc aggacaaatg ttcgattttc tgatgataaa gatggtgtgt 600
tgcctgtaaa aacattcttg gaatatttag aatatgaaaa ggatgtgctc aacataaaga 660
aaataagtga agaggaatat gtggctttag gtagtttctt tttttggaag tgtttgcatg 720
gagaaagctc cctgaggata tgtgtcacac tttggagtcn gctggtctta acccttaact 780
ggtggtggct ctgctnctga gggtttggct ttcaaaggaa aagggtattt tggataacca 840
cancaatctg 850

<210> 3524
<211> 828
<212> DNA
<213> Homo sapiens

<400> 3524
gagaacatct ctgttgacat tcattgtgga gaacctttac aaatagatca cttggttttt 60
gtagtccatg ggattggacc agcttgtgat ctccgctttc gaagcattgt acagtgtgtt 120
aatgattttc gcagtgtttc cttgaacttg ctacagacac attttaagaa agcccaagaa 180
aatcagcaga ttgggagggt agaatttctt ccagtcaact ggcacagtcc tttgcattct 240
actggtgtgg atgtagatct gcagcgaata accctgcccg gcattaaccg cctcaggcac 300
ttcaccaatg acacaattct ggatgtcttc ttctacaata gtcccaccta ctgtcagact 360
attgtggaca cagttgcttc tgaaatgaac cgaatataca cacttttct acagaggaac 420
cctgatttca aaggggtgt atccattgct ggtcatagtt taggttcgct tatattgttt 480
gatatcctaa caaatcagaa agattctttg ggggatattg acagtgaaaa ggattcgcta 540
aatattgtaa tggatcaagg agatacacct acactagagg aagatttgaa gaaacttcag 600
ctctctgaat tctttgatat ctttgagaag gagaaagtag ataaggaaac tctggcttta 660
tgtacagacc gagatcttca ggaaatagga attcctttag gaccaagaaa gaagatatta 720
aactatttca gcaccagaaa aaactcaatg ggtattaaga gaccagcccc gnanctgttn 780
agggcaaaca tcccaagaat tgagtctgca gtacagtatc tagaatgg 828

<210> 3525
<211> 803
<212> DNA
<213> Homo sapiens

<400> 3525
tatcatatac tttatctcgg gcccagactg tggtggttga atatactcat gacagcaaca 60
ccgatatgtc tcagattggc cggtcgactg aaagccccat tgattttgta gtaactgaca 120
cggttcctgg aagtcaaagt aattctgata cacagtcagt acaaagcact atatcaagat 180
ttgcctgcag aatcatatgt gaacggaatc ctccctttac agcacggatt tatgctgcag 240

0050350.0070000

gatttgactc atcaaaaaac atctttcttg gggagaaggc tgccaaatgg aagacatcag 300
atggacagat ggatggcttg accactaatg gtgttcttgt gatgcatcca cgcaatgggt 360
tcacagaaga ctccaagcct ggaatatgga gagaaatatc ggtgtgtgga aatgtattta 420
gcctacgtga aaccagatcg gctcagcaga gaggaaaaat ggtggaaatt gaaaccaatc 480
agttacaaga tggctcgtta attgacctct gtggtgcaac attgttatgg cgtactgcag 540
aaggccttcc ccacactcct accgtgaagc atttagaagc tttaagacag gaaatcaatg 600
cagcacgacc tcagtgccct gtagggttca acacactagc atttcctagt atgaagagga 660
aagacgttgt anatgaaaaa caaccatggg tatatctaaa ctgcggncat gtacatggct 720
atcataactg gggaaaccaa gaagaacgtg atggaaaaga tcgtgaatgt cctatgtgta 780
ngnctggtgg tccctatggt cct 803

<210> 3526
<211> 703
<212> DNA
<213> Homo sapiens

<400> 3526
ttcgaataaa agtggagcct ggaaaataat gggttttgat ttttgtgtat catcaaccaa 60
tccttctgaa caagagccta aatttccttg taaagaatgg gacccaaatt taccttcatt 120
gtgtcttcca aatcctgaat atttggctcc tgaatacata ctttctgtga gctgtgaaac 180
agccagtgat atgtattctt taggaactgt tatgtatgct gtatttaata aagggaaacc 240
tatatttgaa gtcaacaagc aagatattta caagagtttc agtaggcagt tggatcagtt 300
gagtcgttta ggatctagtt cacttacaaa tatacctgag gaagttcgtg aacatgtaaa 360
gctactgtta aatgtaactc cgactgtaag accagatgca gatcaaatga caaagattcc 420
cttctttgat gatgttggtg cagtaacact gcaatatttt gataccttat tccaaagaga 480
taatcttcag aaatcacagt ttttcaaagg actgctaaag gttctaccaa aactgcccaa 540
gcgtgtcatt gtgcagagaa ttttgccttg tttgacttca naatttgtaa accctgcatg 600
gtacctttg ttttgcccaa tgtcctactt attgctgagg aatgcaccan agaagaatat 660
gtcaaattaa ttcttnctga actttggncc tgtgtttaaa cca 703

<210> 3527
<211> 761
<212> DNA
<213> Homo sapiens

<400> 3527
aagttatgct gaagaccgaa gcaagagctg gttcaggtgg cagccacagc agcctcaggg 60
acctcagcaa ctatggcctc ctgcccagac tctgataata gctgggtgct tgctggctcc 120
gagagcctgc cagtggagac actgggcccg gcatccagga tggacccaga atctgagaga 180
gccctgcagg cccctcacag cccctccaag acagatggga aagaattagc tgggaccatg 240
gatggagaag ggacgctctt ccagactgaa agccctcagt ctggcagcat tctaacagag 300
gagactgagg tcaagggcac cctggaaggt gatgtttgtg gtgtggagcc tcctggccca 360
ggagacacag tagtccaggg agacctgcag gagaccaccg tggtgacagg cctgggacca 420
gacacacagg acctggaagg ccagagccct ccacagagcc tgccttcaac ccccaaagca 480
gcttggatca gggaggaggg ccgctgctcc agcagtgacg atgacaccga cgtggacatg 540
gagggtctgc ggagacggcg gggcccggga ggccggccca cctcacccat ggtgcccctg 600
gctgtggaga accaggctgg gggtgagggt gcangcgggg agctgggcat ntccttaaca 660
tgtgccttct tggggccctg gtctgcttgg cctgggggtc cttctcttct caggtggnct 720

09/05/2005 10:07:00

ttaaagtctg agactgggcc catggaggaa ntggaaccgg n 761

<210> 3528
<211> 778
<212> DNA
<213> Homo sapiens

<400> 3528
acagtgggcc atggagttcc cgttcgatgt ggacgcgctg ttcccggagc ggatcacggt 60
gctggaccag cacctgaggc ccccagcccg ccgacccgga accacaacgc cggcccgtgt 120
tgatctacag cagcaaatta tgaccattat agatgaactg ggcaaggctt ctgccaaggc 180
ccagaatctt tccgctccta tcactagtgc atcaaggatg cagagtaacc gccatgttgt 240
ttatattctc aaggacagtt cagcccgacc ggctggaaaa ggagccatta ttggtttcat 300
caaagttgga tacaagaagc tctttgtact ggatgatcgt gaggctcata atgaggtaga 360
accactttgc atcctggact tttacatcca tgagtctgtg caacgccatg gccatgggcg 420
agaactcttc cagtatatgt tgcagaagga gcgagtggaa ccgcaccaac tggcaattga 480
ccgaccctct cagaagctgc tgaaattcct gaataagcac tacaatctgg agaccacagt 540
cccacaggtg aacaactttg tgatctttga aggcttcttt gcccatcaac atcggccccc 600
tgctccctct ctgagggcaa ctcgacactc tcgtgctgct gcagtcgatc ccacgcccgc 660
tgctccagca aggaagctgc cacccaagag agcagangga gacatnaagc catactcctc 720
tagtgaccga gaatttctga aggtacttgt ggacctcctt ggncctaaac agggccct 778

<210> 3529
<211> 799
<212> DNA
<213> Homo sapiens

<400> 3529
ctctgcccgg ctccagccag cgtctgccgc cgccgtagct gccccaggct ccccgccccg 60
ctgccgagat ggcgacgcgc tcctgtcggg agaaggctca gaagctgaac gagcagcacc 120
agctcatcct atccaagctt ctgagggagg aggacaacaa gtactgcgcc gactgcgagg 180
ccaaaggtcc tcgatgggct tcctggaata ttggtgtgtt tatttgcatc agatgtgctg 240
gaattcatag aaaccttggg gttcatatat ccagggtcaa atcagtcaac ctagaccaat 300
ggacagcaga acagatacag tgcatgcaag atatgggaaa tactaaagca agactactct 360
atgaagccaa tcttccagag aactttcgaa gaccacagac agatcaagca gtggaatttt 420
tcatcagaga taaatatgaa aagaagaaat actacgataa aaatgccata gctattacaa 480
ataaagaaaa ggaaaaaaaa aaggaagaga aaaagagaga aaaggagcca gaaaagccgg 540
caaaaccact tacagctgaa aagctgcaga agaaagatca gcaactggag cctaaaaaaa 600
gtccagccct aaaaaagctg cggagcccac tgnggatctt ttaggacttg atggccctgc 660
tgtggcacca gtgaccaacg ggaacacaac ggtgcccccc ctgaacgatg atctggacat 720
ctttggaccg atgatttcta atccttactg gaactggcat gcccccaact naggggacac 780
ccttttgnac cancagctg 799

<210> 3530
<211> 834
<212> DNA
<213> Homo sapiens

09/05/2008 15:50:03

<400> 3530
ttttactcat gctcagcgaa ggctggttcc tggtcccctg ggctgtgtag acccggtgtc 60
ccaccaggct ccaggctccc accatctaca gaggggctta cagcgcccat tctggtcttg 120
gggaacccat cacaaaatag gctttttctg ctccccgatt ctggtgtagt tctaagtaca 180
cagtgatgtc ctctgtaggg gcgtgcctgt ggtggaacat aacgcagtta caaaagaaag 240
ggcaggtgag gcctgggtaa ccccagccat ggaccgtcag tggctggagg gagcttcgtg 300
tctgtgctgg agctgcagcc tgctcgccat ctggaggctc agtggagtgg ggagttgggg 360
ttctcatacc agcagatttc cctagagcgt gattctccca tctgaggcaa tcttgcctcc 420
caggggaaat tttgcaatgt tnggaggatg ttgtcacagc tagtagcggg tgctctggga 480
tctggtggat agatgccaag gatgctgtca agcatactat actgcccaga acagtggccc 540
atagcaggga cctgccctat caaaatatca ggtgtatgga ggtggagtcc caacgctaga 600
gcagcccttc tcagctccac cctgcccggg gagggaggag gagctctggt ttcagagcaa 660
gtgccnggat tgcctttccc caggatctgt gtcngccatc caggaagaac tgtactggcc 720
aacctgggac cacacgtctg cagaaacctg ctcttgttgg ncttgagccc caggncttgg 780
ccctcctgtg ctttggggtn aaccattggc cactggggaa aaggcaaggg accg 834

<210> 3531
<211> 812
<212> DNA
<213> Homo sapiens

<400> 3531
agatctcccg ttgtgtgaga gaaacgcaag cacggagctc ccttgacctg ctgcatcctc 60
ctcggcaatt ttttttttt aagtcaaaaa gcttggattt cctgaaattg ttgaactgga 120
tgcggctgtt gaagagtgaa cttggatcat tcattacaga ctattttcag aaccagcttc 180
ttgcaaaagg actgttcttt gtggaggaga agatcaagct gtgtgaaggt gaaaatcgca 240
ttgaggttct ggctgaagtc tgggaccact tcttcactga gactctccct accctgcagg 300
caatatttta tccagttcag agtgttcacg agcccacagg cccaagtgag agttatttgc 360
aactggagga gctggtgaag caagtggttt ctcctttcct cggcatcagc ggggaccgta 420
gcttctcagg ccccacgtac acgctggcca ggcggcactc cagggtccgg cccaaggtga 480
ctgtcctgaa ctatgcctcc ccgataaccg cagtcagccg gccactgaat gagatggtct 540
tgaccccact gacagagcag gaggggggaag cctacctgga gaagtgtggc agcgtgcggc 600
ggcacacggt ggccaatgcc cactcggaca tccagctgct ggccatggcc accatgatgc 660
actcgggcct gggggaggan gccagcagtg agaacaagtg cctgcttctg ccacccaact 720
ttcccccggc ccaancggca gtgcttccag tgaagcccca acatnaaccg acaaccctga 780
ccggactgga aggaaggggg gccanggggc aa 812

<210> 3532
<211> 790
<212> DNA
<213> Homo sapiens

<400> 3532
acagcaagtt gtattcattc cattcatcta gaattcctag gctgcctttg tcgggcctgc 60
aggtattaat ggagaatagc agcttttttat ttttttatat ttatttttg agacagagtc 120
tcactctgtt gcccaggctg gagtgcaatg gcgcgatctc agctcactgc agcctccgcc 180
tcagaggttc aagtgattct cctgcctcag cctctggaat agctgggact acaggcacct 240
gccaccacac ccagctaact ttttgtattt ttagagaaga tggggtttca tcatgttggc 300

0052950800

caagctggtc tcaaactcct gatctcagtg atccatctgc ctcagcctcc caaagttata 360
agatttttt cctctggttt ttagtaaatg ttttttttga gattgcttag caccagaatg 420
atttgcaaat ttgaaaatag gaactccact aggaatgccg gatagaagag tgcttcacat 480
ttgtagaggg agacaagaac taaatatcac gacgtctttc tgagcctttt ggtttgctaa 540
cgtgccccaa attcttattc caaacggtat aagataatta tgtgtaaatg aataccagct 600
ctacttagtt ttatttcata tttgtgtatc tgaatatatt aaaatatctt ttttttttt 660
tttgatgcgg agtcttgctc tgttgtccag cctggagtgc agtggcatga tctcggntna 720
ctgcaacctc tgcctcccag gttcaagcga ttctcctgcc tcagnctcct taagtagctt 780
gggatttaca 790

<210> 3533
<211> 867
<212> DNA
<213> Homo sapiens

<400> 3533
gagagggcac ggggaaaagg tggctctggc cggggtggct cggtttcctg gggctatgta 60
actgagctcg tcgacttagg ggtccttctt cgctgccctc gccgcgtgct agcagggagt 120
ttccgctcgg gagagagact gtcctcacgc ccgctgcgcc tcctcgacgg cagagcaggc 180
ttgctcgccc gtgggagcgt cccggccgag aagccctgag gggggagggg aggccatttt 240
gtcccgaccg actccccgga accgggcgga gcggctggga gaggctgcgg agccgcggtc 300
gccgccctcg gaggcactgg acgccgccac tgtcggggct tcctcaaagc tgttcgtagg 360
tcgcccgcgc cgtctcgagc ctttttccca cgcttccccg gtcctccggc ctgagaacgc 420
ccgagtgagg agttggccgt agtgagaggg accgatccct tggggccgcc ggcggcgaga 480
gcccgagccg ctcctcccaa tggcgaagaa gacgtacgac ctgcttttca agctgctcct 540
gatcggggat tccggagtgg ggaagacctg cgtccttttt cgtttttcgg atgatgcctt 600
caatactacc tttatttcca ccataggaat agacttcaag atcaaaacag ttgaattaca 660
aggaaagaag atcaagctac agatatggga tacagcaggc caggagcgat ttcacaccat 720
cacaacctnc tactacagan gcgcaatggg tatcatgcta gtatatgaca tcaccaatgg 780
taaaagtttt gaaaacatca gcaaatggct tanaaacata gatgaagcat ccaatgaaaa 840
ttggnaagaa tgtactagga aacaagn 867

<210> 3534
<211> 801
<212> DNA
<213> Homo sapiens

<400> 3534
agagagacgc ctctaggggc agaggccctg ggaggcaaag acccccagga gagatttacc 60
caccccagac ggaaagcgcg gctcagagtc ggacgagggg agactgtcag aggacaacgc 120
cccctaggtc tcctgggaga ccccgaagcg accccggggg cagcccgggc cgtgtccggg 180
cgagggtgac ctatccttgg ttgagagcga tggggacaca agccctgcag ggcttcctct 240
ttctcctctt cctcccgctg ctgcagccgc gtggggcctc ggctgggagc ctgcacagtc 300
caggcctgtc cgaatgcttc caggtgaatg gggctgacta ccgcggccac cagaaccgca 360
ctggcccgcg cggggcgggc cgcccgtgcc tcttctggga ccagacgcag caacacagct 420
acagcagcgc cagcgacccc cacggccgct gggggctggg cgcgcacaac ttctgccgta 480
acccagacgg tgacgtgcag ccgtggtgct acgtggctga gacagaggag ggcatctact 540
ggcgctactg cgacatcccc tcctgtcaca tgccaggcta cctgggatgc tttgtggact 600

0052-0052-0052-0052

cagggcacc cccagccctc agcggcccca gcggcacctc cacgaagctc acggtccagg 660
tgtgcctacg cttcttgccg catgaagggg taccagcttg gcgggcgtgg aagcccggtt 720
acgcctgctt cttgtggctt ctgaaaagcg accttggccc gggggaacgc cttggccccc 780
cggncacccg nantgtgacc c 801

<210> 3535
<211> 741
<212> DNA
<213> Homo sapiens

<400> 3535
ctggtaaagc agcggccagg gggagccgtg agtgaggcgc tgcctctccc gctgaagcgg 60
gttccaaggc caccgtgagg gggaccatcc atccaggaga gtactgggca ggctgcaaat 120
gtctgtgtta aaacagctct gctgggctaa gacaggacag aagcagacag caggtggatg 180
agacacaatt tcctatccag cagaacctgc agcaagctcc acagcaccct ccatgggctc 240
agtcttgctc ccgggaagat ggttaattcc atcagctcct tctggccggc agcaggaaga 300
gtggccctgt gtgtgccagg ccctgcagtc tctcctctca gctggtgtct ccagtgaggg 360
acctgagtca tcgcacacat gagcctgtgc tcagcctgca catctcccgc ctcccaccag 420
ctgctcctca actgccaggg ccagactgtg gcaaaatctc actcctctgc cgatgctggg 480
gtttccctcg tgtctgggag gtggtgtgct tggtggcctg agcactgcag tgaatccatg 540
tttccctccc agcaccctgt tctgtcctcc aacttggccg acagctctgg ccagggacgc 600
agcccagctg gtgcccaccc cgcactctgt ccatttcata agagcccttg gtttcctcac 660
ttccctcaga ttttgccaag agaatggtcc tggtgtggcc canaaaggcc ancggggtgc 720
ancctgggac tgaaaagcag a 741

<210> 3536
<211> 601
<212> DNA
<213> Homo sapiens

<400> 3536
gaggcgggcg gcccccagct cgcgtccccg agtcctagcc cgcgaggcgc cagggctgcg 60
cctgggcatg gaanagggga agatggacna gaatgaatgg gggtaccacg gagagggcaa 120
taagagcctg gtggtggccc acgcgcagtg ctgcgtcgtg ctgcggtttc tgaagtttcc 180
tccaaatang aagaagacct cggaagagat atttnaacac ctgcagaaca tagtggactt 240
tgggaaaaat gtnatgaagg agtttttggg ggagaactat gttcattatg gggaggtcgt 300
tcagctacct ttagagtttg tgaaacagct ttgtttaaag atacaatctg aaagaccaga 360
gtctcgctgt gacaaggacc tggatactct cagtggttac gctatgtgcc ttcctaattt 420
aaccagactc caaacctacc gctttgcaga gcaccggccg attctgtgtg tagagattaa 480
nccaaaatgt gggtttattc ctttctcgag tgatgtcacg catgagatga agcataaggt 540
ctgtcgatac tgcatgcacc agnacctcaa ggnagcaact gggaagtgga agcngatcag 600
c 601

<210> 3537
<211> 744
<212> DNA
<213> Homo sapiens

0052015005900

0050050-000200

<400> 3537
gcatgcatca catcagaagg gctcattgcc ttcaggaacg acaatcgagt ggttagaacc 60
aaagatatct ttatcaaacc actataaaaa tggagctgac cagccctttg caactgatca 120
gagtaagccg gtggcagtcc cagaagagca gcctgttgca gaatctggac tattagcgag 180
ggagcctgaa gaaataaatg cagatgatga gatagaggat acatgtgacc acaaagagga 240
tgacctggga gctgtagaag aacaacgtag tgtcatccta catctcttgt cacagcttaa 300
gctgggcatg gatttaacaa gagtggtgct tcctacattt atcctagaga agcgttcctt 360
gctggaaatg tatgcagact ttatgtctca tccagaccta tttatagcca tcactaatgg 420
agccacagct gaggacagaa tgattcgctt tgttgagtac taccttacct catttcatga 480
aggccgtaag ggagccattg ctaaaaaacc atacaatcct atcattggag aaacatttca 540
ctgttcctgg aagatgccaa aaagcgaggt agcatccagt gtttttagca gttcttccac 600
ccagggagtc acaaatcatg ctcctttatc gggggagtct ttgacccagg tgggatcaga 660
ctggtacaca gtcagatttg ntgctgagca ngtttctcat catcctncag tctcaggatt 720
ttatgcagaa tgtacagaga ggaa 744

<210> 3538
<211> 839
<212> DNA
<213> Homo sapiens

<400> 3538
aggagaccta ggtaccagac tttgctttgc cagtgcctct ttctgtggcc ttgggtaagt 60
ttttcccctc tctgggcctc agtttcccat ttgcaaaata aaagtgttta agactaggtt 120
ccaagatttt ccaattctaa tgctgagagg atacagagga aaacagaaag aatgctggct 180
gaggaaccag gagacttgcc ttcttgtccc agctctgcca ctgacctgac ctctttgggc 240
ctctgcttcc tcatctataa aataagataa agcaacagaa gcctccagcg actaagttaa 300
actttcctgg ggtcacaagg tttacaagtg gctgaatagg atttctacag actggttcct 360
tcacccggct gcccgccgaa gtaagcgggc cttactgccc taattctcaa taggacccca 420
aagaggacgc ttctttgctc ctgaagggat ggcacccttt ggattcgcgg taacagcaaa 480
tggggctctc actcctacca tctcagtgac agtttaaagc gcaccctacc gcaggaaagt 540
gcccatattt gcacacacgc ggcagagggc agggctgaaa aggggcccta gggtgcaggg 600
ggcgcgccct nacccgggga ccccgcattt tacaatatta gcttcaccga ggcgcacgga 660
accgcangcg aacaactgac cttcggcttc agcgggccca aagcccgggg tgggaacgcg 720
cgaccaagta gcggcatgga cttcgagcct ggccccttcg gggntaaaac ttcccagaca 780
ttaanggttc cggacgacag aagtgcaacc cgccgcgttg cccntgggac acttgaact 839

<210> 3539
<211> 760
<212> DNA
<213> Homo sapiens

<400> 3539
taggaggaag agagagatgg aaccatgtaa ccaccacgac caagaggcca gtaaccacca 60
gagctccagc aaatacttta ggaaatgatt ttgacttggc tgatgccctg gatgatcgaa 120
atgatcgaga tgatggccgc aggaaaccaa ttgctggagg aggaggtttt tcagacaagg 180
atcttgaaga catagtaggg ggtggagaat acaaacctga caagggtaaa ggtgatggcc 240
ggtacggcag caatgacgac cctggatctg gcatggtggc agagcctggc accattgccg 300
gggtggccag cgccctggcc atggccctca tcggtgccgt ctccagctac atctcctacc 360

agcagaagaa gttctgcttc agcattcagc agggtctcaa cgcagactac gtgaagggag 420
agaacctgga agccgtggta tgtgaggaac cccaagtgaa atactccacg ttgcacacgc 480
agtctgcaga gccgncgccg ncgccgaacc agcccggatc tgagggccct gtccagctgc 540
aggcatgcac aatggtgcca ccgcttgtca cccggctccc cccacccctt catttggacc 600
cgcagctgct gtgctgctct gtgccatcgg ctccttgttg gtctgagttt cccggatgag 660
ctctgggtgt ttgtgagttt ggnttctctg gccttgccca agcgtgctga gacttggtgc 720
cgaaattcaa gagccanctt ttgatagaaa gncagcacca 760

<210> 3540
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3540
gcgcaggcgt accgggtgcc ccggctctgg agcataaaca agagcgggga cgggatgagg 60
cggcggttga tcccagggtg gcgagtggcg gcgaccgagg cggcgagcgg ggcccggcgc 120
cgaccctgag tgcagcctga cccgccctcg cgcgcgcgcc ctccccggcc gggcccactc 180
gccgcgcgcc cagccatgaa cctggcgagc cagagcgggg aggccggcgc cggccagctg 240
ctcttcgcca acttcaacca ggacaacacg tccctagctg ttggtagtaa gtccggttat 300
aaatttttct ccctttcttc tgtggataag ctggaacaga tctatgaatg caccgatacg 360
gaagatgtgt gcattgtaga gagattgttc tccagcagcc tagtggccat cgtgagcctt 420
aaagcaccaa ggaagctaaa ggtttgccac tttaagaagg gaactgagat ctgcaactac 480
agctactcca acacgattct ggctgtgaag ctcaacaggc agaggctgat agtatgcctg 540
gaggagtccc tgtacatcca caacattcgg gacatgaagg tgctgcatac gatcagggag 600
acgcctccaa accctgcagg cctgtgtgcg ctgtcaatca acaacgacaa ctgctacttg 660
gcgtacccag ggagcgcgac catcggagag gtgcaggtct tcgataccat taatttgaga 720
gcttgcaaac atgattccng ntcacgaaca gtcctttacg ggactggcct ttgacgcaag 780
tgggaactaa actttgccac ggnttccgga gaa 813

<210> 3541
<211> 828
<212> DNA
<213> Homo sapiens

<400> 3541
agtgggtacc gggacgccgt gaggcggaag ctgtgtatgg cgggaggctg tggcggtccc 60
ttggtgggga agctgttgct gttgctagac gacgggaact agctctcgtc acttcctcag 120
cccgccgtct gcccactcct ctagccggaa cctgggggcc cggagccggg gtaggcacag 180
agttgtcctc ggaggtccag gacagcggcc agcccggcgg cgggagtcag ggccacgcca 240
cctgcaggga agaacccgag tcgaagcggg aagatggctg cagacaagcc tgcagatcag 300
ggagcagaga aacatgaagg cacaggtcag tcctctggga tcactgatca agagaaggag 360
ttatccacca atgctttcca agctttcaca tctggaaatt atgatgcctg tctacaacac 420
cttgcccgtc tacaagatat aaacaaagat gattataaaa taattttgaa tacagcagta 480
gctgagtttt ttaaaagtaa ccaaacaaca acagataatt tgagacaaac acttaaccag 540
ctgaagaatc aggtccactc agctgttgaa gaaatggatg gattagatga tgttgaaaac 600
agcatgttgt actataatca agcagtcatt ctttatcatc tgcggcagta tacanaacca 660
tatcagttgg tgaaaaactt tatcagttca tagagccttt tgaagaaaaa tttgcccaag 720
cagtgtgttt tttgcttgga gacctggata tattaaccta ccaagctgag aaacttggat 780

0050205.0050200

cttcttgntg gcctaanaaa aaatgatttc ncaggggtaa ccattacc 828

<210> 3542
<211> 789
<212> DNA
<213> Homo sapiens

<400> 3542
tattccttca atatcccttt ggaagagagg agtgacatgt tcacatggga cccctatgga 60
ccatgggaag gctgtaccaa aatgtgtcaa ggtcttcagc gaagaaacat aacttgcata 120
cataagagtg atcatagtgt tgtgtctgat aaagaatgtg accacttgcc acttccatca 180
tttgttactc aaagttgcaa tacagactgt gaactaaggt ggcatgttat tggcaaaagt 240
gaatgttcat cccaatgtgg tcaaggatat agaaccttgg acatccattg catgaagtat 300
tccattcacg aaggacagac tgttcaagtt gatgaccact actgtggtga ccagcttaaa 360
cctcctaccc aagaactatg ccatggtaac tgtgtcttca caagatggca ttattcagaa 420
tggtctcagt gttccaggag ttgtggagga ggggaaaggt ctcgagaatc ttattgtatg 480
aataactttg gccatcgtct tgctgacaat gaatgccaag aactgtcccg agtgacgaga 540
gagaattgca atgaattttc ctgtcccagt tgggctgcta gtgaatggag cgagtgcctt 600
gttacatgtg gtaaaggaac aaagcagcgg caggtatggt gtcagctgaa tgtagatcac 660
ttgantgatg gcttctgtaa ttcaagtcca aacctgaatc tctgagtcca tgtgaacttn 720
atcatgtgct ttctggcaag taggaccatg ggggnccttg cacaaccaca tgtggacctt 780
gggtntcaa 789

<210> 3543
<211> 852
<212> DNA
<213> Homo sapiens

<400> 3543
ccatctcttc aaggtcccac tagtctaaaa cgcctggttc tagatggaaa cctgttgaac 60
aatcatggtt taggtgacaa agttttcttc aacctagtta atttgacaga gctgtccctg 120
gtgcggaatt ccctgactgc tgcaccagta aaccttccag gcacaaacct gaggaagctt 180
tatcttcaag ataaccacat caatcgggtg cccccaaatg ctttttctta tctaaggcag 240
ctctatcgac tggatatgtc caataataac ctaagtaatt tacctcaggg tatctttgat 300
gatttggaca atataacaca actgattctt cgcaacaatc cccggtattg cgggtgcaag 360
atgaaatggg tacgtgactg gttacaatca ctacctgtga aggtcaacgt gcgtgggctc 420
atgtgccaag ccccagaaaa ggttcgtggg atggctatta aggatctcaa tgcagaactg 480
tttgattgta aggacagtgg gattgtaagc accattcaga taaccactgc aatacccaac 540
acagtgtatc ctgcccaagg acagtggcca gctccagtga ccaaacagcc agatattaag 600
aaccccaagc tcactaagga tcaccaaacc acagggagtc cctcaagaaa aacaattaca 660
attactgtga agtctgtcac ctctgatacc attcatatct cttggaaact tgctctacct 720
atgactgctt tgagactcan ctggcttaaa ctgggccata ccccggcatt tggatctata 780
cagaaacaat tgtacanggg acgcatgagt cttggtcaca gccctggagc tgatcaccta 840
taaggatgct gg 852

<210> 3544
<211> 738
<212> DNA

09625469.090200

<213> Homo sapiens

<400> 3544
aaaaaaagta cccctgcagc cggccggaga ggctagagcc cgacggggcc cggctccggc 60
ggcagccgcg cctctcgctt gcttccctcg gccgggccgt cctcggcggc agtgtcagga 120
gcactccgct ggtccaggcg gcaacatgtc catgctttta gtgatgtccc tgcctctaat 180
ccagaagcca tggaggagat aaggtagccc ccctcgatcg gatggggaag cccagttcaa 240
tggatactaa attcaaggat gacttatttc ggaagtacgt gcagttccat gagagcaaag 300
tggataccac caccagcagg cagcggcctg gcagcgatga gtgcctgcgg gtggcagcct 360
caaccctgct cagcctgcac aaggtggatc ccttttatcg attccggctg atccagttct 420
acgaggtggt ggagagctcc ttgcgctcgc tcagctcctc tagcctgcgg gctctgcacg 480
gcgccttcag catgctggag acggtgggca tcaacctctt cctctacccg tggaagaagg 540
aattcagaag catcaagacc tacacgggcc cttttgttta ttatgtcaag tcgacattac 600
tggaagagga catccgagcc atcctgagct gcatgggcta cacacctgag ctgggcactg 660
gatacaaagc tcanangagc tcgtggagac ccttcaggtg aagatggtct nctttgagct 720
ctttctgggc aaaagtca 738

<210> 3545
<211> 695
<212> DNA
<213> Homo sapiens

<400> 3545
gtgcacacat tgtgttctta aactgagacg tggctctgca ggtctcctgg gctcattcca 60
tggtgtggta tgtttattcc actgtccaga gctattctct gatggatttg agcaacagca 120
gtggagataa atgtcctaga gtcaccaggt cgcttggaga agtcatttaa gctgcctcgg 180
gtttttgtta cttaaaatgt ggatattatt tctccaccta aatcactgag tttacagagt 240
aataatgtgt tgctctggac attgacagct ttctagagcc agtaatgggc tcttctgaag 300
gatgctgaat tagaagtgaa cctattcata ggatcaaaag ccacttgctt tgaaatatgt 360
agagttcctc agaattgacg gtgctagaaa tatccaagtg ttaaataacc ttttaaaagc 420
aacaaaagct actttttct taccacttaa tagaagaacc tgtccctaga ggcgacttca 480
ttgctatgga tctggagtct ctgaactctt aataggatgc agcctcacat acataatgtc 540
acccatttta tgttgatgaa aacattacaa gttttcatca ttgggtatgt gttgatgttc 600
acagacagta cttgggccca ttaggttttc gcgtctgggc ttanagcatg tgnattcatc 660
tcaacgtgaa tacctnacca gtcttatgaa tagga 695

<210> 3546
<211> 879
<212> DNA
<213> Homo sapiens

<400> 3546
gcttccggct ccggcgtggg gtttgatgtc tacggagtgg cttttgctta gcgtcttgaa 60
ggggggaaaa aaatcctcta agctggtgat ttcacgttct ttgacaaact tcaatagcaa 120
caggcaacga taccacttta agaaaattcc aaggaaaaga cctcatttta aaattcccac 180
ctctggctcc caaagattgg tttgcaaact tcgacaaaat actcttctcc actcgctatt 240
gatggagtct cgctctgtca cccaggctgg agtatagtgg tgtgatcttg gctcactgca 300
acctctgcct cccaggttca agcgattctc ctgcctcagc ctctcgagta gctggaatta 360

09652945 - 09/12/2010

caggtctggc agaaggaaca gtatcaactg actgagtagg tctcattggc agttgtgatt 420
cagagaccta gaaagctgaa cccacggctg gcaagaagag gatggtttgt gggacctggg 480
ctgatgtctg atgaaatttt aagccccagc tatagctact acaaagaaaa gtggctgatg 540
ataagcatgt aactcaaaaa gacaatgtat ataaaaatat gcaagaatca caggaaaccc 600
acatatccaa ccacctagat gaagttgttg ctgctgttag catcactcat agaaagaagt 660
tccaaaacaa gctgcttcag acagcactat tccagcctnc tcgagagaaa ctncacctct 720
gtgaagagaa agcaaagtcc tattncaaca gtcatgagta caaacaggcc gtccatgagc 780
ttgtgccttg cgtaacactg acaagaattt gctatggaga cttacattgg gaactacnga 840
aggcncatgt aatctgggct caaggttacc tccactgaa 879

<210> 3547
<211> 685
<212> DNA
<213> Homo sapiens

<400> 3547
gaagttctag aaaatgttaa ttgggggagc tgtggctggc agagaaggaa aaaggaagct 60
gaagggcact tgggctcata atggtctctc caaccctgat cctgtccttt atggacattt 120
ggcagcgctg ctgccttgag gtgccttgca atgctttatc tttttgttaa agccacctct 180
gttgcttcag ccagcttgag cggttttctg ttacttgcta gtggttggga aggcttagcc 240
gacgaaggga aaatgagtca ggtcctgaag gatgagcaag ttacgggagt gggccgcatg 300
gtgagggagt ggacttcctg atggggttaa gggcgcctga acacctggga ggcaagttga 360
ggccaagacc tggggtgatg gagaggcagg gtaggctacc cagtgagtag gaggccgaag 420
gaaccacagc agggctccag atctcctggc ccagaggggc tggtacggga agcccagaag 480
acactcatcc ctaaggggag cctgagactg aggaactctc atgccctgcg tcgggctcgt 540
gggcgaaggg ccttcccagg gactgcacca tggcctgtcc ccagccttac ccaggggcct 600
tcctctcang ttctgaagga cccaggggtc acagctgtgt ggggtgctcc actgaacact 660
tncttcaaac tccttcangc ttgga 685

<210> 3548
<211> 762
<212> DNA
<213> Homo sapiens

<400> 3548
acttcccccc ccccctccc ttcctctctc ctccctttc cctcctttcc ttgtctcctt 60
cttcttcctc ttctttcccc cagccccccc cctccctgtc cccctctctc cctgctccac 120
gcagtgtccc actgcccgcc tttctctgca gctggctggt atggaggggg ctgccctgag 180
gagccccaga gtaagctgga agggagggga cagaggctgg tgtcatttgt ctctgtagcc 240
ctaggaccgg tctgaaccgg ttgctgggag aggaggaggg ggcggccaga tcgattgcag 300
caaagaggga agagagcggc agagggagct cgcggggctt gcgtgctgga acacgccgat 360
ggcctgtgcc accgcctcac caccgtgtgc cccacgtcca agccgcagac tcagggcctg 420
gccaaggatg cctgggagat ccctcgggag tcgctgcggc tggaggtcaa gctgggccag 480
ggctgctttg gcgaggtgtg gatggggacc tggaacggta ccaccagggt ggccatcaaa 540
accctgaagc ctggcacgat gtctcagagg ccttctgcag gaggcccang tcatgaagaa 600
gctgangcat gagaagctgg tgcagttgna tgctgtggtt tcagaggagc ccatttacat 660
cgtcacggag tacatgagca aaggggagtt tgctggactt tctcaagggg gaaacaggcn 720
aagtacctgc gggttgcctn aactggtggg acatgggttg nt 762

0050204350

0502045.0-0202000

<210> 3549
<211> 794
<212> DNA
<213> Homo sapiens

<400> 3549
gtttctccac cagcaacatg gccgccgcct gagaggagag ccgggccgcc gccgtctctg 60
cagcccgcgg gtaactgggc cgttgccgcc gtccgcgctc ggcccccgcg gagagatcga 120
tgtgtacttg gccaagagtc tggcggaaaa gctgtatcta tttcagtacc ctgtgcgtcc 180
agcctcgatg acctacgatg acattccgca cctctcagcc aagatcaagc ccaagcagca 240
gaaggtagag cttgagatgg ccatcgacac cctgaacccc aactattgcc gcagcaaagg 300
ggagcagatt gcgctgaacg tggacggggc ctgcgccgac gagaccagca cgtattcctc 360
gaagctgatg gacaagcaga ccttctgctc ttcccagacc accagtaaca catcccgtta 420
tgccgctgca ctctacaggc aaggtgagct ccacctgaca cctttacatg gcatcctgca 480
gctgcggccc agcttctcct acctggataa ggctgacgcc aagcaccggg agagggaggc 540
ggccaacgag gcaggggact cttcacagga tgaggcggaa gacgatgtta agcagatcac 600
ggtgcggtct cccggccgga gtcagagcag gcccgncagc gccgtgtgca gtcctatgag 660
ttcctgcaga agaagcacgc agaggagccc tgggtccacc tgcattacta tggcctgang 720
gacagtcgct tctgagcatg aaccgtnagt acctgnttgt gcccccggct tcaagccggg 780
gttgggaaaa acac 794

<210> 3550
<211> 847
<212> DNA
<213> Homo sapiens

<400> 3550
gtgggctggg tgggtttcct aatctggttt cgtctgcttg gttcatctgt gtgcgatggc 60
tccggactcg gatccttcc ctgaagggcc gctcttaaag ctgctaccct tagacgctag 120
agaccggggc acccagcgct gccgcctggg cccggccgcc ctccacgccc tgggcgcgcg 180
cttgggctcg gcagtgaaga tctcgctacc cgacggcggc tcctgcctct gcactgcctg 240
gcctcggcgg gacggagcgg acggctttgt gcagctggac ccgctgtgcg cgagccccgg 300
ggcggcggtc ggggcgtcga gatcccggag gagtctcagc ctgaatcgcc tcctcctagt 360
gccctgtccg cccctgcggc gcgtcgccgt gtggccggtg ttgcgagagc gggcaggcgc 420
gcccggtgcc cggaatacag ccgcggtgct ggaggcggca caggagctgc tgagaaaccg 480
accgatctcc ctgggccacg tggtggtcgc tccgccaggc gctcctggcc tggtggctgc 540
cttgcacatc gtcggcggga cgcccagtcc cgatcccgct gggctggtca cccctcgtac 600
ccgcgtcagc cttggcgggg agcctccgtc ggaagcccag ccgcagcccg aggtgcccct 660
tgggaggtct ttcggaggcn ggccgactcg ctgcggggag cttcttncgg cttccgcttc 720
cgttacccgg ggccgccctg acccgcgctt gggcttaacc ggtggccttc gccgggggtg 780
cttnnctggc cgggggccc cccccggaat tgggcnaaga accccaantt ggtgcaaggg 840
ccctggc 847

<210> 3551
<211> 821
<212> DNA
<213> Homo sapiens

0503250.000200

<400> 3551
aaccctgtca ttgctgaact gtcccaagca ataaacagtg gtacattgtt atcaaaaccg 60
tccccaccct taccacctaa gagaggcatt ccatcaacct cagtacccac cttggagtct 120
gctgctgcca tcaccacaaa aacaccaagt gatgaaagag agaagagcac gtgttctatg 180
ggctcggaac tactaccaat gatctcacct cgctctccgt ccccccccact gcctactcat 240
atacctccag agcctccacg cacccctcca ttccctgcta agacttttca agttgtgcca 300
gaaattgagt ttccaccatc cttagatcta caccaggaga ttccccagca ggaagatcag 360
aaaaaggaag tccccaagag gatactggac cagaactttg gggagcccca tataccctct 420
aggctgcctc cactcccact gcatattcga atccagcagg ccctcaccag cccacttccc 480
atgactccta ttctggaggg ttctcacaga gctcattcgt tgctttttga aaacagtgac 540
agcttttctg aggacagcag tacgccgggt cggaccaggt ctcttcccat cactattgaa 600
atgctaaaag ttccagacga tgaagaagaa gaggagcaaa cctgtccatc cacattcagt 660
gaagaaatga cacctacctc agtcattcct aaattaccac agtgtctacg ggaggaagaa 720
gagaaggaga gcgacttctg attcagaagg tcccattcag taccgagatg aagaagatga 780
agatgaaagc tttcanagtg ctctngccaa cnaaatgaag a 821

<210> 3552
<211> 756
<212> DNA
<213> Homo sapiens

<400> 3552
caaatatgtt tcagagctct ggagtccagc accaccctcc agaaccaaaa gcccaaacag 60
aagggaatga agattcagag ggcaaagagc aaccttggga aatggtgatg gataagaaac 120
actttaagct gtggcggcgc ccaattacag gcacccacct ttaccagtac cgagtttttg 180
gaacctacac agatgtgaca cctcggcagt tcttcaatgt tcagctggac acagagtata 240
gaaaaaaatg ggatgccctg gtaatcaagc tggaggtttg tgtgatgcag aacactaatc 300
ctgcccctcc atttctttag tatccaatgt actcacggga ttatgtttat gttcggcggt 360
atagtgtgga tcaggaaaac aacatgatgg tgttggtgtc gcgtgctgtg gagcatccga 420
gtgtgccaga gtctccagaa ttcgtcaggg tcagatcata tgaatcccaa atggttatcc 480
gtccccacaa gtcatttgat gagaatggct ttgactactt actaacatac agtgacaatc 540
cccaaacggt gtttcctcgc tactgtgtta gttggatggt ttccagtggc atgccagatt 600
tcctggagaa gctgcacatg gccactctga aagccaagaa tatggagatt aaagtaaagg 660
actacatctc agctaacctc tggaaatgag tagtgaagcc aaggncacca gccagtcctt 720
ttgagccgaa agaaacnang gccagctttg gccctg 756

<210> 3553
<211> 647
<212> DNA
<213> Homo sapiens

<400> 3553
agacactggc cgcgggccac catctggacg cgatcccccg ctagggcctc cctggtctgg 60
gccaaagttg gtggccacct tcgcgcgggc tgcgccctcc ttctcttccc tgccctcctc 120
ccccggggcc cgcgcccgct gcctccagca cgcgcgtcgg caggctcggc aagcgaagag 180
gagcggctcg ccccagggcg cccctcgccc agcctgccgg ccaggcgagc gcgacgagag 240
tctccccgca ccccttcctc tcccgggggc cgagagggtt gggctccgcc ccggcgccgc 300

agctcccgac tccccgccgc tcgggctgcc gccgctgccc cgcgcccggc gctcggggca 360
gccgggggcg caggcggaga gcgcagggcg gggagaggcg tggggagcag agcggcgctg 420
aggggagggc agaggaggag agagcctggc agcggaggag cagaggcggg cgccgcaccg 480
cccgnacgct cgctcgctcg ggagagtcgc gggcggncgc ttgggcgcac ttgccgggtc 540
accttgtccc ggaggagaaa tggcttcctg aggcaagtgt aacctacatt ccagccacca 600
agctgacgcc anncagggag agagtaccat ggatggnata ttgaaca 647

<210> 3554
<211> 717
<212> DNA
<213> Homo sapiens

<400> 3554
aagatggcta tcaagagtat cgcttcccgc ctccggggtt cccgtcgttt tctgagcggc 60
ttcgtggttg gggctgtagt gggcgctgcg ggagctgggc tcgcggccct gcagttcttc 120
cggagtcagg gcgctgaggg agcgttgaca gggaagcagc cggatggatc tgcagaaaag 180
gctgtcttgg aacaatttgg attcccttta actggaacag aggcaaggtg ttacactaat 240
cacgctttgt cttatgatca ggcaaagcgg gtgcctagat gggttcttga acatatttcc 300
aaaagcaaga taatgggtga tgcagacaga aagcattgta aatttaagcc tgatcccaat 360
atccctccaa ccttcagtgc cttcaatgaa gattatgttg gaagtgggtg gtcacgagga 420
cacatggctc cagcaggaaa taacaaattt tcaagtaaag ccatggctga aacctttac 480
ctttctaaca ttgtgcctca ggattttgat aataattctg gatattggaa cagaatagaa 540
atgtactgtc gagagctgac agaaaggttt gaagatgttt gggtggtatc tgggcctttg 600
accttacctc agactagagg cgatggaaag aaaatagtta gttaccaggt gattggcgag 660
gacaacgtgg cagtcccctn acacctttat aaggnaatcc tggcccgcan aagctca 717

<210> 3555
<211> 714
<212> DNA
<213> Homo sapiens

<400> 3555
aaacaaaaac aactttaaat gcttgtagca gaccgggtca tctcatgtca gaaaccttta 60
atccaggcct aaatttgcat agacctgaca ttcagctgcc ttgcagttgc ttcctcccat 120
gagccaaggt ggtgtcagag ggcaactgga tgactcgcag taccacagca ctgggacaga 180
cagaagccac acctttcttt tgggtttttg ccaagcctcc tccatctccc atcagtgctg 240
tgggctggct gcaagcctcg aaacagttct cctggaaggg aggtttttgc tttacccccg 300
ccagcacttc cgcacacaat catagagaac ctctctgctc tctgctggcc tacagcttgt 360
ctgtttctca agcagaggca ggaagagcta gtcttagcat ttatatttta ataggaagtt 420
gactcccagc atgtaaaagt gatccacgca gccggagtgt atgccgggag ctaagtggtc 480
tatgggtgaa catatcccac cttgcttcct gagtccttgg tcccaatctt ctcatttgtt 540
cctctcgttt taaatttttt ccccccaact cttttgatgt aagaagttca gtttgtcttc 600
gggagtgggt ctctgcaagg gctctgggat gagtcttggc ttccaagagg acaggctatt 660
aggttcttgg acttttttnct gtgctaccgn tgctgcttgg tggaagtaca ngac 714

<210> 3556
<211> 870
<212> DNA

US 2005/0260686 A1

<213> Homo sapiens

<400> 3556
caacccttaa catttgggta atgtggtcca ccctccctcc caggcaacaa actgcttgag 60
gctggcagct cctgtttctg aagactgatg cagcccttga aggtcaacct gctggagcaa 120
aaaaacttgg gacttgaatt tgtagctcca tttacatgga tccattgccc cagctactgg 180
agtatagcct acaatgttta tttcagtcaa tattccttta tctgggtgtt ctgtacaatg 240
tttattacag tcaatattcc ttcatctgga tgttctgtga agatagccat gtttatgggg 300
gtcttagttt tcaaactctg gcaactctgt gaaaaatagg agcaaactag agagccctgg 360
agattggtag tagggaaggg aggatagcag gaagtttgaa aaattagcag ccccggggcc 420
taaaggaatc agctgtcatc attttcatca ttattatttt ggttaggatg gcttgaaaat 480
cagaacgtat cttggtttac gtaattgagg tcttaaagaa ctaagaacag ttaaatagtc 540
acaactacca ccctctgact tacataatca ttggtgtggg cttcgttttg cctttagagt 600
cacatctttc agtaaattca cagagatcaa gagggacgtg caacatacag cttaaaggct 660
gntatgcttc anggttgctg aagaagatga aacatcagcc tgccatcgtc tagaagagac 720
attggcagtt aaaaattagc acctncagtg tagtcgcctg gcactgccca tcatgctgan 780
ggagcagatt ctttccaagg cagcttcagc taggaatttg taagccagga cttgtgacac 840
atttgtcccc tggactgacc tttttaactn 870

<210> 3557
<211> 873
<212> DNA
<213> Homo sapiens

<400> 3557
atnttgtttg acatcctgtc taatcaaaaa gcatttgaat ttatcaaagt gccctggacc 60
tcttgctgtt gctaatggag ttgtgaagca gctacatttt caggaaaagc agatgcctga 120
agagccaaag ctgactttgg atgagtcgta tgaccttgtt gttgaaaatg aagaagtcct 180
aactttgcaa gaaactctgg aagcacttag cctctctgaa tattttagca cttttgaaaa 240
ggaaaagatt gatatggagt ccctgcttat gtgtacagnt gatgacctga aggaaatggg 300
gataccccct ggacccagaa agaagatagc taactttgta gaacataaag cagccaaact 360
gaaaaaagca gcgtcagaaa agaaggcagt ggcggccact tctacaaaag gacaagagca 420
aagtgcccag aagactaaag acatggcttc cctcccctca gaatccaatg agccaaagag 480
gaaacttcca gttggtgctt gcgtgtcttc tgtgtgtgtg aattatgaat cttttgaagt 540
tggcgccgga caggtttctg ttgcttacaa ctcattanat tttgaaccag agatattctt 600
tgccttgggg tctccaattg ctatgtttct cactattcga ggagttgata ggatagatga 660
gaattacagc cttnctacct gtaaagggtt cttcaatatt tatcatccgc ttgatccagt 720
ggcatataga ttagacctat gattggtcca gatttggacc taaaagctgt ctcattccca 780
tcacaaaggc ngaaaagact tcttttagaa ttgaaagaga gtctctctcg natgggatct 840
gatttgaagc agggtttatt acctctttca aaa 873

<210> 3558
<211> 806
<212> DNA
<213> Homo sapiens

<400> 3558
gatgctgaaa ttcagaagtc agcacttcag attgtcatca attgtgtgtg tggcccagat 60

0962459.0020800

aaccgaatat ccagtattgg taaatttatc tctggtactc ctcggagaaa gctgcctcag 120
aaccctaaaa gcagtgagca caccctggcc aagatgtgga atgtggttca gtccaacaac 180
ggcatcaagg tgctcctgtc cttactgtcc attaagatgc ccatcacaga tgcagaccaa 240
atccgggccc tggcctgcaa agccctagtg ggcctgtctc gcagtagcac tgtccggcag 300
atcatcagta aactgccccc tttcagcagc tgccagatcc agcagctgat gaaggagcct 360
gtgctgcagg acaagcgcag tgaccatgtc aagttctgca agtatgctgc tgaactcatt 420
gaacgggtgt caggaaaacc acttctcatt ggcactgatg tttccctagc acgactgcag 480
aaagcagatg ttgttgccca gtcaaggatc tccttccctg agaaagagct gcttttgttg 540
atacgaaacc atcttatttc taaagggctt ggagaaacag caaccgtgct gacaaaagag 600
gctgacctgc ccatgactgc tgcctcccat tcttctgcct ttaccccagt cactgctgct 660
gcttctcctg tctctctacc ccgaaccccc cgtatcgcta atggcattgc aactcgtctg 720
ggcagccatg ctgctgtggg tgcctctgcg ccttctgccc ctactgntca tncttaagcc 780
acggncccca cagggtccgc tagctt 806

<210> 3559
<211> 839
<212> DNA
<213> Homo sapiens

<400> 3559
gtttttacct aagcaagcct gggcaatggc gggcgtccct cccccagcct cgttgccgcc 60
ttgcagtttg atctcagact gctgtgctag caatcagcga gattccgtgg gcgtaggacc 120
ctctgagcca ggaactgaag ttaaaagatg aagaatgtga gaggctttca aaagtgcgag 180
atcaacttgg acaggaattg gaagaactca cagctagtct atttgaggaa gctcataaaa 240
tggtgagaga agcaaatatc aagcaggcaa cagcagaaaa acagctaaaa gaagcacaag 300
gaaaaattga tgtacttcaa gctgaagtag ctgcattgaa gacacttgta ttgtccagtt 360
ctccaacatc acctacgcag gagcctttgc caggtggaaa gacacctttt aaaaaggggc 420
atacaagaaa caaaagcaca agcagtgcta tgagtggcag tcatcaggac ctcagtgtga 480
tacagccaat tgtaaaagac tgcaaagagg ctgacttatc cttgtataat gaattccgat 540
tgtggaagga tgagcccaca atggacagga cgtgtccttt cttagacaaa atctaccagg 600
aagatatctt tccatgttta acattctcaa aaagtgagtt ggcttcagct gttctggang 660
ctgtggaaaa caatactcta agcattgaac cagtgggatt acaacctatc cggtttgtga 720
aagcttctgc agttgaatgc cgaggaccca aaaaaatgtg ctctactggg ccanagtaag 780
tcctgtaaac ncnggaattt aaattaaggg gactcaagcc actattaata aaattcttc 839

<210> 3560
<211> 777
<212> DNA
<213> Homo sapiens

<400> 3560
ataacatgat tcatcaggtg ccaattaaat ccctccctca agaatggctt tggtgtgaaa 60
cgtggtgtga tgacgcctct aagaaaaggg caaaaaccat tgatttgtgt aataatccga 120
tgaccaaaga gccgaaactg gaagcagctg tgcggattgt cccggagtgg caggactacg 180
accaagagat caaacagcta cagatccgct ttcagaagga gaaagaaacg ggagcactgt 240
acaaagagaa gacaaaagaa ccaagccgag aaggtcctca gaaacgtgaa gaattatgat 300
ctctggagaa ggacaggaaa tcaccccatt tgaaaaacag tttttataat aaatgctagt 360
tttttctgat ctgtctatac aactgctgat aagccggctg ggcaggagtg ccacaccttt 420

US20070059800A1

tgattctgag catttgattc tgacttctgt actctggtgg ccactggatc tttgggatta 480
aagctctgtt ggatttgtac ctcagaggaa gaccaagtgg ctgatccttt ggactctgta 540
aagagcattc ttctagtcag agggtggaat ggcagcagca actggaagaa aatgagtttt 600
ttggtgccca cacccaagag cacacacatg ctgcactgtc tcggaaagca nggccagcta 660
gagccaccat gttcttctta cctcagttta cctgcggnct gcgctgcact gcanatgccc 720
accctgccct gggtctggcc ggcggaagct ctgtccaagg tccacacacc ttncagg 777

<210> 3561
<211> 743
<212> DNA
<213> Homo sapiens

<400> 3561
ccccgccccc ggagccggcg gcgcagggcg cagcttcccg ccgccagagc gggccagcct 60
gctgcgtgcg tgcgtgtgta cgactctgcg tgcgtgcgtg cgtgcgtgcg tgccgtcagc 120
tcgccgggca ccgcggcctc gccctcgccc tccgcccctg cgcctgcacc gcgtagaccg 180
acccccccgc agcgcgccca cccggtagag gacccccgcc cgtgccccga ccggtccccg 240
ccttttttgta aaacttaaag cgggcgcagc attaacgctt cccgccccgg tgacctctca 300
ggggtctccc cgccaaaggt gctccgccgc taaggaacat ggcgaaggtg gagcaggtcc 360
tgagcctcga gccgcagcac gagctcaaat tccgaggtcc cttcaccgat gttgtcacca 420
ccaacctaaa gcttggcaac ccgacagacc gaaatgtgtg ttttaaggtg aagactacag 480
caccacgtag gtactgtgtg aggcccaaca gcggaatcat cgatgcaggg gcctcaatta 540
atgtatctgt gatgttacag cctttcgatt atgatcccaa tgagaaaagt aaacacaagt 600
ttatggttca gtctatgttt gctccaactg acacttcaga tatggaagca gtatggaagg 660
aggcaaaacc ggaagacctt atggattcaa aacttanatg tgtgtttgaa ttgccagcan 720
agaatgatna accacatgat gta 743

<210> 3562
<211> 814
<212> DNA
<213> Homo sapiens

<400> 3562
gcaaaaatat gaaccaagag aaattcaata agagcctttc atagaggagt agaaaggatt 60
attacagaat ccaatgaatg ccaagaaaat gtacagcaaa tgtgccactt gaatatctag 120
tatgaagctg gtaatgaaga aattgccatt tctgaagcag atatgaaata tgatctgctt 180
aattgttaag gcaactgacc tttcaaaagt gcagagtctt attaaaagag gggaggggta 240
gaagcagaat aatagtcata tgtctaacct gccccagtta actcctcttg ttaaattata 300
agccagttat ctttttaga tagtattttt gtcacttgga taatcacagg aaatatataa 360
gaaaagagct tggactaact tgagaagttg gacatggaaa gcaagaccaa gttccagttg 420
ggtttaattt tccctcttgg ttattttcgg acacaaaggg aatgcttaaa actgagttta 480
gtaataaaaa gcataaatct cttctgtaac ttttataaac cacagggagg tttcaatcca 540
tgcattttcc ttcattactc aagattataa atctgttttt aaaatacatc taaacaaaca 600
gttgagaaac aaaagtttgg catgttgtca gatcccctta agaggaagag gttaagctgt 660
aaagtagtgg ccctgttttg atgccagaac attcatatgc tgttggtctg gatttctttt 720
aaatgcatgt attttaaatc tggttaaatc ttanaatctt ggctatatct tanaattctg 780
gctcttggta ccattnttcc agaagtctat attg 814

09629469 - 070208

<210> 3563
<211> 887
<212> DNA
<213> Homo sapiens

<400> 3563
cagaagcagt agtccaaacc tagtataggg aaaggataaa aataagtcac cttcaccaag 60
agatgccaat gattaccaaa caacagacaa ttgccaaata ctggtttctc tttcccctga 120
aaatggcttt tgttctcaaa tgataagaga gctaatacat ttagctaata ttctagctct 180
ctttattatg gaacagatct tgatagatgg tttaattttc tcctaaagag aaataatcag 240
ttgagaattt gagaatgggt tgtaattatc gctcacccat tgggatggtt cattgtttaa 300
atatggcatt ttccccccctt cagctgcagg ttcctgagat ttggtgcctg tgagctctga 360
ttgtaggaat gcatgtgaca gtcccagtcc tatggtaatg acttaggagg aatgcagata 420
aaagtacctt gtaagataaa tataaattgg agttaggaat ttcatgaacc tcactatgac 480
caaaattaat ttttgattc agtttgtctg tctgtctgtc cttcccctct cttctttttt 540
cagggtgagg tgctgtgttt cttatttcat acgagataaa acagagagaa gttctctctt 600
ctccagcttg tccatttccc cacttgaaga aaacttttga tatatatgcc ttactgagta 660
catgcccccct ttaatgntaa tatgacttgg agtaatttct gaggtttact gacaaacata 720
aaaatccctt taattgtagt gtagttggtc tataaaccat atttttcat gatgtggata 780
ttttcttcta tttctttggc ttcatttaat ttggtgggtg gngaacttta cttgctggat 840
tttcttttat ttttcctgga tgaagtttgg gcttggaatg aanagng 887

<210> 3564
<211> 796
<212> DNA
<213> Homo sapiens

<400> 3564
tcgggttggt gtcatggcag ctgcggggag ccgcaagagg cgcctggcgg agctgacggt 60
ggacgagttc ctagcttcgg gctttgactc cgagtccgaa tccgaatccg aaaattctcc 120
acaagcggag acacgggaag cacgcgaggc tgcccggagt ccggataagc cgggcgggag 180
cccctcggcc agccggcgta aaggccgtgc ctctgagcac aaagaccagc tctctcggct 240
gaaggacaga gaccccgagt tctacaagtt cctgcaggag aatgaccaga gcctgctaaa 300
cttcagcgac tcggacagct ctgaggagga agaggggccg ttccactccc tgccagatgt 360
gctggaggaa gccagtgagg aggaggatgg agcggaggaa ggagaagatg gggacagagt 420
ccccagaggg ctgaagggga agaagaattc tgttcctgtg accgtcgcca tggttgagag 480
atggaagcag gcagcaaagc aacgcctcac tccaaagctg ttccatgaag tggtacaggc 540
gttccgagca gctgtggcca ccacccgagg ggaccaggaa agtgctgagg ccaacaaatt 600
ccaggtcacg gacagtgctg cattcaatgc tctggttacc ttctgcatca gagacctcat 660
tggcttgtct ncagaagctg ctgtttggaa aggtggcaaa ggatacagca ggatcttgca 720
acccgtccag caacccgntt ttgggggaag cttctgtgga cattaaggct tacctggctt 780
cggncataca ggntgg 796

<210> 3565
<211> 834
<212> DNA
<213> Homo sapiens

09529469.030808

<400> 3565
cttatatgtg aaaagtctat aggtacttgt aatagacctt tgggcgctgg ggaggccttg 60
agacgagtaa tggagtgttt ggcatctgga atactacttc ctgggggtcc tggtcttcat 120
gatccttgtg agcgagaccc aacagatgct ctgagctata tgaccatcca gcaaaaagaa 180
gatattaccc acagtgcaca gcatgcactc agactatcag cctttggcca gatttacaaa 240
gtgctggaga tggacccccc tccatctagt aagccttttc agaagtattc ctggtcagtt 300
actgataaag aaggtgctgg gtcttcagct ctaaagaggc catttgaaga tggattaggg 360
gatgataaag accccaacaa gaagatgaaa cgaaacttaa ggaaaattct ggatagtaaa 420
gcaatagacc ttatgaatgc actaatgagg ctaaatcaga tcaggcctgg gcttcagtat 480
aagctcctat ctcagtctgg ccccgttcat gccccagtct tcacaatgtc tgtagatgtg 540
gatggcacaa catatgaagc ctcaggacca tccaagaaaa cagcaaaact tcacgtagcg 600
gtgaaggtat tgcaggcaat gggatatcca acaggctttg atgcagatat tgaatgtatg 660
agttccgatg aaaaatcaga taatgaaagt aaaaatgaaa cagtgtcttc aaactcaagc 720
aataatactg gaaattctac actgaaacct ncagtacctt agaggtaaga ctcanggccc 780
tatcctnaca gcaagtggca aaaaccctgt atggagctaa tgaaaaaaga agag 834

<210> 3566
<211> 772
<212> DNA
<213> Homo sapiens

<400> 3566
gggccgaggc gcgggagagg cggtggacac cgagaagccc gccggcggct tgcaattccc 60
tcacccggcg cgcgcctttc gcagagggaa ggagcaagag ggcccctacc tcatcgtgcg 120
cgggtggggt cggcgcttgt cgcgtgtggc gcgcagtggg gcgggcggcg ggaggggggt 180
ggcagtggag ggagcgagag gtgcaggggt gactttgttg gcagcaggac tagctggaga 240
gctagacctg gaagcgcatc cggggaggac ttgcggggca gaggagggcg tgggcgtgtc 300
tggtatggga tgcagtggaa aggagggggc cctcctgagt agatctgtgg gtgattcctt 360
cgaggacgcc tcgtcttccc gtctgccctt ttatttgtca gcgagggagt ccccatggtc 420
tctgttcaag ttctggaaac tttctctttg ggtgggctta atcacctgct actaaatcgt 480
agaactgccc agggcccttt ctaatattgg tcacaaacgt gaggagtatg tcagaaaaca 540
gaaaaccgct gctgggcttt gtaagcaaac tcactagtgg gactgcactt gggaactcan 600
gcaagactna ctgccccctg tgcttggggc ttttcaaagc ccccaggctc ttgccttggt 660
tgcatacagt ttgcaccacg tgtctggagc aactggagcc cttctngtag tggacattcc 720
anggggaaaa ttttgacaca aacttnttaa ggggtcaaat atttcaggaa ct 772

<210> 3567
<211> 875
<212> DNA
<213> Homo sapiens

<400> 3567
gtgcgcgctc cctcggtgcg gcgggctgcg tgcgcgagtg ggaggtggca ggcctgcgac 60
tccggccttg tccgcgcccg ctctcggcgc gacgtctcca gccatgaacc ggtttggtac 120
ccggttggtg ggagccacgg cgacttcttc gccgccgccg aaggcccgca gcaatgaaaa 180
cctcgacaaa atagatatgt ctttggatga tatcatcaag ttgaatcgaa aggaagggaa 240
gaagcagaat tttccaagac taaatagaag actcctccag caaagtggtg cccagcaatt 300
caggatgaga gtgcgatggg gaatccaaca gaattctggt tttggtaaga ctagtctgaa 360

09629469 - 092800

tcatagagga agagtaatgc ctggaaagag acgtcctaat ggagttatca ctggccttgc 420
agctaggaaa acgactggaa ttcgaaaagg aattagtcct atgaatcgtc cacctctaag 480
tgacaagaat atagaacaat attttccagt gttaaaaagg aaggcaaacc ttctgagaca 540
aaatgaaggg cagaggaaac cagtagcagt tctcaagaga cctagccagc taagcagaaa 600
aaataacatt ccagctaatt ttaccaggag tggaaataaa ttaaatcatc agaaagatac 660
tcgtcaggca acttttcttt tcagaagaag cctgaaagtg cangcccagt tgaatacaga 720
acaactgcta gacgatgtag tacaaagaga ctcgtcaatg gcggactttc accacaaatg 780
gagggatttt gactggatct attgacaatc ctggaacaat gcaatgccca tactnagaaa 840
ccacgattaa ctctactggt gnaccttcat tttna 875

<210> 3568
<211> 772
<212> DNA
<213> Homo sapiens

<400> 3568
aattaaatgc atatgttctc caagaaccac ctaaaggaga aacctacacc tacgactggc 60
agctgattac tcatcctaga gactacagtg gagaaatgga agggaaacat tcccagatcc 120
tcaaactatc gaagctcact ccaggcctgt atgaattcaa agtgattgta gagggtcaaa 180
atgcccatgg ggaaggctat gtgaacgtga cagtcaagcc agagccccgt aagaatcggc 240
cccccattgc tattgtgtca cctcagttcc aggagatctc tttgccaacc acttctacag 300
tcattgatgg cagtcaaagc actgatgatg ataaaatcgt tcagtaccat tgggaagaac 360
ttaaggggcc tctaagagaa gagaagattt ctgaagatac agccatatta aaactaagta 420
aactcgtccc tgggaactac actttcagct tgactgtagt agactctgat ggagctacca 480
actctactac tgcaaacctg acagtgaaca aagctgtgga ttacccccct gtggccaacg 540
caggccccaa ccaagtgatc accctgcccc aaaactccat caccctcttt gggaaccaga 600
gcactgatga tcatggcatc accagctatg agtggtcact cagcccaagc agcaaaggga 660
aagtggtgga gatgcanggt gttagaacac caaccttaca gctctctgcg atgcaagaag 720
gagacttcct taccagctna cagtgactga ccaatnggac agcaggccac tg 772

<210> 3569
<211> 873
<212> DNA
<213> Homo sapiens

<400> 3569
aagaaaaagc cgggtgaggt ggtgtgtacc tgtagtcaca ggtacttggg aggctgaggt 60
gggaggatca cttgagccca ggagatagag gctgcagtga gctgtgatcg taccactgca 120
ctccagcctg ggcgacaaaa tgagaccctg tctcaaaaga aagccctctc cttagctgag 180
cagaggaagg gaaggagtgt ggctatgaga atatgattta tgccatttc tgtttttaaa 240
tctagaagat cttctaagca caaatacagc tacaatgaaa tattttacag acaaaatgtt 300
aatagaccat attctttgaa ttaaatttgt ttttaatttt ctctacacat ttttttttc 360
ctggagtctc ttagctctaa atatatcaat cagatttata tttttttac ctgattcaga 420
tgtcttacat ttttatatta aatgaacctt aagcatgatt cttttggtaa gccagtatga 480
atgccagtgg ttgggggcg gnggggggag tcagttgaca taagatttag tcctaataag 540
gactctgtat tcacttgatt attctgaccc ttcctaaggg agggaggtgg attagatacc 600
actggaggcc cattctgtat tcctaatcca gtctcagcac tttattcata caaaataatc 660
aaaataggtt ttctacacca aatgctccca gcagtgctct ataattnatt tgcacacctg 720

09529450.0720800

tatgtggggt gccatgttan ccactaaatc tgaactttta ccctgctttc atcatggatt 780
tttttgggta acccggaaac aagtcccaat gcttnctggg cctggtttcc tcatttgcac 840
caggagggta attnccgacc tacctttga aaa 873

<210> 3570
<211> 737
<212> DNA
<213> Homo sapiens

<400> 3570
aatcccaaag gggcccagat gcagccgatc tccctcccca gagttcagca ggtaccccag 60
caggtgcagc cggtgcagca cgtgtatcct gcccaggtgc agtacgtgga agggggagac 120
gccgtctaca ccaatggaac catacgaaca gcctacacct acaaccccga gcctcagatg 180
tacgccccca gcagcacggc ttcttacttc gaggccccag gcggtgccca ggtgaccgtg 240
gcagcctcgt ccccgccagc ggtcccctcc cacagcatgg tgggcatcac catggatgtc 300
gggggggagcc ccatcgtctc cagcgcggga gcctatctca tccacggggg gatggacagc 360
accagacact ccctggccca cacctcccgc tcatcgcccg ccacgctcca gtggctgttg 420
gataattatg aaacagcgga aggtgtgagt ctccccagaa gttctcttta caaccactac 480
cttcggcact gccaggagca caagctagac ccagtgaacg ccgcctcctt cgggaaactg 540
atccgttctg tgtttatggg gctgagaacg cggcggctgg gcaccagggg caactcgaag 600
taccattact atgggattcg tctgaagccg gactcaccac tgaaccggct gcaggaggac 660
acgcagtaca tggccatgcg gcagcagccc atgcaccaga agcccangta ccggncagcc 720
cagaagacgg acagnct 737

<210> 3571
<211> 840
<212> DNA
<213> Homo sapiens

<400> 3571
ggatttggga gttgagcacc ttcgtcgcca ttggctttcc tcccccagct ccagcctctc 60
tcatcttggg aatctgcgtc agaagtcact cgcagtcccg tcagcccaga agaagacgta 120
aagcaggcta ccagcaattt tgagaacttg caaaaacagc ttgcaaggaa aatgaagctt 180
cctattttca tagcagatgc attcacagca agagcatttc gtgggaatcc tgctgctgtt 240
tgcctcctag aaaatgaatt ggatgaagac atgcatcaga aaattgcaag ggagatgaac 300
ctctctgaaa ctgcttttat ccgaaaactg cacccgacag acaactttgc acaaagttcc 360
tgctttggac tgagatggtt tacaccagcg agtgaggtcc cactctgtgg ccatgccacc 420
ctggcttctg cagctgtgct gtttcacaaa ataaaaaaca tgaatagcac gctcacgttt 480
gtcactctga gtggagaact aagggccaga cgagcagagg acggcatcgt cctggacttg 540
cctctttatc cagcccaccc ccaggacttc catgaagtag aggacttgat aaagactgcc 600
ataggcaaca cactggtcca ggacatctgt tattctccag atacccaaaa gctcctcgtc 660
cgcctcagtg acgtttacaa cangtcgttt ctggagaacc tgaagtgaca cngagaatct 720
gctgcagttg aaaacacagg gaaggtgaaa ggcttattct tacccttaaa gganacctgg 780
tgggcaaccc aacatttgct ttactcaaan attttcccgg gggtgggngc tgaaaccctg 840

<210> 3572
<211> 514
<212> DNA

WO 2004/063355 PCT/US2003/040800

<213> Homo sapiens

<400> 3572
acattgacca ggtggccaga cacctgaggt gaggcccagg ggcacctgca tgtgtatagg 60
caggggtgga gacaaggatg gatcttgagg tgctgggatt gtgagacagg aggtgggtag 120
tatacttggc ggggaggccc atgtgcgtaa ggctgagagg tggaaagagc tggctgctat 180
agagctagtg aggttgcttt caggaagcag ccaagtacag atgccacggc cgagcatgat 240
ggtgcatgcc tgtaatccca gcaatttggg aggccgaggc aagagggtca tttgggccca 300
ggaattcgaa accagcttgg ccaacatggg aaaaccccat ctctaccaaa acaaatacaa 360
aaattagctg ggcgtggtgg tgcacgcctg taccanttac ttgggaggct gaggtgagaa 420
gggattgatt gagccctgga aggtaaggct acagtgagtc atgatgggtg gcanancaag 480
accctgtttc tttctttctt tctttctttc tttn 514

<210> 3573
<211> 849
<212> DNA
<213> Homo sapiens

<400> 3573
agagcttggg atcgctttct gctattcaac gtcctccacc tctgcccccc tctcccccca 60
gccggtgaca ggctgttgcc ctgtgatctg caggtcctgg gacgtgcaca gacagctaag 120
atgccaggac attccagaag gtgggaaagg cacctgagta atttgactct cctgcctgga 180
cccagcgtac agatgggatt gtgcttcatt gctggaccca gcatttaggc ccactaccta 240
tgagattgca tgctcctgcc tgggctgtgc ccacagtgac cttgtgacat atatctgcat 300
ccatgaccta aaagatgtga cacttcttgc ctgcaacctg ccctgcacag gaaagattgc 360
gacttctccc tggaagcaga caccagggat cgtcactccc gtggatgatc aaaggcgcct 420
gtaatttcag ctactccggg ggctgaggca ggagaatcgc ttgaactcgg gaagcagaag 480
ttgcagtgag ccaaggtcgc accactgcac tccagcccag gcgacattgt gagactccat 540
ctcaaaaaaa aagaaaaaaa gtgtactaac aagacccagc acacagagga gacttttacc 600
attgtatgaa cacccatcaa acagtacaca tcatcattgt gagttctgaa tctcacacat 660
agaggaagtc aaaggtggaa aacttgactc tcatatttgg atccagtcca caggtgtgat 720
tttgacgcac acttctgccc ancacctgag taatgtgatt cttcanaatt ggcccgggcc 780
acaaatagga ttgtgccaca ctgctggacc cantgcctaa atgatgtaac tctattcttt 840
ttgncttgg 849

<210> 3574
<211> 725
<212> DNA
<213> Homo sapiens

<400> 3574
gtgtggaagt gacgctgccc ccgctgccca aaatgtcggc gcccagaggg aggtagagag 60
cccccacata ccactgtatt ccccgccacc atggatgacg tccccgcccc aacccctgca 120
ccagcaccgc ccgccgctgc cgcccccagg gtcccgtttc actgcagtga atgtggcaag 180
agcttccgct accgctcaga cctgcggcgc cactttgccc ggcacacagc gctcaagccc 240
cacgcatgtc cgcgctgcgg caagggtttc aagcacagct tcaacctagc caaccacctg 300
cgctcgcaca ccggggagcg gccctaccgc tgctctgcct gccccaaggg gttccgcgac 360
tccaccggcc tgctgcacca ccaggtcgtc cacactggtg agaaacccta ctgctgcctg 420

0083205 6 9 4 5 2 0 5 0 0

gtctgcgagc tccgcttctc ctcacgctcc agcctgggcc gccacctnag gcgccagcac 480
cgtggggttc tcccctctcc cctgcagccc ggccctggcc tgcccgcctt gagtgcgccc 540
tgctccgtct gctgcaatgt ggggccctgc tcggtgtgcg ggggctcang ggccggcggc 600
ggagagggcc ccgagggggc aggcgcgggt ctgggcagct gggggctggc agaagcggca 660
gctgcggccg cggctcttgc cccattttgc gtgcngcgcc tgcgcgcggn gcttgacacg 720
ggcgn 725

<210> 3575
<211> 710
<212> DNA
<213> Homo sapiens

<400> 3575
agtccgctcc ggcagcgcgc tctgcccggc ttcctcagtc tcctcgccgg gagcgtccgg 60
gagcagctcc gaggccgcgg cgaaaccagg tggagtccga ggttcggagg agtatcagag 120
gttaggggaa ggccggagaa tgggctggga ggctgcgttt cggagcttag ggttctgtcc 180
ctgcgatcgc cgcgtctccc tcccttggtg ggcgcggctc ccgggaagcg gctcgtctcg 240
tctcccctca caggccgggt tcccgttctg gaccttcgcc ctcggaacac agtgctgttg 300
gccgggactc cttcccgagg tggacggctc cctgttctta ttcctggctc tgccagaact 360
gtaggaagtg ctcagtacac tttagggcat gcatggcact ccctgggaga cagtgcttta 420
gggccagagg aaagatcttc cctgaaggca aacgcccgcg gagcccacaa gtccgggccg 480
cactgaacaa gtcaggatgt tgccatcggc aattctgcag aaggcagtaa cccatctgag 540
agaaagagcc gctgtcataa ggtctcttgc ttgagctgct gggttgagaa tggagctgga 600
agagggaact gatctcggag ctccttgggg atcttgggta tgtttgaccc ttttactttc 660
anggagcang gattggatca aagtcattgc atntagagta ccgggggaac 710

<210> 3576
<211> 814
<212> DNA
<213> Homo sapiens

<400> 3576
ctataaaatc tcagtaccag tttccacccc ctctcattgc acccgcggcc attcgggacg 60
gggagctgat ctgcaatggg atccctgagg aatcacagat gcacctttg aactctgagc 120
acttagccac ccaagcagag cagcaagagt ggctctgtag tgttgttgcg ctccagtgca 180
gcatattgaa acatttatct gctaagcaga tgccttcgca ttgggactct gaacagacag 240
agaaggctga tattaagcct gttattgtga ctgacagctc agtcaccacc tccctgcaaa 300
cagctgacaa gacacctaca ccttcccact acccccttgtc ctgcccctca gggattagca 360
cccagaattc cctgagctgc tctccacccc accagtcccc agccctagag gacatcggct 420
gcagttcttg tgcggaaaaa tccaagaaaa ccccttgtgg gactgccaat gggccagtga 480
acacagaggt gaaagctaat ggcccacacc tctacagcag ccctactgat tccacggacc 540
cccggcgact tccaggcgct aacaccccac taccaggcct ctcacaccgg caaggctggc 600
cccggccccc cacgccacca gcggctgggg gccttcagaa ccacaccgtc ggcatcattg 660
tgaagacaga gaatgccact ggccccagtn ttgccccaga ggagttggtt ctgtccaagc 720
tgcccttcat tccagctttg ngccagatng agacaccagc cttgaaagaa gatgtcatcc 780
agatggactc gtgcaatnag gcctggttac ccaa 814

<210> 3577

US 2005/0059008 A1

0952005-000200

<211> 743
<212> DNA
<213> Homo sapiens

<400> 3577
actattggcc agttccgttc aacgaagtgg ttgctttttt tagttccggc aatgagttgc 60
gccggggcgg cggcggctcc ccgcctttgg cggctgcgcc cgggggcccg gcggtccctc 120
tcagcttatg gaagaagaac cagtgtcaga tttcgcagtt caggaatgac tttagacaat 180
atcagtcggg cagctgtgga tcgaataatc cgggtggatc atgcaggcga atatggagca 240
aaccgcatct atgccgggca gatggctgtc ctgggtcgga ccagcgtcgg gccagtcatt 300
cagaaaatgt gggatcaaga aaaggaccat ttgaaaaagt tcaatgagtt gatggttatg 360
ttcagggtcc ggccaacagt tctgatgccc ttgtggaacg tgctggggtt tgcactgggg 420
gcgggggaccg ccttgctcgg gaaggaaggt gccatggcct gcaccgtggc ggtggaagag 480
agcatagcac atcactacaa caaccagatc aggacgctga tggaggagga ccctgaaaaa 540
tacgaggaac ttcttcagct gataaagaaa tttcgggatg aagagcttga gcaccatgac 600
atangcctcg accatgatgc agaattggct ccagcctatg ccgtcctgaa gagcattatc 660
cangccggat gcanagtggc gatatattta tcagaaagat tattaaagtg tgtccagttt 720
tgcctgncta taaaagatga tag 743

<210> 3578
<211> 812
<212> DNA
<213> Homo sapiens

<400> 3578
gcggagagag gcgagcaccg ggaaggggag tgtggggccg ctggaatggg tgaatttaag 60
gtccatcgag tacgtttctt taattatgtt ccatcaggaa tccgctgtgt ggcttacaat 120
aaccagtcaa acagattggc tgtttcacga acagatggca ctgtggaaat ttataacttg 180
tcagcaaact actttcagga gaaatttttc ccaggtcatg agtctcgggc tacagaagct 240
ttgtgctggg cagaaggaca gcgactcttt agtgctgggc tcaatggcga gattatggag 300
tatgatttac aggcgttaaa catcaagtat gctatggatg cctttggagg acctatttgg 360
agcatggctg ccagccccag tggctctcaa cttttggttg gttgtgaaga tggatctgtg 420
aaactatttc aaattacccc agacaaaatc cagtttgaaa gaaattttga tcggcagaaa 480
agtcgcatcc tgagtctcag ctggcatccc tctggtaccc acattgcagc tggttccata 540
gactacatta gtgtgtttga tgtcaaatca ggcagcgctg ttcataagat gattgtggac 600
aggcagtata tgggcgtgtc taagcggaag tgcatcgtgt ggggtgtcgc cttcttgtcc 660
gatggcacta tcataagtgt ggactctgct gggaaggtgc agttctggga ctcaacccac 720
tgggacgctt gtgaagaagc catctcatcg cttatgcttg acgtgcaagt ccattgctgn 780
ancttgaccc aagaaagacn agttttcctg gg 812

<210> 3579
<211> 725
<212> DNA
<213> Homo sapiens

<400> 3579
aaatattaca ctctggctga aatacgcaga aatggaaatg aagaatcgcc aagtcaacca 60
tgctcgaaat atctgggacc gggccataac aacgctgcct cgagttaatc agttctggta 120

caagtacacg tacatggagg aaatgttggg aaacgttgcc ggtgcccggc aggtgtttga 180
gcgctggatg gagtggcagc ctgaggagca agcctggcac tcctacatca actttgagct 240
gagatacaaa gaggtggatc gggcccgcac catttatgag cgatttgtcc tcgtgcaccc 300
tgatgttaag aactggatca agtatgcccg ctttgaagaa aaacatgctt attttgccca 360
tgcacggaaa gtgtatgaga gagctgtgga attctttgga gatgaacata tggatgagca 420
cctttatgtt gcctttgcca agtttgaaga aaatcagaaa gagtttgaaa gggtacgagt 480
gatttacaag tatgccctgg acagaatttc aaaacaagat gcccaagaac tctttaaaaa 540
ttataccatc tttgagaaga agtttggtga taggcggggt attgaagata tcattgtgag 600
caaacggagg ttccagtacg aagaagaagt gaaggcgaat ccacacaatt atgatgcatg 660
gnttgattac ttgcgcttgg tagaaagtga cgcanaagct tgaaccntga gagaagtcta 720
tgaaa 725

<210> 3580
<211> 731
<212> DNA
<213> Homo sapiens

<400> 3580
gtgtaataac aacatctccg agggcgaagg gtatgtggag tctccagatc tggggagccc 60
cgtcagccgc accctggggc tcctggactg cacttacagc atccatgtct accctggcta 120
cggcattgag atccaggtgc agacgctgaa cctgtcacag gaagaggagc tcctggtgct 180
ggctggtggg ggatccccag gcctggcccc ccgactcctg gccaactcat ccatgcttgg 240
agaaggacaa gtccttcgga gcccaaccaa ccggctgctt ctgcacttcc agagcccacg 300
ggtcccaagg ggcggtggct tcaggatcca ctatcaggcc tacctcctga gctgtggctt 360
ccctcccccgg ccggcccatg gggacgtgag tgtgacggac ctgcaccctg ggggcactgc 420
caccttttcac tgtgattcgg gctaccagct gcagggagag gagaccctca tctgcctcaa 480
tggcacccgg ccatcctgga acggtgaaac ccccagctgc atggcatcct gtggtggcac 540
catccacaat gccaccctgg gccgcatcgt gtccccagag cctgggggag ccgtagggcc 600
caacctcacc tgccgttggg tcattgaagc agctganggg cgccggctgc acctgcactt 660
tgaaagggtc tcgctggatg angacaatga ccggctgatg gtgcgctcag ggggcaaccc 720
cctatncccc g 731

<210> 3581
<211> 875
<212> DNA
<213> Homo sapiens

<400> 3581
agagaaagat aatggaaata ttgaacttga aaataaaaaa ttagaaaaag agagtaagaa 60
tgaacaagag agagaaaaga aggaaaacat ggctaaagag aatcctccca tgaattctcc 120
ttgccaaata accgtgaaag gactcagtaa tttgggaaac acatgtttct tcaatgcagt 180
tatgcagaac ttgtcacaaa caccagtgct tagagaacta ctaaaagaag tgaaaatgtc 240
tggaacaatt gtaaaaattg aaccacctga tttggcatta acagaaccat tagaaataaa 300
ccttgagcct ccaggccctc ttactttagc catgagccag tttcttaatg agatgcaaga 360
gaccaaaaag ggggttgtga caccgaaaga actcttttct caggtctgta aaaaagcagt 420
gcggtttaaa ggctatcagc ggcaagacag ccaggagctg cttcgctact tattggatgg 480
gatgagagca gaagaacacc aaagagtgag taaaggaata cttaaagcat ttggtaattc 540
tactgaaaag ttggatgaag aactaaaaaa taaagttaaa gattatgaga agaaaaaatc 600

US 2006/0269950 A1

aatgccaagt tttgttgacc gcatctttgg tggtgaacta actagtatga tcatgtgtga 660
tcaatgcaga actgtctnct tggttcatga atctttcctt gatttgtccc ttccagtttt 720
agatgatcag agtggtaaga aaagtgtaaa tgataaaaat ctgaaaaaga cagtggagga 780
tgaagatcaa gatgtgagga agaaaaagat accacggttc cttaaaagag agaatgatat 840
tcctttggga caagtagcct tnccgaaaaa gcaaa 875

<210> 3582
<211> 816
<212> DNA
<213> Homo sapiens

<400> 3582
aacactacct ttgctgtaat ttcatttgag attttctaag ggtagaattt ggtctcacca 60
acaagtgagg atatagcctt atctcatgga ggacgagctc cgtatttact caggagcagt 120
cagggtacat tacataaaac aatggaggat gcctcatttt agcaaactag gtttctttgt 180
attcttcagt ccttttacag aattgatgtg ctaactgaat atcattgcag caactagact 240
aagatattca agatctcttt attggggatg ggagaaatag ggaaagaaat gtgtataagt 300
aattatgata ttgcaaaagt gatacttaga ttttacagcc tcagtagtct gcccagtgtc 360
cacattaatg aaggatccat gtttgtagtg agagaaaaaa accccaaggt aacccgatat 420
gatttaggat gcatatcagt tctaacaatt caatcagaag tcaagctcat tggaattcct 480
tttttaactg atccaaatac tagtagaagg gggagggaga ggtgttgggt tttttttaa 540
gtttttattt aattttgttg gttagaattt ttttctgttt ttggcatcct acataatacc 600
ccccttcttg acttttttctg ataattagct gatattcatg gttgnttagc acacagttca 660
ggacctttga gatcatgttt gtataagcac tccttgaaga atatctaagc ttttctgana 720
tgggctttta aaatataatn agggaagtta ttttctgcgg ttttgcaaga ataaccaagc 780
cctggaatta atttttcatt gggganccgat taaaat 816

<210> 3583
<211> 713
<212> DNA
<213> Homo sapiens

<400> 3583
agagtccgcg ccctgcgtcc gcgaccagga ggatcggacc ttcgccttcg ctgtcgccgc 60
cgccgccgcc cgcggccgtc ggggctatta gtgaaagatg gtggatcgct tggcaaacag 120
tgaagcaaat actagacgta taagtatagt ggaaaactgt tttggagcag ctggtcaacc 180
tttaactata cctggacgag ttcttattgg agaaggagta ttgactaagt tgtgcaggaa 240
aaagcccaaa gcaaggcagt ttttcttgtt taatgatatt cttgtatatg gcaatattgt 300
catccagaag aaaaaatata acaaacaaca tattattccc ctggaaaatg tcactattga 360
ttccatcaaa gatgagggag acttaaggaa tggatggcta atcaagacac caactaaatc 420
ttttgcagtt tatgctgcca ctgctacgga gaaatcagaa tggatgaatc atataaataa 480
atgtgttact gatttactct ccaaaagtgg gaagacaccc agtaatgaac atgctgctgt 540
ctgggttcct gactctgagg caactgtatg tatgcgttgt cagaaagcaa aattcacacc 600
tgttaatcgt cgccaccatt gccgcaaatg tgggtttggt ggctgngggc cctgctctga 660
aaagagattc ttcttcccag ccagnccttt aancctggcc ggatttggaa ctt 713

<210> 3584
<211> 666

0050345.0013000

<212> DNA
<213> Homo sapiens

<400> 3584
gtcctaagat ggctgctggg cgaccacttc ctgacagctc cagttaacgg gactgccagc 60
aggctagaca tccttcgccg gaatgtgcag cgcttagttc tgtgcccggg aggggcttct 120
ctctcttttg ggattggagt gtggcattgc cgccagaaag cctgcagaat tccgggttgt 180
gcagccaagc aggaacggtg tacctttcta gacccatcct cttgcaatct tggaccctaa 240
gaaaagatgt ggagtgggct gctacctcct ggcctaaatg aaagtgacgc tgagtcaaac 300
tcggaagatg aagctacgtt ggagaactct ggacttaact tacaggaaga taaagaggat 360
gagagcatca gaaaaacaga aatcatagat ttctcaacag atgaaccaaa aactgaaaca 420
gagtcaaatg taaatgccta tgaagagtgt ccttctggaa ttcccataga tatgtggaat 480
aaatttcaag aattgcataa aaaacattct gaacagaaaa gcacaacctc aagattcaga 540
gggaaaagaa gaaaacgctc cagaaaagat aaattgaaga atgaaaaaga attacatagt 600
gaaccgtcct caatgaaacc agtgggaaga gcttacttag nattttnggg gccatggttn 660
aattta 666

<210> 3585
<211> 781
<212> DNA
<213> Homo sapiens

<400> 3585
atgcgaggct ggggccggtt gcctaccggc cgcttctcgc cgaggcagtc cagacttttc 60
ccccggcggt gcccgctcca agacagcatc tgtcaacgct cctcttctcc cctcctcctc 120
ctgccgggcc gggctccgcc ggctgcggcc gagaggacgc gggacccggc gcggtgagcc 180
catcagctgt caggcgagcg gcgaagcggc tggagggcgg cgagagacac acaaagaacg 240
cggtgggcgg cggcggcgaa aggggacggc aactcctccc cgcgcccgcc ggtgccaccg 300
ccggccgtgc ttgttccgag gccgcgcaga caatgcggcc gggctcgtcc ccgcgtgccc 360
cagagtgcgg agcgcccgcg ctcccccgac cccaacttga ccgtctcccg gctcgcccag 420
ccccctcccg gggtaggggc gcccccctccc tccggtggcc ggcgaaggaa gtcggtccgc 480
ggccgcagat cccggcaact tgcgaaccgg gaaaagtttg cggcgcctcc gcggggcggc 540
gcgacgcgtc ccgcccctcg cgtccgcggt catcgcgggt gactttctcg actcgtcgtc 600
agccggggcc gagcgcggnc ggtggggact gcggggcggg cccggagtcc gtccgaggtc 660
ttccgacctt gggcttgcgg atttcangta cttccacttg ggcattttct cttcatggac 720
ccttatagca accaaaaagt ggtttancaa aacaacccga acatttttg ggatttaatn 780
t 781

<210> 3586
<211> 489
<212> DNA
<213> Homo sapiens

<400> 3586
tgtgaattgg gccagaagat cagagtgnaa tatgngtaat actccaaagt atgctaaatt 60
agaagaaaga acaggatatg gtggtggttt taatgaaaga gaaaatgttg aatatataga 120
aagagaagaa tctgatggtg aatatgatga gttnggacgt aaaacgaaaa aatacnnagg 180
gaaagcagtt ggtcctgcat ctatattaaa ggaagttgaa gataaagaat cagagggaga 240

US 2005/0059030 A1

agaagaggat gaggatgaag atctttctaa atataagtta gatgatgatg aggatgaaga 300
tgacgctgat ctctcaaaat ataatcttga tgccagtgaa gaagaagata gtaatanaaa 360
gaaatctaat agacgaagtc gctcanagtc tcgatcttca cattcacnat cttcatcacg 420
ctcatcctcc ccctcaagtt caaggtctaa gtccaggtcc cgttcaagan gttcttccag 480
ttcgcantc 489

<210> 3587
<211> 819
<212> DNA
<213> Homo sapiens

<400> 3587
gtcccgggtg gaggcggcgg agccggagcc gggggagggg gcagcggctg tctcacggac 60
cacggcggcg cccgcagctc ctcaccgaaa caaggagacc agtgctggtc cagtggctgt 120
gatgggaaaa gattattaca agattcttgg gatcccatcg ggggccaacg aggatgagat 180
caagaaagcc taccggaaga tggccttgaa gtaccaccca gacaagaata aagaacccaa 240
cgctgaggag aagtttaagg agattgcaga ggcctatgat gtgctaagtg accccaagaa 300
acggggcctg tatgaccagt atggggagga aggcctgaag accggcggtg gcacatcagg 360
tggctccagt ggctcctttc actacacctt tcatggggac ccccatgcca cctttgcctc 420
cttctttggt ggctccaacc ccttcgatat cttctttgcc agcagccgct ccactcggcc 480
cttcagtggc tttgacccag atgacatgga tgtggatgaa gatgaggacc catttggcgc 540
tttcggccgt tttggcttca atgggctgag taggggtcca aggcgagccc cagaaccact 600
gtaccctcgg cgcaaggtgc aggacccccc agtggtgcac gagctgcggg tgtccctgga 660
ggagatctac catggcttca ccaagcgcat gaagatcaca aggcgtcgcc ttaaccctga 720
tgggccgaac tgtgcgcacc gaggacaaga tccttgcaca tagtcattaa gcgttggctt 780
gnaaggaang cacccaagat cacctttccc naagaaagg 819

<210> 3588
<211> 664
<212> DNA
<213> Homo sapiens

<400> 3588
aaaaaatcac ccggatggcg gctgcgacgc gcggctgccg gccctggggc tcgctcctcg 60
ggctgctcgg gctggtctcg gccgcggccg ccgcctggga cctggcttcc ctgcgctgca 120
ccttgggcgc cttttgcgaa tgcgacttcc ggcccgactt gccgggtctg gagtgtgacc 180
tggctcagca cctggccggc cagcatctgg ccaaggcgct ggtggtgaag gcgctgaagg 240
cctttgtgcg ggacccagcc cccaccaagc cgctggtcct ctccctgcac ggctggaccg 300
gcaccggcaa atcctatgtc agctccctgc tggcgcacta cctcttccag ggcggcctcc 360
gcagcccccg cgtgcaccac ttttctcccg tcctccactt cccccacccc agccacatcg 420
agcgctacaa gaaggatctg aagagctggg tccaagggaa cctcactgcc tgtggccgct 480
ccctcttcct cttcgatgag atggacaaga tgcccccagg cctgatggaa gtcctgcggc 540
ctttcctggg ctcctcctgg gtggtatacg ggaccaatta ccgcaaagcc atcttcatct 600
tcatcaggtg gggcccggct ttgcagtggg cacaatgcng ggggccactt ttnanaggtt 660
aact 664

<210> 3589
<211> 816

0355050 = 0N2000

<212> DNA
<213> Homo sapiens

<400> 3589
gcgagcctgc gttttccggc cagaggacat gatgcagggg gaggcacacc ctagtgcttc 60
ccttattgac agaaccatca agatgagaaa agaaacagag gctaggaaag tggtcttagc 120
ctggggactc ctaaatgtat ctatggctgg aatgatatat actgaaatga ctggaaaatt 180
gattagttca tactacaatg tgacatactg gcccctctgg tatattgagc ttgcccttgc 240
atctctcttc agccttaatg ccttatttga tttttggaga tatttcaaat atactgtggc 300
accaacaagt ctggttgtta gtcctggaca gcaaacactt ttagggttga aaacagctgt 360
tgtacagact acgcctccac atgatctggc agcaacccaa atccctcccg ctccaccttc 420
cccttcaatt cagggtcaga gtgtgttgag ttatagccct tctcgttcgc ccagtaccag 480
tcccaagttc accaccagct gtatgactgg ttacagccct cagctgcaag gtctgtcctc 540
aggtggcagt ggttcttata gccctggagt gacctactcg cccgtcagtg gttataataa 600
ggtaatgact ctcttctctt gnctagtcac attattttag aattgagagg tatactaaaa 660
atcatctaat gagtcaaaac ttatcantga gcaaactgag agttgatttg cccagaacac 720
ccatttaaaa acccgggaat tgaacatnat atcttaaaca caacatctta aaatggaaag 780
agaaaaaatt tgcntttcc ggagatacca acntta 816

<210> 3590
<211> 828
<212> DNA
<213> Homo sapiens

<400> 3590
ccaagcactt aactttcttt gactgcactg agaattgcta atgatttccc atgagatttg 60
cttacttttg tatactgtat tttccagcat tacagaacct tggttattgt tttttagcca 120
tagaatcttc tagtaaaaaa tatctgccac cattttagat ttaagcattt gcctatgggg 180
agacactgaa tatgtggatg tgtgtattaa tatttggggt ggggacaggg aagggaatgt 240
ggaaaacaaa tgctggctgt gagcagtgct gagatggcca ggccaggcgg ctgagtttgc 300
ttggaaattc aggacattct gactcctaag agttgccccc acccaccatc aaactgaaat 360
cagcaccaat ggtgtcagca ctttacagcc catagccaac tttctttatt tttaacgtag 420
cacaaaaatg tataatagca aggaaaagac atttttaaat tccggttatt tttattgtct 480
aaaatgaaag caacagtgtt ttgataaaga tgaaaaagaa aagctactaa attagtaaat 540
cagtggttac gtgccctgca gaatttctta acagatggtg ctgagtgcac gagttacata 600
actttctctc taattgaggt tcacaaggcg tcttctaaat tttgctttga caattaattc 660
atttctgatg gtaaccaaat agagtgnata tatcctactc ccattactgg ctctttcccc 720
ctactatggc ttgnagattt tcaaaagata gaagtctagg caaaactgtn cagttcatta 780
aaagttggta ggatagtatn tctaaaatca gagatttggt ccctcctt 828

<210> 3591
<211> 769
<212> DNA
<213> Homo sapiens

<400> 3591
ttgtgtgaca actgagggca aagaagggaa aacagaagca aagaaaactg tttcaaaagc 60
cttggaattg ctactgttaa aaggctgcgg ttcatttctg atttcctcat cttttgctac 120

0000000000000000

aaaggaaaaa gaaatccaat gatgtgtcta cctttggtga gaagaaaaca cgagcaacag 180
cagtgtagtt tcgaaagtca ttgtgcagag agggcaggag tgaattaagg ccccggggac 240
cgcggacgcc tggccaggag accgcctgaa atatgagccg aacctgtttt gcagaaactg 300
caggctgttc agaatccaat tctctggata ttggcatgct acattcaatg tccagctaca 360
ttaagtgtcc atctatcaaa atactagatt tcatggctgg agcaggaaaa gttatgagct 420
tggaatatct tcagtgcctg aaagtgagga agtgctccca aaaatatgaa ggcctgtcaa 480
aagggagaga acaagaagga ggaggagcta gaaaaagaaa aagcagtggg aactgtcatg 540
ggtgaatccc agaatgggca tcccagatga catctgtctc cattcctgcc atctcttcct 600
ggctgccagc cacttagcct ccaggtgttt gtgtctaagg ccaactctct ttccagacta 660
gaagaaagtg aggcagctca ccttttcatt tangtttact ttggaaagtt ctgtggttga 720
atatcaacat agtgactgat ttggnggctt gtaaagcttg tacagctna 769

<210> 3592
<211> 789
<212> DNA
<213> Homo sapiens

<400> 3592
aagtgctctc ctgacccgcc gctgtgcagc gcagcgcacc gcgggaagat ggcgttggag 60
gtcggcgata tggaagatgg gcagctttcc gactcggatt ccgacatgac ggtcgcaccc 120
agcgacaggc cgctgcaatt gccaaaagtg ctaggtggcg acagtgctat gagggccttc 180
cagaacacgg caactgcatg tgcaccagta tcacattatc gagctgttga aagtgtggat 240
tcaagtgaag aaagtttttc tgattcagat gatgatagct gtctttggaa acgcaaacga 300
cagaaatgtt ttaaccctcc tcccaaacca gagcctttc agtttggcca gagcagtcag 360
aaaccacctg ttgctggagg aaagaagatt aacaacatat ggggtgctgt gctgcaggaa 420
cagaatcaag atgcagtggc cactgaactt ggtatcttgg gaatggaggc cactattgac 480
agaagcagac aatccgagac ctacaattat ttgcttgcca agaaacttag gaaggaatct 540
caagagcata caaaagatct agacaaggaa ctagatgaat atatgcatgg tggcaaaaaa 600
atgggatcaa aggaagagga aaatgggcaa ggtcatctca aaaggaaacg acctgtcaaa 660
gacaggctag ggaacagacc agaaatgaac tataaaggtc gatacgagat cacagcggaa 720
gattctcaag aaaaagtggc tgatgaaatt cantcagggt acaggaccaa naaagactga 780
tancccagt 789

<210> 3593
<211> 719
<212> DNA
<213> Homo sapiens

<400> 3593
cttcaggaga ggatctgtaa gagtacacaa acagagtgag ccattgccat agaatattct 60
cttgacagga ccctagctca taaacatttc ttcagaacta tacttcaaat gggatgcttt 120
gtattaaaac tttaataaat ttaatttatt ttttcttttg aatataaata actgagctta 180
agcattatca tcatatcgat ttcttatgct gcctaaacct cttaatttta gtcgaaatat 240
atctttttt ttttttggag gcggaatttc attcttgttg cccaggctgg agtgcaatgg 300
cacggtctcg gcttaccgca acctccgcct cccgggttca ggcggttctc ctgcctcgga 360
ctcccgagta gctgggacta caggcatgtg ccactacgcc cggctaattt tgtattttta 420
gtagggacag ggtttctcca tgttggtcag gttgctctca aactcccaac ctcaggtgat 480
ctgcccgcct cggcctccca aagtgctggg attactgagc cactgtgccc agcccaaaat 540

0050469-070800

gtatcttata caaacattgt anaaatgaat aatgattact caaataagat cttttaatta 600
taagcttctg gcatctctat ttttccctta agtaggggat actaaagnga atgattttct 660
aagaggatct tttgaaactc tttagncaat attngagtaa aataaattat tgggggatc 719

<210> 3594
<211> 841
<212> DNA
<213> Homo sapiens

<400> 3594
gaaaggtcac agcgcggcag cgggtctggc tggcggcagc ggcgggaggg agccgagaga 60
cccgagtgca cgtgtggaga agcggcggca caagcgcggc ggcgggagac actcccgccc 120
ccaccagact caagccctca ctcgactctc gcggccttcg ttgctcgcac agctccctgc 180
ccaggctagg aggccggctt gcggggttga gtggcccgag ctaagggtgc ggagacctaa 240
gggcggcgac tacgacggcg ttgatatcgg tggtaacgac ggcctcagca ggcggggaag 300
atgaaaggta gccggatcga gctgggagat gtgacaccac acaatattaa acagttgaaa 360
agattgaatc aggtcatctt tccagtcagc tacaatgaca agttctacaa ggatgtgctg 420
gaggttggcg agctagcaaa acttgcctat ttcaatgata ttgctgtagg tgcagtatgc 480
tgtagggtgg atcattcaca gaatcagaag agactttaca tcatgacact aggatgtctg 540
gcaccttacc gaaggctagg aataggaact aaaatgttaa atcatgtctt aaacatctgt 600
gaaaaagatg gtacttttga caacatttat ctgcatgtcc agatcagcaa tgagtcggca 660
attgacttct acaggaagtt tggctttgag attattgaga caaagaagac tactatnaga 720
ggatagagcc cgcagatgct catgtgctgc agaaaaacct caaagttcct tctggtcana 780
atgcaatgtg caaaagacag acaactggac aaattacaaa tgaactttnt tgccttgctt 840
g 841

<210> 3595
<211> 826
<212> DNA
<213> Homo sapiens

<400> 3595
ttctttgaat tccggaggcg gcattcggtg gtcagaggcc tgtgcggctg caggtagagt 60
gtcttaggaa cctaggaaat aactcggaac ctgtaacgtc ccactggttt ggacatattc 120
ctctcctgat ctggcctcat ctgttccagg gaggtgggat tgaaacatat gcagtaatgt 180
cacctcaaaa gagagttaag aacgtccagg cacaaaacag gacttcacaa ggtagtagta 240
gttttcagac cacgctttca gcctggaaag taaaacagga tccaagcaac tcgaagaaca 300
tctcaaaaca tggacaaaac aatccagtgg gagattatga acatgctgat gatcaagctg 360
aagaagatgc tttgcaaatg gcagtgggat attttgagaa aggtcccatt aaagcttcac 420
agaataaaga taaaaccttg gaaaaacact tgaaaactgt ggaaaatgtg gcttggaaga 480
atgggttagc ttcagaagaa attgatattc tattaaatat tgcactcagt ggcaaatttg 540
gaaatgctgt aaacacacgg atattgaagt gcatgatccc agcaacagta atatcagaag 600
attctgtggt taaggcagtc tcctggcttt gtgttggcaa gtgttctggt agcaccaagg 660
tacttttta tcgntggctg gntgcaatgt ttgacttcat tgatcgtaag gagcaaatta 720
acttgctcta tggcttcttt tttgcttcat tgcaggatga tgcactgngc ccttatgttt 780
ggcatttggt atattacttc ccaaaaagag aatgtnaanc ctttcg 826

<210> 3596

09/05/2003 10:03:56

0050250.000200

<211> 781
<212> DNA
<213> Homo sapiens

<400> 3596
agggtcacaa gggagatgtc cgcccccagt cgtagcctcg gacggtttct gagcgttggt 60
gtttggcacg cgccaccctc tcttgctttg gttccgccat gccgatgtac caggtaaaac 120
cttatcacgg gcgcggcgcg cctctccgtg tggagcttcc cacctgcatg taccggctct 180
ctaacgtgca aggcaggagc ggcggcccag cgcccggcgt tggccaccta cagtctttgg 240
tagatgagtg gctggatagc tacaagcaag accaggatgc aggatttctg gagcttgtta 300
acttttttcat ctgatcttgt ggatgtaaag gactcggggg actatcctct gacagctcca 360
ggtctatcct ggaagaagtt ccagggcagc ttctgtgagt ttgtggggac attggtctgt 420
cggtgccagt acatcctcct ccatgatgac ttccctatgg acaacctcat ctccctgctc 480
actggcttct cagactcaca agtctgcgcc ttctgtcaca ctagcaccct ggctgctatg 540
aaactgatga cctccctggt aagagttgcc ctccaactga gtctgcacca agatatcaat 600
cagcgtcagt atgangctga aagaaacaag gggccagggc agaaggcacc tgancggntg 660
gagaagcctg ttggagaaac acaaagagct gcattaatac tacattgtca aagacaaaga 720
cgaacatgag acatgcgata tgagttttaa aaggagagaa gagcnnaaaa accattcagn 780
t 781

<210> 3597
<211> 759
<212> DNA
<213> Homo sapiens

<400> 3597
ggtgaatggg ctggtggtgc tcgctgctgc tgctgagagg aggaggagga tgaagagttg 60
ggcttgtttg tctcctcctc ctcctgcttc ccctgctcag agttcctgcc tccagctgcc 120
aggggggaca gccagccagc agcaggaggg gggctagaga gctgaaggag agccagtttc 180
cccaaaattg gacttctcag aacctttaat atgctaatgt gcattgtgaa tctccaagag 240
ggggatatga tatgcagcat tcttgaatac ttctaatgac agggagccca ctacctcata 300
agctgcagtg agaagaggag tttgttactt taaacagagg ctgaagaaac tatagaatta 360
gcagagaaag tggagaaggt agaggatgga gttgcagact ctacaggagg ctcttaaagt 420
ggaaattcag gttcaccaga aactggttgc tcaaatgaag caggatccac agaatgctga 480
cttaaagaaa cagcttcatg aactccaagc caaaatcaca gctttgagtg agaaacagaa 540
aagagtagtt gaacagctac ggaagaacct gatagtnaag caagaacaac cggacaagtt 600
ccaaatacag ccattgccac aatctgaaaa caaactacaa acagcacagc agcaaccact 660
acagcaacta caacaacagc agcagtacca ccaccnccac gcccagcagt cagctgcagc 720
ctnttnccaa cctgactgct tacagaagac tgtaactac 759

<210> 3598
<211> 357
<212> DNA
<213> Homo sapiens

<400> 3598
agccgccaca ctttcccaag cccgcaggcg ccccccccaa caccagcgct gcaccccga 60
cccattcccc gcgggcccct ccaggagaaa aaatgaaacc agactggccg aggaggggg 120

cggcagggac cagggtgcgg agcagaggtg agggagacgg gacttacttt gcgaggctcg 180
gtgcagggcg ccgccgacga gaaataaagg ccccgatacg ggctgcctgg agccccccga 240
gcgcagcaat gtcagggctc cagtccgggc ggcgttggcg gncgcagggg acggggacgg 300
gcgcgcgtgc ngcgggcgct ctcgctgcgc tccggctcgg gccccggntc cgcgcgg 357

<210> 3599
<211> 659
<212> DNA
<213> Homo sapiens

<400> 3599
ncggagggaa ggaaggaaga gagggaggcg ggcaagcagg cgggcgcggg ggtcggggac 60
tgaggcagta gagggaggcg agagcccggc agccgcttcg cgctgtttgc tgcgcgggct 120
tttggagggg gcggccgttt agtcggctga ggagaagcgg acaccagcgg cgttggtgat 180
agcgcctggg ggaggggggac tggagaggcg agaaggggggg tcgctgcggt ggttctctcg 240
ctgtcgctct ctctttgcct cgctcccggc tcggcgggct cctcccggcg tctctctcgc 300
ctccggggtc ccgctccccg ccccccgcgg tatgtcttga tcccgagcag cgggtttcat 360
ggggctcctc aggattatga tgccgtccaa gttgcagctg ctggcggtgg tggccttcgc 420
ggtggcgatg ctcttcttgg aaaaccagat ccagaaactg gaggagtccc gctcgaagct 480
agaaagggct attgcaagac acgaagtccg agaaattgag cagcgacata caatggatgg 540
ccctcggcaa gatgccactt tagatgagga agaggacatg gtgatcattt ataacagagt 600
tcccaaaacg ggaagcactt catttaccaa tntcgnctat gancctgtgt gcaaagaat 659

<210> 3600
<211> 778
<212> DNA
<213> Homo sapiens

<400> 3600
tcggaactcg ccaggggcgc cgccggcggc ggagggagcg tgactgcgct gcgcagggcg 60
ctaggaggca ttgtcgccgc tcaggccctt ttgtgagaag cagaccagcc tgggggctgg 120
cggcaggaca cctgtgtctg catgctgaag aagatgggtg aggccgtggc cagagtagca 180
aggaaggtca acgagacggt ggagagcggc tctgacactc tggacctggc cgagtgcaag 240
ctggtctcct ttcccattgg catctacaag gtcctgcgga atgtctctgg ccagatccac 300
ctcatcaccc tggctaacaa cgagcttaag tccctcacca gcaagttcat gaccacattc 360
agtcagctcc gagatgtgcc cgtggagaag ctggccgcca tgccagcctt gcgcagcatc 420
aacctccgct tcaacccact caacgccgag gtgcgcgtga tcgccccgcc gctcatcaag 480
tttgacatgc tcatgtctcc ggaaggcgca agagcccccc taccttaggc caccctcctc 540
atgcccaccc agcaagggac agaggccaca ggcctggaac cctggaaggg agggaggccc 600
atgggaggcc aagcctgggg gctgggggcg ggtgggccga gcacnacgtg gtgggtgggg 660
tgcaactggt ctggatagat agcttacagc agtagtgggc tctggaatgc ccaaagggaa 720
gaagcaaggt gggggcctgc aancccngac ttngggactt aacaagcttg cttggtgc 778

<210> 3601
<211> 767
<212> DNA
<213> Homo sapiens

0020050053 - 09-03-2005

<400> 3601
agtgctagga acctgcgccc ggctgagctg agcgaggcga gaggagaaag cgaggcccgg 60
ggacgggact gagagctctg aaaggaggga ggcggctccc gagtactccg cgccgggcag 120
gccccggcct cgcctgttcg cccattttta aggctcgagt tagaggccac ctcctccgag 180
aagccttcgg tgacaccacc tctcccagac ggttcccctt tctgattccc acagcatttt 240
ccaaccattc acggtcagaa ccactcacca ggacgtgttg tcaccatttt accgctttgc 300
ctcgtctctt aactagacga atgggttcc ttttggctct ttggaaaggg aggctgtctt 360
ctatttattt ccgtggtaat cccacctccc acaacaagtt ccattctaca gcaatgtctt 420
ttctcttgct gagaaccatt caagtctaag ttttctgtcc tggttgctca tctcgcccac 480
ttgcacagcc cacctgtgtg gccgactcag gattgaccca cctgctctct tcaggccata 540
ttcccacgca gaagtgggtc ccactcctca ggcctctgtg ctggccccgt ctgtggggtt 600
agcaagcagc cctgctctnc atttccagct cagaagcaac tggatcgtta cctcattggt 660
gacaacttga cttgtgctgc caaaacttga tangaaacat tacccggggg aaaaccactt 720
gcttttcctt ggttnctaat cagggtggga aanactggta aattttt 767

<210> 3602
<211> 714
<212> DNA
<213> Homo sapiens

<400> 3602
atatttatgt caatctggct acttttctag tatgttcagt ggttcttgga aagaatccag 60
catgaatatt attgaactgg agattcctga ccagaacatt gatgtagtag cactgcaggt 120
tgcatttggt tcactgtatc gagatgatgt cttgataaag cccagtcgag ttgttgccat 180
tttggcagca gcttgtttgc tgcagttgga cggtttaata cagcagtgtg gtgagacaat 240
gaaggaaaca gttaatgtga aaactgtatg tggctattac acatcagcag ggacctatgg 300
attagattct gtaaagaaaa agtgccttga atggcttcta aacaatttga tgactcacca 360
gaatgttgaa ctttttaaag aactcagtat aaatgtcatg aaacagctca ttggttcatc 420
taacttattt gtgatgcaag tggagatgga tatatacact gctctaaaaa agtggatgtt 480
ccttcaactt gtgccttctt ggaatggatc tttaaaacag cttttgacag acacagatgt 540
ctggttttct aaacagagga aagattttga aggtatggcc tttcttgaaa ctgaacaagg 600
aaatccattg ggtcagtatt cagacattta aggttacaat atattatcag tgatctggct 660
tctgccaaga attattggac caagaatctg gnantacctt canaaatggc tcct 714

<210> 3603
<211> 712
<212> DNA
<213> Homo sapiens

<400> 3603
gaataagctg aaggccatca aagcccggaa tgagtacttg ctggctttgg aggcaaccaa 60
tgcatctgtc ttcaagtact acatccatga cctatctgac cttattgatt gttgtgactt 120
aggctaccat gcaagtctga accgggctct acgcaccttc ctctctgctg agttaaacct 180
ggaacagtcg aagcatgagg gtctggatgc catcgagaat gcagtagaaa acctggatgc 240
caccagtgac aagcagcgcc tcatggagat gtacaacaac gtcttctgcc cccctatgaa 300
gtttgagttt cagccccaca tgggggatat ggcttcccag ctctgtgccc agcagcctgt 360
ccagagtgag ctggtacaga gatgccaaca actgcagtct cgcttatcca ctctaaagat 420
tgaaaacgaa gaggtaaaga agacaatgga ggccaccctg caaaccatcc aggacattgt 480

0950f8a3-0202-4000

gactgtcgag gactttgatg tgtctgactg cttccagtac agcaactcca tggagtccgt 540
caagtccacg gtctctgaaa ccttcatgag caagcccagc attgctaaga ggagagccaa 600
ccagcaagag acagagcagt tttatttcac aaaaatgaaa gagtcctgga nggcaggaac 660
cttatnacca agttacaagc caagcatgac ctttttgcan aaaaacctgg ga 712

<210> 3604
<211> 732
<212> DNA
<213> Homo sapiens

<400> 3604
aaaaaaaaaa agcgggtgct gcttgctgca ggctctgggg agtcgccatg cctacaacac 60
agcagtcccc tcaggatgag caggaaaagc tcttggatga agccatacag gctgtgaagg 120
tccagtcatt ccaaatgaag agatgcctgg acaaaaacaa gcttatggat gctctaaaac 180
atgcttctaa tatgcttggt gaactccgga cttctatgtt atcaccaaag agttactatg 240
aactttatat ggccatttct gatgaactgc actacttgga ggtctacctg acagatgagt 300
ttgctaaagg aaggaaagtg gcagatctct acgaacttgt acagtatgct ggaaacatta 360
tcccaaggct ttacctttg atcacagttg gagttgtata tgtcaagtca tttcctcagt 420
ccaggaagga tattttgaaa gatttggtag aaatgtgccg tggtgtgcaa catcccttga 480
ggggtctgtt tcttcgaaat taccttcttc agtgtaccag aaatatctta cctgatgaag 540
gagagccaac agatgaagaa acaactggtg acatcagtga ttccatggat tttgtactgc 600
tcaactttgc agaaatgaac aagctctggg tgccaatgca gcatcagggg acatagcccg 660
agatngagaa aaangagaac gaagaaagac aaggaactgg agaaattttt agtggggaaa 720
caaaattttg gn 732

<210> 3605
<211> 744
<212> DNA
<213> Homo sapiens

<400> 3605
gaaagtgtgt gaaattcatt ttcatgaaat caacaacaaa atggtggaat gtaagaaagc 60
tcagccaaag gaggtgatgt cgccaacggg ctcagcccgg gggaggtctc gagtcatgcc 120
ctacggaatg gacgccttca tgctgggcat cggcatgctg ggttacccag gtttccaagc 180
cacaacctac gccagccgga gttatacagg cctcgccccc ggctacacct accagttccc 240
cgaattccgt gtagagcgga ccccctctccc gagcgcccca gtcctccccg agcttacagc 300
cattcctctc actgcctacg gaccaatggc ggcggcagcg gcggcagcgg ctgtggttcg 360
agggacaggc tctcaccccc ggacgatggc tccccctcca ggttcgactc ccagccgcac 420
agggggcttc ctggggacca ccagccccgg ccccatggcc gagctctacg gggcggccaa 480
ccaggactcg ggggtcagca gttacatcag cgccgccagc cctgccccca gcaccggctt 540
cggccacagt cttgggggcc ctttgattgc cacagcctta ccaatgggta ccactgaagc 600
aggggacggt ggcaggagcg ccccaacctg caactgactg aggaccacga gtgagccaac 660
gaggggggcgg gagacctnac cgcagccgnc gcccttcccc gcaacgactt ggacccgnta 720
ctgctgccca acttcccggc ccgg 744

<210> 3606
<211> 833
<212> DNA

0050250.0050950

<213> Homo sapiens

<400> 3606
gcggcttccg gcggcgtgac ctgaccgcaa gaggccaatg gagtgtggga gctgaaaggg 60
tcttcgctgg cggccggtaa ctggcggcgg ttgggaacgg ccgagtgtgg ctcttctggt 120
gtttcagctt ggggagagag gggtggcctt cctcttgcag ttgaggccgg cgccgagccg 180
gacttcaggc ggatctcgtg gcggagccca tcttgctccc tctcccaggc ctttacccgc 240
tccctaggat tcccgggccc tgtaggtggg agttgggaga cgacagtact gcttttaaag 300
agacagtgtt agggatcttg gaagcacagc caacatgtgt gacattgaag aagccactaa 360
ccaactccta gatgtgaacc ttcatgagaa ccagaagtct gtacaagtga cagaaagtga 420
cctcggaagt gaatctgagc ttctagtcac tattggagcc actgtaccta ctggctttga 480
gcaaacagct gcagatgaag tcagagagaa acttgggtca tcatgcaaaa tcagcagaga 540
ccgtggcaag atatattttg tcatttcagt ggaaagtctg gcacaggttc attgtctgag 600
atcagttgat aacttatttg tggtggttca ggagtttcaa gattaccagt tcaaacaaac 660
aaaggaagaa gttctaaagg attttgaaga cttggctgga aaactccatg gtcaaacccc 720
ttaaaagtgt ggaaaattaa tgccagtttt aaaaagaaaa aagcaagcgc aaaaagatna 780
atcagaattc aagtaaggag aagattaatn atggncaaga agtcaaaatc atc 833

<210> 3607
<211> 823
<212> DNA
<213> Homo sapiens

<400> 3607
attgctggtt caaatggtag ttctgtttta acttctttga gaaatctcca aactgctttc 60
acagtggctg aactaatttg catttccatc agtgtaggcg cattctacac tgcactggct 120
tctacagtgt tgaagcattc cgtttttccc acagcctcac cagcatctgt tatttttttg 180
acttttttgat aatagccatt ctgactggtg tgagattgta actcattgtg gttttgattt 240
gcatttatct gattagtaat gttgagcatt ttttcatgtt tgttaaccgc ttgtatgttg 300
tcttttgaga agtgtctgtt caagtctttt ggcatttttt taatgggttt ttgtttgtgt 360
gtgtgtattt ttgtttttgt ttttgttttg agatggagtt tcactgttgt cacccaggct 420
agagtgcaat ggcaccatct cagctcactg caacctccac ctcccgggtt caagcgattc 480
tcctgcccca gcctcctgag ttgctgggat tacaggtgcc tgccaccaag cgtggctaat 540
tttggtactt ttagtagaga cagggtttca ccatgttggc cagcctggtc tcgaattcct 600
gacctcaggt gatccaccca tctcagcctn ccaaagtgct gggattacag gagtgagcca 660
ccacacctgg cccgagttac ttggttttcg tttctgaatt ggtttaattc cttatagatt 720
ttggacatta gacctttttc agatgcccag tttgggaata tctctccatc tgtaggtgct 780
gntactggat tgaagtcctt ttgcgggcaa aactcttant tga 823

<210> 3608
<211> 737
<212> DNA
<213> Homo sapiens

<400> 3608
aaaaaatgca gacgggatag gggtgtgtgt gtgaggggag ggggcctgta tggcaactgc 60
tcttgcccca gcgtccccaa aagtgcagag gcagcggctg cagcatccag ccagcttgga 120
tgtctggcct acttccagga ctctgaagaa acagttacaa gcaggatgct tttcccaacc 180

0050450.0007000

tctgcgcaag aatcttcccg tggcctccca gatgcaaatg acttgtgcct tggcctgcag 240
tccctcagtt tgacaggctg ggaccgaccc tggagcaccc aggactcaga ttcctcagcc 300
cagagcagca cacactcggt actgagcatg ctccataacc cactgggaaa tgtcctagga 360
aaaccccccc tgagcttcct gcctctggat ccccttgggt ctgacttggt ggacaagttt 420
ccagcaccct cagttagagg atcacgcctg gacacccggc ccatcctgga ctctcgatct 480
agcagcccct ctgactcaga caccagtggc ttcagctctg gatcagatca tctctcagat 540
ttgatttcaa gccttcgcat ttctccacct ctgcccttct gtctctgtca gggggtggtc 600
ccagagaccc tttaaagatg ggggtagggt ctcggatgga ccaagagcaa gctgctcttg 660
ctgcagtcac ttccttccca accagtgctt caaagagatg gccaggagct tctgtgtggn 720
catnctggga cctcttn 737

<210> 3609
<211> 832
<212> DNA
<213> Homo sapiens

<400> 3609
gtgcatgagg gggctgctcc ggagcgacgg cggctgcagc tggagccagg cgctcgcccg 60
tccgccggtt ggctcgccgg gacctcgcgc accggcggca gagtcccttg cgtggattgg 120
caagcgacgc cccacctgcc ccgagctcac cattttcttt cgcgctggct gcagctgacc 180
cggcgaaggg agccgaccgg gccctgggct ggaggtaaaa ccccacggaa agaacatgag 240
gttcccttgg aaatcattca agaggaagat ggaaggggct gtttagaaga gcttaaaagc 300
tacaggctgt aagactgggg cctgagtgct ggcagtggaa aacactgttg ggctgtgatc 360
tctccctgaa aagttccagg tgccttttg cttcctgcaa aagaaaggaa gcgaaagaga 420
agaccatgtc catagccctg aagcaggtat tcaacaagga caagaccttc cgacccaaga 480
ggaaatttga acctggcaca cagaggtttg agctgcacaa acgggctcag gcatccctca 540
actcgggtgt ggacctgaag gcggctgtgc agttgcccag tggggaggac cagaatgact 600
gggtggcagt acatgtggtg gacttcttca atcggatcaa cctcatctat ggcaccatct 660
gtgagttctg caccgagcgg acctgtcctg tgatgtcaag gggccccaaa tatgagtatc 720
ggtggcagga tgatctcaag tntaagaagc caacancgct tgccagcttc ccagtacatg 780
aaccttctta tggattggat tgaggttcan atcaacaacc agggaaatat tt 832

<210> 3610
<211> 836
<212> DNA
<213> Homo sapiens

<400> 3610
cagagaattg cttttctaga tttgatggag ggaggggggag agtcacatca tttggattct 60
accaatctgc aggctctatc tttggcaaca tgtaaataat tagactatac atctgtttct 120
caagtatggc aagaccaata gtttgaattt aattatcaat gctatggtat actttctggt 180
catattttag ttatgtcagt tttaaggtaa gtttttttcat ttattaaagc ccttaaatga 240
gattttagac tgccaaagag aagaggcagt ccaattgacc taactgaaat gagatgacca 300
gtatatagag cctagatgga ctgtagcagc tctacccctt tgttttacaa ggtaaatcat 360
tttaaaaatt acctttttttg atcagtgggt aaaagttaaa gggatcttta atttttgata 420
tattcaagtt aattttctaa atgtgaatca gtccttggac tgcaactata tattcaccta 480
caaaatccca atcaaaaaat tacatgagcc tgtcaagcag atctttagtt ttccacttca 540
cacaagatcg ttaatgttct aaattaatct attcacttag atgatttttg tcagttctta 600

0952950-0002

aatgggatat aataaattta gcattttcat cttaacaagc aaaagagtta aaaaacaaaa 660
caaacactac tccaagccaa atacattcta nctgggtaat tccagacttg tcccaagtgg 720
ttccccaacc tcttttncac tggtaatttc ttttcatgca ggcagaatat aggggtgcca 780
accctgtgag ttttacatat gaacttggat aggggaacct gaacccagtc aggaac 836

<210> 3611
<211> 797
<212> DNA
<213> Homo sapiens

<400> 3611
agagtgctga tttagaagaa tacaaatcat ggctgaaaat agtgtattaa catccactac 60
tgggaggact agcttggcag actcttccat ttttgattct aaagttactg agatttccaa 120
ggaaaactta cttattggat ctacttcata tgtagaagaa gagatgcctc agattgaaac 180
aagagtgata ttggttcaag aagctggaaa acaagaagaa cttacaaaag ccttaaagga 240
cattaaagtg ggctttgtaa agatggagtc agtggaagaa tttgaaggtt tggattctcc 300
ggaatttgaa aatgtatttg tagtcacgga ctttcaggat tctgtcttta atgacctcta 360
caaggctgat tgtagagtta ttggaccacc agttgtatta aattgttcac aaaaaggaga 420
gcctttgcca ttttcatgtc gcccgttgta ttgtacaagt atgatgaatc tagtactatg 480
ctttactgga tttaggaaaa aagaagaact agtcaggttg gtgacattgg tccatcacat 540
gggtggagtt attcgaaaag actttaattc aaaagttaca catttggtgg caaattgtac 600
acaaggagaa aaattcaggg ttgctgtgag tctaggtctc caattatgaa gccagaatgg 660
atttataaag cttgggaaan gcggaatgaa caggatttct atgcagcagt tgatgctttn 720
gaaatgaatt taaagttcct ccatttcaag aatggatttt tagnttcctg ggattttcag 780
atgaagagaa aacccnt 797

<210> 3612
<211> 686
<212> DNA
<213> Homo sapiens

<400> 3612
actggttcgc cgcggggacc gggcagggct ccccgtcgga gtgcactgcg ccggacactt 60
caagccctgg agggacagga aagccagaaa tggacttcgt gagactcgct cgactgttcg 120
ccagggcccg ccccatggga ctgttcatcc tgcaacacct ggacccctgt agagccaggt 180
gggcaggagg cagggagggg ctgatgcggc cagtgtgggc gcccttcagc agctcctcct 240
ctcagctgcc cctcggccag gagcgtcagg aaaacacggg cagcctgggc tctgacccga 300
gccactccaa ctccacggcc actcaggaag aagacgagga ggaggaggag agttttggga 360
ccctctctga caaatactcc tcccggagac tattccgcaa atccgcagcc cagttccata 420
acctgcggtt tggggaacgg agagatgagc aaatggaacc ggagcccaaa ttatggcgag 480
gccggagaga caccccgtac tggtacttct tgcagtgcaa acacctgatc aaggaaggga 540
agctggttga agccctggac ctgtttgaga ggcagatgct gaaggaggag cgattgcagg 600
ccatggagag caactacacg gtgctgattg ggggctgcng gcgggttggc tacctgaaga 660
angncttcaa cctctacaac caagat 686

<210> 3613
<211> 792
<212> DNA

09825369.1 09825369

<213> Homo sapiens

<400> 3613
aaaactcagc tatgcaaagc aactcaggaa tctttcaaag aagtaccaac ctaaaaagaa 60
ctcgaaggag gaagaagaat acaagtatac gtcatgtaaa gctttcattt ccaacctgaa 120
cgaaatgaat gattacgcag ggcagcatga agttatctcc gagaacatgg catcacagat 180
cattgtggac ttggcacgct atgttcagga actgaaacag gagaggaaat caaactttca 240
cgatggccgt aaagcacagc agcacatcga gacttgctgg aagcagcttg aatctagtaa 300
aaggcgattt gaacgcgatt gcaaagaggc ggacagggcg cagcagtact ttgagaaaat 360
ggacgctgac atcaatgtca caaaagcgga tgttgaaaag gcccgacaac aagctcaaat 420
acgtcaccaa atggcagagg acagcaaagc agattactca tccattctcc agaaattcaa 480
ccatgagcag catgaatatt accatactca catccccaac atcttccaga aaatacaaga 540
gatggaggaa aggaggattg tgagaatggg agagtccatg aagacatatg cagaggttga 600
tcggcaggtg atcccaatca ttgggaagtg cctggatgga atagtaaaag cagcccgaat 660
caattgatca gaaaaatgat tcacagctgg taatagaagc ttataaatca nggtttgagc 720
ctnctggaga cattgaattg aggattacac tnagcccatg aacgcactgt gtcagataca 780
gcctttcaat tc 792

<210> 3614
<211> 715
<212> DNA
<213> Homo sapiens

<400> 3614
ccagagccca gacttgcagg ctcacggtgc agggtgaacc tggccacagc tcaccctgga 60
acagccacaa tgtctgcccc ttagagaaga accctgaaat cagaccagtt tttgcggcct 120
ccccctttcc tctctgttac agtgcccttt ccaggcctta agagaagtaa aacttagctg 180
cagcgtcagg aggtggaccc cagagtgtga gtggcacgct tccctgtgaa cccgtcctca 240
ccatgtttgc cacatctggg gcagtggcag cggggaagcc ttactcgtgc agcgaatgtg 300
gcaagagctt ctgctacagc tcagtgctgc tgcgacatga acgagctcac ggcggtgacg 360
gccgcttccg ttgcctagaa tgcggtgagc gctgtgcacg ggctgctgac ctccgagcgc 420
acaggcgcac gcatgctggc cagaccctct acatctgcag tgagtgcgga caaagcttcc 480
gccacagcgg ccgtcttgac ctacacttgg gcgcacaccg gcagcgatgc cgcacttgcc 540
cctgccgcac atgcggccgg cgcttcccgc acctcccggc gctgctgcta caccggcgcc 600
gccagcatct gccagagcgg ccccgccgct gcccgctgtg cgcccgacct ttcggcanaa 660
cgcgctgtct ttcaccangc gcgggcgcac cccttgggga caacctntga ccttg 715

<210> 3615
<211> 733
<212> DNA
<213> Homo sapiens

<400> 3615
aactattaca tattgcggcg tcacagggac acgcagagtg tctacagcac ctcacttctt 60
tgatgggaga agactgcctc aatgagcgca acactgagaa gttgactcca gcaggcctgg 120
ccattaagaa tggtcagttg gagtgcgtac gctggatggt gagcgaaaca gaagccattg 180
cagaactgag ttgttctaag gattttccaa gccttattca ttacgcaggt tgctatggcc 240
aggaaaagat tcttctgtgg cttcttcagt ttatgcaaga acagggcatc tcgttggatg 300

0960456-070800

aagtagacca ggatggcaac agtgccgttc acgtagcctc acagcatggc taccttggat 360
gcatacagac cttggttgaa tatggagcaa atgtcaccat gcagaaccac gctggggaaa 420
agccctccca gagcgccgag cggcaggggc acaccttgtg ctccaggtac ctggtggtgg 480
tggagacctg catgtcgctg gcctctcaag tggtgaagtt aaccaagcag ctaaaggaac 540
aaacagtaga acgtgtcacg ctgcagaacc aactccaaca atttctagaa gcccagaaat 600
cagagggcaa gtcactccct tcttcaccca gttcaccatc cccacctgcc ttcagaaagt 660
cccagtggaa atctncagat gcagatgatg attcttgtac caaaagcaag ccaggagtnc 720
aagangggat tca 733

<210> 3616
<211> 860
<212> DNA
<213> Homo sapiens

<400> 3616
atgagagaga tgttgttgca cagcaggaat ccattttggc tttggaaaaa ttccctactc 60
cagcatctcg gcttgcactc actgatatat tagaacaaga gcagtgtttc tacagagtaa 120
gaatgtcagc ttgcttctgt cttgcaaaga ttgcaaattc aatggtgagc acatggacag 180
gaccaccagc catgaagtca ctcttcacta ggatgttttg ttgtaaaagt tgtccaaaca 240
ttgtgaaaac aaacaacttt aagagctttc aaagctattt tctacagaag actacgccag 300
ttgcaatggc tttattaaga gatgttcata atctttgtcc taaagaagtc ttaacattta 360
ttttagactt aatcaagtac aatgacaaca ggaaaaataa gttttcagat aactattatc 420
gtgcagaaat gattgatgcc ctggccaact ctgttacacc tgcagtcagt gtgaataatg 480
aagttagaac tttggataac ttaaatcctg atgtgcgact cattcttgaa gaaatcacca 540
gatttttgaa tatggaaaaa cttcttccga gttacaggca taccatcact gtcagttgtt 600
tgagagccat acgggtactt cagaagaacg gacatgtgcc aagtgatcca gctcttttta 660
aatcttatgc tgaatatggc cactttgtgg acattaggat agcagctttg gaagcagttg 720
gtgattatac taaagtgggc cagaagttat gaagaactgc aattggctac ttaatatgat 780
tcaanaatga ccctgtaccc tatggtaagg cntaagatct tnaacatggt ggacttagaa 840
cccaccattt acttaagaac 860

<210> 3617
<211> 712
<212> DNA
<213> Homo sapiens

<400> 3617
gtgcaatttg tagaggctgc agcacacgag agtgaacagc agaaagaggc ttcttggaaa 60
cataaccagg aattgcgaaa agccttgcag cagctacaag aagtattgca gaataagagc 120
caacagcttc gtgcctggga ggctgaaaaa tacaatgaga ttcgaaccca ggaacaaaac 180
atccagcacc taaaccatag tctgagtcac aaggagcagt tgcttcagga atttcgggag 240
ctcctacagt atcgagataa ctcagacaaa acccttgaag caaatgaaat gttgcttgag 300
aaacttcgcc agcgaatacg tgataaagct gttgctctgg agcgggctat agatgaaaaa 360
ttctctgctc tagaagagaa agaaaaagaa ctgcgccagc ttcgtcttgc tgtgagagag 420
cgagatcatg acctagagag actgcgcgat gtcctctcct ccaatgaagc tactatgcaa 480
actatggaga gtctcctgag ggccaaaggc ctggaagtgg aacagttatc tactacctgt 540
caaaacctcc agtggctgaa agaagaaatg gaaaccaaat ttagccgttg gcagaaggaa 600
caagagagta tcattcagca gttacagacg tctcttcatg ataggaacaa agaagtggag 660

0956294-070800

gatcttaatg caacattgct ctgcaacttg gccaggcana atgagatacn na 712

<210> 3618
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3618
gttttggcgt tcagttatat ttcacaacca ccttgattat ttagctaaaa atggttatga 60
atatgaagag agcactaaaa atcaagcaac aaaagagcaa caggaacttt taatgaaaat 120
gcttgcgctt tcttgtaaac tggagcgaga attccgttgt gtggaacttg ctgatctaat 180
gactcaaaat gctgtgaatt tagccattaa atatgcttct cgctctcgga aattaatact 240
ggctcaaaaa ctaagtgaac tggctgtaga gaaggcagcc gaattgacag caacccaggt 300
ggaagaggaa gaagaagaag aagatttcag aaaaaagctg aatgctggtt acagcaatac 360
tgctacagag tggagccaac caaggttcag aaatcaagtt gaagaagatg ctgaggacag 420
tggagaagct gatgatgaag aaaaaccaga aatacataag cctggacaga actcgttttc 480
caaaagtaca aattcctctg atgtttcagc taagtcaggt gcagttacct ttagcagcca 540
aggacgagta aatcccttta aggtatcagc cagttccaaa gaaccagcca tgtcaatgaa 600
ttcagcacgt tcaactaata ttttagacaa tatgggcaaa tcatncaaga aatccctgca 660
cttagtcgaa ctacaaataa tgaaaagtct nccattataa gcctctgttc caaagccgaa 720
cctaacagca tntgcagcat ctattcagaa agaatctaac tataactgng agtgaagaag 780
aaatttaaag ttattgaacc ctttgctctc aan 813

<210> 3619
<211> 628
<212> DNA
<213> Homo sapiens

<400> 3619
ccactacctc tagactgccc tcccgggctg gcgtcccacg gagtctcagc cgcgcacccc 60
ttcctcgcgt taccctcctt ccggacagca ccccctccct tctccggtag ctcctacccc 120
tgcctgtgcg ggcctcgtcc ccgcgcccag ccctcggtgc tgcctccgac agcgccgcgc 180
tctctcagcc gccccctgc ccctcgggcc cccctctctg ctgcccctgg cgccatggcg 240
tgcagcctca aggacgagct gctgtgctcc atctgcctga gcatctacca ggacccggtg 300
agcctgggct gcgagcacta cttctgccgc cgctgcatca cggagcactg ggtgcggcag 360
gaggcgcagg gcgcccgcga ctgccccgag tgccggcgca cgttcgccga gcccgcgctg 420
gcgcccagcc tcaagctggc caacatcgtg gagcgctaca gctccttccc gctggacgcc 480
atcctcaacg cgcgccgcgc cgcgcgaccc tgccaggcgc acgacaaggt caaagctcct 540
ctgctcacgg accgngcgct tctctgcttc ttctgcgacg aagcctgcac tgcacgagca 600
gcatnaggtc accngcattg acgaaccc 628

<210> 3620
<211> 668
<212> DNA
<213> Homo sapiens

<400> 3620
tgaggcaagc gcctcaggag tgcgtgaggc ccacgcagaa ctcggggagc cttttatcct 60

0962945 0972808

gaggacacag gggaagaatt ggaggactat attcagctgc gggcgcttac ctgcccccc 120
tgcagcaggt gttccaggca cctcgccggc ctggcattgg cactgtgggg aaaccaatca 180
agctcctggc caattacttt gaggtggaca tccctaagat cgacgtgtac cactacgagg 240
tggacatcaa gccggataag tgtccccgta gagtcaaccg ggaagtggtg gaatacatgg 300
tccagcattt caagcctcag atctttggtg atcgcaagcc tgtgtatgat ggaaagaaga 360
acatttacac tgtcacagca ctgcccattg gcaacgaacg ggtcgacttt gaggtgacaa 420
tccctgggga agggaaggat cgaatcttta aggtctccat caagtggcta gccattgtga 480
gctggcgaat gctgcatgag gccctggtca gcggccagat ccctgttccc ttggagtctg 540
tgcaagccct ggatgtggcc atgaggcacc tggcatccat gaggtacacc cctgtgggcc 600
gtccttcttc tnccggctga gggctactac cacccgcttg ggggtggccc cangtctggn 660
tcggcttt 668

<210> 3621
<211> 629
<212> DNA
<213> Homo sapiens

<400> 3621
ntccagcgtc tgccgcggct ccgagggggt ggggctgctg ggaatggctg tgccccttc 60
ggcccctcag cagcgcgcgt cctttcncct gaggaggcac acgccttgcc cgcagtgctc 120
atggggcatg gaggagaagg cggcggccag cgccagctgc cgggagccgc cgggcccccc 180
gagggccgcc gccgtcgcgt acttcggcat ttccgtggac ccggacgaca tccttcccgg 240
ggccctgcgc ctcatccagg agctgcggcc gcattggaaa cccgagcaag ttcggaccaa 300
gcgcttcacg gatggcatca ccaacaagct ggtggcctgc tatgtggagg aggacatgca 360
ggactgcgtg ctggtccggg tgtatgggga gcggacggag ctgctggtgg accgggagaa 420
tgaggtcaga aacttccagc tgctgcgagc acacagctgt gcccccaaac tctactgcac 480
cttccagaat gggctgtgct atgagtacat gcagggtgtg gccctggagc ctgagcacat 540
ccgtgagccc cggcttttca ggttaatcgc cttanaaatg gcaaagattc atactatcca 600
cgccaacggc agnctgccaa gcccatnct 629

<210> 3622
<211> 700
<212> DNA
<213> Homo sapiens

<400> 3622
accatcctcc tgggcgccgc tttcgcgcgg cggcggcggc tgcggcgggg tctttctttg 60
cttaaatacc tcgttggcca gaagcgctgg taccgggggc gggttgggtc gggtcgggca 120
gtgctgcaca cctgggtttc cttgcctaga gctgtgtgtt cggggtcctt tggtccagtc 180
ggaggctgcg gagcggcggg ggttgcctgc gctgtccgcc cgggcatcct cccggtgatg 240
gaagcagccg ccgccgccgc tgcggggtcg cgctgtgccc cattcaccgc tgccagagag 300
gtgggaaaat tcgccgcacg gaggccgaaa gcgagagggg ctgcgccgct atgccgggag 360
ctgagtccca tataagccgc ccccagccat cgcccccagc cggcttcgtt cccctgagcg 420
agacaggaag ctgcggtccc gagaaagcgg aggagacgtc gctggagccg ggaggcgccg 480
ggttcggcgg agcgcggagc ggggctctgg gccgcgtgaa agtttttctt cccgagccgc 540
agggcgcccg ctgcccggaa actgcccagg gataagtcgg ccgacttccc agacccctcg 600
aaggtgcggg gacccccagc ggaagcgaga gggaaccgaa aatcgangaa cgagttgaca 660
gcccggacag tnccgcccng gccggtgatc ccggggcccg 700

0552945 0/2880

<210> 3623
<211> 848
<212> DNA
<213> Homo sapiens

<400> 3623
agagtggcgc ggggggcgtg gggcggtgct gaggagctga agccgtggcc agctcgacgc 60
cggacagtcc agcgagcagc acggcgggaa ccggcagccg gagcagtccc ggagcagaag 120
cagcagcagc agcagcagcc ctcgccgttc gcggagcgca gccgagccgg ccatggcgtt 180
gtcgatgcca ctgaatgggc tgaaggagga ggacaaagag cccctcatcg agctcttcgt 240
caaggctggc agtgatggtg aaagcatagg aaactgcccc ttttcccaga ggctcttcat 300
gattctttgg ctcaaaggag ttgtatttag tgtgacgact gttgacctga aaaggaagcc 360
agcagacctg cagaacttgg ctcccgggac ccacccacca tttataactt tcaacagtga 420
agtcaaaacg gatgtaaata agattgagga atttcttgaa gaagtcttat gccctcccaa 480
gtacttaaag ctttcaccaa aacacccaga atcaaatact gctggaatgg acatctttgc 540
caaattctct gcatatatca agaattcaag gccagaggct aatgaagcac tggagagggg 600
tctcctgaaa accctgcaga aactggatga atatctgaat tctcctctcc ctgatgaaat 660
tgatgaaaat agtatggagg acataaagtt ttctacacgt aaatttctgg atggcaatga 720
aatgacatta gctgattgca acctgctgcc aaactgnata ttgtcnaggt ggtggncaaa 780
aaaatatcgc aacttttgat atttccaaaa gaaatgactg gcatctggag atcctaacta 840
atgcatac 848

<210> 3624
<211> 479
<212> DNA
<213> Homo sapiens

<400> 3624
ggtttatcct aaattactca acccccttgta gccttgacaa attttacctt aaaaccaaan 60
tgaaacacaa aaattaatcc ttaataatga tagcaagtga tctttctttt tagntttagc 120
cttccttttt caatagtaat atttaaaccc actcttgacc aattgtttgc ccaaatattc 180
ttgtcatttg gagtcagtgg aaaatccagc acaccaagca ccagtcttct tctgaggcaa 240
aagaaaagtg ttgtcatttt cactctgttg gagctgcaca ctttttttct ttttctttt 300
tttttttgt cgngtaagaa ggatgctggt cagagctgca naaaatatga ggcaattaaa 360
agtctttagc tgttagcaaa cctgttagtt ttacttctgc nttgaaccag cctcagaagc 420
tacttactgc tttatgtact ctttgggcat taatgccttc tntgtaatta tatctnggt 479

<210> 3625
<211> 750
<212> DNA
<213> Homo sapiens

<400> 3625
ttttagattt tgaaatttag ggataatagc tcttaggttt gggtaccact ttgctgcagt 60
ttaagaaagg gggaagggaa ctcatttatt aaacatcaat cacgtgctgt gttctgtttg 120
ttttctagtc atcatatcac acacctttac gacagctcac tgaaggaagg tgatactgtt 180
cccattttgt agatggaata gacaaaacct gaatttaagt agcttgctca aggttccata 240

0955294 "07/27/2009

ttgaatatgg aaagttcaaa tcatctcagt aatgaatata ccatatatac ttgctgtatt 300
gtatctatga taattcagtt acccacaata ccctttaaa tttctgttaa tgacatacct 360
ttaaatgtct ccttgatgaa cagaatcatg gtctttaaaa acattttcat gggttgattg 420
cattttcaag ctctaaagga ttgaaagata aatcttcacg ttaaaggtga gagtgaagta 480
tctgctcttg ggttacagaa ccagatagta ctagaactaa gattacaggg taaagctgct 540
tttatctttt ttctttttct ttttcttttt tttttgacat ggggtctcac tgtattgccc 600
aggcttggaa tgcantggca tgatctcagc tcacggcagc ctctgcctct tgggctcaag 660
cgattctcct gcttcagctt tccaagtatt tgggaccaca ggcgccacca caggcctggc 720
taatggtttt ggtttgnttt tggtananac 750

<210> 3626
<211> 879
<212> DNA
<213> Homo sapiens

<400> 3626
agcatcgagt cggccttgtt gcggaacgga accactgggc cgcagcgacc acaggggagt 60
tcttcgccgg ccgcaggttc aaagcgatct gcaatgagcg cctttaggaa ttcattcgaa 120
ggcgcaaaag aaaaagaaat taaggcagga actgagcgag gaaggaaggg agggaaagaa 180
aggaagaaag agaaaaagag aaagaaacag aaagaacagg caaaagctga aagggtcatg 240
ggaggaggct gctggttcca gtgaatggcg ctgaccccac tgagatcaac accttgctgg 300
aggcctcaaa cactgaaaga aagacatgca aaggaaataa ttcaggacca actggtgggc 360
tccaaaaatc tcttctatga ggaaggtgaa tgcaggctct gctacgtcct gcctgtgaaa 420
gaatcccttc aggaaaccag agcttccctc gtttaccttt tctcctacaa agggaagcag 480
cctggaagaa agagtccagt acttgaccca tgcctcaaca aactctgcta tcaatatggt 540
gcagcttacc aaaggtccta gaactttgtc aacgcacttg gagtaatttt tatgaaatat 600
tgtgtgtgat aagcaaactg tggaaattta tataagatgt tggtggcata gagttatacg 660
attgngtatt aagggtagtt ttangatgtc attttttttt cagttcatca tgacagaagt 720
ccttttttatg aganaaagtc ccatgagaaa aaaactttct tatattggga agctncttct 780
aatagggggga tgggccattt aatggccttc cacttaagat gggggtaata ncccggggg 840
gttggcttta aagtttttta actttaaatc ngggttaan 879

<210> 3627
<211> 703
<212> DNA
<213> Homo sapiens

<400> 3627
aggtctgagg gagcgatggc ggtacgcgcg ttgaagctgc tgaccacact gctggctgtc 60
gtggccgctg cctcccaagc cgaggtcgag tccgaggcag gatggggcat ggtgacgcct 120
gatctgctct tcgccgaggg gaccgcagcc tacgcgcgcg gggactggcc cggggtggtc 180
ctgagcatgg aacgggcgct gcgctcccgg gcagccctcc gcgcccttcg cctgcgctgc 240
cgcacccagt gtgccgncga cttcccgtgg gagctggacc ccgactggtc ccccagcccg 300
gcccaggcct cgggcgccgc cgncctgcgc gacctgagct tcttcggggg ccttctgcgt 360
cgcgctgcct gcctgcgccg ctgcctcggg ccgncggccg nccactcgct cagcgaagag 420
atggagctgg agttccgcaa gcggagcccc tacaactacc tgcaggtcgc ctacttcaag 480
atcaacaagt tggagaaagc tgttgctgca ncacacacct tcttcgtggg caatcctgan 540
cacatggaaa tgcagcagaa cctagactat taccaaacca tgtctggagt gaangaggcc 600

US 2003/0224385 A1 Dec. 4, 2003

gacttcaagg atcttgagac tcaaccccat atgccaagaa tttcgactgg gagtgcgact 660
ctactcanan gaacagccac aggaagcttg tgccccacct ana 703

<210> 3628
<211> 720
<212> DNA
<213> Homo sapiens

<400> 3628
ttcattgagt cttctgttgc caaattaaat gccctgagga aaagtggcca gttctgtgat 60
gttcgacttc aggtctgngg ccntgaaatg ttagcacaca gagcagtgct agcttgctgc 120
agtccctatt tatttgaaat ctttaatagt gatagtgatc ctcatggaat ttctcacgtt 180
aaatttgatg atctcaatcc agaagctgtt gaagtcttgt tgaattatgc ctacactgct 240
canttgaaag cagataagga attggtaaaa gatgtttatt ctgcagcaaa aaagctgaag 300
atggatcgag taaagcangt ttgtggtgat tatttactgt ctagaatgga tgttaccagc 360
tgcatctctt accgaaattt tgcaagtngt atgggagact cccgtttgtt gaataaggtt 420
gatgcttata ttcaggagca tttgttacaa atttctgaag aggaggagtt tcttaagctt 480
ccaaggctaa agttggaggt aatgcttgaa gataatgttt gcttgcccag caatggcaaa 540
ttatatacaa aggtaatcaa ctgggtgcag ccgtagcatc tgggagaatg gagacaatct 600
ggaagagctg atgggaagag gttcaaacct tgtctactca gctgatcaca agctgcttga 660
tgggaaccta ctagatggac agggctgang ntgtttggcc antgatgatg accacattca 720

<210> 3629
<211> 847
<212> DNA
<213> Homo sapiens

<400> 3629
aggagaagct gatgaagagc tagttgatga tggagaagat cagaatgatc cctctcgatg 60
ggatgaatca ggagaagttt gtatgtctct agatgattaa ctgacctact atactcctca 120
aggatgctgc atttggacct aatatgaatc gacaatttgg attgttgaac ttgaaggctt 180
gcaaaatatg gtacatgctg gatagtagtt atgttgctgt gaaaactgta gggtcaaagc 240
cttatagcaa aaaaaatttt tttttatatt tgcacaggac tatacagcaa acaaccatgt 300
ggttggatta catggagtcc ccacatactc agtcagttat caaagtaaaa tatttttat 360
ttataggata tacagtaact atttgggtcc tatgaaaata gtccttaaag agcttacatt 420
catgtgctac tttaacatga atggagaaaa tccgtttatg gaagtacagt gacaattgac 480
ccaatcactc tgtccatcaa accactcagg ctagtttgta ctagtagagt tttgtttcta 540
tttttatttt tattaatttt atttttttta atacagattt tcagtgaggg gctttttcaa 600
tcccattggt tctattttct tgtatttttc catttaattt gcttcataac ttaaaccaag 660
tctcttctag tcttaggtat tatttctcga ttttgtgctg atgggcatgt ttataagaac 720
tggacttttt gacatgaatt ttactacttc acaaatgaag aatgatgnta tgaagtaccg 780
tggcgaagtt gacaatccct aaaatgatat gattaaaagt acttcttctg tgtctatcgg 840
taatggn 847

<210> 3630
<211> 773
<212> DNA
<213> Homo sapiens

09015605.090800

0508305.0002

<400> 3630
catcgcccgc tgcagtagcc ctgagcccat ggctgacagg ctcctgctca ccaccccaac 60
ccaccgcttc cagtgcaaag ggccagtgga catcaacatt gtggccaaat gcaatgcctg 120
cctctccagc ccgtgcaaga ataacgggac atgcacccag gaccctgtgg agctgtaccg 180
ctgtgcctgc ccctacagct acaagggcaa ggactgcact gtgcccatca acacctgcat 240
ccagaacccc tgtcagcatg gaggcacctg ccacctgagt gacagccaca aggatgggtt 300
cagctgctcc tgccctctgg gctttgaggg gcagcggtgt gagatcaacc cagatgactg 360
tgaggacaac gactgcgaaa acaatgccac ctgcgtggac gggatcaaca actacgtgtg 420
tatctgtccg cctaactaca caggtgagct atgcgacgag gtgattgacc actgtgtgcc 480
tgagctgaac ctctgtcagc atgaggccaa gtgcatcccc ctggacaaag gattcagctg 540
cgagtgtgtc cctggctaca gcgggaagct ctgtgagaca gacaatgatg actgtgtggc 600
ccacaagtgc cggcacgggg cccagtgcgt ggacacaatc aatggctaca catgcgcctg 660
cccccagggc ttcantggac ccttctgtga acacccccca cccatggtcc tactgnagac 720
cagccatgcg accagtccna gtgccagaac ggggcccagt gcatcgtggt gca 773

<210> 3631
<211> 834
<212> DNA
<213> Homo sapiens

<400> 3631
caaaaaaaaa aatggcggct gccactgtgg ggcttctgcc ggccggtagt ccctggcgct 60
gctgacccag catcggcttt tctacgtctt gaacctggat tcgcctaggg gttgggaagg 120
gctgtggacg gcgttggggg aggcctgacg agattaataa agaactcttc agaattcctg 180
gtgtttcatc atatatacga ctaagatatc aactcttcta gcttgctgtt tctggaccaa 240
aaaaaatgac gtctattatc aaattaacta ccctttctgg ggtccaagaa gaatctgccc 300
tttgctatct tctccaagtt gatgagttta gattttatt ggactgtggc tgggatgagc 360
acttttctat ggatattatt gattccctga ggaagcatgt tcaccagatt gatgcagtgc 420
tgttgtctca ccctgatcct ctccaccttg gtgccctccc gtatgctgtc ggaaagttgg 480
gtctgaactg tgctatctat gcaaccattc ctgtttataa aatgggacag atgttcatgt 540
atgatcttta tcagtctcga cacaatacag aagattttac actctttaca ttagatgatg 600
tggatgcagc ctttgataaa atacagcagc taaaattctc tcagattgtg aatttgaaag 660
gtaaaggaca tggcctgtct atcacacctc tgccagctgg tcatatgata ggtgggaaca 720
atatggaaaa tagtcaaaga tggagaagaa gaaattggtt atgcagttga ctttaaccnc 780
caaganggag atccatttaa aatggatgtt cctggaaatg ctaaacaggn cttt 834

<210> 3632
<211> 773
<212> DNA
<213> Homo sapiens

<400> 3632
aaggaatcaa gcccccaaga tggcggcagc ggcggaggag cggatggcag aggaaggagg 60
cggcggccaa ggcgacggcg gttcctcttt ggcctccggc tctacccagc gacagcctcc 120
accgcccgcg ccacagcacc cgcagccggg gtcccaggcg ctcccagccc ccgcgctggc 180
tccggaccag ctgcctcaaa acaacacgct tgtggcgctg cccatcgtag ccatcgagaa 240
catcctcagc tttatgtcct acgacgaaat tagccagctc cgcctggttt gtaaaagaat 300

ggacttggtc tgccagagaa tgttgaatca gggatttctg aaagtggaga ggtaccataa 360
tctatgtcag aaacaagtta aagcacaact cccaaggaga gagtcagaaa ggagaaacca 420
ttcattagct cgtcatgcag acattcttgc tgctgttgaa acaaggctgt cactattaaa 480
tatgactttc atgaaatatg tggattccaa tctctgttgc ttcatcccag gaaaggtgat 540
tgatgagatt tatcgtgtgt tgagatatgt caattctacc agagcccctc aacgagctca 600
tgaagtactt caagaattaa gggatatatc ctctatggca atggagtact ttgatgaaaa 660
gattggtcca attttaaaga ggaaattacc aggatcagat gtttctggaa gactcatggg 720
ctcttcttca gttncaggaa ccgtctgcag cctaacaaca atgcagctnt tnt 773

<210> 3633
<211> 780
<212> DNA
<213> Homo sapiens

<400> 3633
ggaagctggt ggcggctggt gggcgaccgg gcgcatcctc attgcagtgc ggcggcccta 60
cctcggccct ggcctgaccc cggcggccct gcccgccccc ccctccagca tcatggccag 120
cccaagaacc aggaaggttc ttaaagaagt cagggtgcag gatgagaaca acgtttgttt 180
tgagtgtggc gcgttcaatc ctcagtgggt cagtgtgacc tacggcatct ggatctgcct 240
ggagtgctcg gggagacacc gcgggcttgg ggttcacctc agctttgtgc gctctgttac 300
tatggacaag tggaaggaca ttgagcttga gaagatgaaa gctggtggga atgctaagtt 360
ccgagagttc ctggagtctc aggaggatta cgatccttgc tggtccttgc aggagaagta 420
caacagcaga gccgcggccc tctttaggga taaggtggtc gctctggccg aaggcagaga 480
gtggtctctg gagtcatcac ctgcccagaa ctggacccca cctcagccca ggacgctgcc 540
gtccatggtg caccgagtct ctggccagcc gcagagtgtg accgccttct cggacaaggc 600
ttttgaggac tggctgaatg atgacctcgg ctcctatcaa ggggcccagg ggaatcgcta 660
cgtggggttt gggaacacgc caccgctnag aagaaagaag atgacttnct taacaacgcc 720
atgtccttcc ttgtactcgg gctggaacag cttnaccact ggagccagcc cggtttgcct 780

<210> 3634
<211> 765
<212> DNA
<213> Homo sapiens

<400> 3634
aattcatggg acttatataa gaaggacaat taatgctgat ttgggtacag gggaattatg 60
tgtgtgaatg tcatctacaa ttaaaaaaaa ttagcacatc cctttactta cttgttatca 120
gtggattctc ggggtttgga cttaatgttg agctaagaag cattaagtct ttgaactgaa 180
tgtattttgc atccctggtt ttggacgaca gtaaacgtag gagcactgtt gaagtcctgg 240
aagggagatc gaaggaggaa gattgacttg gttctttctt agtcctatat ctgtagcata 300
gatgacttgg aataaaagct gtatgcatgg gcattacccc tcaggtccta agaaataagt 360
cctgaatgca tgtcgttcca aactaacact ctgtaatttt tcttttatgt cttattttcc 420
aagagtcctc catttttgc acccccctcac cgccaactct gttattcagt agagagaagt 480
gtacggcttt ctgattggtg agtgaaaaag taacttgaga cacgacctaa gttgaagagt 540
ttagacttgc tgagttttag aagtgatgga aattaagaga gcatttcaat aaaatgtgac 600
ttggctgtct ttggaagaga agtgcaaggc tttcctttga agaatttaaa ttagtccggt 660
aggatgtcag gtgagactgt gtatgcaaaa tgaatggcac angtgatgcc agggcctctt 720
gcttggggtc tgagtcttgg cacanggtaa gtgaanggta atttc 765

0000000000000000

0050505-070000

<210> 3635
<211> 782
<212> DNA
<213> Homo sapiens

<400> 3635
catttggccc ggggatggtc acacgcgcgg gggccggaac tgccgtcgcc ggcgcggtcg 60
ttgtcgcatt gctctcggcc gcactcgcgc tgtacgggcc gccactggac gcagttttag 120
aaagagcgtt ttcgctacgt aaagcacatt cgataaagga tatggaaaat actttgcagc 180
tggtgagaaa tatcatacct cctctgtctt ccacaaagca caaagggcaa gatggaagaa 240
taggcgtagt tggaggctgt caggagtaca ctggagcccc atattttgca gcaatctcag 300
ctctcaaagt gggcgcagac ttgtcccacg tgttctgtgc cagtgcggcc gcacctgtga 360
ttaaggccta cagcccggag ctgatcgtcc acccagttct tgacagcccc aatgctgttc 420
atgaggtgga gaagtggctg ccccggctgc atgctcttgt cgtaggacct ggcttgggta 480
gagatgatgc gcttctcaga aatgtccagg gcattttgga agtgtcaaag gccagggaca 540
tccctgttgt catcgacgcg gatggcctgt ggctggtcgc tcagcagccg gccctcatcc 600
atggctaccg gaaggctgtg ctcactcccg accacgtgga gttcaacang ctgtatgacg 660
ctgtgctcaa aggccctatg gacagcgatg acagccatgg atctgngcta agactcagcc 720
aacccttggg caacgtgacn gtggtccaaa aaggagagcg cgacatcttt tcaacggnca 780
ca 782

<210> 3636
<211> 888
<212> DNA
<213> Homo sapiens

<400> 3636
agtgtccata aacctgtgtt ttgccagctt gcacaggatg aaggtagtta cgttggtggc 60
tttgcagtgg ttgaatatag cactgcggag caggctgaag aggtccagca ggcagcagac 120
ggtatgacca tcaagggcag caaagtccag gtttccttct gtgctcctgg agcgccaggg 180
cgaagtacat tagcagcatt gatagcggct caacgtgtga tgcacagtaa tcaaaagggc 240
ttacttccag agccaaatcc agtacaaatt atgaaaagtt taaacaaccc tgccatgttg 300
caagttcttc tacagcccca gttatgtgga cgagctgtta aaccagccgt tcttggaaca 360
cctcacagct tgccacatct gatgaaacca tccatctctc ctgcattttt acatttgaat 420
aaagcacatc agaatctttc tcatatacca ctggcacaac aacaattaat gaagtttgag 480
aatattcata ctaataataa acccggctta cttggagagc ccccagctgt ggtacttcag 540
actgcactag ggatagggtc agtgcttcca ttgaaaaagg agttgggaca tcatcatgga 600
gaagcacata aaagctgcct ctaagaatca aacttcactc ttgggagaac caccaaaaga 660
aattcggctc agtaaaaatc catacttgaa tttggcaagt gtgttgccca gtgtgtgctt 720
atcatcccct gcaagtaaaa ccactcttca taagactgga attgcaagca gcattctgga 780
tgcaatcttt tcagggaagt gaatcacaac acgcattgga aaagtgcatt gcttatcttc 840
acctttggn gatatgcnca ggtaaataat tnccaggttc ttgatgat 888

<210> 3637
<211> 676
<212> DNA
<213> Homo sapiens

0050250300 = 02/28/2008

<400> 3637
atgtcaggtt caaggaaagg acccttccgt ggacatcact caggaccttg tggatgaatc 60
tgaagaggag cgttttgatg atatgtcatc gccaggctta gaattgccat cttgtgaatt 120
aagtcgcctt gaagaaattg cagaacttgt ggcatcatct ttaccttcac ctcttcgtcg 180
tgaaaaactt gcactggcac tagaaaatga gggttatatt aaaaagctcc tggagctttt 240
tcatgtgtgt gaagatttgg aaaatattga aggactgcac cacttgtatg aaattatcaa 300
aggcatcttt ctcttgaatc gaactgctct ttttgaagtt atgttctctg aagaatgtat 360
aatggacgtc attggatgtt tagaatatga tcctgcttta tcacaaccac gaaaacacag 420
ggaatttcta acaaaaacag ccaagtttaa agaagtgatt cccatatcag atcctgagct 480
gaaacaaaaa attcatcaag acatacagag ttcagtatat acaagatatg gttctaccaa 540
ctccttcggt ctttgaagaa aacatgttat caacacttca ctcttttatc tttttcaata 600
aggnagagat tggtggcatg ttgcaggaag atgaaaaatt tctgcagatt tggttgccca 660
cttacagatg aacnnc 676

<210> 3638
<211> 786
<212> DNA
<213> Homo sapiens

<400> 3638
agtagtggtg gtacgggtcc gactgagggg tactcgccac cggctgcgtc cacccgagcg 60
gctgcgagag ccaaggcccg agggggtggg cgtggcggcc gccgaaacac aacccccctct 120
gttccctctc ttcgcggagc ggcgccgcgt agcttccatc cgccagctgc catgagcgag 180
cgcctccgtc ccaggaaaag gagaaggaat ggcaacgaag aagacaacca tcttcccccc 240
cagaccaaaa gaagtagcag aaaccctgtc tttcaggatt cctgggacac agagtcttca 300
ggcagtgaca gtggtgggag cagcagcagc agcagcagca gcatcaatag cccggacagg 360
gccagcgggc cggaaggcag cttgagccag accatggccg gatccagccc taacacgcct 420
cagcccgtgc ccgagcagtc cgcgctgtgc caaggcctct acttccacat caaccagacc 480
ctgagggagg cccacttcca cagcctacag caccgagggc ggcctctgac atgatgtgcc 540
ggcagtttct tgccttctgt gaagggacag cgctgtgcag atttgatatt tcaacttaca 600
acttggttta aaagaaaaat tgccacgana aatgcctgtt ggcttttcag tctatatttg 660
aaataacagg ttaacaggca gttgtttact tgngggtttg ctgcactatt gcaatttcna 720
aggggctttg aacaattttt ataggattct ttttanggaa ggtattcaaa tctatgtcaa 780
ggtaat 786

<210> 3639
<211> 827
<212> DNA
<213> Homo sapiens

<400> 3639
gtggtaccaa agacctgtcc atcgctgcag tggggaagta cgggactctg caggaatttt 60
ctttctttga caaggtccgc cgggtgctga agagccagga ggtgtatgaa aacttcctcc 120
gctgcatcgc actcttcaac caggagctgg tgtctggctc tgagctcctg cagctcgtca 180
gcccatttct ggggaaattt ccagaactct ttgcacagtt caagtccttc ctgggggtaa 240
aagagctgtc cttcgcgcca cccatgagcg acagatccgg ggacgggata agccgggaaa 300
ttgattatgc atcctgcaag cgcataggat ccagctaccg ggcactcccc aaaacctacc 360

agcagcccaa gtgcagtggg aggacagcca tctgcaagga ggtactgaac gacacctggg 420
tctccttccc ttcctggtct gaggactcca cgttcgtcag ctccaagaag acaccgtacg 480
aggagcagct tcaccgctgt gaggacgagc gcttcgagtt agacgttgtc ctggagacga 540
acctggccac aatccgtgtg ttggaaagtg tgcagaagaa gctgtcccgg atggcgccgg 600
aagaccagga gaagttccgg ctggacgact ccctgggagg cacgtcggaa gtgatccanc 660
gccgtgccat ttatcgcatc tatggcgaca aggccccgga gatcatcgag agcctcaaga 720
anaaccctgt caccggttgn ccccgttgtc ctgaaaagac tgaagggcca aggaaaaaga 780
attggcggga ngcccaacag ggctttaaca agatctggcg ggaaccn 827

<210> 3640
<211> 786
<212> DNA
<213> Homo sapiens

<400> 3640
tcaattttcc tttttccgga ggggagatgg attccctgga atggaactgg gctctggtgt 60
atgagctcag tggagagcac catgacgaag agtggtcagt gaagacttac caggaagtag 120
ctcagaagtt tgtggaaact caccctgagt ttattggaat caaaatcatt tattcggatc 180
acagatccaa agatgtggct gtcatcgcag aatccatccg aatggccatg gggctccgaa 240
tcaagttccc cacggtggtg gcagggtttg acctggtggg gcatgaggac actggccact 300
ccttgcatga ctacaaggaa gctctgatga tccccgccaa ggatggcgtt aagctgcctt 360
acttcttcca cgccggagaa acagactggc agggtacttc catagacagg aacattctgg 420
atgctctgat gctgaacact accagaatcg gccatggatt tgctttgagc aaacaccccg 480
cagtcaggac ttactcctgg aaaaaggaca tccccataga agtctgtccc atctctaacc 540
aggtgctgaa actggtgtct gacttgagga accaccctgt ggccactctg atggccactg 600
ggcaccccat ggtgatcagc tctgatgacc cagctatgtt tggtgccaaa ggcttgtcct 660
acgatttcta tgaggtcttc atgggcattg gggggatgaa ggctgacctg aggaccctna 720
aacagctggn catgaactct atcaagtaca gtaccctgtt gganagtgag aaaaatactt 780
tcatgg 786

<210> 3641
<211> 751
<212> DNA
<213> Homo sapiens

<400> 3641
ttttgtttgg gccttgggca atagggagca gcccagtgat gactcagctc cccagggaga 60
aagctgtctc agcagcccat acttcagggt gttagtcctg ccccctggca gctggttatc 120
cagctagctc cctaaagtga gtactagagt tgtttggcct gtagtgtggg gtgtctcatc 180
tcatgccctg ctttgtttcc ctggaatgtg aaggcccatg ccagctcagc ccagtattgc 240
atagctactc agttcaggca aggcactgca tccccagagg gtaatgtgcc tcgtcagctc 300
aggtctaggg tgtgtgacct taggttggcc caggcaccat tttcctggga tgcaggaagc 360
tgcttcagat taggtactgg actgtgtgtc tgcttgggat ggccaagaca ctgttacctg 420
gaaggcaggg tggtaggtag ggtgctgctt aaacttaggc actggggagg catgactgct 480
ctcgatggcc aaagtactgt tttcccagga gacaaggtac tgcttcagct caggtacaga 540
ggggtgtgac tgctctggat ggttaatgca ctgttttccc aggatgcctg gcattgcttc 600
agctctggcc tagaggggca ggatgtagca gcatctggga ggggtaggtg gaggagcttc 660
gccaaggcat cctttcctca ggaggcaatg tgcancttca gctcaggtcc ctggaagcan 720

0950250.0020800

ggcantttg ggagaagtag actgagaggt a 751

<210> 3642
<211> 865
<212> DNA
<213> Homo sapiens

<400> 3642
gatcttggct cactgcaacc accatctcct gggttcaagc gatcttccca ccttatcctc 60
ctgagtacct ggggctacag gcatgtgcca ccacgcctgg ctaatttttg tattttctta 120
gtagagatgg ggttttgcca tgttgttccg gctggtcaca aactccaggg ctcaagcaat 180
ccactcactt cagcttccca aagtgctggg attacaggca tgagccacaa cacccagccc 240
tttatataat tttaaaagtg taggtaatta ggtaaaatta ggttaaaagt atatgtatat 300
ttacctgata tttaaatatt acctaagtgt ttaatgtgga catgtaagct ctttaaagat 360
agtgcttatg tattttatat ctgtttcaca tactccttat atatccccca cagaaatggt 420
cacaaatagg ttccttaata agtatttttg aattcagcca tgctatatat tcattagtaa 480
gtgagttttc ttttattatg aactacaaac tttaaccttt ttttgagtag tgagcagtta 540
ttcatttacc ttcacactct ttaaatacca aattttgagt gagtgagtgt gtaaggtttt 600
gtcatacaga cttgcaattc ctatatggga taaagtagac tagcacagga atttttcttg 660
tatcactcat gcaagactct aaattcctta aaggcaggga tcatgtatat tttgatcact 720
ggtgnatcct cagcacttca catggtgcct gtcacataaa tatttggtaa atgacttctt 780
caagcaatag ctttggcttt atggtatcct ggatttcaaa acgtcatata taaattctct 840
cactatgact tgntcatang gncta 865

<210> 3643
<211> 818
<212> DNA
<213> Homo sapiens

<400> 3643
cttccttcgt cccttccttc cttcctttcg ccgggcgcga tggagccggg gcgccggggg 60
gccgcggcgc tgctagcgct gctgtgcgtg gcctgcgcgc tgcgcgccgg gcgcgcccaa 120
tacgaacgct acagcttccg cagcttccca cgggacgagc tgatgccgct cgagtcggcc 180
taccggcacg cgctgggcaa gtacagcggc gagcactggg ccgagagcgt gggctacctg 240
gagatcagcc tgcggctgca ccgcttgctg cgcgacagcg aggccttctg ccaccgcaac 300
tgcagcgccg cgccgcagcc cgagcccgcc gccggcctcg ccagctatcc cgagctgcgc 360
ctcttcgggg gcctgctgcg ccgcgcgcac tgcctcaagc gctgcaagca gggcctgcca 420
gccttccgcc agtcccagcc cagccgcgag gtgctggcgg acttccagcg ccgcgagccc 480
tacaagttcc tgcagttcgc ttacttcaag gcaaataatc tccccaaagc catcgccgct 540
gctcacacct ttctactgaa gcatcctgat gacgaaatga tgaagaggaa catggcatat 600
tataagagcc tgctggtgcc gaggactaca ttaaagacct ggaaaccaag ttcatatgaa 660
aagcctgttc atccgancag tgcgggcata caacggtgaa aactggagaa cattcatcac 720
agacatggaa ctggcccctt tccgaatttc ttcaaaagnc ttttacgaat ggtcttgcan 780
cctggcgaag ggttncaagg gaagaatcaa gggacttt 818

<210> 3644
<211> 773
<212> DNA

09/02/2008 09:50:56

<213> Homo sapiens

<400> 3644
ccctaatcaa gtacccctc ctcctccacc acctcctgcc ccacccctcc ctgcatctgg 60
attctttttg gcatccatgt cagaagacaa tcgcccttta actggacttg cagctgcaat 120
tgccggagca aaacttagga aagtgtcacg gatggaggat acctctttcc caagtggagg 180
gaatgctatt ggtgtgaact ccgcctcatc taaaacagat acaggccgtg gaaatggacc 240
ccttccttta gggggtagtg gtttaatgga agaaatgagt gccctgctgg ccaggaggag 300
aagaattgct gaaaagggat caacaataga aacagaacaa aaagaggaca aaggtgaaga 360
ttcagagcct gtaacttcta aggcctcttc aacaagtaca cctgaaccaa caagaaaacc 420
ttgggaaaga acaaatacaa tgaatggcag caagtcacct gttatctcca gaccaaaatc 480
cacaccctta tcacagccca gtgccaatgg agtccagacg gaaggacttg actatgacag 540
gctgaagcan gacattttag atgaaatgag aaaagaatta acaaagctaa aagaagagct 600
cattgatgca atcaggcagg aactgagcaa gtcaaatact gnatagagga acagactaag 660
gagagatagg actttaatct ggangaaaaa tatcctacaa acaacaactg gtcacaacag 720
cnaaccccta catttatgag ctgtaagaag aaaatggaga ccaacngaaa ggg 773

<210> 3645
<211> 872
<212> DNA
<213> Homo sapiens

<400> 3645
ctctttgccc tcgcgacgcc gccacctccg gaacaagcca tggtggcggc gacggtggca 60
gcggcgtggc tgctcctgtg ggctgcggcc tgcgcgcagc aggagcagga cttctacgac 120
ttcaaggcgg tcaacatccg gggcaaactg gtgtcgctgg agaagtaccg cggatcggtg 180
tccctggtgg tgaatgtggc cagcgagtgc ggcttcacag accagcacta ccgagccctg 240
cagcagctgc agcgagacct gggcccccac cactttaacg tgctcgcctt cccctgcaac 300
cagtttggcc aacaggagcc tgacagcaac aaggagattg agagctttgc ccgccgcacc 360
tacagtgtct cattccccat gtttagcaag attgcagtca ccggtactgg tgcccatcct 420
gccttcaagt acctggccca gacttctggg aaggagccca cctggaactt ctggaagtac 480
ctagtagccc cagatggaaa ggtggtaggg gcttgggacc caactgtgtc agtggaggag 540
gtcagacccc agatcacagc gctcgtgagg aagctcatcc tactgaagcg agaagactta 600
taaccaccgc gtctcctcct ccaccacctc atcccgccca cctgtgtggg gctgaccaat 660
gcaaactcaa atggtgcttc aaagggagag acccactgac tctccttcct ttactcttat 720
gccattggtc ccatcattct tgtgggggaa aaattctagt attttgatta tttgaatctt 780
acagcaacaa ataggaactt ctgggcaatg agacttcttg accagtgaat caccagccga 840
tacgaacgtc ttgccaacaa aaatgtgtgg ca 872

<210> 3646
<211> 523
<212> DNA
<213> Homo sapiens

<400> 3646
gatgtagctc gcagagaaga gcaggagcag aattagccct ttcttcaggc catcttgcct 60
caaagggtac acatgtttgg cggttaagat gaaactaacc cttatgtttc atcctggccc 120
catgatgtac acatcttagc catgtagtgg ccttgggggg ccacagagat ttcctttgag 180

US 2003/0224385 A1 Dec. 4, 2003

gagcatggta gagtccacag ccatggctga agtcagtgga caccgagggg acaggactgc 240
aggccaccag gggcctctgc ccagagggag gcagagagga tggcggccac gggtgctctc 300
ctggcatcct catggggtga tgccaggccg ggcacttcaa aacaggctca gccgactggg 360
agatcctttg tactttgcac agttcacaca cacaaacaca cacaccctat cccaagtgtt 420
tttgttagac acaaatgtca gcgtgtgatt ttggaagact tgtcagtgat gacaaaccat 480
gatgcctgtg tttctgagtc tttaaataaa aatgaacatg gag 523

<210> 3647
<211> 726
<212> DNA
<213> Homo sapiens

<400> 3647
tgtgccttct ctttcggagt tgttccgtgc tcccacgtgc ttccccttct ccactggctg 60
ggatcccccg ggctcggggc gcagtaataa tttttcacca tgcatcggaa aaaggtggat 120
aaccgaatcc ggattctcat tgagaatgga gtagctgagc ggcaaagatc tctccttgtt 180
gtagttgggg atcgaggaaa agatcaggtg gtaatacttc atcacatgtt atccaaagca 240
actgtgaagg ctcggccttc agtgctgtgg tgttataaga aagagctggg gtttagcagt 300
caccggaaga aaagaatgcg acagctgcag aagaaaataa agaatggaac actgaacata 360
aagcaggacg acccctttga actcttcata gcagccacaa acattcgcta ctgctactac 420
aacgagaccc acaagatcct gggcaatacc ttcggcatgt gtgtgctgca ggattttgaa 480
gccttaactc caaacttgct ggccaggact gtagaaacag tggaaggtgg tgggctagtg 540
gtcatcctcc tacggaccat gaactcactc aagcaattgt acacagtgac tatggatgtg 600
cattccaggt acagaactga ggcccatcag gatgtggtgg gaagatttaa tgaaagggtt 660
attctgnctc tggcctcttg taagaagtgn ctcgtcattg atgaccagct taacatnctg 720
ccatct 726

<210> 3648
<211> 861
<212> DNA
<213> Homo sapiens

<400> 3648
ggtggcggtg caaccgtcat gtggagagca tcgacaagcg ccactgctcg ctggtctacg 60
tccccgagga gatctaccgc tatgcccgga gcctggagga gctgctgctg gacgccaacc 120
agctccgcga gctgcccgag caatttttcc agctagtcaa attacgaaag cttggactta 180
gtgataatga aattcagcgg ctccctccag aaatagcaaa cttcatgcag ctggtggaac 240
tagatgtgtc tcgaaatgag attcctgaaa ttccagaaag catttcattc tgtaaagcac 300
tgcaggtagc tgacttcagc ggaaacccac tgactaggtt gccagaaagc tttcctgaat 360
tacagaattt aacatgtctt tctgtaaatg acatctcact acagtctcta cctgaaaata 420
ttggcaatct ttataacctg gcttcactgg aactgagaga gaatcttctt acatatcttc 480
ctgactctct tacccagctg cgaagactag aagaacttga tttaggaaac aatgaaatat 540
ataatttgcc agaatcaatt ggagccctct tacatctaaa agatctctgg ttggatggaa 600
atcaactgtc agaattacct caggaaatag gaaatctgaa gaacctgctg tgtttagatg 660
tctctgaaaa caggttggaa agacttcctg aagaaatcag tggcctgact tcattaacgg 720
atttagtcat ttcccagaac ttattagaaa cgattccgga tggattggaa aactaaagaa 780
ctgncaatct tgaaggngga tcagaataga cttacacagt tgnctgaagc agttggggga 840
tgtgaaagtc ttactgggtt a 861

US 2005/0059000 A1

0508202.000900

<210> 3649
<211> 830
<212> DNA
<213> Homo sapiens

<400> 3649
tggaaaaggc ggcggcggcg gcggcggcag cggcagcagc aggtggagcg agctacagcg 60
tttggcctga aacccactgc tgcagccacc cgggctggag ttggcccgtt gggtggagcc 120
agtgctcgcc ccggtccgac ccccggtttc cgggacactt gggttgcgga ggccggctgg 180
ccggagtcac ggttggggac gggcgcgcct cggagcgcac ggctgcgctg gaagccgcgt 240
ctggggcgca ggaccaacgg gacctacctc ctcccggcta cctaaagact ccttctctcg 300
ggaaagagcg ctgcccggct ctgggatttg ggaggagctc ggaggccgct cgggcacctc 360
gctggacact atccgtttgc gccccggtgg cgcgggaggg tccggagcgg agcgctcgtc 420
tctcctcagc ggtttagtgg agaaaagcag agagctcttc ctggggcgaa tgggacctcc 480
tccctcggtc ctccgtggag tcgtcgcatc gcttgtcgtg ttggtctcga ggggctcaca 540
gcttggcact aatttgcagg tgttcgctgc tgatttggtt tcttcttcga tttgcggacg 600
gttcccttca gcgactctcg acacacgttt tcctgtcttc gccgganggc cgggtctggg 660
gtcgccggac ctgcgggaat ccagcgctta ttcgctgacc ctcgagtcgc ttcgctagct 720
gtgcgcctct gggcactacc tggaaggagc tgcaacccgn tcttgaggat ncgtcttagg 780
agcatcgctc taaggctttt gcttgtgtgg atggtcgcgc atgcttattn 830

<210> 3650
<211> 689
<212> DNA
<213> Homo sapiens

<400> 3650
gtgcagaacc tttgcctcct ggccagaggg acccttctgc aggctgattc cagcagtgcc 60
cgatggtggg acccacacca gaccaagcct tcgcctccca gaggcctcct ggccctcctg 120
tcatggcctg tgagagccac acccctaggc cccgtctcct agtctgcagg ccgcaggacc 180
agctgcccac ggccccaggg ggcaagggct gtagatgagg gtctcagagg tggtgggagc 240
acccccccca cccacagttc ctgggcattt ctttagagct ttaaaatggc acctggagac 300
caccaggcgc ggcgatcaga tcgggtggtg tggtgcctcc tgggactgac cacttcttgc 360
tctccgacca ggcaggggcg agtggcctgg gaggttcccg gaccctcagg gcgcctgtgt 420
ctctgggcac cgcagctccg ccccactcct tcctccagaa cattccccac tcgggctaga 480
gaattgcgtc tgctccagga atgcatccta gcgtgtgtac gatcgcgcct gggtgtcctg 540
ttctcatgag caagcggttt taaccagcag cataatttat actcatagac aggactgggg 600
gaanggctgt tcctgangct ggggtgcagt gccttggaaa gcacccctga aacagtggac 660
cttgnatttt taagtgtccc tgcaaccat 689

<210> 3651
<211> 737
<212> DNA
<213> Homo sapiens

<400> 3651
ctttttccct ctgtgatggt tgtagtagaa caaattaaaa gtcaaaagat tcatggttgt 60

caaatcctgg aaacagtcta caaacacagc tgtgggggt tgcctcctgt tcgaagtgca 120
ctggaaaaaa tcctggccgt ttgtcatggg gtcatgtata aacagctctc agcctggatg 180
ctccatggac tcctcttgga ccagcatgaa gaattcttta tcaaacaggg gccatcttct 240
ggtaatgtca gtgcccagcc agaagaggac gaggaggatc tgggcattgg gggactgaca 300
ggaaaacaac tgagagaact gcaggacttg cgcctgattg aggaagagaa catgctggca 360
ccatctctga agcagttttc cctacgagtg gagattttgc catcctacat tccagtgagg 420
gttgctgaaa aaatcctatt tgttggagaa tctgtccaga tgtttgagaa tcaaaatgtg 480
aacctgacta gaaaaggatc cattttgaaa aaccaggaag acacttttgc tgcagagctg 540
caccgtctca agcagcagcc actcttcagc ttggtggact ttgaacaggt ggtggatcgc 600
attcgcagca ctgtggctga gcatctctgg aagttgatgg tagaagaatc cgatttactg 660
ggtcanctga agatcattaa agacttttac cttcttggga cgtgganaac tggttcangc 720
cttcatttga cacagtt 737

<210> 3652
<211> 733
<212> DNA
<213> Homo sapiens

<400> 3652
gtagtttcga gcccgctgcc ctttgcctcc tgggcggaga agctgcttcc tcctgggaac 60
aaccgcctcc cgctcctagc aggttgctac tgccccgaac ccgcgctgca gggaacagcg 120
gggcaaacag tgagtggggt tcagcgtaga ctctggacca ggagaggccc gcggtgaccg 180
aggcctgggc cccggaaacc aatagagcca tggcgactcc ctctgctgcc ttcgaggccc 240
ttatgaatgg tgtgacaagc taggatgtac ccgaagatgc tgttccatgt gaactgcttc 300
ttattggaga ggcttcattt cctgtgatgg tgaatgacat gggccaggtc ctcattgctg 360
cctcctccta tggccgtggc cgcctggtgg tcgtgtccca tgaggactac ttggtggaag 420
cccagctcac gccctttctc ctgaacgcag tggggtggct ttgctcttcc cctggggctc 480
ccattggtgt acacccatcc ctggcacctt tggccaaaat cctcgagggc tctggagtgg 540
atgcaaaggt tgagccagaa gtgaaagact ccctgggggt ttactgtatt gatgcctaca 600
atgaaaccat gacagaaaag ctggtcaagt tcatgaaatg tggtggcggc ttgctcatag 660
gangacaagc ctggggttgg gccaaccagg gggaggatga aagggttctg gtnacgttcc 720
ctgggaacct tng 733

<210> 3653
<211> 654
<212> DNA
<213> Homo sapiens

<400> 3653
agtgctgcgg ctgcctagtt gacgcaccca ttgagtcgct ggcttctttg cagcgcttca 60
gcgttttccc ctggagggcg cctccatcct tggaggccta gtgccgtcgg agagagagcg 120
ggagccgcgg acagagacgc gtgcgcaatt cggagccgac tctgggtgcg gactgtggga 180
gctgactctg ggtagccggc tgcgcgtggc tggggaggcg aggccggacg cacctctgtt 240
tgggggtcct cagagattaa tgattcatca agggatagtt gtacttgtct cgtgggaatc 300
acttcatcat gcgaaatctg aaattatttc ggaccctgga gttcagggat attcaaggtc 360
cagggaatcc tcagtgcttc tctctccgaa ctgaacaggg gacggtgctc attggttcag 420
aacatggcct gatagaagta gaccctgtct caagagaagt gaaaaatgaa gtttctttgg 480
tggcagaagg ttttctccca gaggatggaa gtggccgcat tgttggtgtt caggacttgc 540

0302303.0002000

tggatcanga gtcagtgtgt gtggccacag cctctggaga cgtcatactc tgcagnctna 600
cacacaacag ctggaatgtg ttgggaggtg taaccagtgg tatctctgnt atga 654

<210> 3654
<211> 860
<212> DNA
<213> Homo sapiens

<400> 3654
atgcggtccc gggttctgtg gggcgccgcc cggtggctct ggccccgccg ggccgttggc 60
ccagcccgcc ggcccctgag ctccggtagc ccgccgctgg aggagctgtt cgccccgggc 120
gggcccttgc ggaccttcct cgagcgccag gcggggtctg aagcccattt gaaggtcagg 180
aggcccgagt tgctggcggt gatcaaactg ctgaacgaga aggagcagga gctgcgggag 240
actgagcact tgctgcacga tgagaatgaa gatttaagga aacttgcaga gaatgaaatc 300
actttgtgtc aaaaagaaat aactcagctg aagcatcana agaaacagat gaaaatgatt 360
tgatcctgga agtaactgca ggagttggag gtcangaggc aatgttgttt acatcagaga 420
tatttgatat gtatcagcaa tatgctgcat ttaaaagatg gcattttgaa accctggaat 480
attttccaag tgaactangt ggccttagac atgcatctgc cagcattggg ggttcagaag 540
cctataggca catgaaattt gaaggaggtg ttcacagagt acaaagagtg ccaaagacag 600
anaagcangg ccgcgtccat actagcacca tgactgtagc antattaccc cagcctactg 660
agattaatct ggtgattaat ccgaaagatt tgagaattga cactaagcga gccagtggac 720
tgggggggca gcatgtaaat ccacggacag tgcttgtccg gatggtcatc tttcaacagg 780
ngtggttctg aatgcaacaa gagagatctc acttaaaaat aagacttgct ttgacaangt 840
acctgcaaac tgtcagntgc 860

<210> 3655
<211> 782
<212> DNA
<213> Homo sapiens

<400> 3655
ctcttccggt ctccggccgc cccttacctg caggctcttc tcccgccgcg gcccggcgct 60
ctccgagtcg cccctgcgga ctggtctcgc acagtgcctg ggcaccgggc gccagacaga 120
cactggccat gacgagcggc gcaaccaggt accggctgag ctgctcgctc cggggccacg 180
agctggacgt acggggcctg gtgtgctgcg cctatccgcc gggagccttt gtgtccgtgt 240
cccgagaccg caccacccgc ctctgggccc cagacagtcc aaacaggagc tttacagaaa 300
tgcactgtat gagtggccat tccaattttg tatcttgtgt atgcatcata ccctcaagtg 360
acatctaccc tcatggccta attgccaccg gtggaaatga ccacaatata tgcattttct 420
cactggacag tccaatgcca ctttatattc taaaaggcca caaaaatact gtttgtagtc 480
tatcatctgg aaaatttggg acattactta gtggttcatg ggacaccact gctaaagtct 540
ggctgaatga caagtgcatg atgaccttgc agggtcatac aagctgcagt gtgggcggta 600
aagatcttac ctgaacaggg cttaatgttg actggatcan caggcaagac tgttaaactg 660
tggaaggctg gaagatgtga agaggacttt ttcagggcat gaagactgtg taagaagttt 720
ggcaattttg agtgaaacaa gaatttcttt cctgngccaa atgaangctt agtatttaan 780
aa 782

<210> 3656
<211> 774

09653.0050.00

<212> DNA
<213> Homo sapiens

<400> 3656
gagcctacca aacctttggt tcgcagggct ggagctaagt ctcgctccag gagaaagaag 60
cagaagaaga actccaggca ggaagcagtg ccctggaaaa aacccaaagg catcaattcc 120
aacagcacag ctaacttgga ggatcctgag gtgggtgatg ctgaaagcat ggcgatctca 180
gagccgatca agggcagcag aaagccctgt gtgaataagg aggagttggc tttgaagaag 240
cccatggcga aatgtgcctg gaagggtccc agagagccac ctcaggatgc ccgggcagaa 300
gccgagagcc caggaggcgc ctctgagtca gaccaagatg gtggccatga aagcccacca 360
aagaagaagg ccgtggcctg ggtgtctgcc aagaaccccg ctcccatgag gaagaagaag 420
aaggtgagct tgggccctgt ctcctacgtc ttggttgact cagaagatgg caggaagaag 480
ccggtgatgc caaagaaagg gccaggctca agaagggagg catcagatca gaaggcccct 540
cggggccagc agcctgccga ggcaacagcc tcaacctcta ggggtccgaa gccaagccag 600
aaggctctcc tcggcgtgcc ccaatgaatn cagaaaggnt tgatctgggg gaccacccat 660
acttgaggag ttgaaagaac aaggaagacg tnccaagtca accaagtttc tctctttgtc 720
acttgaatta agacttttgg acttttntta aggggcccct tgtttgatta gnaa 774

<210> 3657
<211> 870
<212> DNA
<213> Homo sapiens

<400> 3657
ctcggctttg tgcggcggtg gagctctacc cttctccaaa agaagagcca agagaaggtc 60
cttttctaca aatatcagag ccatggctca ggagtcagtg atgttcagtg atgtgtccgt 120
agacttctct caggaggagt gggaatgcct gaatgatgat cagagagatt tatacagaga 180
tgtgatgttg gagaattaca gcaacctggt ttcaatgggg cattctattt ctaaaccaaa 240
tgtgatctcc tacttggagc aagggaagga gccctggttg gctgacagag agctaacaag 300
aggccagtgg ccagtcctgg aatcaagatg tgagaccaag aaattatttc tgaagaaaga 360
aatttatgaa atagaatcaa cccagtggga aataatggaa aaactcacaa gacgtgattt 420
tcagtgctcc agtttcagag atgattggga atgtaatagg cagtttaaga aagaactcgg 480
ctctcagggg ggacatttca atcaattggt attcactcat gaagatctgc ccactttgag 540
tcaccatcca tccttcacat tacagcaaat cattaacagt aaaaagaaat tctgtgcatc 600
taaagaatat aggaaaacct ttagacatgg ctcacagttt gctacacatg agataattca 660
taccattgag aaccttatga atgtaaggaa tgtggaaagt cctttagaca tccctcaaga 720
ctcactcatc atcagaaaat tcatactggc aagaaaccct ttgaatgtaa ggaatgtgga 780
aaaaccttta ttggggcttc anaccttact cgacatcncc ggaattcaca ctgggtgaga 840
aaccctntga atgtaaggaa tgtgggaaaa 870

<210> 3658
<211> 784
<212> DNA
<213> Homo sapiens

<400> 3658
actttcaaaa tggcggagtg tggagcgagc ggcagcggga gcagcgggga cagtctggac 60
aagagcatca cgctgccccc cgacgagatc ttccgcaacc tggagaacgc caagcgcttc 120

0080/2006 "0 5/05/2006

gccatcgaca taggcgggtc gttaaccaag ctggcctact attcaacggt acagcacaaa 180
gtcgccaagg tgcggtcttt cgaccactcc ggaaaggaca cagaacgtga acatgagccg 240
ccctatgaga tttcagttca agaagagatc actgctcgac tgcacttcat taagtttgag 300
aatacctaca tcgaagcctg cctggacttc atcaaagacc atctcgtcaa cacagagacc 360
aaggtcatcc aggcgaccgg gggcggggcc tacaagttca aggacctcat cgaagagaag 420
ctgcggctga aagtcgacaa ggaggacgtg atgacgtgcc tgattaaggg gtgcaacttc 480
gtgctcaaga acatccccca tgaggccttc gtgtaccaga aggattccga ccctgagttc 540
cggttccaga ccaaccaccc ccacattttc ccctatcttc ttgtcaatat cggctctgga 600
gtctccatcg tgaaggtgga gacggaggac aggttcgagt gggtcggcgg cagctccatt 660
ggaggcggca ccttctgggg gcttggcgct ctgctcacca aaacgaagaa gtttgacgag 720
ctcctgcacc tggctcgang ggccagcaca gcaatgtgga catgctggtg ccggacgtnt 780
acng 784

<210> 3659
<211> 764
<212> DNA
<213> Homo sapiens

<400> 3659
ggaagaaccc gcagcagctc ccaggatgaa ctggttgcag tggctgctgc tgctgcgggg 60
gcgctgagag gacacgagct ctatgccttt ccggctgctc atcccgctcg gcctcctgtg 120
cgcgctgctg cctcagcacc atggtgcgcc aggtcccgac ggctccgcgc cagatcccgc 180
ccactacagg gagcgagtca aggccatgtt ctaccacgcc tacgacagct acctggagaa 240
tgcctttccc ttcgatgagc tgcgacctct cacctgtgac gggcacgaca cctggggcag 300
tttctctctg actctaattg atgcactgga caccttgctg attttgggga atgtctcaga 360
attccaaaga gtggttgaag tgctccagga cagcgtggac tttgatattg atgtgaacgc 420
ctctgtgttt gaaacaaaca ttcgagtggt aggaggactc ctgtctgctc atctgctctc 480
caagaaggct ggggtggaag tagaggctgg atggccctgt tccgggcctc tcctgagaat 540
ggctgacgag gcggnccgaa aacttctccc agcctttcag acccccactg gcatgccata 600
tggaacagtg aacttacttc atggcgtgaa cccaggagag acccctgtca cctgtacggc 660
agggattggg accttcattg gtgaatttgc caccctgagc agcctnactg gtgacccggt 720
gntcgaagat gtggccngaa gtggcttttg atgcgcctct ggga 764

<210> 3660
<211> 788
<212> DNA
<213> Homo sapiens

<400> 3660
attgataata cttttaatgt gttggtaatg atgtttaaaa ttgaaagatt tttaaaataa 60
aaatgataga ttttcttact aaaaatgttt ttattaacct tgcttttatt ggaaaaaatc 120
aagcaatatt tctttttctt ttgtgttata ttgtacttta ctgattcatt tactggtgat 180
acatatgttt ttatggattt tccagtttaa tttgcatata caaatgaatg caatggtcta 240
ttggtgagca ttgagcaaca ctgtataaag ttttaaaaat gtaaacactt tttaatctac 300
tttcctctaa aaatcaataa tattctatta tttctaatcc ttttccactt gggaaataac 360
aatgaagaat ctgagaattt gacatctata actttacaga ttcatttttc catttaaatt 420
tcagtttctt ggatcactga atatgggaag ggagagcttc actaattaga cgcagcttct 480
taagaactta tattctcttt gacatacatc tctattgtag ttttttgttt tgttttgttt 540

0508035.0508035.seq

tttgagatgg agtcttgctc tgtcacccag gctggagtgc agtggtgcaa tctcagctca 600
ctgcaacctc tgcctcctgg gttcaagtga ttctcgtacc tcagactccc gagtagttgg 660
gattacaggt gcccaccacc acacccgcta attttgnatt tttagtagcc atgtggtttg 720
ccatgttggc cagctggttc gactctgcct cagtganccc cactanctcc aagtgtggat 780
acgggtga 788

<210> 3661
<211> 738
<212> DNA
<213> Homo sapiens

<400> 3661
acttactgag aacattaaag ggaaatgata aactcgtggt ggggatatgg cagacaggtg 60
cttgtttgtt tgagagaagt agcagaagag ataaaataca aagtgctata tgtttcagct 120
ggagaggaaa gagagagaat ttattagatt atatacttgt cccatggcat accacgtata 180
tgtttaaata gggacacatc tccctatgtt taactatact tataaacaac tttgatacac 240
attgcgtctt ttattctgtc acctgatatt ttagtgtatc tcaagttaca gattacatgt 300
gtccttaaac tatttctgaa tttggactta gttccatata cagaaagaac tttagaaaat 360
tcattaattt ggatcttcta ttgatagcca taaatattat gtttatgtat tctaaaacct 420
ctttgtttag ttagtactgt tcatgaatgt aacaagcttc aatttctcat ttgtgagtag 480
tacatttgct ttttgtttgt ttgtttgttt gtttttgaga tggagtctca cgctgtcacc 540
aggctggagt gcagtggcgc gatttcagct cactgcaacc tccacctccc aggtgcaagt 600
gatgcccctg cctcagcctc ccgagtagct gggactacag acacccgnca ccacacctgg 660
ctaatttttg tatttttagt agagacgggg tttcaccatg ttgctangct ggtctcaaac 720
tcttgacctc gngatttg 738

<210> 3662
<211> 866
<212> DNA
<213> Homo sapiens

<400> 3662
tgatattgaa tatttcagaa aagatccaag accattcttc aagtttgcaa aggaaatata 60
tcctggacaa ttccagccat ctctctgtca caaattcata gccttgtcag ataaggaagg 120
aaaactactt cgcaactata cccagaacat agacacgctg gaacaggttg cgggaatcca 180
aaggataatt cagtgtcatg gttcctttgc aacagcatct tgcctgattt gtaaatacaa 240
agttgactgt gaagctgtac gaggagatat ttttaatcag gtagttcctc gatgtcctag 300
gtgcccagct gatgaaccgc ttgctatcat gaaaccagag attgtgtttt ttggtgaaaa 360
tttaccagaa cagtttcata gagccatgaa gtatgacaaa gatgaagttg acctcctcat 420
tgttattggg tcttccctca aagtaagacc agtagcacta attccaagtt ccatacccca 480
tgaagtgcct cagatattaa ttaatagaga acctttgcct catctgcatt ttgatgtaga 540
gcttcttgga gactgtgatg tcataattaa tgaattgtgt cataggttag gtggtgaata 600
tgccaaactt tgctgtaacc ctgtaaagct ttcagaaatt actgaaaaac cttcacgaac 660
acaaaaagaa ttggcttatt tgtcagagtt gccacccaca cctcttcatg tttcagaaga 720
ctcaagttca ccagaaagaa cttcaccacc agattcttca gtgattgnca cacttttaga 780
ccaagcagct tagagtaatg atgatttana tgtggctgaa tcaaaagggt gtatggaaga 840
aaaccncagg aagtccaaac tttttg 866

US 2003/0170800 A1

0030203450.0 2007.03.30

<210> 3663
<211> 816
<212> DNA
<213> Homo sapiens

<400> 3663
gggagccgca atgtctcttg acagcggcgg cggcgcagcc ggttccgggt tcggcgcggg 60
gcggggatgt gaatcccgat ggagcggccc gaggaaggca agcagtcgcc gccgccgcag 120
ccctggggac ggctcctgcg tctgggcgcg gaggagggcg agccgcacgt cctcctgagg 180
aagcgggagt ggaccatcgg gcggagacga ggttgcgacc tttccttccc cagcaataaa 240
ctggtctctg gagatcactg tagaattgta gtggatgaaa aatcaggtca ggtgacactg 300
gaagatacca gcaccagtgg aacagtgatt aacaagctga aggttgttaa gaagcagaca 360
tgccctttac agactgggga tgtcatctac ttggtgtaca ggaagaatga accggaacac 420
aacgtggcat acctctatga atctttaagt gaaaagcaag gcatgacaca agaatccttt 480
gatacctcag gtgcaggtgc agggcgaggg gccgatcccc gggtccctcc gtcgtcgccc 540
gccactcagg tgtgctttga ggaaccacag ccatcaacat cgacgtcaga cctcttcccc 600
acagcctcgg cctcttccac ggagccttct cctgcagggc gagagcgttc ctccagttgt 660
gggtctgggg gtggtggcat cttccctaaa ggaagtggtc cctctgtggc aagtgatgaa 720
agtctncagc tttgcttaac tcttccagac agaaagactg cgtccttttc gtcgttggaa 780
ccccangatc angaggattt tggagcccgt gaagaa 816

<210> 3664
<211> 874
<212> DNA
<213> Homo sapiens

<400> 3664
gtttggggac ctgtttgaag aggagtattc cactgtgtct aataatcagt atggaaaagg 60
gaagaaatta aagactaaag ctttggagcc acctgctcct agagaattca ccaatttaag 120
cggaatcaga aatcagggtg gaacctgtta cctcaattcc cttcttcaga ctcttcattt 180
cacacctgaa ttcagagaag ctctattttc tcttggccca gaagagcttg gtttgtttga 240
agataaggat aaacccgatg caaaggttcg aatcatccct ttacagttac agcgcttgtt 300
tgctcagctt ctgctcttag accaggaagc tgcatccaca gcagacctca ctgacagctt 360
tgggtggacc agtaatgagg aaatgaggca acatgatgtg caggaactga atcgaatcct 420
cttcagcgct ttggaaactt ctttagttgg gacctccggt catgacctca tctatcgtct 480
gtaccatgga accattgtta accagattgt ttgtaaagaa tgtaagaacg ttagcgagag 540
gcaggaagac ttcttagatc taacagtagc agtcaaaaat gtatccggtt tggaagatgc 600
tctctggaac atgtatgtag aagaggaagt ttttgattgt gacaacttgt accactgtgg 660
aacttgtgac aggctggtta aagcagcaaa gtcggccaaa ttacgtaagc tgcctncttt 720
tcttactggt tcattactaa gatttaattt tgattttgtg aaatgcgaac gcttcaangg 780
aaactagctg gtatacattc ccttttccgg antaatctca gccctttgn ggaacagaag 840
ggaattggga tgacttagaa tatatatatg accc 874

<210> 3665
<211> 801
<212> DNA
<213> Homo sapiens

<400> 3665
agtaacccct cggctttctg ttcctggacg gtggcggccg ccggctctat gatggagccc 60
ccgaagcccg agcctgagct ccagcggttt taccaccggc tgctgcgtcc gctgtcgctc 120
ttccccacta ggacgacgtc cccagagcct cagaagcgcc ccccgcagga gggccggatt 180
ctgcagtcct tccctctggc gaagctgacg gtggcgtcgc tgtgcagcca ggtggccaag 240
ctgctggccg gcagcgggat agcagcggga gtgcctcctg aggcccgact acgtctcatc 300
aaggtcatcc tggacgagct gaagtgcagc tggcgggagc cgcccgccga acttagtctg 360
agccacaaaa acaaccagaa gctgcggaag cggctcgagg cctacgtgct gctgagcagc 420
gagcagctct tcttgcgcta cctgcacctg ctggtgacca tgtcgactcc caggggggtc 480
ttcactgaat cagccaccct cacccggttg gccgccagcc tcgccaggga ctgcacactc 540
ttccttacta gtcccaacgt ctaccgtggc ctgcttgccg acttccaggc cctgctgagg 600
gcagagcang cctctgggga tgtggacaag ctgcaccctg tctgcccgct gggacgttca 660
agctgtgccc tatcctggct acagcactgg cttcgccaat gcagtgtcta actnaactga 720
ctactatcaa ctagcgtcac aagttctatg ancagaagat gatcatgang atgatcatcc 780
tcgtgagaga aaagcttcat g 801

<210> 3666
<211> 750
<212> DNA
<213> Homo sapiens

<400> 3666
actccctccc cgcggggcgc gcagctcgcg ggtctttgga caccaccggt cctgagtccg 60
cggactgcca ttttcattaa gaactgccac ttagaggtac caaaataaag ggtatttgct 120
acctttaata cttgccagtt caggttggag gcacaggcag cagcaagaat ggaaagaaat 180
gttcttacaa cattttcaca ggaaatgtcc cagttaattt tgaatgaaat gccaaaagct 240
gaatattcca gtttattcaa tgattttgtt gaatctgaat ttttttgat tgatggggat 300
tcattactta tcacatgtat ctgtgagata tcatttaagc ctgggcagaa cctccatttc 360
ttctatctgg ttgaacgcta tcttgtggat cttattagca aaggaggaca attcaccata 420
gttttcttca aggatgccga gtatgcgtat ttcaacttcc ctgaacttct ttctttgaga 480
actgctttaa tccttcatct tcagaagaat accaccattg atgttcgaac aacattttcg 540
agatgcttat caaaagagtg gggaagtttc ttggaagaga gttacccata tttcctgata 600
gttgcagacg aagcctgaac gatctacaaa cacagctttt caacttttta atcattcatt 660
cttgggcaan gaangtcaac ggttggactt tcctcagggc aagaatctga nggtctttgg 720
ctttatgcat acctttttc caacatgtcc 750

<210> 3667
<211> 857
<212> DNA
<213> Homo sapiens

<400> 3667
gaggcgggca aggcgggcgc cgaggtttgc aaaggctcgc agcggccaga aacccggctc 60
cgagcggcgg cggcccggct tccgctgccc gtgagctaag gacggtccgc tccctctagc 120
cagctccgaa tcctgatcca ggcgggggcc aggggccccc cgcctccccc ctgaggaccg 180
aagatgagct tcctcttcag cagccgctct tctaaaacat tcaaaccaaa gaagaatatc 240
cctgaaggat ctcatcagta tgaactctta aaacatgcag aagcaactct aggaagtggg 300
aatctgagac aagctgttat gttgcctgag ggagaggatc tcaatgaatg gattgctgtg 360

DO NOT ENTER

aacactgtgg atttctttaa ccagatcaac atgttatatg gaactattac agaattctgc 420
actgaagcaa gctgtccagt catgtctgca ggtccgagat atgaatatca ctgggcagat 480
ggtactaata ttaaaaagcc aatcaaatgt tctgcaccaa aatacattga ctatttgatg 540
acttgggttc aagatcagct tgatgatgaa actcttttc cttctaagat tggtgtccca 600
tttcccaaaa actttatgtc tgtggcaaag actattctaa agcgtctgtt cagggtttat 660
gcccatattt atcaccagca ctttgattct gtgatgcagc tgcaagaagg ggcccacctc 720
acacctcctt taagcacttt attttctttg gtcaggagtt taatctgatt gatagcgtga 780
acttggcacc tcttcaagaa ttaatagaga aacttggatc aaaagacnga taatggttct 840
tctaaacaca gtacccc 857

<210> 3668
<211> 867
<212> DNA
<213> Homo sapiens

<400> 3668
ctcgtagcga gcctagtggc gggtgtttgc attgaaacgt gagcgcgacc cgaccttaaa 60
gagtggggag caaagggagg acagagccct ttaaaacgag gcgggtggtg cctgcccctt 120
taagggcggg gcgtccggac gactgtatct gagccccaga ctgccccgag tttctgtcgc 180
aggctgcgag gaaaggcccc taggctgggt ctgggtgctt ggcggcggcg gcttcctccc 240
cgctcgtcct ccccgggccc agaggcacct cggcttcagt catgctgagc agagtatgga 300
agcacctgac tacgaagtgc tatccgcgcg agaacagcta ttccacgaga ggatccgcga 360
gtgtattata tcaacacttc tgtttgcaac actgtacatc ctctgccaca tcttcctgac 420
ccgcttcaag aagcctgctg agttcaccac agtggatgat gaagatgcca ccgtcaacaa 480
gattgcgctc gagctgtgca cctttaccct ggcaattgcc ctgggtgctg tcctgctcct 540
gcccttctcc atcatcagca atgaggtgct gctctccctg cctcggaact actacatcca 600
gtggctcaac ggctccctca tccatggcct ctggaacctt ggttttctct tctccaacct 660
gtccctcatc ttcctcatgc cctttgcata tttcttcact gagtctgang gctttgctgg 720
cttcagaaan ggtgtcctgg gccgggtcta tgagacagtg gtgatgttga tgcttcttac 780
tttgctggtg ctaaggtatg gngtgggttg gcattaagcc attgnggaca agaaccaagg 840
gccaacagan agtcactcta tgacttt 867

<210> 3669
<211> 865
<212> DNA
<213> Homo sapiens

<400> 3669
tgtattgtga ctatcagcat tctggtgcaa atgaactttt ctccatcatc gactgtggaa 60
aattgatact tttaaagcat attcttctat gagcacaggt cctcctagtg aagcttagtt 120
tgacaaaggg tgtcatatgc tttcctaacc tgatttgtag ttaacattca cagagcctac 180
attttctcat tagggttatg atgctcagta tctttccaag tgccaggcac gggcttcctt 240
ttctgatcaa acataccatt ttttgtattt cacaactata gacagtcact tctgcagtcc 300
caatttaaaa atgcagaact gctttatcca agaatgctga aaaatactgt tctatccagg 360
tttcctaaac tataaaagca gattttgctt ttgtttgtta atcataggca tggccgagca 420
ttgtggatta gcctgaggct taaaatcaga tgcatgtctg gtaagatgac cactgtctca 480
ctatcaagag cctgcagagc cattttccag acctgtgatt gcccagaaca catagtcccc 540
acgtttctaa tttggagcaa atctaaaagg tgctgaggga ttggacagct ctgactttcc 600

US 9,550,838 B2

tcgagactat ggatatagtc cttctcggat tagctggaaa tggggacaga gttctcattt 660
atcccagaca tatacattgg ctttttgga atctacagat tgagattttg atgaatttat 720
attgggtttt aatgagaccc aaatggactc ttctcttaac aattcaagcn gtagnaccaa 780
aggttggctc accaaattnc cggaaaaaac catcttttt gggcctacct ttcgccaagg 840
ttttccaaaa accgtggata aatta 865

<210> 3670
<211> 852
<212> DNA
<213> Homo sapiens

<400> 3670
agttaacaga ttcttgctcg atagcttgtt tgtgtctgtc gtgttattag agggaactcc 60
actatatatg gtcacttgaa attatgatgc aaaggtttct cttgcattga aaccctcttg 120
gatattacag tatttttaat tgaaagtcct aattctgtta aggaaaggag ttgattaaat 180
tttaaggtac cactggtatt ttgggagatt ataatcagtt tgttttcaag ataatagaaa 240
ataaggtcca tgagaataga agttatgtga tttcagtgag ttgatgtgta cagcatggct 300
gtgctccatc tgatttaccc cattcttaag ttctgagagt atgttctcaa ggaagattta 360
actctctttg gttttaaatt acttttttaac cagcctaata aataagtctt actacttttc 420
ataatatttc ataatagtta aaagtaggtg ttttttttcgt gctcaatttg gcactcaaaa 480
taatgttcat tatggaagtt tggtaatact gagcaagcct gtggaatttt ctttatgaaa 540
aatgatttta gcctttgcaa atgttaacca tgtgaaacac attttcagta taagtatgcg 600
ttacagggtt tgatactttc ctgcacttag gtttgtccta ttcttcattt attcatacta 660
ggatagaaaa ttttggaatc agaaaataga tccagtgttt agctacatac aatctagtac 720
aagtgaattt ttattcttaa acataggtgt gttggctctt tttttaaaag atgcgctcta 780
cctgaaaang gaaattggga ttttanaact gggatgtggg tgccggtgaa agtattttan 840
ggcccaggtc tg 852

<210> 3671
<211> 880
<212> DNA
<213> Homo sapiens

<400> 3671
gaactgtggc gctttctggg taaagatgga cgtccacgat ctctttcgcc ggctcggcgc 60
gggggccaaa ttcgacacga gacgcttctc ggcagacgca gctcgattcc agataggaaa 120
aaggaaatat gactttgatt cttcggaggt gcttcaggga ctggactttt ttggaaacaa 180
gaagtctgtc ccaggtgtgt gtggagcatc acaaacacat cagaagcccc aaaatggaga 240
gaaaaaagaa gagagcctaa ctgaaaggaa gagggagcag agcaagaaaa aaaggaagac 300
gatgacttca gagacagggt ttcaccatgt tggccagtat ggtctcgatc tcctgacctc 360
gtgattcacc caccttgggc tcccaaagtg ctgggattac agatgtgagc caccacgccc 420
agccagaaat tgcttcccaa gaagaaggtg ctactataca gtggatgtca tctgtagaag 480
caaagattga agacaaaaaa gttcagagag aaagtaaact aacttccgga aagttggaga 540
atctcagaaa agaaaagata aacttcttgc ggaataaaca caaaattcac gtccaaggaa 600
ccgatcttcc tgacccaatt gctacatttc agcaacttga ccaggaatat aaaatcaatt 660
ctcgactact tcagaacatt ctagatgcag gcttncaaat gcctacgcca atccaaatgc 720
aagccatccc agttatgctg catggtccgg gaacttcttg gcttctgctc caactggatc 780
tggaaaaaca ttagctttta gcattcctat tttaatgcca cttgaaacaa cccgcaaatt 840

0 9 0 2 5 4 5 0 3 0 0 2 0 0 0

aaggctttaa aaccctgant atntcancca acacgagaac 880

<210> 3672
<211> 845
<212> DNA
<213> Homo sapiens

<400> 3672
tctccccgcc cgccggcccc tccagcctcc tccaaggcgg cggaccaggc cgggccggag 60
ttttcggggt tcagcccgcg agcgggagga ccggggaggc gagggaggag gaaggcgaga 120
agggccagat cgcgggagag cccaatcacg gggcgagctg gacctggctg tgatcattta 180
taatccttga ctcctccgct ccgccacttg tcaagatgac aggggtcatc cgtgaataac 240
acttcacgct gatgaatggc tcttgccggc tttcggctct gatgaggggt ctgcccgccg 300
ccgattgaaa acactaatga acttactgcg ccatttgaaa ttcacacgca ccaacaaaat 360
ggggggtggg catttcaggt cagctgagtc acccgaggag gtggcagtgc aagacactgc 420
cgggaagacg gattccgagg cagaagggtg taattaagga tttccacccc cggtaggcgg 480
cccgtccttt gcagagcctc tgaaaatgac ccgcgccttc ctttccacag tgttctttcg 540
tccgagaccg aaaagcgcaa atgacctttg gacagggaag ggaggcagta aacactcaga 600
cttccttacc agcccctggt gggcactgca gcagaacaat tgtctgcccc caggttcaag 660
cacctagcct ccgncccgca tacctgccag gggcggaccc cgggagtcct tcgaagcttc 720
actcccactt ttactactct tctttctctc attctnccct caaattaacg ggccggacac 780
ttgtcccttg nctcgaattt tggttgcttg tgggaaagga aaaaaaaaag ntttgctggt 840
tcctt 845

<210> 3673
<211> 835
<212> DNA
<213> Homo sapiens

<400> 3673
ggagcctagc ggctctcccc gcgtccaaga tggcggcaga agcagctggt gggaaataca 60
gaagcacagt cagcaaaagc aaagacccct cggggctgct catctctgtg atcaggactc 120
tgtctactag tgacgatgtc gaagacaggg aaaatgaaaa gggtcgcctt gaagaagcct 180
acgagaaatg tgaccgtgac ctggatgaat tgattgtaca gcactacaca gaattgacga 240
cagccattcg cacataccag agcatcacag agcgcatcac taactcccga aataaaataa 300
agcaggtaaa agagaacctg ctttcatgca agatgctgct gcactgcaaa cgggatgagc 360
ttcggaaact gtggattgaa ggaattgagc ataagcatgt cctgaacttg ttggatgaaa 420
ttgagaatat caagcaagtg cctcaaaagc tggaacagtg catggccagc aagcactatc 480
tcagtgccac tgacatgttg gtgtcagcag ttgagtcttt ggagggcccc ctgctccagg 540
tggaaggact gagtgacctt cgactagagc ttcacagcaa gaagatgaac cttcacttgg 600
tctcatagat gaactacacc ggcacctgta catcaaatcg actagccgag ttgtgcagcg 660
taacaaggaa aaagggaaaa tcagcttcct cgtgaaagat gcttctgttc ctctgattga 720
tgttacaaac ctcctactcc tcgaaaattc cttgatcctc tnctattcta ctgntggaac 780
tcaagtgtga nggagataaa tctgcaggac atcagggaag attagaattg gatcc 835

<210> 3674
<211> 882
<212> DNA

US005955600A

<213> Homo sapiens

<400> 3674
ctaaaaatca agcatggcga tttgttgttc ctgtttccct cgagccttgc tgggccctca 60
tctgaaatgg agacgtcagt tccaccgggc ttcaaagtct ttggcgctcc caacgtggtg 120
gaggatgaga ttgatcagta cctcagcaaa caggacggga agatttacag aagccgagac 180
ccacagctat gccgccacgg ccctttgggg aaatgcgtgc actgcgtccc tctagagcca 240
ttcgatgagg actatctaaa ccatctcgag cctcccgtga agcacatgtc cttccacgcc 300
tacatccgga agctgactgg aggggctgac aaggggaagt ttgttgccct ggagaacatc 360
agctgcaaga ttaagtcagg gtgcgagggg cacctcccgt ggccgaatgg catctgtact 420
aagtgccagc cgagcgccat cacgctgaac agacagaagt acaggcatgt ggacaatatc 480
atgtttgaga atcacaccgt cgctgaccgc tttcttgact tctggagaaa gacagggagc 540
cagcattttg ggtacttata cggacggtac acggagcaca aagacattcc ccttggcatc 600
agggctgaag tggctgcgat ttatgagcca cctcagattg gtacacagaa cagcttggag 660
cttcttgagg atccaaaagc tgaagtggtc gatgaaattg cttgccaaac ttggcctgcg 720
gaaggntggc tggatattta cagacctcgt cttaaaaaga tacccgaaag ggtacccgtc 780
cgcttcaagt cgaaatangg cacctatttt ctaagttcan aagaatgcat cactgcagga 840
gactttcaga acaagcattc caacatgtgc cggnttttt ca 882

<210> 3675
<211> 885
<212> DNA
<213> Homo sapiens

<400> 3675
agatttccag tgggttcaag gagatgtgtg tgaagttcag ctgatggtat ataacccaat 60
gccgtttgaa cttcgagttg aaaacatggg gctgctcacc agcggagtgg agttcgagtc 120
tctccctgcg gcgctttctc ttccggctga atctggtctg tacccagtga cgctcgtcgg 180
ggtcccgcag acgactggaa cgattactgt gaacggttac cataccacgg tcttcggtga 240
gttcagtgac tgtttgctgg ataacctgcc gggaataaaa accagtggct ccacagtgga 300
agtcattccc gcgttgccaa gactgcagat cagcacctct ctgcccagat ctgcacattc 360
attgcaacct tcttctggtg atgaaatatc tactaatgta tctgtccagc tttacaatgg 420
agaaagtcag caactaatca ttaaattgga aaatattgga atggaaccat tggagaaact 480
ggaggtcacc tcgaaagttc tcaccactaa agaaaaattg tatggcgact tcttgagctg 540
gaagctagag gaaacccttg cccagttccc tttgcagcct gggaaggtgg ccacgttcac 600
aatcaacatc aaagtgaagc tggatttctc ctgccaggag aatctcctgc aggatctcag 660
tgatgatgga atcagtgtga gtggctttcc cctgtccagt ccttttcggc angtcgttcg 720
gccccgaatg ganggcaaac ctgtgaaccc acccgagagc aacaaagcag gcgactacag 780
ccacgtgaag accctggaag ctgtcctgac tttaaatact ntggaggccc gggccacact 840
tgaaggatnt tncaggaatc tcttcctggg gcttgcatgt aaaaa 885

<210> 3676
<211> 886
<212> DNA
<213> Homo sapiens

<400> 3676
aagtggcagg caggcaggct ggccccgggg acttctctct ggccctgctc cctccgagcg 60

0956945.0002800

ctccgccgtt gcccgcctgg cccctacgga gtccttagcc aggatggagg ctgttgtgaa 120
cttgtaccaa gaggtgatga agcacgcaga tccccggatc cagggctacc ctctgatggg 180
gtccccttg ctaatgacct ccattctcct gacctacgtg tacttcgttc tctcacttgg 240
gcctcgcatc atggctaatc ggaagccctt ccagctccgt ggcttcatga ttgtctacaa 300
cttcccactg gtggcactct ccctctacat tgtctatgag ttcctgatgt cgggctggct 360
gagcacctat acctggcgct gtgaccctgt ggactattcc aacagccctg aggcacttag 420
gatggttcgg gtggcctggc tcttcctctt ctccaagttc attgagctga tggacacagt 480
gatctttatt ctccgaaaga aagacgggca ggtgaccttc ctacatgtct tccatcactc 540
tgtgcttccc tggagctggt ggtgggggt aaagattgcc ccgggaggaa tgggctcttt 600
ccatgccatg ataaactctt ccgtgcatgt cataatgtac ctgtactacg gattatctgc 660
ctttggccct gtggcacaac cctacctttg gtggaaaaag cacatgacaa gccattcagc 720
tgatccagtt tgncctggtc tcactgnaca tctnccagta ctactttatg tccaactgta 780
actaccaagt acccagtcat tattcacctc atctgggatg tatggcacca tcttcttcat 840
gctggtcttc aacttntggg attacttctt ataccaaggg caagcg 886

<210> 3677
<211> 844
<212> DNA
<213> Homo sapiens

<400> 3677
tgcttggccg tgcttgccct gtcatcccac ctgagaacca tgctcaccga ccctggggca 60
gtacccaaag gaaacgctac gaaagaatac atggagagct tgcagctgaa gcccggggaa 120
gtcatctaca agtgccccaa gtgctgctgt attaaacccg agcgcgccca ccactgcagt 180
atttgcaaaa gatgtattcg gaaaatggat catcactgcc cgtgggtgaa caattgtgta 240
ggagaaaaga atcaaagatt ttttgtgctc ttcactatgt atatagctct gtcttcagtc 300
catgctctga tcctttgtgg atttcagttc atctcctgtg tccgagggca gtggactgaa 360
tgcagtgatt tttcacctcc gataactgta atcctgttga tcttcctgtg ccttgagggt 420
cttctgtttt tcactttcac tgcagttatg tttggcaccc aaatccactc catatgcaac 480
gacgagacgg agatcgagcg attgaaaagt gagaagccca catgggagcg gaggctgcga 540
tgggaaggga tgaagtccgt ctttgggggg ccccccctcac tcctctggat gaatcccttt 600
gtgggcttcc gatttaggcg actgcccacg agacccagaa aaggcggccc ggagttctca 660
gtgtgaggcg tggctcatca gactgaaact tgctcacaga cttncagtta tttatttggg 720
gtctgaagga tatcaacaag ctcatctgtg accaacaggg caactgggaa cctacacaaa 780
ccaattgctt gcancaagca gaagtttata tatttatagt cccaatggca naggaagagg 840
ctnt 844

<210> 3678
<211> 811
<212> DNA
<213> Homo sapiens

<400> 3678
cagcgccagc tccgcgtccc gaccggcccg cggcagcctg cgccgcgcca tggccacctc 60
cccgcagaag tcgccttctg tccccaagtc tcccactccc aagtcgcccc cgtcccgcaa 120
gaaagatgat tccttcttgg ggaaactcgg agggaccctg gcccggagga agaaagccaa 180
ggaggtgtcc gagctgcagg aggagggaat gaacgccatc aacctgcccc tcagcccaat 240
tcccctttgag ctggaccccg aggacacgat gctggaggag aatgaggtgc gaacaatggt 300

0050250-0050800

ggatccaaac tcacgcagtg accccaagct tcaagaactg atgaaggtat taattgactg 360
gattaatgat gtgttggttg gagaaagaat cattgtgaaa gacctagctg aagatttgta 420
tgatggacaa gtcctgcaga agcttttcga gaaactggag agtgagaagc taaatgtggc 480
tgaggtcacc cagtcagaga ttgctcagaa gcaaaaactg cagactgtcc tggagaagat 540
caatgaaacc ctgaaacttc ctcccaggag catcaagtgg aatgtggatt ctgttcatgc 600
caagagcctg gtggccatct tacacctgct cgttgctctg tctcagtatt tccgcgcacc 660
aattcgactt ccagaccatg tttccatcca agtggttgtg gtccagaaac gagaaggaat 720
ccttcatctc ggcaaatcca agaggaaata actggtaaca cagangctct ttncggangc 780
atgaacgtga tgcctttgac accttgttcg a 811

<210> 3679
<211> 702
<212> DNA
<213> Homo sapiens

<400> 3679
gaggctcggc cgcctgagcc gcggacggtt tgctgagccc gttagtgcgc ccggccgaga 60
cacgccgccg ccatgtcccg ctacctgcgt ccccccaaca cgtctctgtt cgtcaggaac 120
gtggccgacg acaccaggtc tgaagacttg cggcgtgaat ttggtcgtta tggtcctata 180
gttgatgtgt atgttccact tgatttctac actcgccgtc caagaggatt tgcttatgtt 240
caatttgagg atgttcgtga tgctgaagac gctttacata atttggacag aaagtggatt 300
tgtggacggc agattgaaat acagtttgcc caggggatc gaaagacacc aaatcagatg 360
aaagccaagg aagggaggaa tgtgtacagt tcttcacgct atgatgatta tgacagatac 420
agacgttcta gaagccgaag ttatgaaagg aggagatcaa gaagtcggtc ttttgattac 480
aactatagaa gatcgtatag tcctagaaat agaccgactg gaagaccacg gcgtagcaga 540
agccattccg acaatgatag attcaaacac cgaaatcgat ctttttcaag atctaaatcc 600
aattcaagat cacggtccaa gtcccagccc aagaaagaaa tgaagctaaa tcacgttcta 660
ngtctgnatt tacaccaaac tagaggcacc tntaaacaga tt 702

<210> 3680
<211> 826
<212> DNA
<213> Homo sapiens

<400> 3680
aagtcacgtg ctgtgacagt agctggggtg aggccgtcgt cgccgcacgg gctggttggg 60
gctgtgtctg tgggaggcgc cggggtgatg gcggtggaga ctctgtcccc ggactgggag 120
tttgaccgcg ttgacgacgg ctcgcagaaa attcatgccg aagtccaact taagaattat 180
gggaaatttc ttgaggagta tacctctcaa ctgagaagaa ttgaggacgc tctggatgac 240
tcaattggag atgtttggga tttcaatctt gatcctatag cattaaagct tttgccttat 300
gaacagtcct ctcttttgga actcataaag actgaaaaca aggtcttaaa caaagtcatc 360
actgtttatg ctgcactttg ttgtgaaatc aagaaattaa aatatgaggc tgaaactaaa 420
ttttacaatg gtctcttgtt ttatggagaa ggagctacag atgccagcat ggtggaaggt 480
gattgccaaa ttcaaatggg gagatttatt tcattcttac aggaactgtc ttgctttgtt 540
acgaggtgct atgaagtggt gatgaacgta gtccaccagt tggctgccct ctatatcagt 600
aacaagattg cacccaaaat tatagagaca actggagttc attttcagac tatgtatgag 660
cacttgggag aactgctaac agttttgctc accctggatg aaattattga taatcatatc 720
acactgaaag accactggac tatgtcaaaa ggttactgaa atctgtccat cacaatcctt 780

0050030.0050000

caaaatttgg aattcaggaa gaaaaattaa agccatttga aaggtt 826

<210> 3681
<211> 824
<212> DNA
<213> Homo sapiens

<400> 3681
ctcttgacag cggcggcggc gcagccggtt ccgggttcgg cgcggggcgg ggatgtgaat 60
cccgatggag cggcccgagg aaggcaagca gtcgccgccg ccgcagccct ggggacggct 120
cctgcgtctg ggcgcggagg agggcgagcc gcacgtcctc ctgaggaagc gggagtggac 180
catcgggcgg agacgaggtt gcgacctttc cttccccagc aataaactgg tctctggaga 240
tcactgtaga attgtagtgg atgaaaaatc aggtcaggtg acactggaag ataccagcac 300
cagtggaaca gtgattaaca agctgaaggt tgttaagaag cagacatgcc ctttacagac 360
tggggatgtc atctacttgg tgtacaggaa gaatgaaccg gaacacaacg tggcatacct 420
ctatgaatct ttaagtgaaa agcaaggcat gacacaagaa tcctttgaga tggtgccttg 480
ctgtgttgcc caggctggtc taaaactcct gggatcaagt gatcctccca ccttggcctc 540
ccaaagtatt gtgattacag ggtctggggg tggtggcatc tcccctaaag gaagtggtcc 600
ctctgtggca agtgatgaag tctccagctt tgcctcagct ctcccagaca gaaagactgc 660
gtcctttcg tcgttggaac cccaggatca ggaggatttg gagcccgaga agaagaaaat 720
gagangagat ggggaccttg acctgaacgg gcagttgttg gtcgcacaac cgcgtagaaa 780
tgcccaaacc gtccacgagg acgtcagaac acngctgggg aagc 824

<210> 3682
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3682
agagtagagg cggcggcggc ggcggccgga cccagactgg tagtgaggcg ttggaccccg 60
agccgctgca atgccgctgg agctggagct gtgtcccggg cgctgggtgg gcggncaaca 120
cccgtgcttc atcattgccg agatcggcca gaaccaccag ggcgacctgg acgtagccaa 180
gcgcatgatc cgcatggcca aggagtgtgg ggctgattgt gccaagttcc agaagagtga 240
gctagaattc aagtttaatc ggaaagcctt ggacaggcca tacacctcga agcattcctg 300
ggggaagacg tacggggagc acaaacgaca tctggagttc agccatgacc agtacaggga 360
gctgcagagg tacgccgagg aggttgggat cttcttcact gnctctggca tggatgagat 420
ggcagttgaa ttcctgcatg aactgaatgt tccatttttc aaagttggat ctggagacac 480
taataatttt ccttatctgg aaaagacagn caaaaaaggt cgcccaatgg tgatctccag 540
tgggatgcag tcaatggaca ccatgaagca agtttatcag atcgtgaagc ccctcaaccc 600
caacttctgc ttcttgcagt gtaccagcgc atacccgctc cagcctgagg acgtcaacct 660
gcgggtcatc tcggaatatc agaagctctt tcctgacatt cccatagggt attctgggca 720
tgaaacaggc atagcgatat ctgtggccgc agtggctttt ggggaccaag gtgntggaac 780
gtcacatact ttggacaaga cctggaangg gag 813

<210> 3683
<211> 822
<212> DNA
<213> Homo sapiens

US 2002/0076800 A1

<400> 3683
actgcagcct ccatcttgga agcggccgcc ggcgcctaga actgtatttc agaaaaaaga 60
aactacagtt ttagcatgca gaaaggaaaa gggagaacaa gccggatcag aagacgaaaa 120
ctctgcggaa gttctgaatc aagaggagtg aatgagagcc acaagtctga atttatagag 180
ctgaggaagt ggctgaaagc taggaagttt caagattcaa acttagcgcc tgcttgtttt 240
ccaggtacag gaagagggct gatgagtcaa acatccctgc aggagggaca gatgattatt 300
tcgttgcctg agagttgcct gctcaccacg gacacagtga ttcgaagcta cttaggggca 360
tacattacta agtggaagcc tcctccatct cctctgctgg cgctgtgcac ctttttagtt 420
tcagaaaagc atgctgggca ccgatctctt tggaagcctt acctggagat tttacccaag 480
gcgtatacct gccctgtttg tttggagccg gaagtggtga accttcttcc caaatcttta 540
aaagcaaagg ctgaagagca gagagcccac gtgcaggagt tctttgcttc ctccagagac 600
tttttctctt ctctgcagcc tctgtttgcg gaggctgttg acagcatctt cagctacagt 660
gccctgctgt gggcttggtg caccgtcaac accagagccg tgtacctgag gcccaggcag 720
cgggaatgcc tttcttgcag agcccggaca cctgtgcact tcgcttccgt acctggacct 780
gctgaatcat agcccacatt gtccaggtna aaagcagcgt tn 822

<210> 3684
<211> 691
<212> DNA
<213> Homo sapiens

<400> 3684
accangcgcg gtccggaggc cgagggcgac cacagcagcc tccgcctcct gctgctccgg 60
actattctgc gctgggctag ncggcggtga cccggactgc gcccggcagt ggcttcgcgg 120
gcgacgcgtc gccatgggct ctcgctggag cagcaaagag gagaggcagc cgctgctggg 180
gcccgggctc gggcctgggc tgggggcctc ctggagaagc cgggaggcgg cggcggcggc 240
gctgcccgcg gcggtcccgg gtcccgggcg ggtatacggg cgccgctggc tggtgctgct 300
gctcttctcg ctgctggcgt tcgttcaggg cctggtctgg aacacctggg gtcccatcca 360
gaactcggcg cgccaggcct acggcttctc cagctgggac atcgcgctgc tcgtgctgtg 420
ggggcccatc ggcttcctgc cctgcttcgc gttcatgtgg ctcctggaca agagaggtct 480
ccggataact gtgctcctga catccttcct tatggttttg ggaactggtc taagatgcat 540
acctatatca gacttaatcc ttaaaaagaa gattaattca tggaggacag atgttaaatg 600
gattggcang tccaactgta atgaatgcag naccatttc tctctacgac gtggttttct 660
gcagatgaaa agggccacaa gncacagcta t 691

<210> 3685
<211> 821
<212> DNA
<213> Homo sapiens

<400> 3685
tacacataca ataggaattc tctataattc ccaaggacag gccataattg aaagaactaa 60
tagaacactc aaagctcaat tggttaaaca aaaaaaagga aaagacagga gtataacact 120
ccccagatgc aacttaatct agcactctat actttaaatg ttttaaacat ttatagaaat 180
cagaccacta cctctgcaga acaacatctt actggtaaaa ggaacagccc acatgaagga 240
aaactgattt ggtggaaaga taataaaaat aaaacatggg aaatggggaa ggtgataacg 300
tgggggagag gttttgcttg tgtttcacca ggagaaaatc agcttcctgt ttggataccc 360

0050450200 D: 07/20/2006

actagacatt taaagttcta caatgaactc actggagatg caaagaaaag tgtggagatg 420
gagacacccc aatcgactcg ccaggtaaac aaaatggtga tatcagaaga acagaaaaag 480
ttgccttcca tcaaggaagc agagttgcca atataggcac aattaaagaa gctgacacag 540
ttagctaaaa aaaaaagcct agagaataca aaggtgacac caactccaga gagtatgctg 600
cttgcagctc tgatgattgt atcaacggtg gtaagtcttc ccaagtctgc aggagcagct 660
gcagctaatt atacttactg ggcctatgtg cctttcccac ccttaattng ggcagttaca 720
tagatggata atcctattga agtagatgtt aataatagtg catgggtgcc tggcccacan 780
atgactggtg ccctgnccaa cctgaagaag gaatgatgat n 821

<210> 3686
<211> 817
<212> DNA
<213> Homo sapiens

<400> 3686
ttatttgaat attggtgagg aaggctgcac ttgtgaaatg aatgggctca ccctcccagg 60
tcctgtggga tttgcttcaa ccaccactat caaggatgcc cctaagccag ccactccatc 120
ctctagcagt gggattgcct ctgagttcag cagtgagatg tccacctcag aggtgagcag 180
tgaagtgggg tccactgctt ctgatgagca taatgctggg ggcctggaca ctgccttgct 240
tccgaggcca gagcggcgct gcagcctcca cccaacaccc acctctgggc tgtttcagcg 300
ccagccttct tctgctacct tctccagtaa ccagtctgac aacggcctgg acagtgatga 360
tgaccagccc gttgaggggg tcataaccaa tggcagcaag gtagaggtgg aagtagacat 420
ccactgctgc agggggaggg atctggagaa ctcacccccc ctcatagaga gttctcctac 480
cctgtgttct gaggaacatg ctagagggtc gtgttttggg atccgaagac agaacagtgt 540
gaatagtggc atgctcctgc caatgagcaa ggacaggatg gagttacaga agtctccctc 600
cacctcctgc ctctatggga agaaactctc caatggctct attgtgcccc tagaggacag 660
cctgaacctc attgaagtgg ccacagaagt gcccaagagg aaaactggct attttgctgc 720
ccccactcag atggaaccag aggaccagtt tgntgtgcct catgacctgg aagaagaagt 780
gaaggaacaa atgaaacagc accaggacag ccggctc 817

<210> 3687
<211> 800
<212> DNA
<213> Homo sapiens

<400> 3687
gtgtggcgag gcggggaagg aagacacggt ggaagaggag gaaggcaagt ttaacctcat 60
gctcatggag tgctccatct gcaatgaaat catccaccct ggatgcctta agattaagga 120
gtcagagggt gtggtcaacg acgagcttcc aaactgctgg gagtgtccga agtgtaacca 180
cgccggcaag accgggaaac aaaagcgtgg ccctggcttt aagtacgcct ccaacctgcc 240
cggctccctg ctcaaggagc agaagatgaa ccgggacaac aaggaagggc aggaacctgc 300
caagcggagg agtgagtgtg aggaggcgcc ccggcgcagg tcggatgagc actcgaagaa 360
ggtgccgccg gacggccttc tgcgcagaaa gtctgacgac gtgcacctga ggaagaagcg 420
gaaatacgag aagccccagg agctgagtgg acgcaagcgg gcctcatcgc ttcaaacgtc 480
ccccggttcc tcctctcacc tctcgccgag gccccctcta ggcagcagcc tcagcccctg 540
gtggagatcc agtctcactt acttccagca gcagctcaaa cctggcaaag aagataagct 600
tttcaggaaa aagcggcggt cctggaagaa cgccgaggac cgcatggcgc tggccaacaa 660
gcccctccgg cgcttcaagc aggaacccga ggacgaactg cccgangcgc cccccaagac 720

0509536.0004

caggggagag cgaccacttc ccgcttcagc ttccccaccg ngggacccaa ccaccgaagg 780
ggcccnaagg ccccggagga 800

<210> 3688
<211> 816
<212> DNA
<213> Homo sapiens

<400> 3688
ggctgactta tgtttttgg tgcagcatta tgatttggct tacagttgct atcatactgc 60
aaagaaagat tttcttaatg atcaagcaat gctttatgca gctggtgcct tggaaatggc 120
agcagtgtct gcttttcttc aaccaggagc acctaggcca tatcctgctc attacatgga 180
tacagcaatt cagacataca gagatatctg caagaatatg gtgttggctg aaagatgtgt 240
gttgcttagt gctgaacttt taaaaagcca aagcaaatat tcagaggctg cagctctcct 300
aatacggttg accagtgagg attctgatct tcgaagtgca cttcttttgg aacaggcagc 360
acattgcttt ataaacatga aaagtcccat ggttagaaaa tatgcatttc atatgatatt 420
ggcaggccat cgatttagta aagcagggca gaaaaagcat gctttacgct gttattgtca 480
agccatgcaa gtttacaaag gaaaaggctg gtctcttgca gaggatcaca ttaatttcac 540
tattgggcgc cagtcctata ctcttagaca gctggataat gctgtgtctg cttttaggca 600
tattctaatt aatggaagta aacaatctgc tgctcaacag ggggctttcc tcagagaata 660
tctttatgtt tacaagaatg taagtcagct gtcaccagat ggcctttgcc acagcttcct 720
ttaccgnata ttaacagttc aacaacacgg gttttttttg gncatgacag acgaccagcc 780
ggatggtgaa aaaacaagca gctactcatg taagtt 816

<210> 3689
<211> 766
<212> DNA
<213> Homo sapiens

<400> 3689
aatcatcttg ttggccctga cctcgttgga aaacgaagct ccccgcaggg tcccggcctc 60
tagggctgct gtgcgggcgg gggtggcctg gagctatttc cattcggcgg cgggaacagg 120
tgccggcgcc tccgccccat ccccaggggc cgcctccccc ggggcggcct ccaggctgcc 180
gagacctata aaggcgccag gttttctcaa tgaagccggg acgcactccg gagcgcactg 240
cgtggtcgca ccctacccgg gctgccttgg aagtcgtccc cgccgccccc ccgcaccggc 300
atgaagctca tcgtgggcat cggaggcatg accaacggcg gcaagaccac gctgaccaac 360
agcctgctca gagccctgcc caactgctgc gtgatccatc aggatgactt cttcaagccc 420
caagaccaaa tagcagttgg ggaagacggc ttcaaacagt gggacgtgct ggagtctctg 480
gacatggagg ccatgctgga caccgtgcag gcctggctga gcagcccgca gaagtttgcc 540
cgtgcccacg gggtcagcgt ccagccagag gcctcggaca cccacatcct cctcctggaa 600
ggcttctgct ctacagctac aagcccctgg tggacttgta caagccgccg gtacttctga 660
ccgtcccgta tgaagagtgc aagtggagga gaagtacccg caactacaca gtcccttgat 720
ccccccggnc tnttcgatgg ccacgtgtgg nccatgtacc aaaagt 766

<210> 3690
<211> 598
<212> DNA
<213> Homo sapiens

0050503-0050800

0052005-000076

<400> 3690
tggtagcggc agcagctcgc gcccgcgccc tcctcgtacc cgtgcgcccc cggagaccga 60
tcccgccccg cggcccaggc cgggcctgaa cccagcgggt gccgcttctc cacccgaggc 120
ttccacctcc aacgagccat gttccaggct gcaggagccg cccaggccac cccctctcat 180
gacgccaaag gcggcggcag cagcacggtg cagcgctcca agtccttcag cctgcgggcc 240
caggtgaagg agacctgcgc cgcctgccag aagaccgtgt accccatgga gcggctggtg 300
gccgacaagc tcattttccg caactcttgc ttctgctgca agcactgtca caccaagctc 360
agcctgggca gctacgccgc gctgcacggg gagttctact gcaaacccca cttccagcag 420
ctgtttaaga gcaaaggcaa ctacgacgag gggtttggcc gcaagcagca caaggagctc 480
tgggcccaca aggaggtgga ccccggnacc aagacggnct gaggcctctg taaccttcca 540
ccccctctgc ggaaggcctg gagccggcan ggggaaggtg ggaaggaggt ccaagctt 598

<210> 3691
<211> 816
<212> DNA
<213> Homo sapiens

<400> 3691
gtttcaggtc agacagataa atgtagggag gaaactttta aacaagaatc acaacctcca 60
gaaaaaaatt caggacattc tacaagcaaa ggagacagag tggcacaaag tgagagcaag 120
agaagaaaaa ctgaggaaat tctgaaaagt cagactccaa agggaggaga caagaaggaa 180
tcctccaagt cattagtgcg acaagggagc ttcactatag aaaaacccag cccaaacata 240
cccatagaac ttattcccca tataaataaa cagacttcct ctactccttc ttctttagca 300
ttaacatctg caagtagaat acgagaaaga agtgagtctt tggatcctga ttctagtatg 360
gacacaaccc ttattctaaa agacacagaa gcagtaatgg cttttctaga agctaaacta 420
cgtgaagata ataaaactga tgaaggacca gatactccca gttataatag agacaattct 480
atttcaccag aatctgatgt agatacagct agtacaatca gtctggttac tggagaaact 540
gaaagaaagt caacccaaaa gcgaaagagt ttcactagcc tctataaaga taggtgttcc 600
acaggttctc cttccaaaga tgttacaaaa tcatcatctt caggtgctag ggaaaaaatg 660
gaaaagaaaa caaaaagtcg ttccacagat gtgggttcaa gagcagatgg ccgtaaattt 720
ggtcagtcca gtgggagaat aagacagncc tcantagact taacagatga tgaccaaacc 780
tctagggacc tcantcttgg catctctgaa attatg 816

<210> 3692
<211> 912
<212> DNA
<213> Homo sapiens

<400> 3692
accgcgggca tttacccgtg ctttcccaag cctggaagaa ctcgtcatgc tctttgtagc 60
gtggtgcttc tgttgctcac agaggtgcct gcttcccctt ctgccatgat tggaagtttc 120
ctgaggcctc cccagccatg tggaactgac aacttgcctt tgatgatttt caagagagtt 180
gtgctatgat gtggcaaaag tatgcaggaa gcaggcggtc aatgcctctg ggagtaagga 240
tcctttttcca cggtgtgttc tatgccgggg gctttgccat tgtgtattac ctcattcaaa 300
agtttcattc cagggcttta tattacaagt tggcagtgga gcagctgcag agccatcccg 360
aggcacagga agctctgggc cctcctctca acatccatta tctcaagctc atcgacaggg 420
aaaacttcgt ggacattgtt gatgccaagt tgaagattcc tgtctctgga tccaaatcag 480

agggccttct ctacgtccac tcatccagag gtggcccctt tcagaggtgg caccttgacg 540
aggtcttttt agagctcaag gatggtcagc agattcctgt gttcaagctc agtggggaaa 600
acggtgatga agtgaaaaag gagtagagac gacccagaag acccagcttg cttctagtcc 660
atccttccct catctctacc atatggccac tggggtggtg gcccatctca gtgacagaca 720
ctcctgcaac ccagtttttc agccaccagt gggatgatgg cctncctatt ccctgagaca 780
caacagtatt gaaattgggc ccattaataa cttcacaagt ggcctctcac taaatgtgan 840
aagtgaagga agcttgcagg aaaaaaattt gaacttacan tggtcatgan aagtaagtaa 900
aagaagccat ct 912

<210> 3693
<211> 845
<212> DNA
<213> Homo sapiens

<400> 3693
aactccagga atttgtggcg gagagggcaa ataactgcgg ctctcccggc gccccgatgc 60
tcgcaccatg tcgaggcgca agcaggcgaa accccagcac atcaactcgg aggaggacca 120
gggcgagcag cagccgcagc agcagacccc ggagtttgca gatgcggccc cagcggcgcc 180
cgcggcgggg gagctgggtg ctccagtgaa ccacccaggg aatgacgagg tggcgagtga 240
ggatgaagcc acagtaaagc ggcttcgtcg ggaggagacg cacgtctgtg agaaatgctg 300
tgcggagttc ttcagcatct ctgagttcct ggaacataag aaaaattgca ctaaaaatcc 360
acctgtcctc atcatgaatg acagcgaggg gcctgtgcct tcagaagact tctccggagc 420
tgtactgagc caccagccca ccagtcccgg cagtaaggac tgtcacaggg agaatggcgg 480
cagctcagag gacatgaagg agaagccgga tgcggagtct gtggtgtacc taaagacaga 540
gacagccctg ccccaccccc caggacataa gctatttagc caaaggcaaa gtggccaaca 600
ctaacgtgac cttgcaggca ctacggggca ccaaggtggc ggtgaatcag cggagcgcgg 660
atgcactccc tgcccccgtg cctggtgcca acagcatccc gtgggtcctc gagcagatct 720
tgtgtcttgc agcagcagca agcttcagca gatccagctt naccgacaga tccgcattcc 780
aggtgaacat tgtgggcctt ccacgccctt caattaaagc ngggcaaggg gcccgacact 840
tnttg 845

<210> 3694
<211> 928
<212> DNA
<213> Homo sapiens

<400> 3694
gagggagagc tggggcctgc tcccggagag atacggctat gtcgatcgaa atcgaatctt 60
cggatgtgat ccgccttatt atgcagtact tgaaggagaa cagtttacat cgggcgttag 120
ccaccttgca ggaggagact actgtgtctc tgaatactgt ggacagcatt gagagttttg 180
tggctgacat taacagtggc cattgggata ctgtgttgca ggctatacag tctctgaaat 240
tgccagacaa aaccctcatt gacctctatg aacaggttgt tctggaattg atagagctcc 300
gtgaattggg tgctgccagg tcacttttga gacagactga tcccatgatc atgttaaaac 360
aaacacagcc agagcgatat attcatctgg agaacctttt ggccaggtct tactttgatc 420
ctcgtgaggc atacccagat ggaagtagca aagaaaagag aagagcagca attgcccagg 480
ccttagctgg cgaagtcagt gtggtgcctc catctcgtct catggcattg ctgggacagg 540
cactgaagtg gcagcagcat cagggattgc ttcctcctgg tatgaccata gatttgtttc 600
gaggcaaggc agctgtcaaa gatgtggaag aagaaaagtt tcctacacaa ctgagcaggc 660

atattaagtt tggtcagaaa tcacatgtgg agtgtgctcg attttctcca gatggtcagt 720
atttggtcac tgggtctggt gatggattca ttgaagtatg gaactttact actggaaaaa 780
tcagaaagga tcttaagtac caggcccaag ataactttta tgatgatgga tgatgctggc 840
cctctgcatg gggtttcanc cngaagatcc cgaaatggtt accactgggg gcccaagaat 900
ggaaaaaatc aaggnggtgg aagaattc 928

<210> 3695
<211> 877
<212> DNA
<213> Homo sapiens

<400> 3695
tcctggtcat cgatgtcatc cacgaggtgg cccacagttg gttcggcaac gctgtcacca 60
acgccacgtg ggaagagatg tggctgagcg agggcctggc cacctatgcc cagcgccgta 120
tcaccaccga aacctacggt gctgccttca cctgcctgga gactgccttc cgcctggacg 180
ccctgcaccg gcagatgaag cttctgggag aggacagccc ggtcagcaaa ctgcaggtca 240
agctggagcc aggagtgaat cccagccacc tgatgaacct gttcacctac gagaagggct 300
actgcttcgt gtactacctg tcccagctct gcggagaccc acagcgcttt gatgactttc 360
tccgagccta tgtggagaag tacaagttca ccagcgtggt ggcccaggac ctgctggact 420
ccttcctgag cttcttcccg gagctgaagg agcagagcgt ggactgccgg gcagggctgg 480
aattcgagcg ctggctcaat gccacaggcc cgccgctggc tgagccggac ctgtctcagg 540
gatccagcct gacccggccc gtggaggccc ttttccagct gtggaccgca gaacctctgg 600
accaggcagc tgcctcggcc agcgccattg acatctccaa gtggaggacc ttccagacag 660
cactcttcct ggaccggctt ctggatgggt ccccgctgcc gcangaagtg ggtgatgaac 720
ctgtccaaag tgctactcct tcctggttgg acttcgatga acgctgagat cccgcatccg 780
ctggcttgca agaatgaagg tcccgnaacg aacttactat ccttgganct ttcacaaggg 840
ttgccggcgc tttnctggga aaagccccga atgttca 877

<210> 3696
<211> 887
<212> DNA
<213> Homo sapiens

<400> 3696
gaaaaaaccc tatgaatgta cgcagtgtgg gaaagcatta tcctctctta caagttttca 60
aacacacata agaatgcact ctggagaaag accttatgaa tgtaagatat gtgggaaagg 120
cttttgttct gccaattcat ttcaaagaca tgaaaaaact cacagtggag agaaacccta 180
taaatgcaag caatgtggta aagccttcat tcattccagt tcccttcgtt atcatgaaag 240
gattcacact ggagagaaac ctatgagtgt aagcaatgtg ggaaggcctt cagatcttcc 300
tcacaccttc aattgcatgg taggactcac actggagaga agccctatga atgtcaggaa 360
tgtgggaaag ccttcagatc tatgaagaac cttcaaagtc atgaaaggac acaaacacac 420
gtaagaatac actctggaga aagaccttat aaatgtaagc tatgtgggaa aggcttttat 480
tgtcccaaat cattgcanag acatgaaaaa actcacactg gagagaaact ctatgaatgc 540
aagcaatgtg gtgaagcctt cagtagttcc agttcctttc gataccatga aaggactcac 600
actggagaga aaccctataa atgcaagcaa tgtgggaaag ccttcagagc tgcctcagtc 660
cttcgaatgc atggtaggac tcaccctgaa gataaaccct atgagtgtaa gcaatgaggg 720
aaagccntca gatctgcctc acacctttga atgcatggta ggacacacaa tcaagagaaa 780
ccatgaatgt naagaatgtg ggaaaccctt caggtctgcc cagaaccttc gaattcataa 840

0356203.0042000

aggacacagc ccncttaaaa tgcattctgg aagctgacca aagnacc 887

<210> 3697
<211> 754
<212> DNA
<213> Homo sapiens

<400> 3697
ctggtgcttc tgcttctccg tgaccctgat catcctcatc gtggagctgt gcgggctcca 60
ggcccgcttc cccctgtctt ggcgcaactt ccccatcacc ttcgcctgct atgcggccct 120
cttctgcctc tcggcctcca tcatctaccc caccacctat gtccagttcc tgtcccacgg 180
ccgttcgcgg gaccacgcca tcgccgccac cttcttctcc tgcatcgcgt gtgtggctta 240
cgccaccgaa gtggcctgga cccgggcccg gcccggcgag atcactggct atatggccac 300
cgtacccggg ctgctgaagg tgctggagac cttcgttgcc tgcatcatct tcgcgttcat 360
cagcgacccc aacctgtacc agcaccagcc ggccctggag tggtgcgtgg cggtgtacgc 420
catctgcttc atcctagcgg ccatcgccat cctgctgaac ctgggggagt gcaccaacgt 480
gctacccatc cccttcccca gcttcctgtc ggggctggcc ttgctgtctg tcctcctcta 540
tgccaccgcc ttgttctctg gcccctctac cagttcgatg agaagtatgg cggccagcct 600
cggcgctcga gagatgtaag ctgcagccgc agccatgcct attacgtgtg tgcctgggac 660
cgncgactgg ctgtggcatc tgacgncatc aactactggc gtatgtggct gaactggtgc 720
actctgccac tggttttggc aaggctaaga ctnt 754

<210> 3698
<211> 822
<212> DNA
<213> Homo sapiens

<400> 3698
tctcaaataa agatagatgc acacctgaac aaagtatgtc caaccactga gaccatttac 60
aatgatgagt tctatactaa acaagatgta attattacag cattagataa tgtggaagcc 120
aggagatacg tagacagtcg ttgcttagca aatctaaggc ctcttttaga ttctggaaca 180
atgggcacta agggacacac tgaagttatt gtaccgcatt tgactgagtc ttacaatagt 240
catcgggatc ccccagaaga ggaaatacca ttttgtactc taaaatcctt tccagctgct 300
attgaacaca ccatacagtg ggcaagagat aagtttgaaa gttccttttc ccacaaacct 360
tcattgttta acaaattttg gcaaacctat tcatctgcag aagaagtctt acagaagata 420
cagagtggac acagtttaga aggctgtttt caagttataa agttacttag cagaagacct 480
agaaattggt cccagtgtgt agaattagca agattaaagt ttgaaaaata ttttaaccat 540
aaggctcttc agcttcttca ctgtttccct cttgacatac gattaaaaga tggcagttta 600
ttttggcagt caccaaagag gccaccctct ccaataaaat ttgatttaaa tgagcctttg 660
cacctcagtt tccttcagaa tgctgcaaaa ctatatgcta cagtatattg gattccattt 720
gcagaagang acttatcagc agatgccctc ttgaatattc tttcagaagt aaagattcag 780
gaattcaagc cttncaatna ggtggtcata ccgatgaaac tg 822

<210> 3699
<211> 929
<212> DNA
<213> Homo sapiens

09509509.0-2401

0050050.00700

<400> 3699
ttcaaaaata tgcttcggtt aaaagaactg ggaatcaaca atatgggcga gctcgtttct 60
gtcgaccgct atgccctgga taacttgcct gaactcacaa agctggaagc caccaataac 120
cctaaactct cttacatcca ccgcttggct ttccgaagtg tccctgctct ggaaagcttg 180
atgctgaaca acaatgcctt gaatgccatt taccaaaaga cagtcgaatc cctccccaat 240
ctgcgtgaga tcagtatcca tagcaatccc ctcaggtgtg actgtgtgat ccactggatt 300
aactccaaca aaaccaacat ccgcttcatg gagcccctgt ccatgttctg tgccatgccg 360
cccgaatata aagggcacca ggtgaaggaa gttttaatcc aggattcgag tgaacagtgc 420
ctcccaatga tatctcacga cagcttccca aatcgtttaa acgtggatat cggcacgacg 480
gttttcctag actgtcgagc catggctgag ccagaacctg aaatttactg ggtcactccc 540
attggaaata agataactgt ggaaaccctt tcagataaat acaagctaag tagcgaaggt 600
accttggaaa tatctaacat acaaattgaa gactcaggaa gatacacatg tgttgcccag 660
aatgtccaag gggcagacac tcgggtggca acaattaagg gtaacgggac ccttctggat 720
ggtacccagg tgctaaaaat atacgtcaag cagacagaat cccattccat cttagtgtcc 780
tggaaagtta attccatgtc atgacgtcaa cttaaaatgg tcgtctggca ccatgaagat 840
gataaccctt acatacatat actggcaggg tcccaatcga tgtccatgaa tccacctaac 900
gcatntgcag ccttcncaga ttntgaagg 929

<210> 3700
<211> 936
<212> DNA
<213> Homo sapiens

<400> 3700
agtccagggc cgctgagagt gggggtggct gggagcagcg cagcctccgg aggaggaggc 60
ggaggccgag gaccaggaat caccttcaag cctatgtcgt gaggctttgg cagaaattaa 120
gaaggaaata tctccattgt tcattggcat ggaaaaatgt tcagtgggag gattagagtt 180
gactgaacag actcctgctt tattagggaa tatggccatg gcaactagtc tcatggacat 240
aggggattca tttggtcatc cagcttgtcc tttagtcagt agatctagga actcaccagt 300
ggaagatgat gatgatgatg atgatgttgt gtttattgaa tctatacaac ctccttcaat 360
ttctgctcca gcaatagctg atcaaagaaa cttcatattt gcatcatcaa aaaatgaaaa 420
gcctcaagga aattattctg taattcctcc ttcttcaaga gatttggcat ctcagaaagg 480
aaatataagt gagacaattg ttattgatga tgaagaggac atagaaacaa atggaggagc 540
agagaaaaag tcttcctgtt ttatcgaatg gggacttcct ggaactagaa acaaaaccaa 600
cgatttggat ttctccactt ccagtctttc aagaagtaag accaagactg gagtaagacc 660
ttttaaccct ggtagaatga atgtggcagg agacttattt cagaatggga gaatttgcaa 720
ctcatcatag tcctgagatg catctaccaa gaaggctaat gncattcttt cagtagaaat 780
caagcaaatc cttncaagaa ttttatagta catcttggtt gcctcctgtg aaaacaactg 840
gaatcttaaa aaaggagttt taataagtcc agatgtccat tggagtaaat taccgangnc 900
tggattttat nctaagtggt ggttagctac agggta 936

<210> 3701
<211> 914
<212> DNA
<213> Homo sapiens

<400> 3701
acaagacact tcctttattc tgtgtattgt ggtgatacaa ccagaaatac ctgtgaaaca 60

actgaagaac ctcaacactg ttcccagcag caagctgctg taccaccggc tggatctcct 120
tggccagccc agtgcttgcc tccacttcaa acagctggca accctagaaa gtcccaccat 180
catgctgtct gctggcagct tttcctcccc ctatgagcac ctcagccagc cagagacaaa 240
gcgcatggta gagcactaca ccgcctatct cagcgacaac acccgcctca ttgctaaccc 300
gggcctcaaa ttctctgtca gaaatgaagt aatggctacc agccacgtca cagatgaatg 360
gatgacacaa atggaaatga gtagcctgaa cacttacatt gtccgccgtt acatagcaac 420
acccaatggc gtcctcagaa tttatcctgg ttccctcatg gacaaagcat ttgatcccac 480
taggagacaa tggtatctcc atgcagtagc taatccaggg ttgatttctt tgactggtcc 540
ttacttagat gttggaggag ctggttatgt tgtgacaatc agtcacacaa ttcattcatc 600
cagtacacag ctgtcttctg ggcacactgt ggctgtgatg ggcattgact tcacactcag 660
atacttctac aaagttctga tggacctatt acctgtctgt aaccaagatg gtggcaacaa 720
aataaggtgc ttcataatgg aggacagggg ttatctggtg gcgcacccga ctctcatcga 780
ccccnaagga catgccctgt ggagcagcag cacataccca caaggagccc ctggtagcaa 840
atggatatcc tnaacacccc actttgtaaa ggaaaacctg ggcaacaagt ttagtggcng 900
gaacggncca aagg 914

<210> 3702
<211> 894
<212> DNA
<213> Homo sapiens

<400> 3702
ttcaagtagc acctctatca gttatggcta aatcctgtcc atctgtgtgt cgctgcgatg 60
cgggtttcat ttactgnaat gatcgctttc tgacatccat tccaacagga ataccagagg 120
atgctacaac tctctacctt cagaacaacc aaataaataa tgctgggatt ccttcagatt 180
tgaaaaactt gctgaaagta gaaagaatat acctatacca caacagttta gatgaatttc 240
ctaccaacct cccaaagtat gtaaaagagt tacatttgca agaaaataac ataaggacta 300
tcacttatga ttcactttca aaaattccct atctggaaga attacattta gatgacaact 360
ctgtctctgc agttagcata gaagagggag cattccgaga cagcaactat ctccgactgc 420
ttttcctgtc ccgtaatcac cttagcacaa ttccctgggg tttgcccagg actatagaag 480
aactacgctt ggatgataat cgcatatcca ctatttcatc accatctctt caaggtctca 540
ctagtctaaa acgcctggtt ctagatggaa acctgttgaa caatcatggt ttgggtgaca 600
aagttttctt caacctagtt aatttgacag agctgtccct ggtgcggaat tccctgactg 660
ctgcaccagt aaaccttcca ggcacaaacc tgaggaagct ttatcttcaa gataaccaca 720
tcaatcgggt gccccccaaa tgctttttct tatctaaggc agctctatcg actggatatg 780
tccaataata acctaagtaa tttacctcan ggtatctttg atgatttgga ncatatacca 840
cactggattc ttcgcaacaa tccctgggat tgcgggtgcc aganggaaat gggt 894

<210> 3703
<211> 789
<212> DNA
<213> Homo sapiens

<400> 3703
ctttcggagt tagcgcagcg cgaacgctgg gtgcggcgcc tttaagcgtc gcggtgacac 60
gtgtgtgagg cgccggaggc ccggatggtg cgcgtgctgg gccgcgggcc gaaggagtcg 120
ccagggctgc gtaggcttgt ggcgcgcccg cggagaggcc ggggctctga cgcccgctct 180
gcggcttcgg tgtttgaaca ggccacagtc caggagcgct tacattcagg agctccgcgt 240

09611.0100

agcacctgcc caaccaaact cagccctccg ttaagatcct ggttccatgc cgcagtagga 300
cagcaggccc aagtctgcac atcccagtga tgcaccatgc caatagtgga taagttgaag 360
gaggccctga aacccggccg caaggactcg gctgatgatg gagaactggg gaagcttctt 420
gcctcctctg ccaagaaggt ccttttacag aaaatcgagt tcgagccagc cagcaagagc 480
ttctcctacc agctggaggc cttaaagagc aaatatgtgt tgctcaaccc caaaacagag 540
ggagctagtc gccacaagag tggagatgac ccaccggcca ggagacaggg cagtgagcac 600
acgtatgaga gctgtggtga cggagtccca gccccgcaga aagtgctttt ccccacggag 660
cgactgtctc tgaagtggga gcgggtcttc cgcgtgggcg caggacttca caaccttggc 720
aacacctgct ttctcaatgc cccatccant gctttgacct tacacaccaa nctntagcca 780
actaccttg 789

<210> 3704
<211> 891
<212> DNA
<213> Homo sapiens

<400> 3704
gctgctagct cgcggcgacg tcgggccgat ttcccagga tgacagagct gaggcagagg 60
gtggcccatg agccggttgc gccacccgag gacaaggagt cagagtcaga agcaaaggta 120
gatggagaga ctgcatcgga cagtgagagc cgggcagaat ccgcaccct gccagtctct 180
gcagatgata ccccggaggt cctcaatagg gccctttcca acttgtcttc aagatggaag 240
aactggtggg tgagaggcat cctgactttg gccatgattg cattttctt catcatcatt 300
tacctgggac caatggtttt gatgataatc gtgatgtgcg ttcagattaa gtgtttccat 360
gagataatca ctattggcta caacgtctac cactcatatg atctgccctg gttcaggacg 420
ctcagctggt actttctcct gtgtgtaaac tatttcttct atggtgagac agtgacggat 480
tacttcttca ccctggtcca gagagaagag cctttgcgga ttctcagtaa ataccaccgg 540
ttcatttcct ttactctcta tctaatagga ttctgcatgt ttgtactgag tctggtcaag 600
aagcattatc gactgcagtt ctacatgttt ggctggaccc atgtgacatt gctgattgtt 660
gtaacacagt cacatcttgg tatccacaac ctatttgaag gaatgatctg gttcattggc 720
cccatatctt gtgtgatctg taatgacatc atggcctata tggttnggct ttttctttgg 780
gcggacccca ctcattaagc tgtccccgaa gaagacctgg gaaggcttca ttgggggctt 840
ctttgctact gggggttgg ncttntggtg gcctatggga ngtccggtcc a 891

<210> 3705
<211> 879
<212> DNA
<213> Homo sapiens

<400> 3705
tatacctaat gataatattt ctgatgagcc aagtctctgt gactgtgatg tacataaaca 60
taatcaaaat gaaaatttag tacctaacaa tcgtgttcaa atacacagaa gccctgcaca 120
gaatttagtt ggagagaaca atcatgatgt tgataacagt gacctcccag tattgtccac 180
tgatcaagat gaaagtttgc tgttatttga agatgttaat acagagttcg acgatgtgag 240
tctttcaccc ttgaacagta aaagcgaatc tttacctgtg tcagacaaaa ctgctattag 300
tgaaacgcct ctggtctctc agttcttaat ttctgatgaa cttttgttgg acaataattc 360
tgaactccaa gatcaaatca cccgtgatgc taatagtttt aaatctcgtg atcagagagg 420
tgtacaggaa gaaaaagtga agaatcatga ggatattttt gattgctcta gggatttatt 480
ttctgttacc tttgatttag gattctgtag tccagattct gatgatgaaa tattggaaca 540

09055490.DOCX

tacatcagat agcaatagac ctctagatga tctatatgga aggtatttgg aaattaagga 600
gataagtgat gcaaattatg tttcgaatca agcactaata ccaagagatc atagtaaaaa 660
ttttactagt ggaactgtta ttatcccatc aaatgaagat atgcagaatc caaattatgt 720
catttgccac tgagtgcaca aaaaatgaag aatggtatct cctggtattc tcagtttctt 780
tccagtgcaa aaaaagttat gagtnnccct ctctaaatca aaccattgac tcatttctaa 840
gataagaagg aatcttagaa ccngatctgg aaggaaaag 879

<210> 3706
<211> 864
<212> DNA
<213> Homo sapiens

<400> 3706
agatatgaaa ctggttctgg agtgagatga gctcggctgg ggacgctact tgagaaggcc 60
tttccccaca gggtgactta aatgtcccag gctggaaggt ggagcgagaa gtggatgccc 120
ccagggctct gggtcacact ccaggatgac ttctcggaac cagctggtgc agaaggtgct 180
gcaggagctg caggaagcag tggagtgcga aggcctggag ggtctcatag gtgcttcctt 240
ggaggccaag caggtcctgt cttccttcac tctccccacc tgccgggagg gaggccctgg 300
cctccaggtg ctggaagtgg actcggtggc cctgagcctg tatccagaag atgctccacg 360
gaacatgctg ccgctggtgt gcaaggggga gggcagcctg ctgttcgagg cggccagcat 420
gctgctgtgg ggtgacgcag gcctcagcct ggagctgcgg gcccgcaccg tggtagagat 480
gctgctgcac agacactact acctccaggg catgatcgac tccaaagtga tgctgcaggc 540
cgtgcgctac tccctatgct ctgaggagtc ccctgagatg accagcttgc cccccgccac 600
gctggaggcc atcttcgatg ccgacgtcaa ggcctcctgt ttccccagca gcttcttcaa 660
cgtgtggcac ttgtatgctc tcgcctctgt ccttcagcgg aacatctact tcatctaccc 720
catgcgcaac ctnaagatcc ggcctacttc aaccgtgtca tccggcccgn cgttgcgaca 780
ctgccctcag ctgacatatg tggctggcag ccttacagca ttttcgcaca tcttgcctgg 840
gnggctnaaa tgactaaggc cctg 864

<210> 3707
<211> 845
<212> DNA
<213> Homo sapiens

<400> 3707
accggtaccg gccgcgcgct ggtaagtcgc cggtgtggct gcacctcacc aatcccgtgc 60
gccgcggctg ggccgtcgga gagtgcgtgt gcttctctcc tgcacgcggt gcttgggctc 120
ggccaggcgg ggtccgccgc cagggtttga ggatggggga gtagctacag gaagcgaccc 180
cgcgatggca aggtatattt ttgtggaatg aaaaggaagt attagaaatg agctgaagac 240
cattcacaga ttaatatttt tggggacaga tttgtgatgc ttgattcacc cttgaagtaa 300
tgtagacaga agttctcaaa tttgcatatt acatcaactg gaaccagcag tgaatcttaa 360
tgttcactta aatcagaact tgcataagaa agagaatggg agtctggtca aataaagatg 420
actatatcag agacttgaaa aggatcattc tctgttttct gatagtgtat atggccattt 480
tagtgggcac agatcaggat ttttacagtt tacttggagt gtccaaaact gcaagcagta 540
gagaaataag acaagctttc aagaaattgg cattgaagtt acatcctgat aaaaacccga 600
ataacccaaa tgcacatggc gatttttaa aaataaatag agcatatgaa gtactcaaag 660
atgaagatct acggaaaaag tatgacaaat atggagaaaa gggacttgag gataatcaag 720
gtggccagta tgaaagctgg aactattatc gntatgaatt ttggtattta tgatgatgat 780

09/05/2005 10:40:00

cctgaaatca tacattggaa agaagagaat tgatgctgct ggtaattctg gaaaactgng 840
gnttg 845

<210> 3708
<211> 883
<212> DNA
<213> Homo sapiens

<400> 3708
agttttgctc cgaaagactt accgaggagg gagcttgcgg tgcgttctgg gaaagttgct 60
gggccagctc ctttgtttcc agtctgagcg ttgcgttcgg tttcccgagg gtcttctgag 120
gcaccgcggc tgcgggcttc tgagttcccg gctctccgca gggaagcctc ctcttcgtac 180
ctcgtttttt ggctcgtggg gggtcctccc accgctggcc gacgcagcca gcatgtccgg 240
ggtgcgcgca gtgcggatca gcatcgaatc ggcctgcgag aagcaggtcc atgaggtggg 300
cctggatggc accgagacgt acctgccccc gctgtccatg tcgcagaatc tggcgcgtct 360
ggcccagcgg atagacttca gccagggttc gggctccgag gaggaggagg cggcggggac 420
cgagggggac gcgcaggact ggccgggcgc cgggtccagc gcagaccagg acgacgagga 480
aggagtggta aaatttcagc cttccctttg gccttgggac tcagtgagga acaatttgag 540
aagtgccctg acagagatgt gtgttctcta tgatgttctc agtattgtta gggataaaaa 600
atttatgact cttgatcctg tctctcagga tgcacttctt caaaacagaa tcctcagacg 660
ttgcaattga tatctaaaaa gaagtcactt gctggagcag cacaaatctt attgaaaggg 720
ggcagaaaga actgacttaa atcagttacc cgaaaaccaa gaaaacagct ncaaagaaga 780
cttcaattct taacttttgc aatacgggac ncttggaact ttgaaaagtt gggaataaaa 840
ttttggaaat tggcttcnaa aggcaggact ttttttccta ana 883

<210> 3709
<211> 848
<212> DNA
<213> Homo sapiens

<400> 3709
agaaaatacc ggagttgcag ggtataggta aatttctcaa ggttataggt tggggttctt 60
agaacttttt gtggtgtgtg ttggcctaga gcgactcaga agcgttagtg acttcaccta 120
aaaaagctaa cctctctgct gagcgcgacc ggtatgcggc gcaggatgag cctcagggct 180
tctgttaaga gtctgtctga gaaagccggt ctgcgctgtt cctcggtggc gaccttaatt 240
atgagatgag ctaatgcttt actgacttaa ccatggcgca gcgggcagtg tggctcataa 300
gccacgaacc gggaactcca ctttgtggca ccgtgagatt ctccagacgg tatccaactg 360
ttgaaaaacg agccagagtc ttcaatggag caagttatgt gcctgttcct gaagatggtc 420
cctttcttaa agcactgctc tttgaactta gattattgga tgatgataaa gacttcgttg 480
agagtcgtga tagctgttca cgcatcaata aaacatccat ttatggactc ctgataggag 540
gtgaagaact ctggccagtt gttgcttttc tgaagaatga catgatatat gcttgtgttc 600
cactagttga acaaactctg tcccctcgtc cgccactaat tagtgtcagt ggagtttcac 660
aaggctttga atttcttttt gggatacagg attttcttta ttcaggtcaa aaaaatgact 720
ctgagctgaa tacaaaattg agccagttgc ctgacttgct tctgcaggct tggccatttg 780
gtactttatt agatgccact tacagaattc attagataat accaantttg catctgngac 840
ttancccc 848

<210> 3710

0503503.0N2000

<211> 917
<212> DNA
<213> Homo sapiens

<400> 3710
ctcttccctt aggtgtttaa gttccgcgcg caggccaggc tgcaacctga cggccagatc 60
cctcgctgtc ctagtcgctg ctccttggag tcatgttccc agccgcccct tctccgcgga 120
ccccgggtac cgggtcccga aggggcccgc tggccggact cgggcccggc tccacgcccc 180
ggacggctag caggaagggt ctgcccctgg ggtctgcagt cagctcccca gtgctcttct 240
cgccggtcgg ccggcgtagc tcgctaagct cgggggggaac accaacacga atgttcccac 300
accactccat aactgagtct gtgaactatg atgtgaaaac gtttggatct tctcttcctg 360
ttaaagtcat ggaagcccta acattggctg aagtcgatga ccagctgacc attaacatag 420
atgaaggtgg atgggcttgt ctggtgtgca aagagaagct cattatttgg aagattgctc 480
tgtcacctat tactaagtta tccgtttgca aagaacttca gctgccatct agtgatttcc 540
actggagtgc cgacttagtg gctctttctt actcttctcc ctcaggtgaa gcacattcta 600
ctcaggctgt tgctgtcatg gttgccacca gagaaggatc tatccgctat tggccaagcc 660
ttgctggtga agatacctac acagaggctt ttgtagattc gggaggtgat aagacttaca 720
ggttcctaac agcagtgcan gggaggaagt tttattttgg cttcatcagg aagccaacta 780
attcgggtga tacctganac tcaggaaaga ttcatcacat atcctgctca gggcaaggat 840
gctttcagga atggnccaaa agttcttctc tttttgaatt tatctctaat angactccac 900
tttaagggtc nctggat 917

<210> 3711
<211> 827
<212> DNA
<213> Homo sapiens

<400> 3711
atgtgatgca tgctcacgtg tctccgcagc cggctcggga aagaatcccc caagctccat 60
ttcatgagta agcgtgagag ccgctcagtt tcctccagct ctgctgaagc cagcacagaa 120
gtagcccaaa ctcttccctc tgctgacagc aaattttagg caaagtcttg agaaagaaga 180
aattgggtcc agaaagggaa gtgaggagaa tcagatccca gacctttggg gagaaggagc 240
aaccgcctct ggcacagccc atcagggaga aagagcaggt tgagaagagt cctaagctaa 300
cagccccaaa caggtgggtg ttgctcagct ccctgaggca tgtggttgta aggcagaacc 360
cacagacctt gcaggaagaa ggctctcggg gccatggccc aggtcagcat caacaatgac 420
tacagcgagt gggacttgag cacggatgcc ggggagcggg ctcggctgct gcagagtccc 480
tgtgtggaca cagcccccaa gagtgagtgg gaagcctctc ctgggggtct ggacagaggc 540
accacttcca cacttggggc catcttcatc gtcgtcaacg cgtgcctggg tgcagggtta 600
ctcaacttcc cagcagcctt cagcactgcg gggggcgtgg cagcaggcat cgcactgcag 660
atgggtatgc tggttttcat catcagtggc cttgtcatcc tggcctactg ctcccaggcc 720
agcaatgaga ngacctacca ggaagtggta tggctgtgtg tggcaagctg acaggtgtgc 780
tatgtgaagt ggncatcgct gctacacctt ttgnacctgc ttggctt 827

<210> 3712
<211> 700
<212> DNA
<213> Homo sapiens

0020020030 : 0020020030

<400> 3712
ttaagctaca gataaagctt ttgtggtagt gtctgaagtg actagagttt ttttcaaatg 60
ctagcagccc tgaagttgta ttcccaatta ggatatgtca gacgttaagc aggcaccccc 120
agagtaacta ttatgactga ttaacatatg ccaaaataat ttttaaaaat tatatcaagt 180
ataacagaac ttattaaaga tttcacaggt tattataccc tcacactagg gtggggtgaa 240
gctctttact gctctaaact caacaacctg ctgtgtagag gtgaactggc acttatcctt 300
agtgacagcc tgttcatcct taggggtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 360
tgtgtgtgtg tgtaagagag aaagaaatgt ctacttaaaa tttgcagctc aaaanaacat 420
tttgcagttc acatgtgcaa gagaatccca cccctgcaaa cttctctcaa tacttgaaac 480
attaggttac tgctatgatt ttttctatta ttgagtttgt tacttttctc angttttaat 540
ttgactgtat aagtttgaag cagagtagac taaagataaa agggaacata cacaattcag 600
aagaacacaa aaaattntgt catatgtttt caattggggc aatgacatat aagtnccctc 660
tgggtctcaa gganagagga tctacccttg acaaataaaa 700

<210> 3713
<211> 857
<212> DNA
<213> Homo sapiens

<400> 3713
actggcgtcc ggcgtgtacc gagagactgg cgtccggtgt gcaggtggcc acatggatcc 60
tggcagccgg tggcggaacc tgcccagcgg gcctagccta aagcacttga ctgacccctc 120
ttatggaatc ccgcgggaac agcaaaaggc agcgttgcag gagctgacgc gggcgcacgt 180
ggagtccttc aactacgctg tgcacgaggg tctcggcctc gcggtgcagg ctatacctcc 240
ctttgaattt gctttcaaag atgagcgtat ctcttttact attctggatg ctgttatcag 300
tccacctaca gttccaaaag ggaccatctg caaagaggcc aatgtttatc cagcagaatg 360
ccggggccga aggagtacct accgtgggaa gttgacagct gatatcaact gggcagtgaa 420
tggaatctca aaaggaatca ttaagcagtt tcttggctat gttcccatca tggtgaaatc 480
caagctttgc aacttacgta accttccccc acaagccctc attgagcacc atgaggaggc 540
agaggaaatg gggggctatt ttataatcaa tggcattgaa aaagtcatcc gaatgttgat 600
tatgcctcgg agaaattttc ccattgcaat gataagacca aaatggaaaa ccagagggcc 660
tggttatact cagtatggag tttcaatgca ctgtgtgang gaagaacatt ccgctgtcaa 720
tatgaacctt cactactttg gaaaatggna caattatgtt tgnaacttta tttacccgaa 780
aagaactggt ctttctttcc tttgggattt gcacttaaag gcccttgtna acttttctg 840
gattatcana actttta 857

<210> 3714
<211> 745
<212> DNA
<213> Homo sapiens

<400> 3714
atacggtgca acgggtccgc gggactcttg gatgcgcgga ggtcccgaga ccaggtgcgt 60
gtgctaagct caggtctgag cacggtggat cccatgggtg tggctctgag gaaattgacg 120
cagtggactg ctgccggaca tggaactgga atcctcgaaa tcacccctct aaatgaancg 180
atattgaaag aaattattgt gtttgtggag agttttatct ataaacatcc tcaagaggca 240
aaatttgttt ttgtggaacc acttgaatgg aacacaagtt tggcgccctc agcatttgaa 300
tcaggttatg ttgtcagtga aacaacagtc aaatcagaag aagttgataa aaatggacag 360

US 2005/0009000 A1

cctttgctat ttctctctgt accacaaatt aaaattagga gctttgggca nctgtcacgc 420
ttgttactta ttgccaaaac tggnaagttg aaggaagccc aagcatgtgt tgaagctaac 480
agagacccca tagtaaaaat cctgggctct gattataata caatgaaaga aaactcantt 540
gcattaaata ttcttggcaa aattaccaga gatgatgatc ctgaaagtna aattaagatg 600
aagattgcta tgctgcttaa gcaattggat ctgcacctcc tcaatcattc tctaaaacat 660
atttcattag aaataagttt aagtcccatg accggtgaan aaggatatag aactgctcaa 720
acgtttctca ngaaaangga aaccc 745

<210> 3715
<211> 907
<212> DNA
<213> Homo sapiens

<400> 3715
gacctgaccg caagaggcca atggagtgtg ggagctgaaa gggtcttcgc tggcggccgg 60
acagtactgc ttttaaagag acagtgttag ggatcttgga agcacagcca acatgtgtga 120
cattgaagaa gccactaacc aactcctaga tgtgaacctt catgagaacc agaagtctgt 180
acaagtgaca gaaagtgacc tcggaagtga atctgagctt ctagtcacta ttggagccac 240
tgtacctact ggctttgagc aaacagctgc agatgaagtc agagagaaac ttgggtcatc 300
atgcaaaatc agcagagacc gtggcaagat atattttgtc atttcagtgg aaagtctggc 360
acaggttcat tgtctgagat cagttgataa cttatttgtg gtggttcagg agtttcaaga 420
ttaccagttc aaacaaacaa aggaagaagt tctaaaggat tttgaagact tggctggaaa 480
actcccatgg tcaaacccct taaaagtgtg gaaaattaat gccagtttta aaaagaaaaa 540
agcaaagcgc aaaaagataa atcagaattc aagtaaagag aagattaata atggacaaga 600
agtcaaaatc gatcagagaa atgttaaaaa agagttcact agccatgctt tagattctca 660
tatcttagat tattatgaaa atccagccat caaagangat gtatcaacat taataggtga 720
tgatttggca tcttgcaaag atgagactga tgaaagctca aaagaagaac tgacctnaag 780
tgctgaagtt tagagtcaca tgccaacang gcaggagaag aaacattgct ttacctcaaa 840
tgangcttca agaaaatttt gggggtgcct gtcaagaatt ttttaagtgg aaggccgacn 900
tgaccac 907

<210> 3716
<211> 864
<212> DNA
<213> Homo sapiens

<400> 3716
gtacaaaacc ggagcctcgg gccgggctgc gtgagggagg agggttcatc atgcctagtg 60
gcgtataaga agaccccgcc accggtccct ccacgcacca cttcaaagcc gttcatctca 120
gtcacagtcc agagcagtac tgagtctgcc caggacacct acctggacag ccaggaccac 180
aagagcgagg tgactagccg gtcgggcctg agcaactcgt cggacagcct ggacagcagt 240
acccgaccgc ccagcgtgac acggggtgga gtcgccccag cccctgaggc cccagagcca 300
cccccaaaac atgcagctct gaaaagtgaa caagggacgc tgaccagctc tgagtcccac 360
cccgaggccg cccccaaaag gaaactgtca tcgataggaa tacaagttga ctgcattcag 420
ccagtgccaa aagaggagcc cagtcccgct accaaattcc agtccatcgg ggttcaggta 480
gaggacgact ggcgaagcag cgtcccctct cacagtatgt cctcccgacg ggacacagac 540
tcggataccc aggatgccaa tgactcaagc tgcaagtcat ctgagaggag cctcccggac 600
tgtacccctc accccaactc catcagcatc gatgccggtc cccggcaggc ccccaagatt 660

US 2003/0224000 A1

gcccagatca agcgcaacct ctcctatgga gacaacagcg acccttgccc tanaggcgtc 720
ctcgctgccc ccacccgacc cctggcttcg agaacttctt cagcttccca acagaaccgg 780
nacaagccag gggccttgcc gccgaaaacg ggttactggg ttccttaaag cttactggaa 840
ggccngaaan cagaaccggg ttgg 864

<210> 3717
<211> 877
<212> DNA
<213> Homo sapiens

<400> 3717
agtggggccc ccgcagctct cgtcccggcc gccgctggtg accactcgcc gcccctccgg 60
aggcttcacc cgcgccctcc cccaggacgc gccagcggag ctccggctcc ttcgccctgg 120
acgcggaggc cgcggtgtgc ggggcgacgg cgaggccgga agatggcctg ggtgctcaag 180
atggacgagg tgatcgagtc cgggctggtg cacgacttcg acgccagcct ctcgggcatc 240
gggcaggaac tgggcgccgg cgcttacagc atgagtgatg tcttggcatt gcccattttc 300
aagcaggaag attccagcct tccattggat ggtgaaacag agcacccacc ctttcagtat 360
gtgatgtgtg ctgcaacgtc accagcagta aaactgcatg atgaaacgct tacttatttg 420
aaccaaggtc agtcatatga tcggatgctg gataatcgga aaatgggtga tatgcctgag 480
atcaatggaa aattagtaaa gagcatcata agggttgtat tccatgacag acggctacaa 540
tacacagagc atcagcaact tgaaggatgg aagtggaatc gcccaggaga cagacttctt 600
gatttagata ttccaatgtc tgtgggaata attgacacaa ggacgaatcc aagccagtta 660
aatgcggttg aatttctgtg ggacccagca aaacgcacct ctgctttcat tcaggtacac 720
tgcatcagca cagaatttac ttcacggaag cacggaggtg aaaagggagt gccctttagg 780
atccaggttg acacctttaa gcngaatgaa aatggagaat ccccngatca tctacacttc 840
acttactggc aaatcaaagt tttaaagcct aaaggnc 877

<210> 3718
<211> 950
<212> DNA
<213> Homo sapiens

<400> 3718
tttcagcaga tggaatgcgt ttggctctgg ctgatgctgg tgacactgta gaagatgcca 60
actttgtgga agccatggca gatgcaggta ttctccgtct gtacacctgg gtagagtggg 120
tgaaagaaat ggttgccaac tgggacagcc taagaagtgg tcctgccagc actttcaatg 180
atagagtttt tgccagtgaa ttgaatgcag gaattataaa aacagatcaa aactatgaaa 240
agatgatgtt taaagaagct ttgaaaacag ggtttttga gtttcaggcc gcaaaagata 300
agtaccgtga attggctgtg gaagggatgc acagagaact tgtgttccgg tttattgaag 360
ttcagacact tctcctcgct ccattctgtc cacatttgtg tgagcacatc tggacactcc 420
tgggaaagcc tgactcaatt atgaatgctt catggcctgt ggcaggtcct gttaatgaag 480
ttttaataca ctcctcacag tatcttatgg aagtaacaca tgaccttaga ctacgactca 540
agaactatat gatgccagct aaagggaaga agactgacaa acaacccctg cagaagccct 600
cacattgcac catctatgtg gcaaagaact atccaccttg gcaacatacc accctgtctg 660
ttctacgtaa acactttgag gccaataacg gaaaactgcc tgacaacaaa gtcattgcta 720
gtgaactagg cagtatgcca taactgaaga aatacatgaa gaaagtcatg ccatttggtg 780
ccatgattaa ggaaaatctg gaaaaagatg gggccctcgt attctggatt tgcaattaga 840
atttgatgaa aangctgggc ttatggagna tatagtctat ctgactaatt cgcttgacct 900

0050245900

agaacncctt gaagtcaagt ttggcttcga accgaagata aatcagggaa 950

<210> 3719
<211> 810
<212> DNA
<213> Homo sapiens

<400> 3719
tacttttcct gttggaactt ctgacctgtc agaaagattt taccaattat tttggacacc 60
tggaaggctg tggtgctgat ctacacaaag aaattcgaga cacttactat caacttgttc 120
tgtttttggt caaagcagtt aaaggattta gtagcctaaa tgacaggtcc ttgctccctg 180
ccttatcctg tgttcagaca gccctgcttc atcttttgga tatgggctgg gaacccaatg 240
atctcgcctt ctttgttgat attcagttac cagatctcct catgaaaatg tcacaggaga 300
atataagtgt ccatgacagt gtgatcagcc aatggagtga agaagatgag cttgctgatg 360
ccaagcagaa ttcagaatgg atggatgagt gtcaggatgg catgtttgag gcctggtatg 420
aaaaaatagc ccaggaagat ccagagaagc agaggaaaat gcacatgttc attgctcgct 480
actgtgacct gttaaatgtg gacatctctt gtgatgggtg tgatgagatt gccccctggc 540
atcgataccg ctgtctgcag tgcagcgaca tggatctctg caaaacttgc ttcctaggtg 600
gggtgaagcc tgagggccac ggagacgacc atgaaatggt caacatggag tttacctgtg 660
accactgcca gggtttgatc ataggccgga ggatgaactg caatgtttgc gatgactttg 720
atctttgcta cggatgctat gcagcgaaga aatctcctac nggncatttg cctacccaca 780
gcatnacggg ccacccaatg gtaaccattc 810

<210> 3720
<211> 774
<212> DNA
<213> Homo sapiens

<400> 3720
actccggcct tggtggcggg tggctggcgg ttccgttagg tctgagggag cgatggcggt 60
acgcgcgttg aagctgctga ccacactgct ggctgtcgtg gccgctgcct cccaagccga 120
ggtcgagtcc gaggcaggat ggggcatggt gacgcctgat ctgctcttcg ccgaggggac 180
cgcagcctac gcgcgcgggg actggcccgg ggtggtcctg agcatggaac gggcgctgcg 240
ctcccgggca gccctccgcg cccttcgcct gcgctgccgc acccagtgtg ccgccgactt 300
cccgtgggag ctggaccccg actggtcccc cagcccggcc caggcctcgg gcgccgccgc 360
cctgcgcgac ctgagcttct tcgggggcct tctgcgtcgc gctgcctgcc tgcgccgctg 420
cctcgggccg acggccgccc actcgctcag cgaagagatg gagctggagt tccgcaagcg 480
gagcccctac aactacctgc aggtcgccta cttcaagatc aacaagttgg agaaagctgt 540
tgctgcagca cacaccttct tcgtgggcaa tcctgagcac atggaaatgc agcagaacct 600
agactattac caaaccatgt ctggagtgaa ngaggccgac ttcaaggatc ttgagactca 660
accccatatg caagaatttc gaattgggag tgcgacttnt acttagaagg aacagccaca 720
nggaagcttg tgccccaact anaaggcggg cgcttgcaag aaatactttg gggg 774

<210> 3721
<211> 743
<212> DNA
<213> Homo sapiens

US005750360-C20000

<400> 3721
ctcgatagct ttccggaaga aagggatctg ggagcgagat gcgtgtagct agcacgatgc 60
gtcgcgcggt gacgctctgg cccgacgccg acggcctctc agtggctccc ggaggacccg 120
gcgggcccag tgttggagag ctgaaggtca ggccaggaca gtgagacctg actccttgct 180
cctaccagcc tactatggct taagacccag ggccagggtc ccgttgatgt aacagagcag 240
aggaccagca gatgaatgga caccttgaag caggggagca gcaggaccag aggccagacc 300
aggagctgac cgggagctgg ggccacgggc ctaggagcac cctggtcagg gctaaggcca 360
tggccccgcc cccaccgcca ctggctgcca gcaccccgct cctccatggc gagtttggct 420
cctacccagc ccgaggccca cgctttgccc tcacccttac atcgcaggcc ctgcacatac 480
agcggctgcg ccccaaacct gaagccaggc cccggggtgg cctggtcccg ttggccgagg 540
tctcaggctg ctgcaccctg cgaagccgca gcccctcaga ctcagcggcc tacttctgca 600
tctacaccta ccctcggggc cggcgcgggg cccggcgcaa aagccactcg caccttccg 660
ggcaaaatgg ggcccgncac cttacgaaag agaacccgtg cccaaggccc ancgcttggg 720
ccaattggcc cttaanctgt ctg 743

<210> 3722
<211> 833
<212> DNA
<213> Homo sapiens

<400> 3722
gaatgaaatg actgttactc acatatttac ttcagatggt ctgcatgctg aggttactgg 60
agttggctat aatcaatttg gggaagtgat tgttgatggt gatgttgttc atggattcta 120
taacccagct gttagcagaa ttgttgaggc gggctgtgtg tgcaatgatg ctgtaattag 180
aaacaatact ctaatgggga agccaacaga aggggcctta attgctcttg caatgaagat 240
gggtcttgat ggacttcaac aagactacat cagaaaagct gaataccctt ttagctctga 300
gcaaaagtgg atggctgtta agtgtgtaca ccgaacacag caggacagac cagagatttg 360
ttttatgaaa ggtgcttacg aacaagtaat taagtactgt actacatacc agagcaaagg 420
gcagaccttg acacttactc agcagcagag agatgtgtac caacaagaga aggcacgcat 480
gggctcagcg ggactcagag ttcttgcttt ggcttctggt cctgaactgg gacagctgac 540
atttcttggc ttggtgggaa tcattgatcc acctagaact ggtgtgaaag aagctgttac 600
aacactcatt gcctcaggag tatcaataaa aatgattact ggagattcac aggagactgc 660
agttgcaatc gccagtcgtc tgggattgna ttccaaaact tccagtcagt ctcaggagaa 720
gaaatagatg caatggatgt tcaacagctt ttcacaaata gtaccaaang gttgcagtan 780
ttttacagag cttagcccaa nggcaccagg atgaaaaatt atttaagtcg ctt 833

<210> 3723
<211> 843
<212> DNA
<213> Homo sapiens

<400> 3723
ctggaaaaag ctcgcttgtc cccggaaccg ccctgctgcc gccgcctgct tcctctgctc 60
gcggttagcc cgtcagtccc tgctctgtgc gcgcctccat ctgggccatg gatggcgggg 120
atctgatgag cttctttctt ctggcatcat taacggacct tttaccatga atagttctac 180
tccttctaca ggtgtgtatg gctttcttag aaatggcttc tgaggaagct gccgttacta 240
tggtgaatta ttacactcct attactcctc accttcgaag ccagcctgtt tatattcagt 300
attccaatca cagagaactt aagactgaca atctacctaa tcaagctcga gcccaagctg 360

09/07/2005 09:50:56 PM

cactgcaggc tgtcagtgcc gtccaatcag gaagcctggc cctttctgga ggtccttcca 420
atgaaggcac agtcctacct gggcagagcc ctgtgcttcg aataattatt gaaaacctct 480
tttaccctgt taccctggaa gttcttcatc agatattttc taaatttggc acagtcttga 540
agattatcac ctttacaaag aataatcagt ttcaagcctt gcttcagtat gctgacccag 600
taaatgcaca ttatgccaaa atggctctgg atggccagaa tatctataat gcatgctgac 660
tctgcgcatt gacttcttca agctcatcag ccttaatgtg aaatataata atgacaaaag 720
cagagacttc actcgcttaa accttnctac tggtgatggc cagccatccc ttgaacccct 780
atgnttctgc ttttgggccc cgggtataat tcttcccata tcangggctt ctggatttgc 840
cca 843

<210> 3724
<211> 899
<212> DNA
<213> Homo sapiens

<400> 3724
atttggctgg ggctaggctt ccggggctct gcagtcctcg gcgtgtgctg gcagcttcgg 60
agcccaccga gccgggcggc taggatgatg aaccggacga cccccgacca ggagctggcg 120
ccagcgtcgg agcccgtgtg ggagcggccg tggtcgatgg aggagatccg caggagcagc 180
cagagctggt cgctggcggc cgacgcgggc ctactacagt ttctacagga attctcacag 240
caaactatct ctaggaccca tgaaatcaag aaacaagtgg acggactaat tcgggaaacc 300
aaagccacag attgtcgcct gcataatgtc ttcaatgact tccttatgct ctctaatacc 360
cagttcattg agaatcgtgt atatgatgaa gaaggctctg taggcagtga tcgtggcagt 420
attgtggaca ctgaggaaga gaaagaagag gaggagtcag atgaagattt tgcccatcat 480
agtgacaatg aacaaaaccg gcacaccaca caaatgagtg atgaggaaga ggatgatgat 540
ggctgtgacc ttttcgctga ctctgagaag gaggaggaag atattgagga cattgaagaa 600
aatactagac ctaaaagaag cagacctaca tcgtttgcag atgagctggc tgccgcatca 660
agggggatgc cgtgggtcga gtggacgaag agcccgacaa ccttaccctc aggagaagca 720
aaacctcgga agacactcaa agagaagaag gaaaggagaa cttctttcag accatgaaag 780
angataactt tattcgcacc ccccccaagc ttgacccgac caaggaactt tttcgccatt 840
ttggcttttt ggaaggtngg ncctggttca atgggggggc caanggggct tcttttgga 899

<210> 3725
<211> 847
<212> DNA
<213> Homo sapiens

<400> 3725
ctaggcgcgt ttcctgaagg tcgatggcca ggtggtcttc ataaactata ctgccttgtg 60
atgcctccct agaaatgaga ggtctcaata ccagctcaga ccatgtggac cgcggatgag 120
attgctcagc tatgctatga acactatggg atcaggctgc ccaagaaggg gaagcctgag 180
ccaaaccatg agtggacatt attggcagcg gtggtgaaga tacaatctcc agctgacaag 240
gcctgcgaca cccctgataa gccggtgcaa gtgacaaagg aagttgtgtc aatgggaaca 300
ggaacaaaat gcataggaca gtccaaaatg aggaagaacg gaaccagacc ctctccagct 360
tccatatgtc ttcacctggt gtcctatctt tgccgcagga gacatcctca atgatagcca 420
tgctgaggtc atagccagaa ggagtttcca aaggtacctt ctccaccaac tccagttggc 480
agccaccctg aaagaggata gcatctttgt cccaggaact caaaaaggag tgtggaaact 540
tagacgagac ctcatttttg tgtttttctc cagccataca ccctgtgggg atgcctccat 600

0050345650-020200

cattccgatg cttgagcttg aagatcagcc ttgctgtcct gtcttcagaa attgggccca 660
caactcatca gtagaagcca gtagtaacct ggaagctcct ggaaatgaaa gaaaatgtga 720
agaccctgac agtcctgtaa cccaaaaaga tgangctttg agcctgggga ctgcaagccc 780
agggaaggtc acccaacngg agcaagcttc accattcaga agtttttggg caaagccnga 840
aaaaagt 847

<210> 3726
<211> 825
<212> DNA
<213> Homo sapiens

<400> 3726
cacgataaag gggacatgcc gggagttgca gtaccctcag gaagaagtca ttgtcatgga 60
catggaccct tttcttcact gtgtgatccc aaacttcatc caaagccaag acttcttaga 120
agggcttcag aaggaactga tgaacttgga cttccatgag aatctgatga tttgaagaag 180
agaagagagc ctcacatctc cactttaagg aaaattctgt ttgaagattt ccggtcctgg 240
ctttctgata tttctaaaat tgacctggaa tcaaccattg acatgtcctg tgctaaatat 300
gaattcactg atgccctgct gtgccatgat gatgagctgg aagggcgccg gattgccttc 360
atcctgtacc tggttccttc ctgggacagg agcatgggtg gtaccctgga cctgtacagc 420
atagatgaac actttcagcc gaagcagatt gtcaagtctc ttatcccttc gtggaacaaa 480
ctggttttct ttgaagtatc tcctgtgtcc tttcaccagg tgtctgaagt gctgtctgaa 540
gaaaagtcac gtttgtctat aagtggctgg tttcatggtc catcattgac tcggcctccc 600
aactactttg aacccccccat acctcggagc cctcacatcc cacaagatca tgagattttg 660
tatgattgga tcaaccctac ttatctggac atggattacc aagttcaaat tcaagaagag 720
tttgaagaaa gttctgaaat tctnctgaan gagtttctta agcctgagaa attcacgaaa 780
agtctgtgaa ggccttggag cattggacat gtgggaatgg ganca 825

<210> 3727
<211> 892
<212> DNA
<213> Homo sapiens

<400> 3727
gcagtggtca tctatttcca gggcttccga gtggacctgc caatcaagtc ggcccgctac 60
cgtggccagt acaacaccta tcccatcaag ctcttctata cgtccaacat ccccatcatc 120
ctgcagtctg ccctggtgtc caacctttat gtcatctccc aaatgctctc agctcgcttc 180
agtggcaact tgctggtcag cctgctgggc acctggtcgg acacgtcttc tgggggccca 240
gcacgtgctt atccagttgg tggcctttgc tattacctgt cccctccaga atcttttggc 300
tccgtgttag aagacccggt ccatgcagtt gtatacatag tgttcatgct gggctcctgt 360
gcattcttct ccaaaacgtg gattgaggtc tcaggttcct ctgccaaaga tgttgcaaag 420
canctgaagg agcagcagat ggtgatgaga ggccaccgag agacctccat ggtccatgaa 480
ctcaaccggt acatccccac agccgcggcc tttggtgggc tgtgcatcgg ggccctctcg 540
gtcctggctg acttcctagg cgccattggg tctggaaccg ggatcctgct cgcagtcaca 600
atcatctacc agtactttga gatcttcgtt aaggagcaaa gcgaggttgg cagcatgggg 660
gccctgctct tctgagcccg tctcccggac aggttgagga actgctccag aacgcctcgg 720
aaggggaact ctcatcatgg cgcgtgctgc tgcgcatatg gacttttaat aatggtnttg 780
aattcgaatt ctttcattcc actgngtaaa gtgctagaca ttttccaatt aaaatttgct 840
tttatcctgg cactggcaaa aagaactgng aaagtgaaaa tttattcagc cn 892

0356303-20200000

0320030.0070000

<210> 3728
<211> 820
<212> DNA
<213> Homo sapiens

<400> 3728
gattgccggc attcccgctt ctgctggttg cttcatgctg caggctgcgg ccgtcagccc 60
tcgctcgcat tggtggcgct gaggtgccgg ggcagcaagt gacatgtcgt cgggcctccg 120
cgccgctgac ttcccccgct ggaagcgcca catctcggag caactgaggc gccgggaccg 180
gctgcagaga caggcgttcg aggagatcat cctgcagtat aacaaattgc tggaaaagtc 240
agatcttcat tcagtgttgg cccagaaact acaggctgaa aagcatgacg taccaaacag 300
gcacgagata agtcccggac atgatggcac atggaatgac aatcagctac aagaaatggc 360
ccaactgagg attaagcacc aagaggaact gactgaatta cacaagaaac gtggggagtt 420
agctcaactg gtgattgacc tgaataacca aatgcagcgg aaggacaggg agatgcagat 480
gaatgaagca aaaattgcag aatgtttgca gactatctct gacctggaga cggagtgcct 540
agacctgcgc actaagcttt gtgaccttga aagagccaac cagaccctga aggatgaata 600
tgatgccctg cagatcactt ttactgcctt ggagggaaaa ctgaggaaaa ctacggaaga 660
gaaccaggag ctggtcacca gatggatggc tgagaaagcc caggaagcca atcggcttaa 720
tgcagagaat gaaaaagact tcaggangcg gcaaagcccc ggcttgcaag aaagagcttt 780
gcagaaacca gccaaangga acctttttacc agttcgnaac 820

<210> 3729
<211> 870
<212> DNA
<213> Homo sapiens

<400> 3729
caagaagttc tggagataaa aaaaatacga gtgatagaag tagcaagaca caagcctctg 60
tcaaaaaaga agagaaaaga tcgtctgaga aatctgaaaa aaaagaaagc aaggatacta 120
agaaaataga aggtaaagat gagaagaatg ataatggagc aagtggccaa acatcagaat 180
cgattaaaaa aagtgaagaa aagaagcgaa taagttccaa gagtccagga catatggtaa 240
tactagacca aactaaagga gatcattgta gaccatcaag aagaggaaga tatgagaaaa 300
ttcatggaag aagtaaggaa aaggagagag ctagtctaga taaaaaaaga gataaagact 360
acagaaggaa agagatcttg ccttttgaaa agatgaagga acaaaggttg agagaacatt 420
tagttcgttt tgaaaggctg cgacgagcaa tggaacttcg aagacgaaga gagattgcag 480
agagagagcg tcgagagcga gaacgcatta gaataattcg tgaacgggaa gaacgggaac 540
gcttacagag agagagagag cgcctagaaa ttgaaaggca aaaactagag agagagagaa 600
tggaacgcga acgcttggaa agggaacgca ttcgtattga acaggaacgt cgtaaggaag 660
ctgaacggat tgctcgagaa agagaggaac tcagaaggca acaacagcag cttcgttatg 720
aacaagaaaa aaggaattcc ttgaaacgcc cacgtgatgt agatcatagc gagatgatcc 780
ttactggacg agaataaaag tggctctaga tcagatgcnc gatttggcnt ggatccgctc 840
tntcgccaca gacagattat gcttgtcccg 870

<210> 3730
<211> 806
<212> DNA
<213> Homo sapiens

<400> 3730
accgccttcg ccgcggacct tcagctgccg cggtcgctcc gagcggcggg ccgcagaggt 60
tcaagcgatt ctcctgcttc agcctccgga gtagctggga ttacaggcac gtgccaacac 120
acccagccac caaaatgcca gaagagatgg acaagccact gatcagcctc cacctggtgg 180
acagcgatag tagccttgcc aaggtccccg atgaggcccc caaagtgggc atcctgggta 240
gcggggactt tgcccgctcc ctggccacac gcctggtggg ctctggcttc aaagtggtgg 300
tggggagccg caaccccaaa cgcacagcca ggctgtatcc ctcagcggcc caagtgactt 360
tccaagagga ggcagtgagc tccccggagg tcatctttgt ggctgtgttc cgggagcact 420
actcttcact gtgcagtctc agtgaccagc tggcgggcaa gatcctggtg gatgtgagca 480
accctacaga gcaagagcac cttcagcatc gtgagtccaa tgctgagtac ctggcctccc 540
tcttccccac ttgcacagtg gtcaaggcct tcaatgtcat ctctgcctgg accctgcagg 600
ctggcccaag ggatggtaac aggcaggtgc ccatctgcgg tgaccagcca gaagccaagc 660
gtgctgtctc ggagatggcg ctcgccatgg gcttcatgcc cgtggacatg ggatccctgg 720
cgtcagcctg ggaggtggan gccatgcccc tgcgccttct tcccggnctg gaangtgccc 780
acccttgttg gcccttgggg cttctt 806

<210> 3731
<211> 754
<212> DNA
<213> Homo sapiens

<400> 3731
acgtggtacg gaaccggcgc cgcgcttgct gctggtaaca gggccttgcc tagtgggcct 60
tccttcccag gtcgcccctc agtctccact agagacagga ctgaccagtt gctcttcctt 120
ccaagaacct tcgagatctg cggtctgggg tctggttgaa agatggcggc cctcactacc 180
ctgtttaagt acatagatga aaatcaggat cgctacatta agaaactcgc aaaatgggtg 240
gctatccaga gtgtgtctgc gtggccggag aagagaggcg aaatcaggag gatgatggaa 300
gttgctgctg cagatgttaa gcagttgggg ggctctgtgg aactggtgga tatcggaaaa 360
caaaagctcc ctgatggctc ggagatcccg ctccctccta ttctgctcgg caggctgggc 420
tccgacccac agaagaagac cgtgtgcatt tacgggcacc tggatgtgca gcctgcagcc 480
ctggaggacg gctgggacag cgagcccttc accctggtgg agcgagacgg caagctgtat 540
gggggaggtt cgactgatga taagggcccg gtggccggct ggataaacgc cctggaagcg 600
tatcagaaaa caggccagga gattcctgtc aacgtccgat tctgcctcga aggcatggaa 660
ggagtcaagg ctcttgangg cctaanacga agcttgattt tttgccccgg gaaaggaaca 720
ccattctttt naagggattg tggggaccta atgg 754

<210> 3732
<211> 839
<212> DNA
<213> Homo sapiens

<400> 3732
acacctcgtg gagtccggcc ggaagagcaa ccgagatgaa ggtgaagatg ctgagccgga 60
atccggacaa ttatgtccgc gaaaccaagt tggacttaca gagagttcca agaaactatg 120
atcctgcttt acatcctttt gaggtcccac gagaatatat aagagcttta aatgctacca 180
aactggaacg agtatttgca aaaccattcc ttgcttcgct ggatggtcac cgtgatggag 240
tcaattgctt ggcaaagcat ccagagaagc tggctactgt cctttctggg gcgtgtgatg 300

00827059.052902

gagaggttag aatttggaat ctaactcagc ggaattgtat ccgtacaata caagcacatg 360
aaggctttgt acgaggaata tgtactcgct tttgtgggac ttctttttc actgttggtg 420
atgacaaaac tgtgaagcag tggaaaatgg atgggccagg ctatggagac gaggaagagc 480
cattacatac aatattagga aagacagtgt atactgggat tgatcatcac tggaaagaag 540
ctgtttttgc cacatgtgga cagcaagtag acatttggga tgaacaaaga actaatccta 600
tatgttcaat gacctgggga tttgacagta taagtagtgt taaatttaac ccaattgagg 660
taatgttttt ttttaagtat gntttactta ttatggctta ataatttcag ttctggttag 720
aaaacttttg aatgtatgat agaaacttct gaattttaat ggngntttgg cattttgca 780
gttttcccga ttggaaatga attctggaac ccttgnttca aatcccaact tggtttccc 839

<210> 3733
<211> 773
<212> DNA
<213> Homo sapiens

<400> 3733
tacaagctca agtctgtggc ccaccttccc tggcgcatgc tcacctacaa ggccctcaac 60
acattcatcg acgacctgtt cgcctttgtc atcaagatgc ccgttatgta ccggatcggc 120
tgcctgcggg acggcccacc tggctgtgga cgggccagcc cgacctcaca ctgcctccca 180
cccctctcca gatgtggttt tcttcatcta cctctaccaa cggtggatct accgcgtcga 240
ccccacccga gtcaacgagt ttggcatgag tggagaagac cccacagctg ccgccccgt 300
ggccgaggtt cccacagcag caggggccct cacgcccaca cctgcaccca ccacgaccac 360
cgccaccagg gaggaggcct ccacgtccct gcccaccaag cccacccagg gggccagctc 420
tgccagcgag ccccaggaag cccctccaaa gccagcagag gacaagaaaa aggattagtc 480
gagactggtc ctcacctgct ccggctcctg gcgaccacta cccctgcgtc ccggcccct 540
cgcctcccct ccctgtcgcc ctttccctgg acagatcagg ccggggcggt gggaggcccg 600
cctcaggtca gggcccagcg tgtgacgtag gggccggggc aggccagggt ttgtttgtgg 660
aggcgctgtc tgtccctctg tcctctgtgt ttcagcatct tggcctgcag cccagcacca 720
ctgggaatca tggtgaactg atgcagcgtg ccgangggt gggttgggcc gnn 773

<210> 3734
<211> 808
<212> DNA
<213> Homo sapiens

<400> 3734
aatccgatgg cagccgccag cagaggacaa gatcaatggc atcctcctgg gcttccggat 60
ccgataccgg gagctgctct atgaaggact gaggggcttc acgcttcgag gcatcaacaa 120
cccaggggcc acatgggctg agcttaccta cctgaacaag cacaggcggt acgagatacg 180
gatgagcgtg tacaacgctg tgggtgaggg gccctccagc cccccgcagg aggtctttgt 240
tggggaggca gtgcccacag cagcacctcg taacgtggtc gtccacggcg ccacggccac 300
acagctggac gtgacttggg agccacctcc gctggacagc cagaatggag acatccaggg 360
gtacaagatt tatttctggg aagcccagcg ggggaacctc acagagcgag tgaagacgct 420
tttcccggct gagaacagcg tgaagctcaa gaacttgact ggctacacgg cctacatggt 480
cagcgtggcc gccttcaacg ccgctgggga tgggcctcgg agcaccccca cccaaggcca 540
gacccagcaa gcagccccca gcgctcccag ctcggtcaag ttcagtgagc tgaccacaac 600
ctcagtgaat gtgtcctggg aagccccgca gttccccaat ggcatcctgg agggctacag 660
gctggtgtac gagccctgca gccccgtgga tggagtcagc aagatcgtga ccgtggacgt 720

0562303.00200

gaaggggaac aagccccctg tggctgaagg tgaaggacct gcgganggggg tgacctacan 780
gttccgcatt agaaccanac tttactac 808

<210> 3735
<211> 701
<212> DNA
<213> Homo sapiens

<400> 3735
aagatggcgg cggggaggta ggcagagcag gacgccgctg ctgccgccgc caccgccgcc 60
tccgctccag tcgcctctgg tccttcaaac tcacacctcc cgggaggagc tgtcctggcg 120
ccgggtcccg cggggaaaat ggtggagcca gggcaagatt tactgcttgc tgctttgagg 180
gagagtggaa ttagtccgaa tgacctcttt gatattgatg gtggagatgc agggcttgca 240
actccaatgc ctaccccgtc agttcagcag tcagtgccac ttagtgcatt agaactaggt 300
ttggagaccg aagcagcagt tcctgttaaa caagaaccag agactgtacc tactccagca 360
ctattaaatg tgaggcagcc tccatctact acaacatttg tgctgaatca aataaatcat 420
cttccaccct tgggatctac aattgtaatg actaaaacac cacctgtaac aaccaacagg 480
caaaccatca ctttaactaa gtttatccag actactgcaa gcacacgccc gtcagtctca 540
gcaccaacag tacgaaatgc catgacctct gcaccttcaa aagaccaagt tcagcttaaa 600
gatctactgg aaaataatag tcttaatgaa ctgatgaaac taaagccacc tgctaatatt 660
gcttacccag tancaacaag cnnctactga tgtaagccaa t 701

<210> 3736
<211> 876
<212> DNA
<213> Homo sapiens

<400> 3736
gtgccacatc ctggctctgt gcgctgggct cccgccgctg ctgcgcgcct ggcgcgtgcc 60
ccccgcgccg cccgtctcgg gccccggacc cagtccgcat ccgtcgtccg gcccgctgct 120
gccgccgcgc ttctacccgc gctacgtgct accgctcgcc ttcggcaagt acttcgcgtc 180
cgtgtcagcg cacgtcagca tctggaaggt gcccgtgtcc tatgcacaca ccgtcaaggc 240
caccatgccc atctgggtgg tcctcctgtc ccggatcatt atgaaggaga agcagagcac 300
caaggtatac ttgtcactca tccccatcat cagcggtgtc ctgctggcca ccgtcaccga 360
gttgtctttt gacatgtggg gactcgtcag cgccctcgcc gccacgctgt gcttctcgct 420
tcagaacatt ttctccaaaa aggtcttgcg agattcacgg atccaccatc tccggctgct 480
caacatcctg ggctgccacg ccgtcttctt tatgatcccc acctgggttc tggtggacct 540
ctcggctttc ctggtcagca gcgacttgac ctacgtctac cagtggccct ggacgctcct 600
gctcctggct gtcagcggct tctgtaactt tgcccagaat gttatcgcct tcagcatcct 660
caacctcgtt agccccctga gctactcggt cgcaatgcca ccaaaagaat catggtcatc 720
acggtgtccc tgatcatgct tgcgcaaccc agtcaccaac accaacgtct gggcatgatg 780
accggcatcc tgggggtctt nctttataac aagaacnagt accaatgcaa aaccaagcaa 840
gccaaggaag caccttcttc cccgttacca caagcn 876

<210> 3737
<211> 836
<212> DNA
<213> Homo sapiens

09053f0502.ST25

0050050-000200

<400> 3737
aagatggcgg cggggaggta ggcagagcag gacgccgctg ctgccgccgc caccgccgcc 60
tccgctccag tcgcctctgg tccttcaaac tcacacctcc cgggaggagc tgtcctggcg 120
ccgggtcccg cggggaaaat ggtggagcca gggcaagatt tactgcttgc tgctttgagg 180
gagagtggaa ttagtccgaa tgacctcttt gatattgatg gtggagatgc agggcttgca 240
actccaatgc ctaccccgtc agttcagcag tcagtgccac ttagtgcatt agaactaggt 300
ttggagaccg aagcagcagt tcctgttaaa caagaaccag agactgtacc tactccagca 360
ctattaaatg tgaggcagcc tccatctact acaacatttg tgctgaatca aataaatcat 420
cttccaccct tgggatctac aattgtaatg actaaaacac cacctgtaac aaccaacagg 480
caaaccatca ctttaactaa gtttatccag actactgcaa gcacacgccc gtcagtctca 540
gcaccaacag tacgaaatgc catgacctct gcaccttcaa aagaccaagt tcagcttaaa 600
gatctactga aaaataatag tcttaatgaa ctgatgaaac taaagccacc tgctaatatt 660
gctcaaccag tagcaacagc agctactgat gtaagcaatg gtacagtaaa gaaagagtct 720
tctaataaag aaggactaga atgtggataa acgacatgaa gatgaggagt ttttncccaa 780
ccatgaaggt tcctgttgta aaagaagatg atgaaccnna ggaagaagat gaagaa 836

<210> 3738
<211> 877
<212> DNA
<213> Homo sapiens

<400> 3738
gtttttggag ctgcgacgcc aaacatggcg tgttcctaga agccgctttc ggcatcagta 60
ggcggcggcg tggggtctgg cagcgtgggg agagggacca accgacgcca cttcgtgttg 120
ggaagtggga gcgggagggc cgggcaattc ccgaccgaac caaacggttt ccatggatct 180
caatagtgcc agcactgttg ttcttcaggt gttaacacag gccaccagtc aggatactgc 240
tgtgttaaaa ccagctgagg agcagttgaa gcagtgggag acacagccag gtttctattc 300
agtgttgctg aatattttca ccaaccacac tttggatata aatgtaaggt ggcttgctgt 360
actgtatttt aaacatggaa ttgatcgcta ctggagacgt gtagcacctc atgctctctc 420
agaggaggag aaaactactc tgcgtgcagg gctcatcacc aacttcaatg aaccaataaa 480
ccagattgca actcagattg cagtgctcat tgcaaaagtt gctagattgg attgtcccag 540
acagtggcct gaactaattc ccactcttat agagtctgtt aaagtccagg atgatcttcg 600
acagcacaga gcattactta ccttctatca tgttaccaag acactggcat ctaaacgact 660
tgctgctgat agaaaactat tttatgattt ancttctgga atttataatt ttgcctgctc 720
tctgtggaat caccacacag acacattcct gcaagaagtt tcttcttgca atgaactgca 780
acntttgagt tcactagaac gaacactgnt atcattgaaa gtgctgcgta agttaactgg 840
taatggattt gtggaaacct cataagaatn tggaggt 877

<210> 3739
<211> 857
<212> DNA
<213> Homo sapiens

<400> 3739
acacaaagga aatgcaggca gatgatgaac tgcttcatcc attaggtcca gatgataaaa 60
atattgaaac aaaagaggga tctgaattct cattttcaga tggagaagtg gcagaaaaag 120
cagaggttta caggtcagaa aatgaaagtg aacggaactg tctagaagaa tcagagggct 180

gctattgcag atcatctgga gaccctgaac aaataaagga agacagttta tcagaagaga 240
gtgctgatgc acggagtttt gaaatgactg aattcaatca agctttagaa gaaataaaag 300
ggcaggttgt tgaaaacaac tctgtaactg aattttctga ggagaaaaac agaactgaaa 360
attacaacag gcaagatggt cagagagttc aaggaggagt ccctgctggc tctgacgagt 420
atgaagatga atgccctcat ctaattgcct tgtcgtcatt aaatagagaa ttcaggcctt 480
tcagagatga agaaaatgtg ggagctatga atcagtatag aacaagaact ctgagtatca 540
cttcttcagg cagtgctgta agctgttcaa caattcctcc agaactggtg aaacagaagg 600
tgaaacgtca gttgacaaaa cagcaaaaat cagctgtcag acgtcgattg cagaaaggag 660
aagcaaatat atttaccaag caacgtaggg aaaacatgca aaatatcaaa tcaagtttgg 720
aagcagctag cttttgggga gaataatata tttaggatct tggatatggt taatatattt 780
tttaaaggta ctggaattcc nttttgaacc ctcattggcc ttttttgagc ccaggntatc 840
atatattaat aaatnaa 857

<210> 3740
<211> 874
<212> DNA
<213> Homo sapiens

<400> 3740
atgcgcataa cggccgccat cttaacagcg cgttcccgtt ggcgtctgag gaacagcatc 60
tctgccttcc tgttcacggt gaccttcgct tggtgtcctc ctggcctcag caacctgaca 120
attctgtcgt gtcccgagag atggctaatg aatggcgctt gatgacagat gagtaatgcc 180
tgttgctgaa agattgacgg tatgagatca tctttctcaa gatgttttct gtcttcatga 240
gtcaaaattt gaagaggaaa ggatggtggc tgggtggttg acaaattact ctcaggactc 300
agtgaccttt gaggatgtgg ctgtggactt cacccaggag gagtggactt tgctggatca 360
aactcagaga aacttataca gagatgtgat gctggagaac tataagaatc tagttgcagt 420
agattgggag agtcatatta ataccaaatg gtcagcacct cagcagaatt ttttgcaggg 480
gaaaacatcc agtgtggtgg aaatgaattc agagtaaaag ggagaatctc aatgaaataa 540
atttggaaaa cttctatgaa ccatcattaa ttttcaccaa caggagagaa accattttgg 600
agaggaactg tttgacttta accaatgtga aaaagccttg agtgaacact catgccttaa 660
gactcacagg agaacttact ttagaaagaa aacctgtgag tgtaatcaat gtgaaaaagc 720
cttcagaaaa ccctctatct ttactttaca caagaaaact gatatcggag angaactttc 780
tactgtaatc aatgtgnaac agcctttagc caacatctac atcttggttg caagaaaact 840
acccaaatct acatcttgtt tgcaanaaac ttnc 874

<210> 3741
<211> 931
<212> DNA
<213> Homo sapiens

<400> 3741
tttaaaaata aagagcatat gaagtactca aagatgaaga tctacggaaa aagtatgaca 60
aatatggaga aaagggactt gaggataatc aaggtggcca gtatgaaagc tggaactatt 120
atcgttatga ttttggtatt tatgatgatg atcctgaaat cataacattg gaaagaagag 180
aatttgatgc tgctgttaat tctggagaac tgtggtttgt aaatttttac tccccaggct 240
gttcacactg ccatgattta gctcccacat ggagagactt tgctaaagaa gtggatgggt 300
tacttcgaat tggagctgtt aactgtggtg atgatagaat gctttgccga atgaaaggag 360
tcaacagcta tcccagtctc ttcatttttc ggtctggaat ggccccagtg aaatatcatg 420

0950340-070200

gagacagatc aaaggagagt ttagtgagtt ttgcaatgca gcatgttaga agtacagtga 480
cagaactttg gacaggaaat tttgtcaact ccatacaaac tgcttttgct gctggtattg 540
gctggctgat cacttttttgt tcaaaaggag gagattgttt gacttcacag acacgactca 600
ggcttggtgg catgttggat ggtcttgtta atgtaggatg gatggactgt gccacccagg 660
ataacctttg taaaagctta gatattacaa caagtactac tgcttatttt cctcctggag 720
ccactttaaa taacaaagag aaaaccgtat tttggttctc actcattgga tgctaaagaa 780
attatttgga agtaatacat aatcttncag attttgactc tttcgcaaac accttaaaga 840
cgtttggctc atcatcggng ctgtattttt cattttggaa aaatgaaaat caatgatcct 900
gacctgaaaa ctaaaactnt cntaaaatga c 931

<210> 3742
<211> 867
<212> DNA
<213> Homo sapiens

<400> 3742
actattttgc tgccatgttt actaatgatg tcagagaggc aagacaagaa gaaataaaaa 60
tggaaggtgt agaaccaaat tcgttgtggt ccttgatcca gtatgcttat acaggccgcc 120
ttgaattaaa agaagataat attgagtgcc tgttatctac agcttgcctt cttcagcttt 180
cacaggttgt agaagcatgc tgtaagtttt taatgaaaca gcttcatcca tccaactgtc 240
ctggaattcg ttcttttgct gatgcccaag gttgtacaga tttgcataaa gtggctcaca 300
attatactat ggagcatttc atggaagtaa tcagaaacca ggaatttgta ttattaccag 360
ccagcgaaat tgcaaagctc ttggctagtg atgacatgaa cattcctaat gaggagacaa 420
tattgaatgc acttcttact tgggtccgtc atgatttgga acagagacgg aaagatctaa 480
gtaaactttt ggcttatatt aggctacctc ttcttgcacc acagttcctg gcagacatgg 540
aaaataatgt acttttcgg gatgatatag aatgtcagaa actcattatg gaagcaatga 600
agtaccattt attaccagag agacgaccca tgttacaaag tcctcggaca aaacctagga 660
agtcaactgt tggtacatta tttgcagttg ggggaatgga ttcaacaaaa ggagcaacaa 720
gcattgaaaa agtatgatct ccgtacaaat atgtggactc cagtagcaaa tatgaatggg 780
angaggctac agttcggtgg tgcagtgcta gatgacaaac tgtatgtggt tggaggaana 840
aatggactga agactttgna tactgga 867

<210> 3743
<211> 848
<212> DNA
<213> Homo sapiens

<400> 3743
ccgtgcggcc agagctctag agagtggtgc cgccttccaa ccttcttccc caagccctgg 60
tggccggctc cgcctcttct cgaatctttt ccacagccca aaatggccgc agaggtgtat 120
tttggcgatc tagagctctt cgagccgttc gaccacccag gggagtcgat tccgaagccc 180
gttcacactc gcttcaagga cgacgacggc gacgaggagg acgaaaatgg ggtcggcgac 240
gcggagctac gggagcggct tcggcagtgc gaggagacca tcgagcagct ccgcgccgag 300
aatcaagaac ttaaacgaaa attgaacatt ctgactcgac cgagtggaat attggtgaac 360
gatactaagt tagatggacc tatattacag attctattca tgaacaatgc tatttcaaag 420
caatatcatc aagaaataga ggaatttgta tcaaatttag taaaaagatt tgaggaacag 480
cagaaaaatg atgtggaaaa gacttccttt aatcttttgc cccagccatc cagtattgtg 540
ctagaggagg accacaaagt ggaagagtcc tgtgccatta aaaacaacaa ggaagctttc 600

US 2005/0009004 A1

agtgttgtag gaagtgtcct gtattttact aatttttgcc ttgataaatt ggggcaaccc 660
gcttctaaat gaaaaccctc agctttccga aggatgggaa atacccaagt accatcaagt 720
cttcagcccc attggttctc tagaagggca agaaatacaa gttaaggcaa aaanggccaa 780
agcctnactg gtttcaaatg ggggntcttg aagaaccccc caatggaaag aattggccca 840
atggcctt 848

<210> 3744
<211> 793
<212> DNA
<213> Homo sapiens

<400> 3744
agtctccgca gagcccgggc gggagtagct ggtggacccc gttgagctgc cgaacttccg 60
ggactccccc gcgacccctt cccagcttcc cgtccgctcc gccgcagcga ttgtctcggt 120
gggttgattc ggcacaaacc gcccgaccca ggggccggtg cgcgtgtgga aggggaagca 180
ctcccctcgt ggtcgcctgg aggtgcgctg gaggaggggg tgacataacc agggactcga 240
ggtccgccgt gggaatgatc cacgaactgc tcttggctct gagcgggtac cctgggtcca 300
ttttcacctg gaacaagcgg agtggcctgc aggtatcgca ggacttccct ttcctccacc 360
ccagtgagac cagtgtcctg aatcgactct gccggctcgg cacagactat attcgcttca 420
ctgagttcat tgaacagtac acgggccatg tgcaacagca ggatcaccat ccatctcaac 480
agggccaagg tgggttacat ggaatctacc tgcgggcctt ctgcacaggg ctggattctg 540
ttttgcagcc ttatcgccaa gcactgcttg atttggaaca agagttcctg ggtgatcccc 600
atctctccat atcacatgtc aactacttct agaccagttc cagcttcttt ttccctctgt 660
gatggttgta gtagaacaaa ttaaaaagtc aaaagattca tggntgtcaa atcctggaaa 720
cagtctacaa acacagcttg tgggggttg gcttctgttc naagtgcact gggaaaaaat 780
cctggcccgn ttg 793

<210> 3745
<211> 590
<212> DNA
<213> Homo sapiens

<400> 3745
aaaaaaaaaa gtacgcggac aagatggcgg cggcagcagt cgacagcgcg atggaggtgg 60
tgccggcgct ggcggaggag gccgcgccgg aggtagcggg cctcagctgc ctcgtcaacc 120
tgccgggtga ggtgctggag tacatcctgt gctgcggctc gctgacggcc gccgacatcg 180
gccgtgtctc cagcacctgc cggcggctgc gcgagctgtg ccagagcagc gggaaggtgt 240
ggaaggagca gttccgggtg aggtggcctt cccttatgaa acactacagn cccaccgact 300
acgtcaattg gttggaagag tataaagttc ggnaaaaagc tgngttagaa gcgcggaaga 360
ttgtagcctc gttctcaaag aggttctttt cagagcacgt tccttgtaat ggcttcagtg 420
acattgagaa ccttgaagga ccaganattt tttttgagga tgaactggtg tgtatcctaa 480
atatggaagg aagaaaagct ttgacctgta aatactacgc anaaaaaatt ctttactacc 540
tgcggcaaca gaagatctta antaatctta atgcctttct tcancagcca 590

<210> 3746
<211> 840
<212> DNA
<213> Homo sapiens

0502045.0702000

0962946.0720800

<400> 3746
agccgcgcga cgccgccgcc ttagaacgcc tttccagtac tgctagcagc agcccgacca 60
cgcgttaccg cacgctcgcg cctttccctt gacacggcgg acgccggagg attggggcgg 120
caatttgtct tttccttttt tattaaaatt atttttcctg cctgttgttg gatttgggga 180
aatttttgt ttgttttta tgatttgtat ttgactgaga gaaacccact gaagacgtct 240
gcgtgagaat agagaccacc gaggccgact cgcgggccgc tgcacccacc gccaaggaca 300
aaaggagccc agcgctacta gctgcacccg attcctccca gtgcttagca tgaagaaggc 360
cgaaatggga cgattcagta tttccccgga tgaagacagc agcagctaca gttccaacag 420
cgacttcaac tactcctacc ccaccaagca agctgctctg aaaagccatt atgcagatgt 480
agatcctgaa aaccagaact ttttacttga atcgaatttg gggaagaaga agtatgaaac 540
agaatttaat tctcttgaca tttgtgtcaa tattttccct gtattctgtt catctccttt 600
tgaagactgc caatgaagga gggtctttat tatatgaaca attgggatat aaggcatttg 660
gattagttgg aaagcttgca gcatctggat caattacaat gcagaatatt ggagctatgt 720
caagctacct cttatagtga aatatgagtt gcctttgggt gatccaggca ttaacgaaca 780
ttgaagatna aactggattg nggtatctga acnggaacta ttgggtctgt ggggcattgg 840

<210> 3747
<211> 806
<212> DNA
<213> Homo sapiens

<400> 3747
gctgacgggt ttgaaatggc tncgatgtta gccgggaccc gactcagatc gatgctatag 60
aagacaaaca aggaaaggtt ttttttcctt ttgcatcatg gctcaatttg gaggacagaa 120
gaatccgcca tgggctactc agtttacagc cactgcagta tcacagncag ctgcactggg 180
tgttcaacag ccatcactcc ttggagcatc tcctaccatt tatacacagc aaactgcatt 240
ggcagcagca ggccttacca cacaaactcc agcaaactat cagttaacac aaactgctgc 300
attgcagcaa caagccgcag ctgcagcagc tgcattacaa cagcaatatt cacaacctca 360
gcaggccctg tatagtgtgc aacaacagtt acagcaaccc cagcaaaccc tcttaacaca 420
gccagctgtt gcactgccta caagccttag cctgtctact cctcagccaa cagcacaaat 480
aactgtatca tatccaacac caaggtccag tcaacagcaa acccagcctc agaagcagcg 540
tgttttcaca ggggtggtta caaaactaca tgatacattt ggatttgngg atgaagatgt 600
attctttcag cttagtgctg tcaaagggaa aacccccaa gtaggtgaca gagtattggt 660
tgaaagctct tataatccta atatgccttt taaatggaat gcacagagaa ttcaaacact 720
ccaaatcaga atcagtcgga aacccagcca ttactgaaga ctcttctgnt ggactttanc 780
caattgnacc acagacaaca atttgg 806

<210> 3748
<211> 727
<212> DNA
<213> Homo sapiens

<400> 3748
atcactcaag atggctgccc ccatcaagat gaccggggtg tgccgggggg aaaggggcag 60
catgatggtc tgagatggtg tagcgtcgga ccatgtggca gtttctgagg ctggggagcc 120
ggataatggg gggtggggcc cgttgggggg taaaggggca atagcgtcct ttcacaggct 180
aacctcggct cttcccagtc ctctggacta aaatggggaa cacattgggc ctggcaccaa 240

tggggacttt gccccgccgg agcccccgcc gagaggaacc cctgcccaac cctgggagct 300
tcgatgagct gcaccgtcta tgcaaagatg tattcccagc acagatggag ggagtgaagc 360
tcgttgtcaa caaggttctg agcagccatt tccaggtggc gcacactata cacatgagtg 420
ccctgggctt gccgggatat cacctccatg cggcctatgc aggggattgg cagctcagtc 480
ccactgaggt gttccccact gtggtagggg atatggacag cagtggcagc ctgaacgccc 540
aggtcttgct cctcttggca gaacggctcc gagctaangc tgtcttcaga cgcagcangc 600
caagttcctg acatggcagt ttgatggcga gtatcgggga gatgactaca cagccacttn 660
tgaccctagg aaatcctgac ctgattgggg aatccgtgat catgggttgc ttnactttcc 720
tgganaa 727

<210> 3749
<211> 798
<212> DNA
<213> Homo sapiens

<400> 3749
aaggaaattc aggaagcaaa agctcccagt ccttccataa accggcaaac cagcattgaa 60
acggatagag tgtctaagga gttcatagaa tttctcaaga ccttccacaa gacaggccaa 120
gaaatctata aacagaccaa gctgtttttg gaaggaatgc attacaaaag ggatctaagc 180
attgaagaac agtcagagtg tgctcaggat ttctaccaca atgtggccga aaggatgcaa 240
actcgtggga aagtgcctcc agaaagagtc gagaagataa tggatcagat tgaaaagtac 300
atcatgactc gtctctataa atatgtattc tgtccagaaa ctactgatga tgagaagaaa 360
gatcttgcca ttcaaaagag aatcagagcc ctgcgctggg ttacgcctca gatgctgtgt 420
gtccctgtta atgaagacat cccagaagtg tctgatatgg tggtgaaggc gatcacagat 480
atcattgaga tggattccaa gcgtgtgcct cgagacaagc tggcctgcat caccaagtgc 540
agcaagcaca tcttcaatgc catcaagatc accaagaatg agcccggcgt cagcggatga 600
cttcctcccc accctcatct acattggttt gaagggcaac cccccacgcc ttcagtctaa 660
tatccagtat atcacgcgct tctgcaatcc aagcccgact gatgactgga gaggatggct 720
actatttcac caatctgggc tgnctggggc tttcattggg aagctngacg cccagtcttt 780
tgaatcttaa ntccggga 798

<210> 3750
<211> 869
<212> DNA
<213> Homo sapiens

<400> 3750
aacttcatgc cctctttact cttgcccaag ctgaggattc tgtccttgtt atagtgaata 60
aagaaaaacc agatatattt cagctggttt cagtgaaact gccaaaatcc tcaagccagg 120
aagtagaagc caaggagctg tcctttgttt tggattacat aaaccagtca cccaagtgca 180
ttgcctttgg aaacgaggga gtatatgttg ctgcagtacg ggaattttac ttgtctgttt 240
atttttcaa aaagaaaaca acatcaaggt ttactttatc atcatcaaga aataagaagc 300
atgctaaaaa caattttaca tgtgtagcat gtcacccaac ggaagactgc atcgcatctg 360
gtcacatgga tggcaaaatt cgtctttgga ggaattttta tgatgataag aaatatacgt 420
acacatgttt acattggcac catgatatgg ttatggattt ggctttttca gtgacaggca 480
ccagtctgct gagtggcggt cgtgaatctg tacttgtaga gtggcgcgat gcaatagaga 540
agaataagga gtttctcccg cgtttaggag ctactattga acatatctca gtctcgcctg 600
caggagattt attctgcact tctcactctg ataataagat aataattatt caccgaaacc 660

0362045.0072000

ttgaagcatc cgcagtaatt caaggcctag tgaaagatag gagtatcttc actggtttga 720
tgattgatcc aagaactaaa gctttggttt tgaatggnaa acctggccac ctgcagttta 780
tctcttcaga gtgataacag tatncattta gatttatcng caggaatttt taatgatatg 840
gctgatcaaa ttgactacaa gntgatttg 869

<210> 3751
<211> 803
<212> DNA
<213> Homo sapiens

<400> 3751
ttttgcttcg atgtgctcta ctgtcacctg tatggatacc agcagccccg gacccccga 60
ttcaccaacg agccctaccc actgtttgta acatggaaga ttggtcgaga caaaagatta 120
cgtggatgca tgggtacttt ttctgccatg aatttgcatt caggactcag ggagtacaca 180
cttaccagtg cccttaaaga tagccgtttt cccccaatga caagggatga gctgccacgg 240
cttttctgct cagtgtctct gctcactaac tttgaagatg tctgtgatta tttggactgg 300
gaggtgggtg tacatggcat tagaatagaa ttcatcaatg aaaaaggatc aaaacgcacc 360
gccacctacc taccggaggt tgcaaaggag caaggatggg accatataca gaccatagac 420
tccttattga ggaaaggagg atacaaagct ccgattacta atgaattcag gaaaaccata 480
aaactgacca ggtatcgtag tgaaaagatg accctgagct atgctgaata ccttgctcat 540
cgccagcatc atcatttcca aaatggcatt gggcatcccc ttccgccata caaccattat 600
tcctgacact gagccgcaca accagtcact gggcctctct gcagacctct tccaggagac 660
cctacacctt cttggtctag ctatctcttt tactgtccat tttatgatga tagtttccgn 720
tgncatggtg aagcttcgac attggcaact aagatcatca tggtaacggg tagaaaaatg 780
gcnttttggt taagaaccct ggt 803

<210> 3752
<211> 837
<212> DNA
<213> Homo sapiens

<400> 3752
agagccgcga gctggaccag ccgtgcaaat ctctagaaga tgacggtgtt ctttaaaacg 60
cttcgaaatc actggaagaa aactacagct gggctctgcc tgctgacctg gggaggccat 120
tggctctatg gaaaacactg tgataacctc ctaaggagag cagcctgtca agaagctcag 180
gtgtttggca atcaactcat tcctcccaat gcacaagtga agaaggccac tgtttttctc 240
aatcctgcag cttgcaaagg aaaagccagg actctatttg aaaaaaatgc tgccccgatt 300
ttacatttat ctggcatgga tgtgactatt gttaagacag attatgaggg acaagccaag 360
aaactcctgg aactgatgga aaacacggat gtgatcattg ttgcaggagg agatgggaca 420
ctgcaggagg ttgttactgg tgttcttcga cgaacagatg aggctacctt cagtaagatt 480
cccattggat ttatcccact gggagagacc agtagtttga gtcataccct ctttgccgaa 540
agtggaaaca aagtccaaca tattactgat gccacacttg ccattgtgaa aggagagaca 600
gttccacttg atgtcttgca gatcaagggt gaaaaggaac agcctgtatt tgcaatgacc 660
ggccttcgat ggggatcttt cagagatgct ggcgtcaaag ttagcaagtc tgggatcttg 720
ggcctctaaa aatcaaagca gcccactttt tcagcactct ttaaggagtg gcctcanact 780
tcatcaagcc tntatctcat ccccgggacc ttccgaagag ancttccaat gaacccc 837

<210> 3753

0050204800

<210> 778
<211> DNA
<213> Homo sapiens

<400> 3753
agagctgaac ctgcatcccg gacctgcggc gaccgtcgta caccatgggc ctccacctcc 60
gcccctaccg tgtggggctg ctcccggatg gcctcctgtt cctcttgctg ctgctaatgc 120
tgctcgcgga cccagcgctc ccggccggac gtcacccccc agtggtgctg gtccctggtg 180
atttgggtaa ccaactggaa gccaagctgg acaagccgac agtggtgcac tacctctgct 240
ccaagaagac cgaaagctac ttcacaatct ggctgaacct ggaactgctg ctgcctgtca 300
tcattgactg ctggattgac aatatcaggc tggtttacaa caaaacatcc agggccaccc 360
agtttcctga tggtgtggat gtacgtgtcc ctggctttgg gaagaccttc tcactggagt 420
tcctggaccc cagcaaaagc agcgtgggtt cctatttcca caccatggtg gagagccttg 480
tgggctgggg ctacacacgg ggtgaggatg tccgaggggc tccctatgac tggcgccgag 540
ccccaaatga aaacgggccc tacttcctgg ccctncgcga gatgatcgan gagatgtacc 600
agctgtatgg gggccccgtg gtgctggttg ccacagtatg ggcaacatgt acacgctcta 660
ctttctgcac ggcagccgaa gcctggaagg acaagtatat ccggccttcg tgtactggtg 720
cnnctggggg gcgtggncaa aacctggcgt ctgcttcaga gaaacaacgg tccantat 778

<210> 3754
<211> 808
<212> DNA
<213> Homo sapiens

<400> 3754
gaaaatgcta aacgactcaa taaactaaga gatgagcttg ttaaactcaa atcctttgca 60
ctcatgctgg tggatgaaag acaaatgcac attgaacaac ttggcctgca aagccagaaa 120
gtacaggatc ttactcagaa gctgagggaa gaagaagaga agctcaaagc cattacttcc 180
aaatccaaag aagacagaca gaaattgctc aagttagaag tggactttga acacaaggct 240
tcgaggtttt ctcaagagca tgaagagatg aacgctaaac tggctaatca agagtctcac 300
aataggcaac ttagactcaa gctggttggc ttaacccaaa gaatcgagga gctagaagag 360
accaacaaaa atctgcagaa ggcagaggaa gaacttcaag aattaagaga taaaattgcc 420
aaaggagaat gtggaaactc tagcctcatg gcagaagtgg aaaatcttcg aaagcgtgtg 480
cttgaaatgg aaggtaaaga tgaggagatc actaaaactg aatcccagtg tagggaattg 540
aggaagaagc tgcaagagga agaacaccat agtaaggagc tcagacttga agttgagaag 600
ctacagaaga gaatgtctga actagagaaa ttggaagaag catttagcaa gagtaaatct 660
gagtgcaccc agctacattt aaatctggag aaagaaaaga acttaccaaa gacctgctaa 720
atgaattgga ngtgggcaag aatcnagtta aagaattgga atggtctgaa gtagaatgga 780
aaaggctgaa ttaanctaaa agatgatc 808

<210> 3755
<211> 797
<212> DNA
<213> Homo sapiens

<400> 3755
ttcggaactc gccaggggcg ccgccggcgg cggagggagc gtgactgcgc tgcgcagggc 60
gctaggaggc attgtcgccg ctcaggccct tttgtgagaa gcagaccagc ctgggggctg 120

09653F05.ST25

gcggcaggac acctgtgtct gcatgctgaa gaagatgggt gaggccgtgg ccagagtagc 180
aaggaaggtc aacgagacgg tggagagcgg ctctgacact ctggagctcc acctggaggg 240
gaacttccta caccgcctcc ccagcgaggt cagtgccctg cagcacctca aggccattga 300
cctgtcccgg aaccagttcc aggacttccc tgagcagctt accgccctgc cggcgctgga 360
gaccatcaac ctggaggaga acgagatcgt agatgtgccc gtggagaagc tggccgccat 420
gccagccttg cgcagcatca acctccgctt caacccactc aacgccgagg tgcgcgtgat 480
cgccccgccg ctcatcaagt ttgacatgct catgtctccg gaaggcgcaa gagcccccct 540
accttacgcc accctnctca tgcccaccca gcaagggaca gaggccacag gcctggaacc 600
ctggaaggga gggaggccca tgggaggcca agcctggggg ctgggggcgg gtggccgagc 660
aacacgtggt gggtggggtg caactggtct ggatagatag cttacagcag tantgggctc 720
ttggaatgcc caagggaaaa gcaaggtggg gccttgaacc tggacttggg actnacantt 780
gttgggcaaa ctcaggc 797

<210> 3756
<211> 850
<212> DNA
<213> Homo sapiens

<400> 3756
taaatgtcca ctttgctccc cggattgtag ttgaccccaa acccacaacc acagacattg 60
gctctgatgt gacccttacc tgtgtctggg ttgggaatcc ccccctcact ctcacctgga 120
ccaaaaagga ctcaaatatg gtcctgagta acagcaacca gctgctgctg aagtcggtga 180
ctcaggcaga cgctggcacc tacacctgcc gggccatcgt gcctcgaatc ggagtggctg 240
agcgggaggt gccgctctat gtgaacgggc cccccatcat ctccagtgag gcagtgcagt 300
atgctgtgag gggtgacggt ggcaaggtgg agtgtttcat tgggagcaca ccacccccag 360
accgcatagc atgggcctgg aaggagaact tcttggaggt ggggaccctg gaacgctata 420
cagtggagag gaccaactca ggcagtgggg tgctatccac gctcaccatc aacaatgtca 480
tggaggccga ctttcagact cactacaact gcaccgcctg gaacagcttc gggccaggca 540
cagccatcat ccagctggaa gagcgagagg tgttacctgt gggcatcata gctggggcca 600
ccatcggcgc gagcatcctg ctcatcttct tcttcatcgc cttggtattc ttcctctacc 660
ggcgccgcaa aggcagtcgc aaagacgtga ccctgaggaa gctggatatc aaggtggaga 720
cagtgaaccc gagagccact tacgatgcat tcttgaccgg gaggatgaca ccggcagccg 780
tcttcacaag caaccccggg tcattgaagg ncatnttact nggtcgttta aaggatgatg 840
gtgggatctg 850

<210> 3757
<211> 894
<212> DNA
<213> Homo sapiens

<400> 3757
aggagatcct ggggccttac ctactagcgg aatcgactga agagacgcct gccagtgcgg 60
gaggtaggaa gctcgatccc caaagaaaag agcgagtggg caggcagctg cgagacagaa 120
ccggagtgtg cagggtccct agaggccggt tcctggtctg tgctgctctc ctggaagcca 180
tggtacaggc agagctcagg gcgatcccca ggtgagggca gcggctctgc ctgggattcc 240
accgcagtac aaccgggtag atgcggggtg gagaagaaag gatgttgcct gcactgctcg 300
ccaatagcac cctgagaggc tacatttgca gaagcagcag cagcagaaga cacagcgccg 360
gtccaggagg cggctcgagc tgttcgtaaa gtcgcccgac agctttttct ccgtagtatg 420

03052003

cgagttgaca aaacagccag agaacagggc tccccattac aatcttttcg agatctttc 480
ccttgctaac cggatctgat ttgtgcgaaa acatgccttg cacttgtacc tggaggaact 540
ggagacagtg gattcgacct ttagtagcgg tcatctacct ggtgtcaata gtggttgcgg 600
ttcccctatg cgtgtgggaa ttacagaaac tggaggttgg aatacacacc aaggcttggt 660
ttattgctgg aatcttttg ctggtgacta ttcctatatc actgtgggtg atattgcaac 720
acttaagtgc attatacaca accttgaact acnaaaacca ataattaagg attctttgga 780
tggtacctat ttacaggttt aaatagttgg atacttttgn aatatcccgg aattgcaata 840
tatgtggatc cctgcanaaa atgcttttga agcttatgna atttacaact tttt 894

<210> 3758
<211> 736
<212> DNA
<213> Homo sapiens

<400> 3758
gcgaagctga gaggcctatg gatgaggagg acgcggcggc cccggtttgt tctcatgaac 60
aagatggatg acctcaacct gcactaccgg tttctgaatt ggcgccggcg gatccgggag 120
attcgagagg tccgagcttt ccgatatcag gagaggttca aacatatcct tgtagatgga 180
gatactttaa gttatcatgg aaactctggt gaagttggct gctacgtggc ttctcgaccc 240
ctgaccaagg acagcaatta ttttgaggtg tctattgtgg acagtggagt ccggggcacc 300
attgctgtgg ggctggtccc tcagtactac agcttggatc accagcctgg ctggttgcct 360
gactctgtag cctaccatgc tgatgatggc aagctgtaca atggccgagc caagggccgc 420
cagtttgggt caaagtgcaa ctccggggac cggattggct gtggcattga gcctgtgtcc 480
tttgatgtgc agaccgccca gatcttcttc accaaaaatg ggaagcgggt gggctctacc 540
atcatgccca tgtccccaga tggactgttc ccagcagtgg gcatgcactc cctgggtgaa 600
gaggtgcggc tgcacctnaa cgctgaactg ggccgtgagg acnacagcgt catgatggtg 660
gacagttacc aggatnaatg gggcccggct acatgatgtc agaatctgtg ggactcttgc 720
tggaatactt anggaa 736

<210> 3759
<211> 767
<212> DNA
<213> Homo sapiens

<400> 3759
actgccggcc tgcgcggtac tcactgccgg cctccgcggt acccactgcc ggcctccgcg 60
ctacccggcc gcagcgcgcg agtcacatgg aagctcctga ggagcccgcg ccagtgcgcg 120
gaggcccgga ggccaccctt gaggtccgtg ggtcgcgctg cttgcggctg tccgccttcc 180
gagaagagct gcgggcgctc ttggtcctgg ctggccccgc gttcttggtt cagctgatgg 240
tgttcctgat cagcttcata agctccgtgt tctgtggcca cctgggcaag ctggagctgg 300
atgcagtcac gctggcaatc gcggttatca atgtcactgg tgtctcagtg ggattcggct 360
tatcttctgc ctgtgacacc ctcatctccc agacgtacgg gagccagaac ctgaagcacg 420
tgggcgtgat cctgcagcgg agtgcgctcg tcctgctcct ctgctgcttc ccctgctggg 480
cgctctttct caacacccag cacatcctgc tgctcttcag gcaggaccca gatgtgtcca 540
ggcttaccca gacctatgtc acgatcttca ttccagctct tcctgcaacc tttctttata 600
tgttacaagt taaatatttg ctcaaccagg gaattgtact gccccagatc gtaactggag 660
ttgcagccaa cttgtcaatg ccctcgcaac tatctgttct catcaactgc atnttggggt 720
gataggctct gactggcaaa cttgatttcc antacaccct ggctnta 767

0356350.0370000

<210> 3760
<211> 872
<212> DNA
<213> Homo sapiens

<400> 3760
aacctcagtc aggaccgcct gcaccgcagt ccggggatcg ggtcgagggg agaagaaaaa 60
ggggtgctcg ggagcagccc ccggctacct cccctggagg cacagagggc gggggccttg 120
gcgaatggct ttcttgctgg ccacttgcgg aggtttggat tcaggatttg ttcctagtgt 180
ccaagatttt gataagaaac ttacagaagc tgatgcttac ctacaaatct tgattgaaca 240
attaaagctt tttgatgaca agcttcaaaa ctgcaaagaa gatgaacaga gaaagaaaat 300
tgaaactctc aaagagacaa caaatagcat ggtagaatca attaaacact gcattgtgtt 360
gctgcagatt gccaaaagta ctattaatcc cgtagatgca atatatcaac ctagtccttt 420
ggaacctgtg atcagcacaa tgccttccca gactgtgtta cctccagaac ctgttcagtt 480
gtgtaagtca gagcagcgtc catcttccct accagttgga cctgtgttgg ctaccttggg 540
acatcatcag actcctacac caaatagtac aggcagtggc cattcaccac cgagtagcag 600
tctcacttct ccaagccacg tgaacttgtc tccaaataca gtcccagagt tctcttactc 660
cagcagtgaa gatgaatttt atgatgctga tgaattccat caaaagtggc tcatncccaa 720
agcgcttaat agattcttct ggatctgcct caatccttga cacacagcag cttcgggaaa 780
tagtctaaaa cgcccaaaat ccccngaaa tcacttnaat tcttncttgg gccaatggga 840
accaagtgga tgcctgaccc tggttggaat tc 872

<210> 3761
<211> 826
<212> DNA
<213> Homo sapiens

<400> 3761
tactaaagaa tgagaaagat gaggtgcaaa aattacaaaa tatcattgca agtcgagcta 60
ctcagtataa tcatgatatg aagagaaaag agcgtgaata taataaactg aaggaacgtc 120
tacatcaact tgttatgaac aagaaagata agaaaatagc tatggacatt ttgaattatg 180
tcgggagagc tgatggaaaa agaggctcct ggaggactgg taaaactgaa gccaggaatg 240
aagatgaaat gtataaaatt ctcttgaatg attatgaata tcgtcagaaa caaatcctaa 300
tggaaaatgc agaacttaag aaggttcttc aacaaatgaa aaaggaaatg atttctcttc 360
tttctcccca aaagaagaaa cctagagaaa gagtagatga tagtacagga actgttattt 420
ccgatgttga agaagatgcc ggggaactaa gcagagagag tatgtgggac ctttcctgtg 480
aaactgtgag agagcagctt acaaacagca tcagaaaaca gtggagaatt ttgaaaagtc 540
atgtagaaaa gcttgataac caagtttcaa aggtacacct ggaaggtttt aatgatgaag 600
atgtaatctc acgacaagac catgaacaag aaactgaaaa actcgagtta gaaattcagc 660
agtgtaaaga aatgattaaa actcagcaac agcttttaca gcagcagctc gctactgcat 720
atgatgatga tccacttcct attacgagac tggtatttgg ttggaagaaa aggaccgtnt 780
caaagaaaaa tgggcccttt ttaaagaacc cnaaaaagaa attttn 826

<210> 3762
<211> 818
<212> DNA
<213> Homo sapiens

0960303 "09/20/00

<400> 3762
gcgcgaggga ggcgagccgg agcccgagca ctagcagcag ccggagtcgg cggaaagcac 60
ccgggcgcag ccggagccgg tgccgcagct gcgatggccg tggccgtggg gagaccgtct 120
aatgaagagc ttcgaaactt gtctttgtct ggccatgtgg gatttgacag cctccctgac 180
cagctggtca acaagtctac ttctcaagga ttctgtttca acatcctttg tgttggtgag 240
acaggcattg gcaaatccac gttaatggac actttgttca acaccaaatt tgaaagtgac 300
ccagctactc acaatgaacc aggtgttcgg ttaaaagcca gaagttatga gcttcaggaa 360
agcaatgtac ggctgaagtt aaccattgtt gacaccgtgg gatttggaga ccagataaat 420
aaagatgaca gctataagcc gatagtagaa tatattgatg cccagttcga ggcctacctg 480
caagaggaat tgaagattaa acgttctctc ttcaactacc atgacacgag gatccatgcc 540
tgcctctact ttattgcccc tactggacat tcactaaagt ccctggatct ggtcaccatg 600
aaaaagctgg acagtaaggt gaacatcatt ccaataattg caaaagctga caccattgcc 660
aagaatgaac tgcacaaatt caagagtaaa gatcatgagt gaactggtca gcaatggggt 720
ccagatatat caagtttncc actgatgaag aaaccggtgg cagaagatta acgcaacaat 780
tgatggtcca tcttnccatt ttgcaatggg tggcanca 818

<210> 3763
<211> 839
<212> DNA
<213> Homo sapiens

<400> 3763
tggagagaag ccacatgagt gtaaggaatg tggaaaggcc tttcgtcagt tttcccacct 60
tgtgggtcat aaaagaattc atactggaga aaaaccctat gaatgcaagg aatgcgggaa 120
gggctttaca tgtaggtatc aacttaccat gcatcagaga atttattcag gggagaaaca 180
ctatgaatgt aaagaaaatg gggaggcttt tagtagtggc catcaactta ctgcacctca 240
tacatttgaa agtgttgaga aaccttataa gtgtgaggaa tgtgggaaag cctttagtgt 300
gcatggacga cttactcgac atcagggtat tcatagtggt aagaaaccct atgaatgtaa 360
caaatgtggg aagtccttta ggctcaattc atcccttaaa atacatcaaa atattcatac 420
cggtgagaaa ccctacaaat gtaaggaatg tgggaaggcc ttcagtcagc gtgcacacct 480
tgcccatcat aacagaattc atactggtta caaacccttt gaatgtaaag aatgtgggaa 540
gtcctttcgt tgtgcctcat atcttgntat acatgagaga attcatacag gagagaaacc 600
ctatgtatgt caagagtgtg ggaagggttt tagttatagc cataaactca ctatcatcgc 660
agagttcata ctggtgagaa accttatgaa tgtaaggaat gtgggaaggc ctttaatgna 720
tctggacact tactcagcat ctgagtattc acagnggtaa gaaacccttt tgaatgccac 780
aaatgccggg aagtctttaa ggtcatttct ggccttaagg cccatcnnaa tattcatag 839

<210> 3764
<211> 722
<212> DNA
<213> Homo sapiens

<400> 3764
aaggcgcgag cctgcgtttt ccggccagag gacatgatgc aggggggaggc acaccctagt 60
gcttcccctta ttgacagaac catcaagatg agaaaagaaa cagaggctag gaaagtggtc 120
ttagcctggg gactcctaaa tgtatctatg gctggaatga tatatactga aatgactgga 180
aaattgatta gttcatacta caatgtgaca tactggcccc tctggtatat tgagcttgcc 240

US 2003/0224385 A1 Dec. 4, 2003

cttgcatctc tcttcagcct taatgcctta tttgattttt ggagatattt caaatatact 300
gtggcaccaa caagtctggt tgttagtcct ggacagcaaa cacttttagg gttgaaaaca 360
gctgttgtac agactacgcc tccacatgat ctggcagcaa cccaaatccc tcccgctcca 420
ccttcccctt caattcaggg tcagagtgtg ttgagttata gcccttctcg ttcgcccagt 480
accagtccca agttcaccac cagctgtatg actggttaca gccctcagct gcaaggtctg 540
tcctcaggtg gcagtggttc ttatagccct ggagtgacct actcgcccgt cagtggttat 600
aataagttgg cgagctttac ccctctcttc ttctncgtac cctaccactg ttggaccant 660
ggagagcagt ggattgagat ctcgctaccg gtcttcacct accgtctaca actnacctac 720
tg 722

<210> 3765
<211> 746
<212> DNA
<213> Homo sapiens

<400> 3765
ataaggctac ggatgggcgg gacggagcag cccaccgcaa agtggcggtt tacttgaggc 60
ggttacctta gtactccgag tagactgagt ctgtggcgag ctgcgggccg attcctggcc 120
agtgccatct cagccggagc aggcctcggg gcctcagaag caggctttta tctggcccga 180
ggctcccagc cgttcagcgc gtcttcccat aacctatacc gattattggg actctcggct 240
gcagacacag gagtcacaga tgctgggaag tatggcccga aagaaacctc gaaatacctc 300
aaggttgccc ctggctttaa acccccctgaa gagcaaggac gtgttggcag tgctggctga 360
gaggaacgag gctatagtac cagttggggc atgggtggaa cctgcctcac caggtagttc 420
ggaaatccca gcatatacat cagcatattt aattgaagaa gaactaaagg aacagctaag 480
aaaaaaacaa gaagctttga aacattttca gaaacaagtt aaataccgag taaatcaaca 540
aattaggttg agaaaaaagc aacagcttca gaagtcttat gaaagagcac aaaaagaagc 600
tccatagcca tgcagtcttc agcaacacac ttaactttca aaaggacaag tggttttnca 660
aacaatttga atggtgctat tggaaagttc tanggtacct tctttccttg atgcctgggg 720
gatggaatag angatgaaga agaatc 746

<210> 3766
<211> 840
<212> DNA
<213> Homo sapiens

<400> 3766
attgaggaac atggcgttgc tggtgcgagt ccttaggaac cagactagca tttctcagtg 60
ggttccagta tgcagccgat tgatacctgt gtctcctacc caaggacagg gggacagggc 120
tctgtctcgc acttcccagt ggccccagat gagccagtcc caagcatgtg gtggatcaga 180
acagattcct ggaatagaca tacagctgaa taggaagtat cacaccacac gtaagctttc 240
tactaccaaa gattccccac agcctgttga ggagaaggtt ggtgctttca caaagataat 300
agaagccatg ggattcacgg gacctttgaa atacagtaaa tggaagatta agattgcggc 360
cctgcgcatg tatactagct gtgtggagaa aactgacttc gaggaattcc ttctaaggtg 420
tcagatgcct gatacattca attcatggtt tcttataacc ctactccacg tctggatgtg 480
tctagtccga atgaagcagg aaggccggag tgggaagtac atgtgtcgta tcatagttca 540
ttttatgtgg gaggatgttc agcagcgcgg cagagtcatg ggggttaatc cctatatcct 600
gaagaagaac atgatcctca tgacaaatca tttctatgca gcgatcttgg gatatgatga 660
ggggatcctt tcagatgatc atgggctgcc gctgccctnt ggagaacctt cttcaaccgg 720

0050-0050-0050

aaatgtgaag accctcgaca tcttgaattg ctggtagagt atgtgaggaa acagatncag 780
tacctggact ccatgaacng gggangatct ggttctgaca ggggaagtga actgcgccct 840

<210> 3767
<211> 811
<212> DNA
<213> Homo sapiens

<400> 3767
acggcgcgcg cgcacccctt ccgcgcagcc ccctgacctg cagcctccgg acctcgctgc 60
agcgcggacc cggcccgccc gcccgaatga gtcagctgag gctgctgccg tcccgtcttg 120
gggtacaggc tgcgaggctc ctggctgcac atgacgtccc ggtgtttggc tggcgcagca 180
ggtcctccgg gccaccggcc accttcccaa gcagcaaagg tggaggcggc tccagttaca 240
tggaggagat gtacttcgcc tggttggaaa acccccagag tgtccacaag tcctgggaca 300
gcttcttcag ggaagccagc gaggaagcct tttctggctc tgctcagcca cggccccctt 360
ctgttgtcca tgagggcagg tctgcagtct caagtcggac caagaccagc aaattggtgg 420
aggaccacct ggctgtacag tccctgatcc gggcctacca gatccggggt caccatgtgg 480
cccagctgga ccccctgggc attctggatg cagacctgga ctcctttgtg ccctcagact 540
tgatcacaac cattgataaa ctggccttct atgaccttca ggaggctgac cttgataagg 600
agttcagctg ccgacaacca ccttcattgg gggctctgaa aacacccttt ctctgcggga 660
gatcattcgg cgcctggaga acacctactg gcagcacatt ggcctggagt tcatgttcat 720
caacgatgtg gagcaatgcc agtggatccg gcagaagttt gagaccctgg tgtgatgcan 780
ttctcaccan gagaaacgga cctgtggncc g 811

<210> 3768
<211> 857
<212> DNA
<213> Homo sapiens

<400> 3768
gcgccagcag gaagtgggag aagaggcgac ccaaggcggg ctggcgggct ggcggcagtc 60
gctacttgcc tagtagcctc agccgctgtg ggctcctggg gagatggagg ggccgggggct 120
gggctcgcag tgcaggaatc acagccatgg cccccaccct ccaggatttg gtcgatatgg 180
catctgtgca catgaaaaca aagaacttgc caatgcaaga gaagctcttc ctcttataga 240
ggactctagt aactgtgaca ttgtcaaagc tactcaatac ggaatttttg aacgatgtaa 300
agagttggta gaagcaggat atgatgtcag gcaaccagat aaagaaaatg tgtcgcttct 360
tcattgggct gctattaaca acagactgga tcttgtaagg ttttatattt caaaaggtgc 420
tgttgtagat cagttgggtg gagatttaaa ttcaactcct cttcactggg ccatccgaca 480
aggacattta cctatggtca tattattact ccagcatggt gcagacccca ctcttattga 540
tggagaggga ttcagcagca tccacctggc agtattgttt caacacatgc ctattatagc 600
atatctcatc tcaaagggac agagtgtgaa tatgacagat gtaaatgggc agacacctct 660
catgttatca gctcacaaag taattgggcc agaccaactg gatttctttt aaaggttaat 720
ccttctctca atgtgggtga taaaatcacc aaaacactcc acttcactgg gcagttgcag 780
caggaaatgt taatgcattg ataagctttt ggnaactggn tctaccctgg atatncagaa 840
tggtaaaggg agaaaca 857

<210> 3769
<211> 873

0302045.0002

<212> DNA
<213> Homo sapiens

<400> 3769
aagtgcacgg aggagttccg ggggccaggc ggccgccgcg agtctggtat cctgagcttc 60
gtgagttgag cgctgctgct ccgcggtgga gtcaccgcac cgctcccggg atcatggtgt 120
tctacttcac cagcagcagc gttaattcat ctgcctacac tatttacatg ggaaaagata 180
aatatgaaaa tgaagatctg atcaagcatg gctggcctga agatatctgg gagagaatat 240
agaagacatc ccaaaggaag tgctgatgga ctgtgcccac cttgtgaagg ccaatagcat 300
tcaaggctgc aagatgaaca acgttaatgt ggtatatacg ccgtggtcta acctgaagaa 360
aacagctgac atggatgtgg ggcagatagg ctttcacagg cagaaggatg taaaaattgt 420
gacagtggag aagaaagtaa atgagatcct gaaccgatta gaaaagacca aagtcgagcg 480
gttcccagac ctagcagcag agaaagaatg cagagatcgt gaagagagga atgagaaaaa 540
agcccaaatt caggaaatga aaaagagaga aaaagaagaa atgaagaaga agagggaaat 600
ggatgaactt aggagctatt catcactaat gaaagttgaa aatatgtctt caaatcagga 660
tggcaatgat tcagatgaat tcatgtaaaa ggagaaaagg agaaaaggac ctttgaaaga 720
tgtgaatgta gagacaattg cagacctttt gggttcatct gngttctgaa gtataaaatn 780
caccaaaatt ctaccttcat cctacccaga aattattgat tttcaagttt taaaaaaatt 840
gnacctttt tgcttgccgg aaaaggatcn gat 873

<210> 3770
<211> 790
<212> DNA
<213> Homo sapiens

<400> 3770
cttcgcgcac ctcatggaat cccttctgca gcacctggat cgcttttccg agcttctggc 60
ggtctcaagc actacctacg tcagcacctg ggaccccgcc accgtgcgcc gggccttgca 120
gtgggcgcgc tacctgcgcc acatccatcg gcgctttggt cggcatggcc ccattcgcac 180
ggctctggag cggcggctgc acaaccagtg gaggcaagag ggcggctttg ggcggggtcc 240
agttccggga ttagcgaact tccaggccct cggtcactgt gacgtcctgc tctctctgcg 300
cctgctggag aaccgggccc tcggggatgc agctcgttac cacctggtgc agcaactctt 360
tcccggcccg ggcgtccggg acgccgatga ggagacactc caagagagcc tggcccgcct 420
tgcccgccgg cggtctgcgg tgcacatgct gcgcttcaat ggctatagag agaacccaaa 480
tctccaggag gactctctga tgaagaccca ggcggagctg ctgctggagc gtctgcagga 540
ggtggggaag gccgaagcgg agcgtcccgc caggtttctc agcagcctgt gggagcgctt 600
gcctcagaac aacttcctga aggtgatagc ggtggcgctg ttgcaacccg nctttgtctc 660
gtcggcccca agaagagttg gaacccggca ttcacaaatc acctggaaaa ggggagccaa 720
agtgctaagt ccacttggct ttttggggaa ttcggnaagt ctttgctggc cttttgtcgn 780
gcccttccan 790

<210> 3771
<211> 753
<212> DNA
<213> Homo sapiens

<400> 3771
gaagaagaat ttacaggttt taaccaagaa gatctggaag aagaaaaagg tgaaacacag 60

0356230.00000

gtaaaagaag cagaagattc agattctgat gataacataa agagaggaaa acatatggac 120
tttctgtcag attttgagat gatgttgcag cgaaaaaaga gcatgagtgg caagcgcaga 180
cggaaccgcg atggtggcac ctttattagt gatgcagacg acgtcgtgag tgccatgatc 240
gtcaagatga atgaagctgc tgaggaagac agacagttga acaatcaaaa aaagccggca 300
ctgaaaaaat taactttact gcctgctgta gttatgcacc ttaagaagca ggaccttaaa 360
gaaacattca ttgacagtgg tgtgatgtct gccatcaaag aatggctctc acctctacca 420
gataggagtt tgcctgcact caagatccgg gaggagctgc tgaagatcct gcaagagctg 480
cctagtgtga gccaggagac cctgaagcat agtgggattg gacgagcagt gatgtatctc 540
tataaacacc ccaaggagtc aaggtctaac aaggacatgg cagggaaatt aatcaatgag 600
tggtctaggc ctatatttgg tcttacctca aactacaaag gaatgacaag agaagaaagg 660
gagcanagag atctanaaca gatgcctnaa cgacgaagaa tgaacagcac tggtggtcaa 720
gacacccaga agagacctgg gaaaaagtgc ttg 753

<210> 3772
<211> 821
<212> DNA
<213> Homo sapiens

<400> 3772
ctgcatcagc acagaattta ctccacggaa gcacggaggt gaaaagggag tgcccttag 60
gatccaggtt gacaccttta agcagaatga aaatggagaa tacacagatc atctacactc 120
agctagctgc caaatcaaag tttttaagcc taaaggtgca gacaggaaac aaaaaactga 180
ccgagagaag atggagaaga gaacagctca tgaaaaagaa aagtatcagc cgtcctatga 240
taccacaatc ctcacagagt gttctccgtg gcccgatgcc tccacagcct atgtgaataa 300
cagcccttcc ccagcgccca ctttcacctc cccacagcag agcacttgca gtgtcccaga 360
cagcaattct tcttccccaa atcatcaggg agatggagct tcacagacct ctggtgaaca 420
aattcagcct tcagctacga tccaggaaac acagcaatgg ctgctcaaaa acagattctc 480
ttcctacaca agactgttct ctaatctttc aggtgccgac ttattaaaac tgacaaagga 540
ggatttagct caaatttgtg gtgcagccga tggaattcgg ctctataatt cactgaagtc 600
aaggtcggtt agaccccgtt taaccatcta tgtctgccgg gagcagccaa gcagcacagt 660
gctgcaaggg cagcancaag ctgcaagcag tgcaagcgag aatggcagtg gggcacccta 720
tgtttatcat gcaatctact tgggaagaaa tgattggctc agaagttggt tcgaaaactt 780
tgcgctggng gttaatatnc cttttccacc naatttaatc a 821

<210> 3773
<211> 846
<212> DNA
<213> Homo sapiens

<400> 3773
gctctacagc ggaggtggct gtggcggtgg cgctggtggc tgcggcggcg gcggcggcag 60
cggcgctcga gcggttcctg tcagggtcag ccggcgggcc ccctgggtgg tccacctgca 120
aatcgcggag cggcgcccca gggatcgatg gcgatgaact ataacgcgaa ggatgaagtg 180
gacggtgggc ccccgtgtgc tccgggggcc accgcgaaga ctcggagacc ggataacacg 240
gccttcaaac agcaacggct gccagcttgg cagcccatcc ttacggctgg cacggtgcta 300
cctattttct tcatcatcgg tctcatcttc attcccatcg gcattggcat ttttgtcacc 360
tccaacaaca tccgcgagat cgagattgat ataccggaa cagagccttc cagtccctgt 420
aataaatgtt tatctccgga tgtgacacct tgcttttgta ccattaactt cacactggaa 480

0950345.0970000

aagtcatttg agggcaacgt gtttatgtat tatggactgt ctaatttcta tcaaaaccat 540
cgtcgttacg tgaaatctcg agatgatagt caactaaatg gagattctag tgctttgctt 600
aatcccagta aggaatgtga accttatcga agaaatgaag acaaaccaat tgctccttgt 660
ggagctattg ccaacagcat gtttaatgat acattagaat tgnttctcat tggcaatgat 720
tcttatccta tacctatcgc tttgaaaaag aangtattgc ttggtggaca gataaaatgt 780
gaaattcgaa atcccctgga ggaacaacct ggaaaacgat taaaggtcca caaacctgtg 840
actgnt 846

<210> 3774
<211> 860
<212> DNA
<213> Homo sapiens

<400> 3774
ctgggccgag agcgggtggc tgagccggga cctcgcgtga ttctcggaac ccgaggagaa 60
gcggcgtccg gggctatggc tgtgactctg gacaaagacg cttattatcg gcgagtgaag 120
agactgtaca gcaattggcg gaaaggagaa gatgagtatg ccaacgttga tgccattgtt 180
gtatcagtgg gtgttgatga agaaattgtt tatgccaaat caactgcctt acagacatgg 240
ctctttggtt atgaactaac tgatactatc atggtctttt gtgatgacaa aatcatcttt 300
atggccagca agaaaaaagt ggagttcttg aaacagattg ccaacactaa gggcaatgag 360
aatgctaatg gagcccctgc catcacactg ctaatacgag aaaagaatga aagtaataag 420
agtagctttg acaaaatgat tgaagccatt aaagaaagca agaatggcaa gaaggttgga 480
gtgttcagca aagacaaatt ccctggagag ttcatgaaga gctggaatga ctgcctcaac 540
aaagaaggct ttgacaaaat agatatcagt gcagttgtgg catataccat cgctgtaaag 600
gaggatgggg agctcaacct aatgaagaaa gcagccagca tcacttctga agtcttcaac 660
aaattcttca aggaaagagt catggaaata gttgatgcag atgagaaagt tcgacacagc 720
aaactggctg agtctgtgga aaaggccatt gaagagaaaa aatccttgct tggggcagac 780
ccttctactg nggaaatgtg gtacccttct atcattcana gtggtggcac tattaatctc 840
aagttcagtg nggtgaagtg 860

<210> 3775
<211> 871
<212> DNA
<213> Homo sapiens

<400> 3775
ngngcccgcg cagcgttgag ttgcacagcg gtattctcac caggccctgc aatcggtggg 60
ccacagtgcc ggccacagag atggtggaag gaccaggctg tactctgaat ggagagaaga 120
ttcgcgcgcg ggtgctcccg ggccaggcgg tgaccggcgt gcggggaagc gctctgcgga 180
gtccgcaggg ccgcgccttg cggctcgcag cctccacggt tgtggtctcc ccgcaggctg 240
ctgcactgaa taatgattcc agccagaatg tcttgagcct gtttaatgga tatgtttaca 300
gtggcgtgga aactttgggg aaggagctct ttatgtactt tggaccaaaa gctttacgga 360
ttcatttcgg aatgaaaggc ttcatcatga ttaatccact tgagtataaa tataaaaatg 420
gagcttctcc tgttttggaa gtgcagctca ccaaagattt gatttgtttc tttgactcat 480
cagtagaact cagaaactca atggaaagcc aacagagaat aagaatgatg aaagaattag 540
atgtatgttc acctgaattt agtttcttga gagcagaaag tgaagttaaa aaacagaaag 600
gccggatgct aggtgatgtg ctaatggatc anaacgtatt gcctggagta gggaacatca 660
tcaaaaatga agctctcttt gacagtggtc tccacccagc tgttaaagtt tgncaattaa 720

US005750500

cagatgaaca natccatcac ctcatgaaaa tgatacgtga tttcagcatt ctctttttac 780
aggtgcccgt aaaacaagga ctttgctctc ttttaaacac tttaaggttt acaagccgtt 840
cctaaaattg gggggccagt ggccacttgc n 871

<210> 3776
<211> 834
<212> DNA
<213> Homo sapiens

<400> 3776
agaaagttac tgggagataa cttcgaagga ttttgcaaca aattcgagct gtccgactct 60
gagaatgaga catgaaaaat gctgtaattg gaaacaacaa gcagaaagcc aatctcattg 120
ttttaggagc tgttccaaga ttgttgtact tgcttcagca agaaacctca agcacagggc 180
tgaaaactga atgtgcagtg gtgttgggaa gtcttgctat gggtactgaa aacaatgtca 240
agtctctact ggactgccat attatccctg ccttattgca aggactactg tccccagacc 300
tgaagtttat tgaagcttgc ctccgatgcc tgcgtaccat cttcaccagt cctgtcactc 360
cagaggagct actgtataca gatgccacag tgataccaca cctcatggca ctgcttagca 420
ggtcccgcta tacccaggag tacatctgtc agatcttctc acactgctgt aaagggccag 480
atcatcaaac aattttattt aaccacggtg cagttcagaa tattgctcac ctactaacct 540
cactgtccta caaagttcga atgcaagcac tgaaatgttt ctcagtttta gcttttgaaa 600
acccccaggt atcgatgacc ctggtaaatg ttttggttga tggagaattg ttaccacaga 660
tttttgtgaa gatgttacag agggataagc ctattgagat gcagctcaca tcagcaaaat 720
gtttaactta catgtgtaga gctggagcaa ttcggacaga tgataactgn attggattaa 780
aagacattac cttggttggn tcgaatgtgc ataaggagag attactagag gana 834

<210> 3777
<211> 846
<212> DNA
<213> Homo sapiens

<400> 3777
tatccaagga catgagcagt ttacacatct cacccaattc agggaatgtc actagtgcat 60
ctgggtctca gatggcaagc ggcatcagcc tggtctcctt caacagccga cccgacggca 120
tgcaccagcg ctcctactca gtctccagtg ccgaccagtg gagtgaggct acggtcattg 180
caaactcggc catcagcagt gacacagggc tgggtgactc cgtatgctcc agccccagta 240
tctccagcac caccagcccc aagctcgacc cgccccctc ccctcacgcc aacagaaaga 300
agcaccgaag gaagaaaagc actagcaact tcaaagccga cggcctgtcc ggcactgctg 360
aagaacaaga agaaaatttt gagtttatca ttgtgtccct cactggccaa acatggcact 420
ttgaagccac gacgtatgag gagcgggacg cctgggtcca agccatcgag agccagatcc 480
tggccagcct gcagtcgtgc gagagcagca agaacaagtc ccggctgacg agccagagcg 540
aggccatggc cctgcagtcg atccggaaca tgcgcgggaa ctcccactgt gtggactgcg 600
agacccagaa tcccaactgg gccagtttga acttgggagc cctcatgtgc atcgaatgct 660
cagggatcca ccggaatctt ggcacccacc tttcccgagt ccgatctctg gacctggatg 720
actggccaat cgagctcatc aaggtgatgt catccatcgg gaacgagcta gccaacagcg 780
ttttgggaag anagcagcca ggggcggacg aaaccatngt agactncaca agggaagaga 840
aggaac 846

<210> 3778

US20040005600

<211> 788
<212> DNA
<213> Homo sapiens

<400> 3778
acaggaagtg aagagcttcc gccgggagac cgcggctgca ggaacggagg cggaaggggc 60
cctgcggcga cgacgtcgtc gacgggggtg gccgtgggag ctgagcacgg agaagactcc 120
ctctctcgga agccggatcc cgagccgggc aggatggatc accaccagcc ggggactggg 180
cgctaccagg tgcttcttaa tgaagaggat aactcagaat catcggctat agagcagcca 240
cctacttcaa acccagcacc gcagattgtg caggctgcgt cttcagcacc agcacttgaa 300
actgactctt cccctccacc atatagtagt attactgtgg aagtacctac aacttcagat 360
acagaagttt acggtgagtt ttatcccgtg ccacctccct atagcgttgc tacctctctt 420
cctacatacg atgaagctga gaaggctaaa gctgctgcaa tggcagctgc agcagcagaa 480
acatctcaaa gaattcagga ggaagagtgt ccaccaagag atgacttcag tgatgcagac 540
cagctcagag tggggaatga tggcattttc atgctggcat ttttcatggc atttattttc 600
aactggcttg gattttgttt atccttctgt atcaccaata ccatagctgg aaggtatggt 660
gctatctgcg gatttggcct ttccttgatc aaatggatcc ttattgtcag gttttctgat 720
tattttactg gatatttcaa tgggacaagt attggctttg gnggatattc ttgnacttgg 780
nctggttc 788

<210> 3779
<211> 813
<212> DNA
<213> Homo sapiens

<400> 3779
agaaccgctg tggcaccgct actccgtgcc gcgcccgtcg agcattgcgt tgctgcattg 60
cgccccaccg actccactat gttgaagaaa ttcgacaaga aggatgagga gtcaggtgga 120
ggctccaacc cattccagca ccttgagaag agtgcggtac tccaggaggc ccgtgtattt 180
aatgaaactc ccatcaaccc tcggaaatgt gcccacatcc tcaccaagat tctttatctc 240
ataaaccagg gggagcacct ggggaccacg gaagcgaccg aggccttctt tgccatgacc 300
aagctctttc agtccaatga tcccacactc cgtcggatgt gctacttgac catcaaggag 360
atgtcttgca ttgcagagga tgtcatcatt gtcaccagca gcctaacaaa agacatgact 420
gggaaagaag acaactaccg gggcccggcc gtgcgagccc tctgccagat cactgatagc 480
accatgctgc aggctattga gcgctacatg aaacaagcca ttgtggacaa ggtgcccagt 540
gtctccagct ctgccctcgt gtcttccttg cacctgctga agtgcagctt tgacgtggtc 600
aagcgctggg tgaatgaagc tcangaggca gcatccagtg ataacatcat ggtccagtac 660
cacgcactan ggcttctgta ccatgtgcgt aagaatgacc gctaccgtca ataagatgat 720
cagcaaggtc acacggnatg ggcttaagtc ttcctttggc tactggatga tgatcccggt 780
gggcaacaag canctggaaa aagaggatgg cna 813

<210> 3780
<211> 852
<212> DNA
<213> Homo sapiens

<400> 3780
atggcttggg taccacaact tccggtgcgc ctttctttac agttcgtaag gttcataggc 60

0950340.0700

gggtggtcct gggctccagg aaccactgca acttggggag ttggatatca cttctgatga 120
attcatcctg gatgaagtgg atgttcacat tcaggcaaat ctggaggatg agttagtaaa 180
ggaagctctt aaaacgggtg tagatctccg tcactattca aagcaagttg agctggagct 240
acagcagatt gaacagaaat ccattcggga ttatattcaa gagagtgaga atatagcatc 300
tctacacaac cagatcacag cctgtgatgc tgtcctggag cgaatggagc agatgttggg 360
agcttttcag agtgacctca gctccatcag ctctgagatc cggacactgc aggaacagtc 420
aggagccatg aacattcgac ttcgaaatcg ccaggcagtt cgggggaaac ttggggagct 480
tgttgatggt ctggtggtgc cttctgctct ggtcacggca attctggagg ctccagtgac 540
agagcccagg ttcttggagc agctacagga gctggatgcc aaggcagccg cagtcagaga 600
gcaggaagct agaggcacag cagcctgcgc agatgtcaga gcgtgctcga tcggctccgg 660
gtcaaggcag tgaccaagat ccgagagttt atccttcaga agatttattc cttcaggaaa 720
cccatgacca actatcagat ccccccanacg ggcctgctga agtacagggt cttctatcag 780
tttctgctgg gcaatgaacc agccacagcn aaggagatca gggatgaata tgtggaaacn 840
cttaccagaa tt 852

<210> 3781
<211> 831
<212> DNA
<213> Homo sapiens

<400> 3781
cgattccagc caatgaagct gtttgctata tgcctgaatc aaagtatgct gttgtgaaat 60
gttctaagtc tggagacctc tacgtactgg cggcagataa agtagcatct gttgcttcta 120
ctttggaaac aacatttgag actatttcaa cactttcagg tgtagatttg gaaaatggta 180
cttgcagtca tccattaatt cctgataaag cctctcctct tttacctgca aatcatgtga 240
ccatggcaaa aggaacggga ttggttcaca cagccccagc tcatggtatg gaagactacg 300
gtgtagcgtc tcagcacaac ctgcccatgg attgtctagt ggacgaagat ggagttttca 360
cagatgttgc aggtcctgaa cttcaaaaca aggctgtcct tgaagaggga actgatgtgg 420
ttataaagat gcttcanact gcaaagaatt tgttgaaaga ggagaaattg gtgcatagct 480
atccgtatga ctggaggacc aagaaacctg tggttattcg tgccagcaag cagtggttta 540
taaacatcac ggatattaag actgcagcca aggaattgtt aaaaaaggtg aaatttattc 600
ctggatcagc actgaatggc atggttgaaa tgatggacag gcggcatatt ggtgtatatc 660
aaggcaaaga gtttggggtg ttccaattcc tgngtttcat cataagacca aggatgaatc 720
ttgatcaaca gccaaaccac tgagcatatt ggtaaactag tggnaccacc cnggagtgat 780
atctggtgga ctttttccct gaacaacttn ttccaaaaga agcttatctg a 831

<210> 3782
<211> 876
<212> DNA
<213> Homo sapiens

<400> 3782
aaatgtctga tgctcagggc agctacaaac tggatgaagc tcaggctgtc ttgagagaaa 60
caaaagccat caaaaaggct attacctgtg gggaaaagga aaagcaagat ctcattaaga 120
gccttgccat gttgaaggac ggcttccgca ctgacagggg gtctcactca gacctgtggt 180
ccagcagcag ctctccggag agttcgagtt tcccgctacc gaaacagtac ctggatgtga 240
gctcccagac agacatctcg ggaagcttcg gcatcaacag caacaatcag ttggcagaga 300
aggtcagatt gcgccttcga tatgaagagg ctaagagaag gatcgccaac ctgaagatcc 360

0950F6B-CN2008

agctggccaa gcttgacagt gaggcctggc ctggggtgct ggactcagag agggaccggc 420
tgatccttat caacgagaag gaggagctgc tgaaggagat gcgcttcatc agcccccgca 480
agtggacccc ctcctggctg gtgatgcctt cctcaactcc ttggagtttg aagacccgga 540
gctgagtgcc actctttgtg aactgagcct tggtaacagc gcccaggaaa gataccggct 600
ggaggaacca ggaacggagg gcaagcagct gggccaagct gtgaatacgg cccaggggtg 660
tggcctgaaa gtggcctgtg tctaacccgc cgtatcggac gagtcagtgg ctggagacag 720
tggtgtgtac caagcttncg tgccagagac tgggttgctt taaaaactgg ctgcatttga 780
caagtgacca aatcggnaag ccatggggtg ccaacccgaa ttcanaattg gccttgaant 840
attgatgaag aagaattaag ccattttgca atatta 876

<210> 3783
<211> 862
<212> DNA
<213> Homo sapiens

<400> 3783
gtgaggccgt cgtcgccgca cgggctggtt ggggctgtgt ctgtgggagg cgccggggtg 60
atggcggtgg agactctgtc cccggactgg gagtttgacc gcgttgacga cggctcgcag 120
aaaattcatg ccgaagtcca acttaagaat tatgggaaat ttcttgagga gtatacctct 180
caactgagaa gaattgagga cgctctggat gactcaattg gagatgtttg ggatttcaat 240
cttgatccta tagcattaaa gcttttgcct tatgaacagt cctctctttt ggaactcata 300
aagactgaaa acaaggtctt aaacaaagtc atcactgttt atgctgcact ttgttgtgaa 360
atcaagaaat taaaatatga ggctgaaact aaattttaca atggtctctt gttttatgga 420
gaaggagcta cagatgccag catggtggaa ggtgattgcc aaattcaaat ggggagattt 480
atttcattct tacaggaact gtcttgcttt gttacatgaa gtggtgatga acgtagtcca 540
ccagttggct gccctctata tcagtaacaa gattgcaccc aaaattatag agacaactgg 600
agttcatttt cagactatgt atgagcactt gggagaactg ctaacagttt tgctcaccct 660
ggatgaaatt attgataatc atatcacact gaaagaccac tggactatgt acaaaaggtt 720
actgaaatct gtccatcaca atccttcaaa atttggaaat tcaggaagaa aaattaaaag 780
ccatttgaaa aagttcttgc tgaanctaga anggcaatta ctggatggaa tgatattcca 840
ggcctgtata gaacaaccat tt 862

<210> 3784
<211> 845
<212> DNA
<213> Homo sapiens

<400> 3784
aatatgtatc gtctccctgc cacccaggag gtggtgacgc agctgcagag ccagatcttg 60
gagctgcagg gggagctgaa ggagtttaaa acttgtaata agcaacttca ccaaaagtta 120
attctggctg aggcagtgat ggaggggagg ccaacgcccg acaaaacgtt gctgaatgac 180
tctgagattt gcccacctga tgaccttgcc agcttgccat catgcaaaga aaatcctgaa 240
gatgttctga gcccaacttc agtagctact tacctgagtt ccaagagtca gccttctgct 300
aaagtcagtg tgatggggac tgatcagtca gagagcatta atacctcaaa tgagacagaa 360
tacttaaaac agaaaatcca tgacttggaa actgagctgg aaggctacca gaatttcata 420
tttcagcttc aaaagcactc ccagtgcagt gaggccataa ttacagtttt gtgtgggaca 480
gaaggggccc aggatggctt gagcaagccc aagaatggtt ctgatgggga agaaatgacc 540
ttttcaagtt tgcaccaagt gcgatatgtg aaacacgtga aaatcctcgg tccgctggcc 600

Document: 0050-0050-0

ccagagatga ttgacagcag ggtgctggag aacctcaaac agcagctgga ggaacaggaa 660
tacaagctgc agaaggagca gaatttgaac atgcaacttt tcagtgagat ccataatctg 720
cagaaataag ttcagagatc tctcaccttc cagatacgat tcattagttc agtcccaagc 780
cagggagctn ttcctttaac gggagcagat taaaggatgg ncatggcatc tgggncatct 840
tccgt 845

<210> 3785
<211> 793
<212> DNA
<213> Homo sapiens

<400> 3785
caagttgtgg aagcccttgg gtcctctcta gagaatccag aaccccgaac tcgggcacga 60
ggaatccagc ttttgtcaca ggtgctactc cactgtcaca ccttgctcct ggagaaggaa 120
gtggtacacc tgatactgtt ctatgagaac cggctgaagg accatcatct tgtgatccca 180
tctgtcctgc agggtttgaa ggcacttagc ctgtgtgtgg ccctgccccc agggctggct 240
gtttctgtgc ttaaagccat cttccaggaa gtgcatgtac agtccctgcc acaggtggac 300
cgacacacag tctacaatat catcaccaat tttatgcgaa cccgggaaga agagctaaag 360
agcctaggag ctgacttcac ctttggcttc atccaggtga tggatgggga aaaggatccc 420
cgtaatcttc tggtggcctt ccgcatcgtc catgacctca tctccaggga ctatagcctg 480
ggaccctttg tggaggagtt gtttgaagtg acatcctgtt atttccctat cgattttacc 540
cctccaccta atgatcccca tggtatccag agagaagacc tcatcctgag tcttcgcgct 600
gtgctggctt ctacaccacg atttgctgag tttctgctgc ccctgttgat tgagaaagtg 660
gattctgagg ttctgagtgc caagttggat tctctacaga ctctgaatgc ttgctgtgct 720
gngtatggac agaaggaact gaaggacttc ctcccagctt tgggcttcta tncgcanaga 780
gagcagccac cgg 793

<210> 3786
<211> 664
<212> DNA
<213> Homo sapiens

<400> 3786
gtaatgctgg gaaaccccgg ctgacgcgcc cctcccccgc ccgcagtgcg gctcggcgga 60
gtacatggcc ccggaggtag tggaggcctt cagcgaggag gctagcatct acgacaagcg 120
ctgcgacctg tggagcctgg gcgtcatctt gtatatccta ctcagcggct acccgccctt 180
cgtgggccgc tgtggcagcg actgcngctg ggaccgcggc gaggcctgcc ctgcctgcca 240
gaacatgctg tttgagagca tccaggaggg caagtacgag ttccccgaca aggactgggc 300
ccacatctnc tgcgctgcca aagacctcat ctccaagctg ctggtccgtg acgccaagca 360
naggctgant gccgcccaag tcctgcagca cccctgggtt caggggtgcg ccccggagaa 420
caccttgccc actcccatgg tcctgcatag gtgggacagt cacttcctcc tccctcccca 480
cccctgtcgc atncacgtgc gacctggagg actggtcaaa accgttactg ngaatgagtg 540
aagatcctgg aggaccctgg gccccaggcc agctcccatc gctgggggac ggtgaacggc 600
catgtgttaa tgttacgatg ttnttaaaag acaacttgaa ggaacttggc cgntctgnaa 660
gcat 664

<210> 3787
<211> 850

US 2003/0224000 A1

<212> DNA
<213> Homo sapiens

<400> 3787
ngctcacgtg acaaagctcc cggaggtggg agccctgggc caaaatggcg gcctacctgc 60
agtggcggcg cttcgttttc ttcgacaagg agctggtgaa ggagccgctg agcaatgatg 120
gggccgctcc cggggccaca cctgcttctg gatccgctgc ttccaagttc ctttgcctcc 180
ctcctggcat cactgtctgc gactcaggcc gagggagcct ggtctttgga gatatggaag 240
gccagatctg gttcttgcca cgttccctac agcttacagg cttccaagcc tacaaactac 300
gggtgacaca cctgtaccaa ctgaagcagc acaatattct ggcatctgtt ggagaagatg 360
aagagggcat caaccccttg gttaagatct ggaacctgga gaagagagat ggtggcaatc 420
cactctgcac tcgaatcttc cctgctattc caggaacaga gccaactgtt gtatcttgtt 480
tgactgtcca tgaaaatctc aactttatgg ccattggttt cacagatggg agtgttacat 540
tgaacaaagg agacatcacc cgggaccggc atagcagacc cagattttgc acaagggcaa 600
ctatcctgta actggattgg cctttcgcca agcaggaaag accactcact tgtttgttgt 660
gacaacagag aacgtccagt cctatatagt ttctggaaaa gactaccctc gcgtggagtt 720
ggacacccat ggttgtggcc tgcgctgtta accctaagtg acccttctca ngacctgcag 780
ttattgnggg ccggggatga tgggctactt gtccagcctg atgaactggg ccctgcttcg 840
cctttanggc 850

<210> 3788
<211> 667
<212> DNA
<213> Homo sapiens

<400> 3788
acacgtcttc cagctccaca tcctgagagg acgcttctgg agccgcgact gcccggggtt 60
gtgccggccg ncgctgccgc ccaggccgcc tcagctctcc tctgcgccgg accgctcact 120
ccgcccggcc ccagccctag cgctggccgc gaccccggcg cctttgaaac ttctgctggt 180
gtgagtgccc tcgggggttc cccaggaata tcgatacaac accaacagga gatcatgaat 240
cagacagata aaaatcaaca agaaatccca tcatacctta atgatgaacc accagaaggt 300
tcaatgaaag atcacccaca gcancagcca ngcatgttgt cccgtgtgac tgggggtatc 360
ttcagtgtta caaagggagc tgttggtgcc accattggtg gtgtggcttg gattggtgga 420
aagagtctgg aagtgaccaa aacagctgnt acaactgtgc cttncatggg aatagggctg 480
gtgaaagggg gtgtctctgc tgtggctgga ggtgtacaag ctgntgggtc tgctgttgta 540
aacaaagtgc ccttaacagg aaagaagaaa gacanatctg actgaaatat agagatacac 600
ttgcgctcca cancactgta atgccanttg gcattgaaat tgctaaatta tggactacca 660
accaagt 667

<210> 3789
<211> 749
<212> DNA
<213> Homo sapiens

<400> 3789
tctactcctc tgattatttg aaatgctgag gaaaatgtcc ctcccatagt aaaacttgta 60
aataaggaac tatatcatat tcagtagctg tgttctgttc catcttttt ttttttttg 120
agatggagtt ttgcttgttg cccaggctgg agtgcagcgg cacgatcttg gttcactgca 180

09050.0050.00000

acctccgcct cccaggttca agcgattctc ttgcctcagc ctcccgagta gctggggact 240
acaggtgtgc gacaccatgc ctggctaatt tttttgtatt tttagtagag atggggtttc 300
accatgttgg ccaggctggt ctcaaactcc tgacctcaaa ggatccaccc gccttggcct 360
cccaaagtgc tgggatcaca ggcgtgagcc accatgcccg gcccatcttt ttttttttt 420
tttttttaa agatgttaat aaactttata cctttctgga nactttgttc taaaatgtac 480
ataaatgctc atctagttaa catatttact tagaatgtgg gaggaggagt cacattatta 540
tccctgaatc tcaagtncag cagaagtgaa ttcctgggat agtaggatag actaacatgt 600
aaaaaggcca ggtgatgcat aggttctcat ttcactgccc tcagccttcc tctccttctg 660
agctggcctt ctncatgttc agtcaactcc agggaatatt ggctccatct tctggataga 720
actagttgcn ggatccgtnc aagaattca 749

<210> 3790
<211> 759
<212> DNA
<213> Homo sapiens

<400> 3790
aggtggcgga gattgcaccg gaagacgctt cctgggtttg aggagttcag tgactgctat 60
tgaaccacca aaagtccatt atgaaactgt attgcctgtc agggcaccca accttaccat 120
gcaatgtgct caaattcaaa tcaaccacca ttatgttgga ctgcggactg gacatgactt 180
ctaccctcaa tttccttcct ttgccacttg ttcaaagtcc caggctgtcc aatcttcctg 240
gctggtccct gaaggatgga aatgctttct tggacaagga gctaaaggag tgctcgggtc 300
atgtatttgt ggattctgtg ccggaattct gtttaccaga gacggagcta atagatctgt 360
ctacagtaga tgtgattctc atctctaact atcactgtat gatggcgctg ccatacatca 420
ccgagcacac cggcttcaca ggcacagtgt atgccacgga acccaccgtc cagatcggca 480
ggcttctcat ggaagagctg gtgaatttca ttgaaagagt gccaaaggct cagtctgcct 540
ccttgtggaa gaataaggac attcagaggc tgttaccttc tcctctcaag gatgcagtgg 600
aagtctcaac ctggagaaga tgctatacaa tgcaagaggt gaactctgcc cttagtaaaa 660
tccactggtg ggatattctc agaaaattga gctttttggt gcngtccang tgactnctct 720
gagctctggc tatgcccttg ggagcttcaa ctggatcat 759

<210> 3791
<211> 778
<212> DNA
<213> Homo sapiens

<400> 3791
agaaaagatg gcgaaagtca acataactag agacctcatc cgtaggcaga tcaaggagcg 60
gggtgccctg agctttgagc ggcgctacca tgtcactgac ccctttatcc ggcggctggg 120
cctggaagca gagctgcagg gtcactcagg atgtgtcaac tgtctggagt ggaatgagaa 180
aggagacttg ctggcctctg gttccgatga ccagcacacg attgtgtggg acccgctgca 240
ccacaagaag ctgctctcca tgcacacggg acacaccgca aatatcttct ctgtcaagtt 300
cctgcctcac gctggggacc gcatcttgat cacgggggca gccgactcta aggtgcatgt 360
gcacgacctg acagtaaagg agaccatcca catgtttgga gaccacacaa accgggtgaa 420
gcgcatcgcc acagcgccca tgtggcccaa cacattctgg agtgctgctg aggatgggct 480
tatccgccag tatgaccttc gagagaacag caaacactcg gaggtgctga ttgacctgac 540
agagtactgt ggccagctgg tggaggccaa gtgcctcact gtcaaccccc aggacaacaa 600
ctgcctggca gttggggcca gcgggcccct cgtgaggctc tatgacatcc gcatgatcca 660

0050250-0050500

taaccacaga aagagcatga acagagccct tcancgggtg tgcacacctt ctgtgaccgg 720
canaaacccc ttncggacgg tgcagcccag tattacgtaa caggtcacct ggccaatg 778

<210> 3792
<211> 863
<212> DNA
<213> Homo sapiens

<400> 3792
gtgggcaagc cgcgcagcgg gaagagccgg ccgaagcgtg gcggccacag actgtgggta 60
ccgggtccga gggactcgcg cttttctctc cgtgccatgg cgccagcgaa agccacgaac 120
gtggtgcggc tgctactagg ctccacagcg ctgtggcttt cgcagctcgg ctccgggacg 180
gtcgccgcgt ccaagtcggt gactgcccac ttggccgcga agtggcccga gaccccgctg 240
ctgctggagg caagtgaatt tatggcggaa gaaagtaatg aaaaattttg gcagtttttg 300
gaaactgtgc aagaattagc aatttataag caaacagaat cagattattc ttattacaac 360
ttaatcctga agaaagctgg acagtttcta gacaatttac acatcaacct tttaaagttt 420
gctttctcta taagggcata ctccccagct attcagatgt ttcagcagat tgcagctgat 480
gagccaccac cagatggttg taatgcattt gtggttattc ataagaagca cacctgtaaa 540
attaatgaga ttaaaaagct gctgaagaaa gctgcttcaa ggactagacc ttatctattt 600
aaaggagatc acaaatttcc tacaaacaaa gagaacttac cagtggtgat tctctatgcc 660
gaaatgggta ctagaacatt tagtgcattt cacaaagtat tgtctgaaaa agctcaaaat 720
gaggaaattc tgnatggtct tcgccattat attcagaacc aagctnacgg aaaatgtact 780
tatctgggta tggtgtggaa ctagcaattt aagagtcccg aatcaaagca ctggatgata 840
cccaagntta aactggngac tta 863

<210> 3793
<211> 709
<212> DNA
<213> Homo sapiens

<400> 3793
gcgttttccg gccgtgcgtt tgtggccgtc cggcctccct gacatgcagc cctctggacc 60
ccgaggttgg accctactgt gacacaccta ccatgcggac actcttcaac ctcctctggc 120
ttgccctggc ctgcagccct gttcacacta ccctgtcaaa gtcagatgcc aaaaaagccg 180
cctcaaagac gctgctggag aagagtcagt tttcagataa gccggtgcaa gaccggggtt 240
tggtggtgac ggacctcaaa gctgagagtg tggttcttga gcatcgcagc tactgctcgg 300
caaaggcccg ggacagacac tttgctgggg atgtactggg ctatgtcact ccatggaaca 360
gccatggcta cgatgtcacc aaggtctttg ggagcaagtt cacacagatc tcacccgtct 420
ggctgcagct gaagagacgt ggccgtgaga tgtttgaggt cacgggcctc cacgacgtgg 480
accaagggtg gatgcgagct gtcaggaagc atgccaaggg cctgcacata gtgcctcggc 540
tcctgtttga ggactggact tacgatgatt tccggaacgt cttagacagt gaggatgaga 600
tagaggagct gagcaagacc gtggtccang tggcaaagaa ccagcatttc gatggcttcg 660
tggtggaagt ctggaaccag ctgctaagcc agaancgcgt gggcctnat 709

<210> 3794
<211> 856
<212> DNA
<213> Homo sapiens

09/15/2005 15:03 FAX

<400> 3794
atncgtagcg gccgccattg ttccgcgccg atggcgagat ccttgttcct cagatagcgt 60
tcatcgcccg tcgtggtcaa cgggccagcc gagtctggag tggttgcgaa cccttctggc 120
tgcagatctg gaggtggagg cagtaccctg gactctattc tgctgcccct tcagggtttg 180
gaggagccgg agcatccctc gcgtcctgtc acttccagcg aggcacacaa aactgaccgt 240
agggatggcc accagggtcc ggacagcttc tatttgggtc ccacctctcc aagaacgaaa 300
cagttcatgg gataggatca gaaagctcca aggtcaggaa tccatcttgg gccaagggac 360
tcctggtctg caacctctcc ctggaacacc caggcagaag cagaagagtc gcagaataga 420
gaaagtccta gagtggctgt ttatttccca agagcagcca aaaatcacca agtcctgggg 480
acctttgtca ttcatggatg tgtttgtgga ttttacctgg gaggagtggc agctgctaga 540
cccagcacag aagtgcctgt acaggagtgt gatgttggag aactatagca acctggtgtc 600
cctagggtac caacacacca aacctgatat catcttcaag ttggaacaag gagaagagct 660
gtgtttggcg caagcccaag ttncaaatca gacctgtcca attttgaang ctggaaagtc 720
caaagccaag gtgctggcag gtttggtgtc tggtgaaggc ctgctctggg cttncaagat 780
gacgccttgg tgctgcatcc tntggagacc agtcttggaa aattggatga tcttatggat 840
tggcntcagg gaaaat 856

<210> 3795
<211> 869
<212> DNA
<213> Homo sapiens

<400> 3795
gtcgtttaaa agaaacactt gctcagcttt caagagagac agacgtgtca ccatttccac 60
cccgtaagcg cccatcagct gagcattccc tttccatagg gtcactccta gatatctcca 120
acacaccaga gtctagcatt aactatggag acaccccaaa gtcttgtact aagtcttcta 180
aaagctccac tccagttcct tcaaagcagt cagcaaggtg gcaagttgca aaagagcttt 240
atcaaactga aagtaattat gttaatatat tggcaacaat tattcagtta tttcaagtac 300
cattggaaga ggaaggacaa cgtggtggac ctatccttgc accagaggag attaagacta 360
tttttggtag catcccagat atctttgatg tacacactaa gataaaggat gatcttgaag 420
accttatagt taattgggat gagagcaaaa gcattggtga catttttctg aaatattcaa 480
aagatttggt aaaaacctac cctccctttg taaacttctt tgaaatgagc aaggaaacaa 540
ttattaaatg tgaaaaacag aaaccaagat ttcatgcttt tctcaagata aaccaagcaa 600
aaccagaatg tggacggcag agccttgttg aacttcttat ccgaccagta cagaggttac 660
ccagtgttgc attactttta aatgatctta agaagcatac agctgatgaa aatncagaca 720
aaagcacttt agaaaaagct attggatcac tgaaaggaag taatggcccc ttattaatga 780
nggttagaag aaaaaccgaa gctcaaaagc caaatttttg gatggtgggt tatgaagtan 840
atggatgccc actaatcttt tatcttctc 869

<210> 3796
<211> 811
<212> DNA
<213> Homo sapiens

<400> 3796
gggctgtttg aatggctttg ggatggagca ggggagagag tggctccgtt tgcctccccg 60
ctttggtgat gctgtgcgag cggcttcggg ggccctggag acgtccgagt cactgagggt 120

0050203-0050800

gggctgggac tcggggcccg cgtcccatct ccccgccgat tggtccgccc cccgtgcgag 180
tgtaacacag ccagcctcga agacttccct ctgagttgga atgataatga ccggatcccg 240
agaagttata gacttagacc ccccagctga gacttcccag gagcaggaag acctttttcat 300
agtgaaggtg gaagaagaag actgcacctg gatgcaggag tacaacccgc caacgtttga 360
gacttttac cagcgcttca ggcacttcca gtaccatgag gcttcaggac cccgggaggc 420
tctcagccaa ctccgggtgc tctgctgtga gtggctgagg cccgagctgc acacgaagga 480
gcagatcctg gagctgctgg tgctggagca gttcctgacc atcctgcctg aagagttcca 540
gccctgggtg agggaacatc accctgaaag tggagaagag gcggtggccg tgatagaaaa 600
tatacagcga gaacttgagg aacgcagaca gcagattgtt gcctgccctg atgtgcttct 660
cggaagatgg caacacctgg acaatgcang agtcctgcag cccccatccc tgaccgtgga 720
cacccaacct gacaacgcca caaaagcctn gncttctgga ggaaaatgcc ttctgtctcc 780
aagttcttnc cttccctgaa ggacagccag a 811

<210> 3797
<211> 805
<212> DNA
<213> Homo sapiens

<400> 3797
acgcctggtc tctgggacgc ccctccggac ccgtttcgcc tcgcggagcc ggtaggtcca 60
ggtgcagcgg ccgcagtgct gcgtccgtgc gccgcgggct ggggcggtct caggtgtgcc 120
gaagctctgg tcagtgccat gatccggcag gagcgctcca catcctacca ggagctgagt 180
gaggagttgg tccaggtggt tgagagctca gagctggcag acgagcagga caaggagacg 240
gtcagagtcc aaggtccggg tatcttacca ggcctggaca gcgagtccgc ctccagcagc 300
atccgcttca gcaaggcctg cctgaagaac gtcttctcgg tcctactcat cttcatctac 360
ctgctgctca tggctgtggc cgtcttcctg gtctaccgga ccatcacaga ctttcgtgag 420
aaactcaagc accctgtcat gtctgtgtct tacaaggaag tggatcgcta tgatgcccca 480
ggtattgcct tgtaccccgg tcaggcccag ttgctcagct gtaagcacca ttacgaggtc 540
attcctcctc tgacaagccc tgccagccgg gtgacatgaa ttgcaccacc cagaggatca 600
actacacgga ccccttctcc aatcagactg tgaaatctgc cctgattgtc caggggcccc 660
gggaagtgaa aaagcgggag ctgggcttnc ttcagttccg cctgaacaag agtagtgagg 720
acttaacgcc atttgattac ctnctcttct cttcttttca ggagttcctt gcaaaagccc 780
aaacangggt aaggcttcat gcang 805

<210> 3798
<211> 797
<212> DNA
<213> Homo sapiens

<400> 3798
ataatccttt tgcaaacatc tcaacgctgg ctctccaggt ggagcaccat ggaaggcgac 60
tgtctgagct gcatgaagta tctgatgttt gtattcaatt tcttcatatt tctgggcggg 120
gcctgcctgc tggccatcgg catctgggtc atggtggacc ccaccggctt ccgggagatc 180
gtggctgcca atcctctgct cctcacgggc gcctacatcc tcctggccat gggggggcctg 240
ctctttctgc tcggcttcct gggctgctgc ggggccgtcc gtgagaacaa gtgtctgctg 300
ctatttttct tcctgttcat cctgatcatc ttcctggcag agctctcagc agccatcctg 360
gccttcatct tcagggaaaa tctcacccga gaattcttca ccaaggagct caccaagcac 420
taccagggca ataacgacac agacgtcttc tctgccacct ggaactcggt catgatcaca 480

0509203.00000

tttggttgct gcggggtcaa cgggcctgaa gactttaagt ttgcatctgt gtttcgactc 540
ctgaccctgg atagtgaaga ggtgccggag gcctgctgcc ggagggaacc ccaaagtcgg 600
gacggggtcc tgctgagccg ggaggagtgc ctnctgggaa ggagcctatt cctaaacaag 660
cagggctggt acacngngat cctcaacacc ttcgagacct acgtctactt tggcccgaac 720
ccttggcatt ggggtactgg ncattgaacc ttttcgccat gaacttttgc catgngcctt 780
tttccgggca ttccant 797

<210> 3799
<211> 692
<212> DNA
<213> Homo sapiens

<400> 3799
tcaccggtgc cgtgctcttc ctgaaccacg cccacgcgcc gggcacggcg cccccacctg 60
tcgtcagcac tggggctgcc agcgccaaca gcgccctggt cactgtggaa agggcggaca 120
gctcgcacct cagcatcctc attgacccgc gctgccccga cctcaccgac agcttcgcac 180
gcctggagag cgcccaggcc tcggtgctgc aggcgctgac agagcaccag gcccagccac 240
ggctggtggg cgaccaggag caggagctgc tggacacgct ggccgaccag ctgccccggc 300
tgctggcccg agcctcagag ctgcagacgg agtgcatggg gctgcggaag gggcatggca 360
cgctgggcca gggcctcagc gccctgcaga gtgagcaggg ccgcctcatc cagcttctct 420
ctgagagcca gggccacatg gctcacctgg tgaactccgt cagcgacatc ctggatgccc 480
tgcagaggga ccgggggctg ggccggcccc gcaacaaggc cgaccttcag agagcgcctg 540
cccggggaac ccggcccccgg ggcttgtgcc actggctccc ggccccgaga ctgtcttgga 600
cgtcctncta agcgggacaa gcaaggacga tggcgtctac tctggncttt tcccacccca 660
attaccccng gcccgggctt ttccaaggtg gt 692

<210> 3800
<211> 784
<212> DNA
<213> Homo sapiens

<400> 3800
caaacagcag aaggaggtag agaaggttaa accccagtgt aaggaagttc atcagaccct 60
gattctggac ccagcacaaa ggaagagact ccagcagcag atgcagcagc atgttcagct 120
cttgacacaa atccaccttc ttgccacctg caaccccaat ctcaatccgg aggccagtag 180
caccaggata tgtcttaaag agctgggaac ctttgctcaa agctccatcg cccttcacca 240
tcagtacaac cccaagtttc agaccctgtt ccaaccctgt aacttgatgg gagctatgca 300
gctgattgaa gacttcagca cacatgtcag cattgactgc agccctcata aaactgtcaa 360
gaagactgcc aatgaatttc cctgtttgcc aaagcaagtg gcttggatcc tggccacaag 420
caaggttttc atgtatccag agttacttcc agtgtgttcc ctgaaggcaa agaatcccca 480
ggataagatc ctcttcacca aggctgagga caatttgtta gctttaggac tgaagcattt 540
tgaagggact gagtttctta accctctaat cagcaagtac cttctaacct gcaagactgc 600
ccggcaactg acagtgagaa tcaagaacct caacatgaac agagcttctg acaacatcat 660
taaattttat aagaagacca aacagctgcc agtcctagga aaatgctgtg aagagatcca 720
gccncattna gtgggaagcc ncctattgag agaggaagaa caccgggttc caatctgggt 780
taaa 784

<210> 3801

0050204.0003.0003

0002760.50250

<211> 740
<212> DNA
<213> Homo sapiens

<400> 3801
gagttgatat cttcccatcc acccgccgct tctttcctcc atctagcgat ttttatttt 60
taagtgtctc ttccttttc tttcttttct tctttttat tttttatata tatttttgg 120
cattgctttg cagatgttgg gatgagagtc ggagccgaat accaagctcg gatccctgaa 180
tttgatccag gtgctacaaa gtacacagat aaagacaatg gagggatgct tgtatggtct 240
ccatatcaca gtatcccaga tgccaaattg gatgaataca ttgcaattgc aaaggaaaag 300
catggctaca atgtggaaca ggcacttggc atgttgttct ggcataaaca taacattgag 360
aagtcccttg ctgatctccc taatttcact ccctttccgg atgagtggac agtggaagat 420
aaagtcctat ttgaacaagc ctttagtttt catggaaaga gctttcacag gattcagcaa 480
atgcttccag ataagacaat tgcaagcctt gtaaaatatt actattcttg gaaaaaaact 540
cgctctagga caagtttgat ggatcgccag gctcgtaaac tagctaatag acataatcag 600
ggtgacagtg atgatgatgt agaagaaaca cattcaatgg atgggaatga tagtgattat 660
gatccccaaa aagaagccca aaaaganggt aatactggac aacctgttcn aactagccag 720
aatggacttg ggaanaaaga 740

<210> 3802
<211> 784
<212> DNA
<213> Homo sapiens

<400> 3802
gaaacagata ttaacaaact aaaaccccag caagaaccgg gacgaacaat agaagatcta 60
aaaatgtatg aacacctttt ccctgagctt gttgatgatt ttcaggacta tgatttaatc 120
tccaaagaac caaagccttt tgtatttgag ggaaaagtac gtggtcctat tgttgttcct 180
acggcaggcg aggaaacatc tgggaattct ggcaatttaa gaaaggttgt aatgaaggag 240
aacatatctt ctaaaggaga tgaaggtgaa aagaagtcta cctttgtgga tctagcaaaa 300
gaagatatta aagataatga tagaacatta caacagcagc caggtgatca aaatagaact 360
atttcatcag tccatggttt aaacaatgat attgtaaagg ccttggaccg aattacattg 420
cagaatattc cttctcaaac agccccaggt tttactgcag aaatgaagaa ggactgcagt 480
cttcctctta ctgtccttac ctgtgctaaa gcatgtccac acatggctac ttgtggaaat 540
gttctgtttg agggaagaac agttcagcta gggaagcttt gctgcactgg agttgaaact 600
gaagatgatg aagatactga gtcaaattca tcggtagaac aagcatcggt tgaagtacct 660
gatggaccaa cacttcatga cccagacctc tatattgagg attgtgaaaa atacgaaant 720
ctgtcccaga atattcagaa ggnggcttat cccgaatatt ttgggcacan ttccggcttc 780
cttt 784

<210> 3803
<211> 806
<212> DNA
<213> Homo sapiens

<400> 3803
atgcaagaag catcgactca gctggaagac tctctcctgg ggaagatgct ggagacgtgt 60
ggagatgctg agaatcagct ggctctcgag ctctcccagc acgaagtctt tgttgagaag 120

gagatcgtgg accctctgta cggcatagct gaggtggaga ttcccaacat ccagaagcag 180
aggaagcagc ttgcaagatt ggtgttagac tgggattcag tcagagccag gtggaaccaa 240
gctcacaaat cctcaggaac caactttcag gggcttccat caaaaataga tactctaaag 300
gaagagatgg atgaagctgg aaataaagta gaacagtgca aggatcaact tgcagcagac 360
atgtacaact ttatggccaa agaaggggag tatggcaaat tctttgttac gttattagaa 420
gcccaagcag attaccatag aaaagcatta gcagtcttag aaaagaccct ccccgaaatg 480
cgagcccatc aagataagtg ggcggaaaaa ccagcctttg ggactcccct agcagaacac 540
ctgaagagga gcgggcgcga gattgcgctg cccattgaag cctgtgtcat gctgcttctg 600
gagacaggca tgaaggagga nggccttttc cgaattgggg ctggggcctn caagttaaag 660
aagctgaaag ctgctttgga ctggtctact tctcacctgg atgagttcta ttcagacccc 720
catgctgtag caggtgcttt aaaatcctat ttaccggaat tgnctgacct ttgatgactt 780
ttaatctgga tgaanaatgg ncccag 806

<210> 3804
<211> 695
<212> DNA
<213> Homo sapiens

<400> 3804
atcttgtgtt gttgaggctg aggactgact ggggttctga gactccctgt cccggaccgc 60
agattatagt gggaccagtc tcattaggtt gaatctacag cctatgttgg tgttaaccca 120
ggtctcttag agcgttaaaa ggatctgaac aaagtctgct caaatctcct gctgtgaacc 180
agcagaattt ttgaacagag accacgtctc cacctcctgg gctccaacga ttctcccatc 240
ttggcctccc aaagcgctgg atttacaggt ttcttcacat ataaaaatct attgtaaaaa 300
tacggaacag aatggcagcg gaaacgcaga cactgaactt tgggcctgaa tggctccgag 360
ctctgtccag tggtgggagt attacatccc ctcctctttc tccagcattg ccgaagtata 420
aattagcaga ttatcgttac ggcagagaag aaatgttagc acttttcctt aaagacaaca 480
agataccttc agaccttctg gataaagaat ttctgcctat cctccaggag gaaccccttc 540
caccattggc tctggtaccc tttacagaag aagaacagag aaacttttcc atgtctgtaa 600
atagtgctgc tgtcctgcga ttgacaggac gaggaggagg aggaacagtg gtgggggctc 660
ctagaggtcg aagttcttca aganggccan gcana 695

<210> 3805
<211> 745
<212> DNA
<213> Homo sapiens

<400> 3805
aaatactgcc aggattttac cacctctcgc ccatttattt acttctcggt caccgctttc 60
gggggacaga taaacaccac agatgcccat caaaggggcg cacgggtctg gaggcgcagc 120
tcangttttt gcgttggtca ccctgccctc cgcacgtgga gagggcaggc ataaagcacc 180
ttgaaaggaa ggtgctgtca atgctatccg acgacctgtc gccgggcacc gcagcatcct 240
cgctcgctcc gatgggacga gggacgccgg ccccagggta acaggaggcg cctcgccggc 300
cgcgcgctgg atgctgtgat ccaggtccgg agccgggttc cgccgcggcc gcagcgaccc 360
gaccccaccc gacaggccag agaaacagaa aggtcaaatg attctggaaa tggtgagcac 420
aaatctgaga gaaagtcacc tgaagagaat ctacaaggtg ctgtaaaatc tttctgcaca 480
agtgcctcan gagcaccctt gggtcccaaa ggagatggtc attatccatg gagttgtcca 540
gtgactcata cacgggaaaa aatttatgcc atctgttcng actatgcctt tctcaaccag 600

US20050009000

gcgacctcan tctataaaac tncaaatcca tcccgctctt cttgctcctg atagtacctc 660
tttatctgct ggaaataatt catcangata cattggtatc ccgactagta catcggaaat 720
tatntncatt gaaaaaattg cttgg 745

<210> 3806
<211> 849
<212> DNA
<213> Homo sapiens

<400> 3806
cgagctcgcc cgctgtccgc cagcccgcgg gagggaggag agaagcgaag cgtttccgcg 60
gttggctact cagtgtcttg gtctcaagtt gcctcattgc ggctggcgtt cccaatacag 120
acgcatcgtt tctttttaa tactccctaa gaaagggaat aaccttcaag ctggcgggag 180
caatggttca cataaagaaa ggcgagctga cccaggagga gaaggagcta ctggaagtca 240
tcgggaaagg tactgtccaa gaagctggaa cattattatc cagcaagaat gttcgtgtca 300
actgtttgga cgagaatgga atgactcctc taatgcatgc agcatataaa ggaaaactcg 360
atatgtgcaa attactactg cgacatggag ccgatgtaaa ttgtcatcag catgaacatg 420
gatacacagc cctcatgttt gctgcacttt ctggtaataa agacatcaca tgggtaatgt 480
tagaagctgg tgctgagaca gatgttgtca actctgtggg aagaacagca gctcagatgg 540
cagcctttgt gggtcaacat gattgtgtga ccataatcaa caatttcttt cctcgagaga 600
gactggatta ttacactaag ccccanggac tgggtaaaga gccaaaactg cccccaaagt 660
tggcaggccc gctgcacaaa attatcacca caacgaatct tcatcctgtc aagatcgtga 720
tgctttgtaa atgaagaatc ctcttgcttg cagaaagaag cagcccctga ataaatgcta 780
cagagtgatg gatttgattt gngagaaatg tatgaacana gagacctgaa ttgaaatatt 840
ggctttnaa 849

<210> 3807
<211> 770
<212> DNA
<213> Homo sapiens

<400> 3807
agttggcgac atggtggcac ccgtgctgga gacttctcac gtgttttgct gcccaaaccg 60
ggtgcgggga gtcctgaact ggagctctgg gcccagagga cttctggcct ttggcacgtc 120
ctgctccgtg gtgctctatg acccccctgaa aagggttgtt gttaccaact tgaatggtca 180
caccgcccga gtcaattgca tacagtggat ttgtaaacag gatggctccc cttctactga 240
attagtttct ggaggatctg ataatcaagt gattcactgg gaaatagagg ataatcagct 300
tttaaaagca gtgcatcttc aaggccatga aggacctgtt tatgcggtgc atgctgttta 360
ccagaggagg acatcagatc ctgcattatg tacactgatc gtttctgcag ctgcagattc 420
tgctgttcga ctctggtcta aaaagggtcc agaagtaatg tgccttcaga ctttaaactt 480
tggaaatgga tttgctttgg ctctctgctt atctttttg ccaaatactg atgtaccaat 540
attagcatgt ggcaatgatg attgcagaat tcacatattt gctcaacaaa atgatcagtt 600
tcagaaagtg ctttctctct gtggacatga ngattggatt anaggantgg aatgggcaac 660
ctttggtaga gatcttttcc tagcaagctg ttcacaagat tgcctgataa gaatatggaa 720
actgtatatt aagtcaacat ntttanaaac ttcaggatga ccattacntt 770

<210> 3808
<211> 692

09502.0009-00000

<212> DNA
<213> Homo sapiens

<400> 3808
aaaagaagaa acgcaggcgg ggcagaaaag aggagcccga aggtggtagc aggccggcgt 60
gtgggggagc tggcacccag gggcctgtgc agctggtcaa ggaggtggtg gccgaggatg 120
gcaccgtggt caccattaag caggtgctca ccgcgccagg ctcggcgggg cagccccggt 180
ctgaggacga agacagcctt gaggaggccg gcagccccgc acctgggccg tgtccacgct 240
ccaacgccat gctggctgtg aagcatgggg tgctctacgt ctatgggggc atgtttgagg 300
ccggcgaccg ccaggtcacc ctcagcgacc tgcactgcct ggacctgcac aggatggagg 360
cgtggaaggc cttggtggag atggacccag aaactcagga gtggctggag gagacggact 420
cggaagagga cagtgaggag gttgagggcg ccgagggtgg ggtcgacgac naagacagcg 480
gagaggagag cggtgcggag gactgangct gtgacaaacc ctgtgcccac gctgccttca 540
ctgccgggag actcanggct tgggggagac atgccctggt caccacttgc ggagactcan 600
ggcttggggg gagacatgcc ctggccacca ntggtgaacc agccgaagac aggaccccaa 660
cgcgccgctt acccggggac nccatggaac tt 692

<210> 3809
<211> 850
<212> DNA
<213> Homo sapiens

<400> 3809
aacctcgtgc tttctgcaga ggagaccgga gggcagaagg cagagtccag gcttagactg 60
cagttcctcg cttacctgtg cagtctaatt ttgagctgcc tctttgtagt cttaaaaggc 120
aggagcttcg tgttgtgggt ctgctaaccc gtacgtttcc gtgggcaagt cgtgtgtact 180
cctcgccatg gctcagctcc aaacacgctt ctacactgat aacaagaaat atgccgtaga 240
tgatgttccc ttctcaatcc ctgctgcctc tgaaattgcc gaccttagta acatcatcaa 300
taaactacta aaggacaaaa atgagttcca caaacatgtg gagtttgatt tccttattaa 360
gggccagttt ctgcgaatgc ccttggacaa acacatggaa atggagaacg tctcatcaga 420
agaagttgtg gaaatagaat acgtggagaa gtatactgca ccccagccag agcaatgcat 480
gttccatgat gactggatca gttcaattaa aggggcagag gaatggatct tgactggttc 540
ttatgataag acttctcgga tctggtcctt ggaaggaaag tcaataatga caattgtggg 600
acatacggat gttgtaaaag atgtggcctg ggtgaaaaaa gatagtttgt cctgcttatt 660
attgagtgct tctatggatc agactattct cttatgggag tggaatgtan agagaaacaa 720
agtgaaagcc ctacactgct gtanangtca tgctggaagt gtagattcta tagctggtga 780
tggctcagga actaaatttg cagtggcttc tgggataaga tgctaaagat ctggctacag 840
tccctacaga 850

<210> 3810
<211> 849
<212> DNA
<213> Homo sapiens

<400> 3810
aaagtccttg caccatgtag atcagcgtcc cccactttgg catcccggcc ggccggggac 60
ctcccagtct gcggccatga acgcgagcag cgagggcgag agcttcgcgg gctcggtgca 120
aattccaggt ggcacaacgg tgctggtgga gctgactccc gacatccata tctgcggcat 180

WO 2005/003300 PCT/US2004/019800

ctgcaagcag cagtttaaca acctggatgc ctttgtagct cacaagcaaa gtggctgcca 240
gctgacaggc acatccgcag cagcccccag cacggtccag tttgtatcgg aggaaacagt 300
gcctgccacc cagactcaga ccaccaccag aaccatcacc tcggagaccc agacaatcac 360
aggttgccaa ttcaagactg cttatggcat gaaggacatg gagcggcatt taaaaattca 420
cacgggagac aaaccccata agtgtgaagt ctgtggcaag tgctttagcc ggaaagacaa 480
gctgaaaact cacatgcggt gccacacggg cgtgaagccc tacaagtgta agacgtgtga 540
ctacgccgct gccgacagca gcagcctcaa caagcacctg aggatccact cggacgagcg 600
gcccttcaaa tgccagatct gccctacgcc agccgcaact ccagccagct nctgtccacc 660
tgcgatccca cacgggggac gccccccttcc agtgctggct ctgtagcgcc aagttcaaaa 720
tcagctcgga cttgaaaang cacattgcgg gtgcacttcg ggggagaacc tttcaagtgc 780
aattctgcaa tgtccgntga ccatgaaggg gaaccttaag tcgcacatcc gtatcaagcc 840
cagcgggan 849

<210> 3811
<211> 793
<212> DNA
<213> Homo sapiens

<400> 3811
gttggagcgg cgctgctcgg ccgcggacac acgagggacg cgcccgagga gctgcaggtg 60
gcagcccagg cggtccgaac ccgtcggccg gccgagcctg gagtattgcc taagtgtaat 120
cttgaacatg ggcggtgctg tgagtgctgg tgaagacaat gaagagctga tagataattt 180
gaaagaagca cagtatatcc ggactgagct ggtagagcag gctttcagag ctatcgatcg 240
tgcagactat tatcttgaag aatttaaaga aaatgcttat aaagacttgg catggaagca 300
tggaaacatt cacctctcag ccccgtgcat ctactcggag gtgatggaag ccctagatct 360
gcagcctgga ctctcgtttc tgaacctggg cagtggcact gggtatctca gctccatggt 420
gggcctcatt ctaggtcctt ttggtgtgaa ccatggggtg gaacttcact cagatgtgat 480
agagtatgca aagcagaaac tggacttctt catcagaaca agtgatagtt ttgacaagtt 540
tgacttctgt gaaccttcct ttgttactgg gaattgcctg gagatttctc cggattgttc 600
tcagtatgat cgtgtatact gtggggctgg cgtgcagaaa gagcatgaag agtacatgaa 660
gaatcttctc aaagtgggag ggatccttgt catgccactg gaagagaagt tgactaagat 720
aacacgcaca ggtccttcac ttgggaaacc naaaagattc tgctggttct tttgctnctc 780
tgatccancc ctg 793

<210> 3812
<211> 825
<212> DNA
<213> Homo sapiens

<400> 3812
agcaaataat caatttagca ttacaaaaaa cagggatggt agggaaaata gaaggagaaa 60
actctaaaat aggtgatgat aatgaaaatt taacctttaa attagaagta aatgagctga 120
gtggtaaatt agacaacact aacgaataca atagtaatga tggtaagaaa ttaccccagg 180
gtgaatcacg aagttacgaa gtcatgggaa gtatggaaga aaccttatgc aatatagatg 240
acagagatgg aaatcgcaat gtccatttag aatttacaga aagagagagt aggaaggatg 300
gagaggatga atttgtcaaa gaaatgagag aggaaagaaa atttcagaaa ttgaagaata 360
aagaggaggt tttaaaagcc tccagagaag aaaaagtgtt gatggatgaa ggagcagtac 420
ttaccctggc agccgacctt tcatcagcaa cactggatat tagtaagcaa tggagtaatg 480

US005750356A

tcttcaacat tctgagagaa aatgattttg aacctaaatt tctgtgtgaa gttaaattag 540
catttaaatg tgatggtgaa ataaagacat tttcagatct gcaaagcctt agaaaatttg 600
ccagccaaaa atcttctatg aaagaattac tgaaagatgt actcccacaa aaggaagaaa 660
taaatcaagg aggaagaaaa tatggaattc aagaaaaaag ggataaaacc ctaatagact 720
caaagcatag agctggagaa atnaccagtg atggcttgag cttcctattt cttaaagaag 780
taaaagttgc taagccngan gagatgaaaa cttagagact cagga 825

<210> 3813
<211> 743
<212> DNA
<213> Homo sapiens

<400> 3813
agcaaccatt gctagtaatt ctttaatgtg tataaattca atttcaggta taacaaatgt 60
gatcatgaca tgaaaatatt ctagaataga tactgtatta aatattgcca tgtttacaat 120
atgtaatatg tttttagccg atggatttaa acatgtagat tcaactagaa tccatttgtg 180
atatttgtaa ataaaggtag aaatattaga tccatttctg cagaacttac tgtacagttt 240
agttggagtg tagcactgaa gaactgtcag ctcagcgttg actgaggaga tagtgaaaat 300
agcctataca cagcatcttg tgaaaagtac tggcagccgt ggttgcagca aataataggg 360
caaaaaaaat aataataggg tggtcggttc cctttcatct ccctcttctg aaaggaaaaa 420
attgaattgg aacgttcaag tccagtttgt gttcagtcat aaaactgggc cagttgttaa 480
ccttacagaa tgagtcatgt ggccagacct tcaagtccaa ggccttcaga cactaaggat 540
gggaaaatgg gtatttttct ttggagaaaa gctggaaata taaacatggc atttttaggt 600
aaagctcttc cactagttga attttcatgc ncatattttt tcttaaccgt tggtgccagt 660
naagcnaaga gtattatgat ggaaaaagac cagtccaagc cccatcggtc cggaatggga 720
gcccatggtc ttggctaatn ggt 743

<210> 3814
<211> 812
<212> DNA
<213> Homo sapiens

<400> 3814
cgcacgttct ggctggcacc gctaatccga cggttgccaa aagaaacatg actttgcctg 60
gcgagaacgg tcaaaacttg gtggaatgga gattccgaaa agagcaagcc caagggaaag 120
tcaatgtctt tggccgcaag ctcagggtta atggcagaaa cctcctttca gttgactttg 180
atcgaacaac aaagacagaa aagatctatg acgaccaccg taaatttcta ctgaggatcg 240
cctacgacac gtctgggcac ccgactctct ggctgccaag cagcaagctg atggccgtca 300
atgtcaccta ttcatccaca ggtcaaattg ccagcatcca gcgaggcacc actagcgaga 360
aagtagatta tgacggacag gggaggatcg tgtctcgggt ctttgctgat ggtaaaacat 420
ggagttacac atatttagaa aagtccatgg ttcttctgct tcatagccag cggcagtaca 480
tcttcgaata cgatatgtgg gaccgcctgt ctgccatcac catgcccagt gtggctcgcc 540
acaccatgca gaccatccga tccattggct actaccgcaa catatacaac cccccggaaa 600
gcaacgcctc catcatcacg gactacaacg aggaagggct gcttctacaa acagctttct 660
tgggtacaag tcgganggtc ttattcaaat acagaaggca gactangctc tcagaaattt 720
tatatgatag cacaagaagt cagntttacc tatgatgaaa cagcaggagt cctaaagaca 780
gtaaaccttc agaggngatg gtttanttgc cc 812

Docket No. 0609-1000

<210> 3815
<211> 771
<212> DNA
<213> Homo sapiens

<400> 3815
ggagacgcgg cggcgctgga cgcggaggcg ctgggcgcac ggcgcggagc cggccggagc 60
tcgaggccgg cggcggcggg agagcgaccc gggcggcctc gtagcggggc cccggatccc 120
cgagtggcgg ccggagcctc gaaaagagat tctcagcgct gattttgaga tgatgggctt 180
gggaaacggg cgtcgcagca tgaagtcgcc gcccctcgtg ctggccgccc tggtggcctg 240
catcatcgtc ttgggcttca actactggat tgcgagctcc cggancgtgg acctccagac 300
acggatcatg gagctggaag gcagggtccg cagggcggct gcagagagag gcgccgtgga 360
gctgaagaag aacgagttcc agggagagct ggagaagcat cgggagcagc ttgacaaaat 420
ccagtccagc cacaacttcc agctggagag cgtcaacaag ctgtaccagg acgaaaaggc 480
ggttttggtg aataacatna ccacaggtga gaggctcatc cgagtgctgc aagaccagtt 540
aaagaccctg cagaggaatt acggcaggct gcagcaggat gtcctncagt ttcagaagaa 600
ccagaccaac ctggagagga agttctccta cgacctgagc cagtgcatca atcagatgaa 660
ggaagttgaa ggaacagtgt gaggaaccga aatttaagag gtcaccaaaa agggggaatg 720
aancttgtan ctttccagag accttgaatn gaaaaaccaa cgaaccagaa g 771

<210> 3816
<211> 850
<212> DNA
<213> Homo sapiens

<400> 3816
gtgaaaggag ggaacgcagg tgagaaagcg agacaggcag gtagggaaat cgtgaggtga 60
gcgtgatcct agctccttgt ggcagagcct agagagaagg cgaggacgct gaagaaccag 120
gcggacagct ggcagagaga gaagttggct agcatggaat caccagagga gcctggagca 180
tccatggatg agaactactt tgtgaactac actttcaaag atcggtcaca ttcaggccgt 240
gtggctcaag gcatcatgaa actgtgtcta gaggaggagc tctttgctga tgtcaccatt 300
tcggtggaag gccgggagtt tcagctccat cggctggtcc tctcagctca gagctgcttc 360
ttccgatcca tgttcacttc caacctgaag gaggcccaca accgggtgat tgtgctgcag 420
gatgtcagcg agtctgtttt ccagctcctg gttgattata tctaccatgg gactgtgaaa 480
cttcgagctg aggagttgca ggaaatttat gaggtgtcag acatgtatca gctgacatct 540
ctctttgagg aatgctctcg gtttttggcc cgcacagtgc aagtgggaaa ctgccttcag 600
gtgatgtggc tggcagatcg gcacagtgat cctgagctct atacggctgc caagcactgt 660
gccaagaccc acctggccca gctgcagaat acagaggaat ttctncactt gccccaccgc 720
ttactccaga tatcatctcg gatggagttc cgtgttctca gacccaacag aggcaataga 780
acctggatca ctttataaan angaaagaaa ngcttttgca gaatcctcag gacagcttga 840
aggaaattgg 850

<210> 3817
<211> 823
<212> DNA
<213> Homo sapiens

<400> 3817

0962030.0002

gtacttgggc anagctcccc ggggttcatt gncttcgctt cacaggatct gtttgagtcc 60
tgtccaccgg atcctacggg gggtaccttc gaaaaaaaac gggctatgct gctgttgcgt 120
gtgggtaccc tctcctgacg cctccgccgc ccgggtcatg tggaccctcg tgggtcgggg 180
ctgggggtgc gcacgcgctc tcgcgccacg agccactggg gccgngcttc tggtggcccc 240
ggggcccccgg nccgcgccga cccttggggc tgctccagag tcctgggcta ccgacaggct 300
ctacagctcc gcagaattca aggaaaaacc tgacatgtct aggtttcctg ttgaaaatat 360
tagaaatttc agtattgttg cacacgtgga tcatggcaaa agtactttaa ctgacaggct 420
cctagaactt acagggacaa ttgataaaac aaagaataat aagcaggttc ttgataaatt 480
gcaagtggaa cgagaaagag gaatcactgt taaagcacag acagcatctc tcttttacaa 540
ttgtgaagga aagcagtacc ttttaaatct cattgataca ccgggccatg ttgattttag 600
ttatgaagta tccaggtcac tttctgcttg ccagggtgtt ttacttgtgg ttgatgcaaa 660
tgagggaatt caagcccaaa ctgtagcaaa cttctttctt gccttcgaag cacagctatc 720
ggtaattcca gttntaaata agatagatct gaagaatgct gatcctgaaa nggttgaaaa 780
ccaaattgag aaagtggttg atatttccaa gtgatgaaat gna 823

<210> 3818
<211> 879
<212> DNA
<213> Homo sapiens

<400> 3818
ttggatattg aatctgtaat tacctttttat tgtaaatcac gtaacattaa atatagcaca 60
tcccttagct ggatacatct actgaaacca ttggtgcatc ttcaactgcc acgcagcgat 120
ttatacaact gcttttatgc cataatgaat aagtacattc ccagggattg ttcccagaaa 180
gggagaccat ttcatctctt caggttgctc atccaatacc atgagcctga gctttgttct 240
tatcttgata caaagaaaat tactccagac tcctatgcac tcaactggct tggaagtctt 300
tttgcatgtt actgttccac tgaagtcact caggcaatat gggatggata tctacaacaa 360
gcagatccat tttttattta tttcttaatg ttaattatcc ttgttaatgc aaaagaagtt 420
attttaacac aagagtcaga cagcaaagaa gaagttatca agttcttgga aaatactcca 480
tccagtctga atatagaaga tatagaagac cttttctctc tggctcagta ttattgcagc 540
aaaacaccgg cttcttttag gaaggataat caccatctct ttggtagtac tttgttggga 600
attaaggatg atgatgcaga tctgagtcag gctctttgtc tggccatctc cgtgtcagag 660
atccttcaag cgaatcagct acaaggggaa ggagtccggt tctttgtggt ggattgccgt 720
cctgcagaac aatataatgc tgggcattta tcaactgctt tcccttanat tcagacctga 780
gcttcagaat ccatctgagt tgcacagtca gtaaaatcct gctggaaccc agaagcagtc 840
catgggtctg ggttcataac ttggtgggga gcaccttgt 879

<210> 3819
<211> 735
<212> DNA
<213> Homo sapiens

<400> 3819
ggatttttc tgaaccagcc aggaaatacc ggaacccacc aaactttaaa caccagccta 60
aattattcct gttcttttaa gcaggcagca gaaatgacag aaacccgtta acagaaaaaa 120
aaaaaataat gcttttcatt tgaactcctg tgcattttct ttttaactta tatgtgttcc 180
taattttcct tactcttttt gtttgtttgt ttcttagtgt ggtttattga caatcattta 240
caatgccgaa gagtgctgta gtgagccagc acagtgggta acacagcaac ggagaacaga 300

US20030224000

tgcaggtttg aggaatttaa cttgctaaaa ccttgaactg aagtcttaga gattggaaca 360
tacgggtttg tataaatagg cttttaagcc ctgtttgcaa tgggttactg ataggagaaa 420
cttgcttgtg gaatgtcagc tgcgtgagct cactgtcaga caagatggaa gaagaagggc 480
tggagtgtcc aaactcttcc tctgaaaaac gctattttcc tgaatccctg gattccagcg 540
atggggatga ggaagaggtt ttggcctgtg aggatttgga acttaacccc tttgatggat 600
tgccatattc atcacgttat tataaacttc tgaaagaaag agaagatctt cctatatgga 660
aagaaaaata ctcctttatg ganaacctgc tttcaaaatc aaatcgngat tggttcangg 720
agatgctaaa tgtgg 735

<210> 3820
<211> 816
<212> DNA
<213> Homo sapiens

<400> 3820
agcggcccgg ccgggggggc aagatggcgg cggcagtagg ggttcgtggc cggtacgagc 60
tgccgccttg ctccggccca ggctggctcc tcagcctttc cgccttgctg agtgtggcgg 120
cacgaggggc cttcgccacc acgcactggg tcgtcacgga ggacgggaaa atccagcagc 180
aggtggattc accaatgaac ttgaagcatc ctcatgacct agtcatatta atgagacaag 240
aagcaacagt taactacctc aaagaattag agaaacaatt agttgctcaa aaaattcaca 300
tagaagagaa tgaggacaga gacacaggac tggaacagag acataataaa gaagacccag 360
actgcatcaa agccaaggtg cccttagggg acctggatct atatgatggc acatacataa 420
ctttggagag caaagacatc agtcctgaag attatataga cacagaatct cctgtccctc 480
cagacccaga gcaacctgat tgtactaaaa ttctagaact tccatgtagt atacatgctt 540
ttcagcactt gagaggtgta caggagagag ttaatctttc tgcacctctg ctacctaaag 600
aagacccaat cttcacatat ttatctaaac ggttaggaag gagtatagat gacataggtc 660
acctcattca tgaaggccta cagaagaaca cttcctcgtg ggtactgnat aacatggctt 720
cattttactg gagaattaag aatgagccat atcangtagt agaatgtgcc atgccagcac 780
ttcacttctc tttcaggcnc aattaaaaga canttg 816

<210> 3821
<211> 887
<212> DNA
<213> Homo sapiens

<400> 3821
tgtttttatg ttaaaccaaa catgtctctt cggaacacag tctgtataca aataacatgc 60
atgaggactt tccatttaat ctgtgattca gccacatgat gtttttgcca aatgatgtga 120
tactttccaa agcaccttga gtgtgaaatg tcaacagaaa tatcagcaag cttttatgtt 180
gcagagtatt atggtacctc tgaattagcc tgtatagttc tcttcctgct ttaagcatta 240
cctggttagc tcagacggct tgaggcagtc ccttaataat agggatgctt ttcatctcta 300
aggatgtaag aggcaaacaa atcatgtcat tctttaagtg ggctatgctt tgatagatgt 360
gctctttaaa ggtgtgagat tggaatttag agttgttaaa ttgaaatgtt tgcattgcac 420
caaaggagct cagttttcaa actttaatgg aaccttgggt aaagggaaaa aatttttaat 480
gaaatctggg gttttatatt ttgattagcc taaaagtaaa aatacagctt tatccattaa 540
gtgactttta aaaatcagtt ttgccatacc aaagaaatta gattcttagt gtcacatgct 600
atacttttgt ctgtgcttga aacgagcaat gccaacattg ggagcaatga cagaggtttg 660
catcagtttg tcttggcttt ggtaaggact tctgccagaa atgtgctcgt ggttgacaac 720

US07700800

ccaggatcat tggtcaagtt cttatgcaga cacctttgaa aacaattcag atcgtgtcac 780
aagaatctgg gaattgaaaa tatcatttat tttttaatgc caggaatacc canatgtggg 840
ttcacttcag cagtanctat aggggtcact tatatacatt ctggtcn 887

<210> 3822
<211> 863
<212> DNA
<213> Homo sapiens

<400> 3822
acacatccgc gcagaccagg aagcggatcc cgtggattga aggtcgcacc gcggcggatt 60
gacttctaaa gacttggtac gtgaggaaaa aacacggaag aggaagagga aagcaaagga 120
gtcagggatg gctcttcctc agggtctact gacattcagg gatgtggcca tagaattctc 180
tcaggaggag tggaaatgcc tggaccctgc tcagaggact ctatacagag acgtgatgct 240
ggagaattat aggaacctgg tctccctgga tacctcttcc aaatgcatga tgaagatgtt 300
ctcatcaaca ggacaaggca atacagaagt ggtccacaca gggacattgc aaatacatgc 360
aagtcatcac attggagata cttgcttcca ggaaattgag aaagatattc atgactttgt 420
gtttcagtgg caagaaaatg aaacaaatgg ccatgaagca ctcatgacaa aaatcaaaaa 480
gttgatgagt agtacagagc gacatgatca aaggcatgct ggaaacaaac ctattaaaaa 540
tgagcttgga tcaagctttc attcgcatct gcctgaagtg cacatatttc accccgaagg 600
gaaaattggt aatcaagttg agaaggccat caacgatgct ttctcagttt cagcatccca 660
acgaatttcc tgtaggccaa aaactcgtat ttctaataag tataggaata atttcctcca 720
gtcttcatta ctccacaaaa accgggaagt acacacaaga gaaaaatctt tncaacgtaa 780
tgagagtggc naagccttta atggtagctt acttcttaaa aaaacatcag attaatccat 840
ttaggagaca aacagtntaa atg 863

<210> 3823
<211> 835
<212> DNA
<213> Homo sapiens

<400> 3823
aaatccagca gctcttccag ctggtcagac agttcagcta actggacaac ctaacataac 60
tccatcttct tcaccatcac ctgtcccagc tactaataac caagtcccta ctgccatgtc 120
gtcgtcctct acccctcaat cacagggacc acctcctact gtcagtcaaa tgttatctgt 180
gaaaaggcag caacagcagc aacattcacc agcaccccca ccacagcagg tacaagtaca 240
agttcagcag ccccaacgag tacagatgca agttcaacct caacagtcga atgcaggagt 300
tggtcagcct gcctctggtg agtcgagtct gattaaacag cttctgcttc cgaaacgtgg 360
tccttcaaca ccaggtggta agcttattct cccagctcca cagattcctc cccctaataa 420
tgcaagagct cctagccctc aggtggtcta tcaggtggcc agtaaccaag ccgcaggttt 480
tggagtgcag gggcaaactc cagctcagca gctattggtt gggcagcaaa atgttcagtt 540
ggtcccaagt gcaatgccac cctcaggggg agtacaaact gtgcccattt cgaacttaca 600
aatattgcca ggtccactga tctcaaatag cccagcaacc attttccaag ggacttctgg 660
caaccaggta accataacag ttgtgccaaa tacgaagttt tgcacctgca actgtgagtc 720
anggaaatgc aactcagctc attgcttcag canggaatta ccatgagcgg gaacgcagac 780
aggagttggg actttcagta caaacgcttt ncaagccact tnaggcattt tcctg 835

<210> 3824

09693469.0270800

<211> 562
<212> DNA
<213> Homo sapiens

<400> 3824
gacgccgccg ccaccgcctc ctcagagcgg ggcccgggcc cagccgccgc caccgctgcc 60
gccgccgagc tccggcgccg ncgagcacca tgggagacgc tgggagcgag cgcagcaaag 120
cgcccagcct gccgcctcgc tgtccctgcg gcttctgggg gtccagcaag actatgaatc 180
tctgttccaa atgctttgct gattttcaaa agaaacagcc agacgatgat tccgctccaa 240
gtacaagtaa cagccaatca gatttgtttt ccgaagagac caccagtgac aacaacaata 300
cctcgataac cacgccaact cttagtccca gccagcagcc gcttccgaca gaactgaatg 360
taacttcacc gagtaaagag gagtgtgggc catgcacaga cacagctcat gtctcattaa 420
tcacaccaac aaaaagatcc tgtggtacag attcacagtc tgagaatgag gcttnaccag 480
taaaacggnc acgactactt gagaatacgg aacggtccga ggaaaccagt cgatctaaac 540
agaagagtcg acgtcngtgc tt 562

<210> 3825
<211> 831
<212> DNA
<213> Homo sapiens

<400> 3825
agttggcggg aatggctgct cgcggagggg cagtgtacgc ggggccgctg taggctgtcc 60
agcgatggat cccaccgcgg gaagcaagaa ggagcctgga ggaggcgcgg cgactgagga 120
gggcgtgaat aggatcgcag tgccaaagcc gccctccatt gaggaattca gcatagtgaa 180
gcccattagc cggggcgcct tcgggaaagt gtatctgggg cagaaaggcg gcaaattgta 240
tgcagtaaag gttgttaaaa aagcagacat gatcaacaaa aatatgactc atcaggtcca 300
agctgagaga gatgcactgg cactaagcaa aagcccattc attgtccatt tgtattattc 360
actgcagtct gcaaacaatg tctacttggt aatggaatat cttattgggg gagatgtcaa 420
gtctctccta catatatatg gttattttga tgaagagatg gctgtgaaat atatttctga 480
agtagcactg gctctagact accttcacag acatggaatc atccacaggg acttgaaacc 540
ggacaatatg cttatttcta atgagggtca tattaaactg acggattttg gcctttcaaa 600
agttactttg aatagagata ttaatatgat ggatatcctt acaacaccat caatggcaaa 660
acctagacaa gattattcaa gaaccccagg acaagtgtta tcgcttatca actcgntggg 720
atttaacaca ccaattgcag aaaaaaatca agaaccctgc aaacatcctt tcaacctgct 780
gtcttgaaac attacagctt tnttaaggac tcgnatgccc ctatgnctgt a 831

<210> 3826
<211> 539
<212> DNA
<213> Homo sapiens

<400> 3826
atttattgag gggcgtatcc tagtggcccc catccggtct ccgttttgga agacccgcct 60
cggcacagcc aggctcagtc cggccttgcg ctgagaaaag atgacagcaa tcaagcatgc 120
attacaaaga gacatttta caccaaatga tgaacgcctg ctgagcattg tgaatgtctg 180
canagcagga aaaaagaaaa agaactgttt tttatgtgcc acagtgacaa ctgaacgccc 240
tgtgcaggtt aaggtggtca aagtcaagaa atccgataag ggagatttct acaaaaggca 300

US20070009900

gattgcatgg gcccttcgag atcttgctgt ggtagatgcc aaagatgcta tcaaagaaaa 360
tcctgaattt gatttacact ttgaaaaaat atataaatgg gttgccagca gcactgctga 420
aaagaatgca tttatctcat gcatttggaa attgaatcan cgatatctcc ggaagaaaat 480
tgattntgtc aatgttagct cacagctttt ggaagaatct gntccaagtg gagaaaatc 539

<210> 3827
<211> 860
<212> DNA
<213> Homo sapiens

<400> 3827
gtgctggcat caagtaagcc gactacctcg gcaaaggctt agggacaaga gaccagcagc 60
ctgaactggc tggggcatcc ggaaggctta gatcttgtgg ccaagagttc agaccgtggc 120
gaagtggaga gtgacatgca gttggatggc ggtgactgcg tggtatggaa gaaaattcag 180
ctgaaatttg ctagaaaatg agttgttttg gaaagagact gtagagaaag gcaaatggaa 240
gaagaaagct tctgtgcccc cacagatacc gactgaaaag tgttagcatg agcaaaagtt 300
cctatctaat attatatgct ttcctttgct cccaggtctt gcaaccctgg ttccagtctg 360
gcaagcattg tagacctggc tgctgaagac tgacggggcc cagggtccgc tgcccccacc 420
gccatcacca cctcggaacc cagggtaacg ctgtcagtct ttggaccaac ctcgctgtgc 480
ctaacaagaa ttccagaagt cacccatccg aaaggcactg gcccatgaca ctctccactt 540
ccaatcttaa atcttttact tcataccttg tctcagatct ctcctggtac cccttcccca 600
cgcccttaga taatccatct caatccctca tgctaattga ggagctatgg ctgcaaggca 660
cctttcagga tttcacacct acncaaatct nctttttctc cttttgcctt ctctgcttat 720
gggatattct gagtccccac ccccaatcac tgacagctgg gccccttcat taagctacac 780
accacgtatt aagtcaagtc acaatcttcc cttttctcta ctgctggatt tgctttctac 840
cacacccatg attcacgggt 860

<210> 3828
<211> 850
<212> DNA
<213> Homo sapiens

<400> 3828
ttgctacata tggaactatt attattagaa acctttcagt ggaacctctg ccttccaaca 60
gccgcccatt tcattgagta ttatctctct gaagcagtac acgaaacaga tcttcatgac 120
ggctggccaa tgatttgctt ggaaaagact aaactctaca tggccaaata tgcagattac 180
ttcctggaag tatctttgca agctgctgca tgtgtggctt cttcgaggat tatacttcgt 240
ctttctccaa cgtggcctac aagactacat cgtcttactg cctactcttg ggatttctta 300
gtgcagtgta ttgaacgact gttgatcgct catgataatg atgtgaaaga agcaaacaaa 360
cagagagggc aagcaggacc tcagtcagcg caactaagtg tattccagac agcctcccag 420
ccatcacggc cagttcactt tcagcaacct cagtatctcc atcagacaca tcagacctca 480
ctgcagtatc gccatcctac gtcagaacaa ccaagctgtc agcagattgt atcgaccaca 540
cacacctcat cttacacact acagacatgt cctgctggct tccaaactag tgttcagggc 600
cttgggcaca tgcagactgg tgttgggatg tcactggcaa taccagtaga agttaagccc 660
tgtctgagtg tttcttacaa ccggagttat cagataaatg aacattaccc ttgnattact 720
ccatgttttg aaaggtgatt atttgtgaag ctgataaccc gacccagact gctttgtgac 780
atgaactatg ggtaaccgtt ttggaaactt tggtcaaang gaanggatct aaatgacatc 840
gactnttagg 850

0050250600

<210> 3829
<211> 202
<212> DNA
<213> Homo sapiens

<400> 3829
gggccatgag gtccaccagc cccagcaaga gcacaagagg aagagagaga ccctcactgc 60
tggggagtcc ctgccacact cagtccccca ccacactgaa tctcccctcc tcacagttgc 120
catgtagacc ccttgaagag gggaggggcc tagggagccg caccttgtca tgtaccatca 180
ataaagtacc ctgtgctcaa cc 202

<210> 3830
<211> 880
<212> DNA
<213> Homo sapiens

<400> 3830
actagtgaga ggaagatggc ggccgcggct gtggtggttc ccgcagagtg gataaagaac 60
tgggagaaat cagggagagg cgaatttttg catttatgtc ggatcctcag tgaaaataaa 120
agccatgata gttcaacata cagagatttc cagcaagctc tctatgagtt gtcatatcat 180
gtaattaaag gaaatctaaa gcatgaacag gcatctaatg ttcttagtga cattagtgaa 240
tttcgtgagg atatgccctc cattcttgct gatgtattct gcatattaga cattgagaca 300
aattgtttag aagaaaaaag caagagagac tattttacac agttggtatt agcatgtttg 360
tttcagacac agttctaaag gaacgcctgg atccagaaac actggaatca ttagggctta 420
tcaaacaatc acagcagttc aatcaaaagt cagttaaaat caagacaaaa ctcttttata 480
agcagcaaaa attcaatttg ttaagagaag agaatgaagg ttatgccaag ctgattgctg 540
aattggggca agatttatct ggaagtatta ctagtgattt aatcttagaa aatatcaaat 600
ctttaatagg atgctttaat ctggatccca atagagtttt ggatgtcatt ttagaagtgt 660
ttgaatgcag gccagaacac gatgacttct ttatatcttt ggtagaatct tacatgagta 720
tgtgtgaacc gcaaacactg tgtcatattc tttgggttca aattcaagtt ttacccagga 780
accnaatggc gaagacacca tcatctttat accgagttgc agcagtactt ntacaattta 840
atcttattgg tttaanatga tccttatgtc catcttcttc 880

<210> 3831
<211> 824
<212> DNA
<213> Homo sapiens

<400> 3831
aaacgcaggt agccaaagtg gcttgtggag tggcgaccgt tagtgaggcg gttgctgaga 60
cagacgctga ggcgggtagg aggagcccga gccgtaaggg aagccgtgat gagggccgtg 120
ttgacgtgga gagataaagc cgagcactgt ataaatgaca tcgcatttaa gcctgatgga 180
actcaactga ttttggctgc cggaagcaga ttactggttt atgacacctc tgatggcacc 240
ttacttcagc ccctcaaggg acacaaagac actgtgtact gtgtggcata tgcgaaggat 300
ggcaagcgct ttgcttctgg atcagctgac aaaagcgtta ttatctggac atcaaaactg 360
gaaggcattc tgaagtacac gcacaatgat gctatacaat gtgtctccta caatcctatt 420
actcatcaac tggcatcttg ttcctccagt gactttgggt tgtggtctcc tgaacagaag 480

0950304.00800

tctgtctcca aacacaaatc aagcagcaag atcatctgct gcagctggac aaatgatggt 540
cagtacctgg cgctggggat gttcaatggg atcatcagca tacggaacaa aaatggcgag 600
gagaaagtaa agatcgagcg gccgggggggc tccctctcgc caatatggtc catctgctgg 660
aacccttcaa gagaggaacg taatgacatc ctgctgtggc tgactgggga cagaaagttt 720
ccttctacca ctgagtggaa aacagattgg aaaggatcng gcactgactt tgacccctgc 780
tgcatnactc tttactaaag gcagtacatt ttgctngggg gtta 824

<210> 3832
<211> 828
<212> DNA
<213> Homo sapiens

<400> 3832
tttattgacc acagccactt tagaaaagct tcctgtaccc caggtcagtg caactacagc 60
acctgctgga tcagctccac cctcgagcac tttgccagca gcttctagcc ttaaaacccc 120
aggaacttct ttaaacatga atggacccac tttaagacca acctctagta tccctgctaa 180
taatccttta gtgactcagc tgcttcaagg caaagatgtt cccatggagc aaattctgcc 240
taaacctctc accaaagttg aaatgaaaac ggttccactg actgcaaaag aggaaagggg 300
gatgggagcg ctcatagcta ccaacacaac agaaaatagc accagagagg aagttaatga 360
gagacagtcc catccagcta cgcagcagca gctgggcaaa accttgcaaa gtaagcagct 420
cccccaggtt ccaaggcccc ttcagctctt ttcagctaag gagctgaggg actccagcat 480
tgacacacac caataccacg aaggactaag taaagcaacc caagatcaga tccttcagac 540
tctcattcag agggttcgga ggcagaatct tctctcagtt gtgccgcctc acagttcaac 600
ttcgctcact caggtttcca gctggaagac atctccacaa gccagaggtt catgctgggt 660
tttgctggca gaaggacatc caaacctgca atggcagggc actacttact gaatatttct 720
acctacggcc ggggctcana gagctttagg aggacccatt ctgtaaaccc tggaaatcgg 780
tttgnctaac agccccactg aagccttgaa aatgggatat acngactg 828

<210> 3833
<211> 797
<212> DNA
<213> Homo sapiens

<400> 3833
actgttccgc gggcaccggc agcgcagcgt ctccgatagt aagtcgggct gccggccggc 60
tcattccccc agggtaactc tgagcccccg gctccgagct ccctcgaggc cgcctaccgg 120
cgtcgggaac atggatgaga aatccaacaa gctgctgcta gctttggtga tgctcttcct 180
atttgccgtg atcgtcctcc aatacgtgtg ccccggcaca gaatgccagc tcctccgcct 240
gcaggcgttc agctccccgg tgccggaccc gtaccgctcg gaggatgaga gctccgccag 300
gttcgtgccc cgctacaatt tcacccgcgg cgacctcctg cgcaaggtag acttcgacat 360
caagggcgat gacctgatcg tgttcctgca catccagaag accgggggca ccactttcgg 420
ccgccacttg gtgcgtaaca tccagctgga gcagccgtgc gagtgccgcg tgggtcagaa 480
gaaatgcact tgccaccggc cgggtaagcg ggaaacctgg ctcttctcca ggttctccac 540
gggctggagc tgcgggttgc acgccgactg gaccgagctc accagctgtg tgccctccgt 600
ggtggacggc aagcgcgacg ccaggctgag accgtccagg aacttcacta catcaccatc 660
cttcgagacc agtgtcccgg tacttgagtg aatggaggca tgtncagaga ggggcaacat 720
ggaaagcatn cctgcatgtc tgcgatggaa ggctcaactt cgaaaanttg ccacttgtac 780
actggcgata ctggctg 797

0950304.0020000

<210> 3834
<211> 602
<212> DNA
<213> Homo sapiens

<400> 3834
ataacagcat gaagtgccgt ggaactggaa taggcgtgtc ctctccctcg accctccccc 60
tccttgtccc tctgctcacc cctcgctcgt tccctccctc cggcgagggc cgcctttata 120
acaactgctc agagtgcgag ggcgggatag ctgtccaagg tctcccccag cactgaggag 180
ctcgcctgct gccctcttgc gcgcgggaag cagcaccaag ttcacggcca acgccttggc 240
actagggtcc agaatggcta caacagtccc tgatggttgc cgcaatggcc tgaaatccaa 300
gtactacaga ctttgagata aggctgaagc ttggggcatc gacctagaaa cggtggccac 360
agncggggtt gtgacctcgg tggccttcat gctcactctc ccgatcctcg tctgnaaggt 420
gcaggactcc aacaggcgaa aaatgctgcc tactcagttt ctcttcctcc tgggtgtgtt 480
gggcatcttt ggcctcacct tcgncttcat catcggactg gacgggagca cagggcccac 540
acgcttcttc ctctttggga tcctcttttn catctgcttc tactgcctgc tgnctcatgc 600
tg 602

<210> 3835
<211> 869
<212> DNA
<213> Homo sapiens

<400> 3835
tgtttcgaac actaaataga gaagaaattc ctgttaatga tggaatagag ctattgcaga 60
tggttctgaa ctttgatacc aaggatcccc tcatcctgtc ctgcgtcctt actaatgtct 120
ctgcactctt tccatttgtc acctacagac cagagttcct gccccaggtc ttctctaagc 180
tattttcatc tgtcactttt gaaactgttg aagaaagtaa ggcccccaga acccgggcag 240
tgaggaatgt gaggaggcat gcttgttcct ccatcatcaa gatgtgtcgt gactaccccc 300
agcttgtgct gcccaatttt gacatgcttt ataaccatgt gaagcaactc ctctccaatg 360
agctactcct gacacaaatg gagaagtgtg ccctcatgga agccctggtt ctcattagca 420
accaatttaa gaactacgag cgtcagaagg tgttcctaga ggagctgatg gcaccagtgg 480
ccagcatctg gctttctcaa gacatgcaca gagtgctgtc agatgttgat gctttcattg 540
cgtatgtggg tacagatcag aagagctgtg acccaggcct ggaggatccg tgtggcttaa 600
accgtgcacg aatgagcttt tgtgtataca gcattctggg tgtggtgaaa cgaacttgct 660
ggcccactga cctagaagag gccaaagctg ggggatttgt ggtgggttat acatccagtg 720
gaaatccaat cttccgtaac ccctgcacag agcaaaattc tgaaacttct tgacaatttg 780
cttgcgctta taagaaccca caatcattat atgcnccaga aatgctacca aaatggcaaa 840
nccttcacc aaggctntgg atatgcttg 869

<210> 3836
<211> 806
<212> DNA
<213> Homo sapiens

<400> 3836
agtgtcatgg ctgcccacag gtctgcaggc actcggtacg ccgctaacgc ggcgaggtag 60

0507250.0007000

ctcggtgcgt ctcgcggtac cagtgcgaat catcgggcta tccaggtccg agatcctagt 120
ctcctgtcgg ctctgaggag gatggatcct tctgcggata catgggacct cttctcacct 180
ttaatatcat tatggataaa caggttttac atttatttgg gctttgctgt tagcattagc 240
ctttggattt gtgtccagat tgtcatcaag acgcagggca agaacttaca ggaaaaatct 300
gttccaaaag cagctcagga tttgatgaca aatggttatg tctcccttca agagaaagac 360
atctttgtgt ctggagtgaa gatttttat ggttctcaga ctggaacagc aaagggattc 420
gcaacagttc ttgctgaagc agttacatcc ctggatctgc ctgtggccat tattaatcta 480
aaagaatatg atccagatga tcatctgata gaagaggtga ctagtaaaaa tgtctgtgtc 540
ttcctggttg cgacatacac tgacggccta ccaactgaaa gtgcagagtg gttctgcaaa 600
tggttagagg aagcatccat tgattttcga tttggcaaaa cttacctgaa gggtatgaga 660
tatgcggtat ttggcctggg aaattctgcc tatgctagcc acttcaacaa ggttggccaa 720
aaatgttgac aagtggctct ggatgcttgg cgcgcatcgt gtgattnaag cagggggaag 780
gccnactgcg actnggttaa aaacca 806

<210> 3837
<211> 870
<212> DNA
<213> Homo sapiens

<400> 3837
atgctgcaaa tgccgaagtt aaatgaaata cctccgggga gggcaggccg cagggaggct 60
cgggggggagg gaagatggcc tggacaaaca ggtcctgaag ctgcgaggct ggagtggagg 120
gcgcaggggc aggcgggcgg cgccagagct ccatgggaca gctggggaag ctccaggcta 180
cctacacaac ctggcccagg ctggtcacgg tgtccccct ccctgctctg tgccctctcc 240
ttccagaaat ccaccatgga gagtaaggat gaggtcagcg acaccgacag tggcatcatc 300
ctgcagtctg gccccgacag cccggtctcc ccaatgaagg agctgaccca tgcagtgcac 360
aagcagcaga gggccctgga agcgaggctg gaggcctgcc tggaggagct gaggagactc 420
tgccttcggg aagcggagct gacgggcacc ttgccagcgg agtatcccct caaaccaggg 480
gaaaaggccc ccaaggttcg ccgcaggatc ggagcggctt acaaactgga tgactgggcc 540
ttgcacagag aggacccccct aagcagcctg gagcgccagc tggccctgca gctgcagatc 600
acagaggcaa gccgtcggct gtgcctggag gagaacctca gcaggcaggc tcggcggcag 660
cggaagcact tcatgctgca ngaggagaag aactgcagga gcttcagcgc ttgctggtcg 720
agcggcggcg caatagcgag ccaccttccg gctgctggtc tcccctgggc cnaaaactca 780
atggcttttg atgacagttc cttgtanaat ggctcttctg gaaggaaaag gattccaagt 840
ggccaaaact tcttcagagt ttcagccccc 870

<210> 3838
<211> 843
<212> DNA
<213> Homo sapiens

<400> 3838
acgtctgctc agctccgcgg taatggaggc tagggatggg tgctgaagta tcaggctctg 60
gctctagctt tagctctggc actggaactg cgtcggagtc tgggtctgag tctggcagcc 120
cgaagcctgg acacctttc ttgattctct aggcgggggc tgcctgcgtc caagcagctg 180
gtttgcagcg ttccaacgct gggagggagt tcccttacct ggggtccagt ctgtaaagtt 240
gtcgccgctt tctagggacc ccgccccacc ggctgggact cttccatgca gttgaaactg 300
gttgacaacc attaacctgg gttgcaacta caggtggcac tggaagcaga ctggttcctg 360

03507030.0N2000

gacatgcccg gtggaaggag gggccctagt cggcaacagc taagccgttc agctttacct 420
tctttgcaga ctttggttgg tggaggctgt ggcaatggaa caggcttgag aaacaggaat 480
ggtagtgcta ttggccttcc agtcccacct atcacagcct taatcacccc aggtcctgtt 540
cgtcattgcc aaattcctga cttgcctgtg gatgggagcc tactctttga attccttttt 600
ttcatctacc tgttggttgc tcttttcatt cagtacatca acatttataa aacagtgtgg 660
tggtatcctt acaatcatcc tgcttcttgt acatcactga attttcatct cattgattat 720
catctggcag cattcatcac agtgatgctt gcgaagaagc ttgnatggct ctcatctcag 780
aagctactaa ggcangtgca gcatcaatga ttcactacat gggtctgata tcncttgctt 840
tgg 843

<210> 3839
<211> 794
<212> DNA
<213> Homo sapiens

<400> 3839
taagtttcct ttgattctac agtttggggg ttctcaagca gttgcggctg gtccgtattc 60
tgcgcagcac cgtgatggtt cgcgttggtg gaggatggat ggccttggat gaatttttag 120
tgaaaaatga tccctgccga gcacgaggta gaactaacat tgaacttaga gagaaattca 180
tcctaccaga gggagcatcc cagggaatga ccccccttccg ctcacggggt cgaaggtcca 240
aaccatcttc ccgggcagct tcccctactc gttccagctc cagtgctagt cagagtaacc 300
acagctgtac atccatgcca tcttctccag ccaccccagc cagtggaacc aagacttcac 360
ttcagttctc tcgctgttat gacaaaccct ggttggtaaa cagtaaagct ggcacccctа 420
tcagggacag ccattctcct gacctccagc tgcccacccc cgaggttatc ccatcatcag 480
gtagcaagtt gaaacgacca acaccaactt ttcattctag tcggacatcc cttgctggtg 540
ataccagcaa tagttcttcc ccggcctcca caggtgccaa aactaatcgg gcaggtaagt 600
acctgccccg tgacctacaa gccaggctga gaatttggna acaacagcct atgtggaatg 660
tttcactgct cccaaggagc gggtaatgag agtggcactt antgtgatgc ccaaaaagac 720
agacctgcag atgctcaagt gacctttact ttttctgtca ttacagctag cttttaagcn 780
ttccttctga anat 794

<210> 3840
<211> 754
<212> DNA
<213> Homo sapiens

<400> 3840
gacggcaccg tacacgagct caccaagcaa tgccatcctc ttcctgcagc agcttttgga 60
cttccaggag acggcaggcg ccatgctggc ctcccaagag accagctctt cggccaccag 120
ctacagctct gagttcagca agcggctgct aagcacctat atctgtaaag tgctgggcaa 180
cctgcagttg aacttgctga gcaagtccct ggagaagtct gaactgatcc agctggtggc 240
agtgacacag aagactgctg agcgctccta ccgggagcac attgagcagc agatccagac 300
ctaccagcgc agctggttaa aggtgactga ttacatcgca gagaagaatc tacctgtgtt 360
ccagccggga gtcaagctcc gggacaagga gcggcagatt atcaaggagc gttttaaggg 420
cttcaatgat ggcctcgaag aactgtgcaa aatccagaag gcctgggcta ttccagacac 480
agagcanagg gacaggattc gccaggccca gaagaccatt gtcaaggaga cctacggggc 540
ctttctacag aagtttggca acgtgccctt caccaagaac ccggagaagt acatcaagta 600
cggggtggag caagtgggcg acatgatcga tcgccttttc gacacctctg ctgagcctgc 660

0050-0-WO-2005/047509

tgctaaccct gcctggntca acaaactggn gtgtcattgg cagttaacca atgttacttg 720
cctccgggct gggtgaacnt gaagtcctct ggga 754

<210> 3841
<211> 794
<212> DNA
<213> Homo sapiens

<400> 3841
gcattccggt accggacgcc gagagcggtt tgtctccgtc tctggagttg taggcgagag 60
gtgatcatgt ccggtcgcgg gaaacagggc ggcaaagtgc gagcaaaggc caaatcccgc 120
tcctcccgcg cgggcctgca gttcccggtg ggccgagtgc acagactgct gcgcaaaggg 180
aactacgcgg agcgagtggg cgccggggcg ccggtgtacc tggcggcggt gttggagtac 240
cttacggcgg agatcctgga gctggctggc aacgccgcgc gtgacaacaa gaagaccagg 300
ataattcccc gccacctgca gctcgccatc cgcaacgacg aggagttaaa caagctgctg 360
ggcaaagtga ccatcgctca gggcggcgtc ctgcccaaca tccangccgt gctgctgcca 420
gtttgtgagc actcaggacc aagttctggg aagataccgt cggatcgagc tgagctcggg 480
gcaggaagtg tctgcggcca tatttttcaa aaagtggagt aactttccgt cttggaaggg 540
tggctctgat ggcacnatgt caacttgaga ttcttcctag cctagtagct gctgtgcttn 600
catgctttgg atatcagata tctttatata gcacttttat gttcatattt ttttttaat 660
gaaggaaacg ttcaataagt gagtcatgag gtttggaaat tcgttcccct gacagtcata 720
ttgcataaca ttgcaacgcc nttantcgtg ggntaaatat gcttgagctt ttaaagtgat 780
gtttgtcaag tttc 794

<210> 3842
<211> 766
<212> DNA
<213> Homo sapiens

<400> 3842
gcaatcgccg cagccgcccc cgccgtcggc cgccgcaccc caagcgactg cccaaactaa 60
gcctccgtgg ctgggtacgg gagcgctttg gggacaaaaa ttctccctca actgtggtct 120
gcattccttc ggcccgtggg ctgatctggg gcgggaagta ttagcgtctc agttgcgctg 180
cagccgggga ggaaggagga ggccgagcct ggggcggagt ttgggctgac tggggctgga 240
ccgggcaaga cgccgccgct gcccggatgt tgcgatggct gatcggggga ggccgagaac 300
cgcagggact ggccgagaaa tctcctttac agacaatagg tgaagaacaa acccagaatc 360
cctacactga actgctagta ctgaaggctc atcatgatat tgtacgattt ctggtacagt 420
tagatgacta cagatttgca tctgctggtg atgatggaat tgtagttgtg tggaatgccc 480
agacagggga aaaactttta gaactgaatg gacacactca aaagataaca gctattatta 540
catttccttc cttggaatct tgtgaagaga aaaatcaact catcttgaca gcctctgctg 600
atagaacagt tattgtgtgg gatggtgata ctaccagaca agttcagaga atatcatgct 660
tccagtctac tgtaaagtgt ttaactgttc ttcagagact anatgtttgg ctttctggtg 720
ggaatgacct gtgtgtgttg gaaccgaaaa attagatntc ccngtg 766

<210> 3843
<211> 811
<212> DNA
<213> Homo sapiens

09/02/2005

<400> 3843
gcaaagattc tcaacctgaa gctgcgggaa gcagagcagc agcgcgtgaa gcaagcagaa 60
caggagcggc ttcggaagga agaaggccag gtccgcctgc gggccctcta tgctctgcag 120
gaggagatgc tgcagctcag ccagcagctg gatgcctctg agcagcacaa agccctgctt 180
aaggtcgacc tggctgcctt ccagacccga ggcaaccagc tgtgcagcct catctcaggg 240
atcatccggg cctcttcaga gagcagctat cccacagcag agagtcaagc tgaggctgag 300
cgagctctgc gggaaatgcg ggacctcctg atgaacttgg ggcaggagat caccagagcc 360
tgcgaagaca agaggaggca ggatgaagaa gaggcccagg taaagctgca agaggcacag 420
atgcagcagg gaccagaggc ccacaaagag cccccagctc ccagccaggg cccaggaggg 480
aaacagaatg aagacctcca ggtgaaggta caagacatta caatgcagtg gtaccagcag 540
ctgcaggatg cttccatgca ntgtgtgttg acctttgagg gcctgaccaa cagcaaggac 600
agtcaggcca aanagataaa gatggacctc cagaaggctg ctaccatccc agtgagcaaa 660
tctctaccat tgcangctca aaactgaagg anatcttgac aagattcaaa agcctgctct 720
ctgggaaaan ctgttcaatc tggtgggcgc tctgtgtctt cacacttaac ccacangggc 780
tggctttgtc atacaaactg gcagngaaat t 811

<210> 3844
<211> 594
<212> DNA
<213> Homo sapiens

<400> 3844
gcaggccggc cccaccctcc tgacggtcac cctggtccct gaagctgcct ggatatggtc 60
gccatgcagg aagccgccca gcacctcctc ggcacacacg acttcagcgc cttccagtcc 120
gctggcagcc cggtgccgag ccccgtgcga acgctgcgcc gggtctccgt ttccccaggc 180
caagccagcc ccttggtcac ccccgaggag agcaggtgag gaagggcccc tgggctgtgg 240
ccctgccctc aagtcacgtg ctgattttag ctccagcacc tcccccagtt ttaaggcaag 300
gcgaggccct caacacacac ctgcggcacc cggccatcag ggtcctgcgg gccttccgag 360
tgcccagcga cttccacgct cgtcacgcag ccacgtcccg gacctacctg taccgcctgg 420
ccactggctg tcaccggcgt gatgagctgc cggtgtttga acgcaaccta tgctggactc 480
tcccggcaga gtgagtgtgg ccctgacagc ggggaggggg cgggcaagcc ggcccaacct 540
cctgacggtc ancctggtcc ctgaagctgc ctggatatgg ncgccatgca ngaa 594

<210> 3845
<211> 528
<212> DNA
<213> Homo sapiens

<400> 3845
tttttccggt cggcgtggtc ttgcgagtgg agtgtccgct gtgcccgggc ctgcaccatg 60
agcgtcccgg ccttcatcga catcagtgaa gaagatcagg ttagaaaatg gatttctgac 120
tggaatctca ccactgaaaa aaagcacacc cttttaagac tactttatga ggcacttgtg 180
gattgtaaga agagtgatgc tgcttcaaaa gtcatggtgg aattgctcgg aagttacaca 240
gaggacaatg cttcccaggc tcgagttgat gcccacaggt aatgttaaac gttactctga 300
tgagggtttg acagcgatgt agaggtaagc tacaatatta aattaagtaa ctgaaatcat 360
gtttgcaact accagtgatc cagagccatt tgatagtgtg tatttcctgg tgattctaat 420
gtagatacta aaattcaagg tttgatattg gaagaactgt ggattgaata tgaagtagct 480

0050205.0050205

gcatggcgtt tacctggcgg ggggggggtat tgctggtatg gggatnnn 528

<210> 3846
<211> 672
<212> DNA
<213> Homo sapiens

<400> 3846
aaaaaaaaaa gagctccgtc ctgacgcgcc gcctcccgtg ggctccggcc ggctaagccg 60
cggcggacaa ctatgctgaa agccaagatc ctcttcgtgg ggccttgcga gaccttgatt 120
ccaaccactg cccggaggag gtagtggagg cgagcccggt gttaatgagc cccgaaggcc 180
caagagtgga aaaactgttt tggccaactt tctgacagaa tcttctgaca tcactgaata 240
cagcccaacc caaggagtga ggatcctaga atttgagaac ccgcatgtta ccagcaacaa 300
caaaggcacg ggctgtgaat tcgagctatg ggactgtggt ggcgatgcta agtttgagtc 360
ctgctggccg gccctgatga aggatgctca tggagtggtg atcgtcttca atgctgacat 420
cccaagccac cggaaggaaa tggagatgtg gtattcctgc tttgtccaac agccgtcctt 480
acaggacaca cagtgtatgc taattgcaca ccacaaacca agctctggag atgataaagg 540
aagcctgtct ttgtcgccac ccttgaacaa gctgaanctg gtgcactcaa acctggaaga 600
tgaccctgag gagatccgga tggaattcat aaagtattta aaanngcata atcaactcca 660
tgtctgagag ca 672

<210> 3847
<211> 636
<212> DNA
<213> Homo sapiens

<400> 3847
aggaatgttg gtgctcccag cacctagcac cgggagactg gagaggtttc caggagagtg 60
acccgagtag gtcccctcct aattctggag ccgtccctcg ggctgcgcag tggagcgccg 120
aggtggcggg aggctgcggg gagcctgcgc ggccaagcac catctgcagt caggagctcc 180
cgggcagctt gcagggcgca gtttttgaaa gcgggtgctg cgtgcggacc gcgggcctgc 240
agggatcttt tgccagaaat gagggcatac tggcctgacg taattcactc gtttcccaat 300
cgcagccgct tctggaagca tgagtgggaa aagcatggga cctgcgccgc ccaggtggat 360
gcgctcaact cccagaagaa gtactttggc agaagcctgg aactctacag ggagctggac 420
ctcaacaggt gggtgcgccc ttccccggc tgcacttccc agtggggatc tctgctgtcg 480
cccaagcctg acagctggat ccaggggagt gggtgtagac ctcactgccc tccaagcagc 540
ttctgcatgt gcactattcg actactgggg atcattcctg angaatgttc tgancctacc 600
aagcctttcc agatcattcn acatcacgat cacaca 636

<210> 3848
<211> 838
<212> DNA
<213> Homo sapiens

<400> 3848
tttatattgt gtaataactc acgtactctg aagagagctt ggtcaaacaa taaaatacat 60
tgttactaac ttggtttctt ttctgtgtac tttgcaaaaa ttctattttt aattttgttc 120
atatgttgaa tgtgccccta attggcatct taaagagaat agtaagcatc tattaaccaa 180

0000250.0000250

aaaagaactc taatagtaaa ggaaagggaa atattggtgg tatgtaccca caaaaccccc 240
aagtgccaag ttaatggaat ctctgctttc cctttcagat gctagaaagc cactgtaatg 300
agttcttgca gtttagcatc cagtctaagc tactgcattg tttaaagggc agcatcaagg 360
acactttctc caaactggaa ctctcttctt tgtcaaatct tgtactttaa aattctacaa 420
ttctgttaca ttgttgttta aatcacagac tgctcagatc cattttactg cagtagtttc 480
caagtgtgta acttggcttt agtatttatc agttgccaga aagaaacagg ttgtcatttg 540
gaagtttttg tgggtatttt ttcccatttt tattcctcaa gataaaagca gtaccccaaa 600
atagaaaatg aaaatttcat gaaacaaaga gaactccctt gttaaaacca gcttattaac 660
tccgtantct gtcaaatgca ttttttttcca acaactgacc atggatgttg tgaaggngca 720
ttttaattta aacatgggaa aagatttttt canaattaca tactaagaat gtaaaattaa 780
naattttgcc aaggacttaa agagcacagt tgataatccc aaagggtttg atnccaaa 838

<210> 3849
<211> 716
<212> DNA
<213> Homo sapiens

<400> 3849
agtcagaggt taacggaaaa cggaagctgg ctggctgaga agaagcttcc gttagtccta 60
ccttgaagag aaaagagcca gataaagaga aagattaaaa gtatgagaaa atacagaagc 120
cactggtctc agggagacag agaaggatac caaagaagaa gtaactatta tgaggggcca 180
cacaccagcc actcaagccc tgcggaccgg acacgtgagg aggtagtgac gccgacactg 240
ccagaacaca ctgctacaag gtcccagatg gccacgtctc tggattttaa aacttatgta 300
gatcaggcat gtagagctgc tgaggagttt gtcaatattt actatgagac aatggataaa 360
agaagacggg cactaaccag gctgtatctg gacaaggcca ccttaatatg gaatggaaat 420
gctgtttcag ggctggatgc cctaaataat ttttttgaca cattgccttc tagtgagttc 480
caggtcaata tgttagattg ccaaccagtt catgagcaag caactcagtc ccaaactaca 540
gttcttgttg tgaccagtgg aactgtgaag tttgatggaa acaaacaaca tttcttcaac 600
cagaacttcc tgctgactgc tcagtccact cccaacaata ctgtgtggaa gattgcaagt 660
gattgcttcc gttttcaaga atgggccaan tantttaang ggcaaaaagt ccaatc 716

<210> 3850
<211> 588
<212> DNA
<213> Homo sapiens

<400> 3850
ttcttgctca gtataccttc acganttctt gctaagattc caaaatcttt agcttggcat 60
ttgggatttt ctacagtacg aaccctgtcc atcacataaa ccttaacgtc actacatgtg 120
cttatgcaaa aggggctgcc tgaatgagtt gcttgagtgt atgtactagt tggataanta 180
cctgtttgcc attgcttgct gtttatatta cctggaatgc catccttttc ttcttgacag 240
ctttagcaca catccctcct cagtaaaaat agtggcttaa gtttcctgag tgcttacgtc 300
tgtgaggcac catgccttta atttccacta ttgcattgaa gcagtggata tngttatcag 360
tcaagccttg aacattagaa tatacacacc caaatatata tacacacctt gtgacacagg 420
tactgttatc atcatcttgc atttggagga tttgtccaag atcacatacc tagtaagtag 480
cacgagtggg nctctgtctc atgtaattcc agagcccagg tgcttaagtc atactcnagt 540
gccatagcac ttacagctaa cacttactag angaccagtt acatgtca 588

0960469 .0720800

<210> 3851
<211> 850
<212> DNA
<213> Homo sapiens

<400> 3851
ttcccttagg ccgatgcgtg gagaccattg tttctgccat caaggaaaac ttccaattca 60
agaaggatgg acactgcttg aaagaaatct accttgtgga tgtatctgag aagactgttg 120
aggcctttgc agatgctgtt ggtgaaagag ggtgtgcaga atgctaagac cgatgttgtt 180
gtcaactccg ttcccttgga tctcgtgctt agtagagggc ctctttctaa gtccctcttg 240
gaaaaagctg gaccagagct ccaggaggaa ttggacacag ttggacaagg ggtggctgtc 300
agcatgggca cagtgctcaa aaccagcagc tggaatctgg actgtcgcta tgtgcttcac 360
gtggtagctc cggagtggag aaatggtagc acatcttcac tcaagataat ggaagacata 420
atcagagaat gtatggagat cactgagagc ttgtccttaa aatcaattgc atttccagca 480
ataggaacag gaaacttggg atttcctaaa aacatattcg ctgaattaat catttcagag 540
gtgttcaaat ttagtagcaa gaatcagctg aaaactttac aagaggttca ctttctgctg 600
cacccgagtg atcatganaa tattcaggca ttttcagatg aatttgccaa aagggctaat 660
ggaaatctcc gtcaagtgac aaaattccga agggctaaag atacacaang gtttttaagg 720
ggactgtttc caancoctga ttcaaggtgt gtatgaaatg gaagattggg tccatcatct 780
tccaagtggg cttccggaga attcacnaan aggggaaggg aaatgtgatt gtaaattcaa 840
catcaanact 850

<210> 3852
<211> 627
<212> DNA
<213> Homo sapiens

<400> 3852
agacgggctg caagagggag ccggcccgac gcggaccgct tccctgcagt gccccgagtc 60
ccgggcccgc gccgccgccg cccggctccg ctcgcggccc ctctgtctgc aggcgtgccc 120
cggcggcggc ggagagccgt cctcggccga ggaggctggg aaacgcgagc gcaggcggca 180
gagaggcctc aacgccgtcc ctttcgccac cgcctttcc ttgcctcgcg ccgctgtgca 240
tttctctcct tttcctttgt ttttttggcc cctcgcgggt gtgggcattg ttggttagca 300
aaagtgcagc ctcaagatgg ctgatggcaa cgaggatctg cgggctgacg acttgcctgg 360
gccagccttc nagagctatg agtccatgga gcttgcctgc cccgctgagc gcancggcca 420
cgtanccgtc agcgacgggc gccacatgtt cgtctggggc ggctacaaca gtaatcaagt 480
cagaggatta tatgactttt atctgcctan agaagaacta tggatctaca acatggagan 540
tggaagatgg aaaaaaatca acactgantg tgatgttcct ccttctatgt catgaagctg 600
tgctgtgtgt gtanacaggt gctgtac 627

<210> 3853
<211> 772
<212> DNA
<213> Homo sapiens

<400> 3853
attaatccca atataaggtt ataatatttt tctttacatt ctttttttag taagaaaaat 60
gtagttttga accatcatat aatactagaa ctaattagga gaaatttaaa tcctctttgc 120

0502548.0720001

tttatataag tatagtatat atttatttag cagaataaat gtttatggtt gaaaatggct 180
gggattatag ttgtgagcca ttgtgcctgg cctattttca gtatttttgt ttaaattttg 240
taaaaaggta aaataaatga tttttgaaaa tagctggagt tgttttcata gagtctgtgg 300
ttataggact atttaactat atattgagta aaatctatgc tatgtcaagt tttattcagt 360
tgtccctagt agaatatatt tctcttttaa ttctgtatac agtatgagta actccagttt 420
aaaacactgg tattttaatg agtttaaatt gtactgttat atattatgat acatattttt 480
cttctggctg tggtttagtt tttaaaattt ttgatgtcca ttttaatttt tagaaataaa 540
agcttaaaaa tatgggtgga agtagatttc agtttgatga ttatcttggc gaaagtatag 600
tacctgtgaa atggtggtaa taatttgatt ctttattcta ttttgattgt agctcctttt 660
gtaagggagc atttgtaaaa tttaagttgc tttagagtta tacaaaatcc ttttattacc 720
atttattaac cngtttggtn gttttaggga cctggatccc aancctttga ag 772

<210> 3854
<211> 729
<212> DNA
<213> Homo sapiens

<400> 3854
ttctttcttt cattccttcc ttcctctgtt tctttctttc ttcctttcat ttttttttct 60
tttttaagag cgagcggctc tgcggtggcg gtttggggtg ggcgccgccg aggtgaggtc 120
gtctcgcctc ccgcgcgccg gtagattggt tgtttcatta tggatggagg ggatgatggt 180
aaccttatta tcaaaaagag gtttgtgtct gaggcagaac tagatgaacg gcgcaaaagg 240
aggcaagaag aatgggagaa agttcgaaaa cctgaagatc canaagaatg tccagaggag 300
gtttatgacc ctcgatctct atatgaaagg ctacaggaac agaaggacag gaagcagcag 360
gagtacnagg aacagttcaa attcaaaaac atggtaagag gcttagatga agatgagacc 420
aacttccttg atgaggtttc tcgacagcan gaactaatag aaaagcaacg aagagaanaa 480
gaactgaaag aactgaaggg aatacaagaa ataacctcaa gaaggttgga atttctcaag 540
agaacaagaa ggaanttgga aaagaaactg actgtgaagc ctatagaaac caagancaag 600
ttctcccagg cgaagctgtt ggcaggagct gtgaagcata agagctcaga gagtggcaac 660
agtgtgaaaa gactgaaacc gggaccctga gccangatga cangaatcag gagccctcaa 720
cntgcaaag 729

<210> 3855
<211> 277
<212> DNA
<213> Homo sapiens

<400> 3855
acttaancgg gatggaacgg aacgggaggc cccggctggt gggcaggtcg cctgctgctg 60
atacaggaag ggacaaaggg ctcggacgat tccggtcttt ccttagctgc tctccttgca 120
agctctttca tccccatggg tctcttgatg agtccaacaa gacgggcatg gagcccgatc 180
tcacagatgg ggaagctgat gccagcggca gcttccccca gcacagaaga nagctcctgg 240
nattccagca aggggtgact ggaacnaaaa ccaggga 277

<210> 3856
<211> 712
<212> DNA
<213> Homo sapiens

0952469.0725300

<400> 3856
gtaagtatgc acggatgaag atggaactaa gccgagtaag aagacataca aaagcctctt 60
ctgaaggaaa agacagtgta gtcctgcaaa acattttgag gtacattgtt ttgtctcagc 120
tattttgtag cagactcgtg cccccattag tgtgcctctt tggaaattat cgcccacatt 180
tgtaatatag tcgccattga aaagttaatt atccttttt tagggatttt gatgtcattt 240
ctttttttt tttaataaaa aggttgaact gttttttttt tttttctttt tggtattaag 300
tccatcttgt gttggtacat tggcagagac atatgcttta aaaacttaaa tatttcggag 360
gcacatgttg gactactttg ttttaattaa actgctagta tttctttgtc aaggatgttt 420
ctagtttttt gctttattgc cttgcattct aatgcagttt gttctgtaac tcgagagcca 480
gtagcattgg attgatggaa agtgtanggt ttatgaatta ttgcaagctg actaccatac 540
ctcacacagc gttggtgttg tgaagcggcc catgaaaagc caaattaaaa atcaaggatt 600
cagtcaaact aagcaggtac tcaagccaag tactcctttc ncnaaccaaa tccaangttt 660
ggaaatggcc aaattggccc tggtgaaatc ctttaaccgc cctttaaaac cc 712

<210> 3857
<211> 721
<212> DNA
<213> Homo sapiens

<400> 3857
ttagtaattg ttttataaat ttgggaagct ccagtcttag gtgcataaat gtttaggatt 60
gtgatatttt cctgttgcca aggctggagt gcagtggcac gatctcagct cactgcaacc 120
tccatctccc aggttcaagc gattctcctg cctcagcctc cccgagtagc tggaattaca 180
ggcgtgggcc accacgccca gctaattttt ttttttattt ttagtggaga tggggtttca 240
ccatggtggc cagactgatc tcgaactcct gacctcaaat gatccacctg cctcagcctc 300
ccaaagtgct gggattacag gcatgggcca ctgtgtccag ccaaataaag tcagttttaa 360
tgaacatagg ttcatggtgt gccataggtt aagtttttat acagttggta ttaatcaaca 420
ggaaattata atgcaaactg catatactct taaaaacttt tctggaactg agtggatctt 480
gaaaataaaa atgattgtta agatatttca aaggattatt gtaaatttcc aaattctgtt 540
ttttaattct ttacttttaa tcataaagta taccatctat ttgaaaacag gtataccaca 600
atgtacctac ttcatagngt tgctatataa tgcgaagaac aatgcttaac acatcgtaag 660
tatgcgatta aatgtcacca ntgcccttga nttggttaag caccttttaa ggcacaccca 720
n 721

<210> 3858
<211> 746
<212> DNA
<213> Homo sapiens

<400> 3858
attttacata acccagggaa aactagcatg ctttgttctc aggctccctg ccatggtcaa 60
aagcacccca aatctgaaaa gattcttggt aatttattcc ctttcatccc taaagaggag 120
cctttaagat atgtcagggt tgatcttttt ttcagaacct aatgtgtaga tattcagaaa 180
tgactctgga agacaaaaat ttggattgtc agaaggaggc tgctcatata attaatgcca 240
tgtaagtaat tgctttgttt ttaaaaagcc catcgagtgt aaatgttaaa tgtatttgtc 300
tttaaaaatc tattagcact aaactgactg catcgagtat cctagaattc acttaagtct 360
tgccaagaaa ttaaggagct tcaggaactt ggtgttccaa agcccttac cccaggtggt 420

0962946.0720800

agcaaattga aatcatgaaa gtttaaacca ctgcacagct tacagatctg cagggtagct 480
ctgcagttgc cttgcaagga tatagagaag ttaatatctc aaatatttag taacatttat 540
gctaatgagc cttccataat aaccataaat ggctttcaca tgttgtttgt ttaatgtgaa 600
ctggcagagt atctattgac aagaaaacat tgtggagtcc tgagacaatt gaaaataagc 660
cgaaattcac tttcctgaaa tatacattcc ttcacataag aactaaacan tgtattcccc 720
aaagaaacat aattanttcc cngatc 746

<210> 3859
<211> 767
<212> DNA
<213> Homo sapiens

<400> 3859
attgcaaact tgggacaagc aagccaaatt gtcccgggca tatgatggta ccacttacct 60
gccgggtatt gtgggactga ataacataaa ggccaatgat tatgccaacg ctgtccttca 120
ggctctatct aatgttcctc ctctccggaa ctactttctg gaagaagaca attataagaa 180
catcaaacgt cctccagggg atatcatgtt cttgttggtc cagcgttttg gagagctgat 240
gagaaagctc tggaaccctc gaaatttcag ggcacatgtg tctccccatg agatgcttca 300
ggcagttgta ctttgcagta agaagacttt tcagatcacc aaacaaggag atggcgttga 360
ctttctgtct tggtttctga atgctctgca ctcagctctg gggggcacaa agaagaaaaa 420
gaagactatt gtgactgatg ttttccaggg gtccatgagg atcttcacta aaaagcttcc 480
ccatcctgat ctgccagcag aagaaaaaga gcagttgctc cataatgacg agtaccagga 540
gacaatggtg gagtccactt ttatgtacct gacgctggac cttcctactg ccccctcta 600
caaggacgag aaggagcagc tcatcattcc ccaagtgcca ctcttcaaca tcctggctaa 660
gttcaatggc atcactgana aggaatataa gacttacaag gagaactttc tgaagcgctt 720
ccagcttanc aaagttgcct ccatatccaa nccttttgtat caagaga 767

<210> 3860
<211> 782
<212> DNA
<213> Homo sapiens

<400> 3860
ataaatgatg cttaattctt tgtctacaga ttgctgctct ctgaacacta tagtcgtcga 60
atctcacaag cgtacggtct gatgaatgaa ctgttatctg agtcagtaca gctaccaact 120
ctaccacaga aaccattgcc taacaaaccc agccctactc agtcttccag ttgtcaacac 180
tgcccttctc caagaggaga gaatcaacat ggtcacagtt ttctaataaa tcgacctgga 240
aaagtcaaat atatgtccaa accgagttat atccataaga ggaagtcttt tgggcaacct 300
caaggctcac cttggccaca tggaactgcc actttcacca tacagaaaaa agctggtgga 360
gccaaagcag cagtaagaaa ggctacgcag tctccagtta ccttccaaaa aggctctaat 420
gctccgtgtc atagtctgca gcatacaaaa aaacatggaa gtgctgggct tgcacctcaa 480
accaagcagg tgtgtgtaga gtatgaaaga gaggagactg tggtgagtcc ctggacgata 540
ccttcagaaa tccataagat tcttcatgag agtcacaatt cccttctaca agacttgtct 600
ccaactgaag aggaagagcc agagcatcct tttggggtgg gcggtgtgga cagcgtgtct 660
gagagcactg gcagcatcct cagcaagctg gactggaatg ccatcgaagg acatggtggg 720
ccagcgtgga ngaccanggg cctgtctgtc cacnggggcc ctgggacctg taagaacctg 780
gg 782

09620360.020202

<210> 3861
<211> 810
<212> DNA
<213> Homo sapiens

<400> 3861
taaatatgga tatgaacagt attaaagagc cacagtcaag actaaggaag tggacgacag 60
tggacagcat ttctgtgaac acatctttgg atcaaaactc cagcaaacat ggtgctattt 120
caagtggttt caggctggaa gagtctccat ttgttcccta tgactttatg aacagcagta 180
cttcaccagc cagtcctcca ggttcaatag gagatggctg gccacgtgcc aaatcgccta 240
acggctctag cagtgttaat tggccaccag aatttcgtcc tggtgagcca tggaaaggtt 300
atccaaacat tgaccctgaa actgaccctt acgtcactcc tggcagtgtc ataaacaatc 360
tttcaattaa tactgtgcgg gaagttgacc acctcaggga caggaacagt gggtcatcct 420
catccttgaa caccacgctg ccttcaacta gtgcctggtc atccattcgt gcctccaact 480
acaacgttcc cctcagcagt acagcacaaa gcacttcagc cagaaatagt gattccaaat 540
tgacatggtt tcctgggttc agttacaaac acctctctgg ctcatgagct gtggaaggtc 600
cctttgccac ctaaaaacat cactgctccg tcccgcccac ctccgggact gactgggtca 660
gaagccancc ttgtctacgt gggataattc tccccttcgt anaggtggag ggatggggga 720
aattctgacg ccagatatac cccaagttcc agctggggtg agaagcagct caaggagaat 780
aacaaattgg gcttggttcc naaaaannag 810

<210> 3862
<211> 706
<212> DNA
<213> Homo sapiens

<400> 3862
gaagacagat ttcctgatat aatgacttgt catcacagat cttgtgtgga ttgcttacga 60
caatatttaa ggatagaaat ctctgaaagc agagttaata ttagttgccc agaatgtact 120
gaacggttta atccccatga tattcgcttg atattaagtg atgatgtctt gatggaaaaa 180
tacgaagaat ttatgcttag acggtggctt gttgcagatc ctgattgtag gtggtgtcca 240
gctccggact gtggatatgc tgtgatagca tttggatgtg ccagctgtcc aaaattaact 300
tgtgggcgag agggctgtgg aacagagttt tgctaccact gtaaacagat ttggcacccc 360
aaccagacct gtgatgctgc tcgacaagag agagcccaga gcttacgttt gagaactata 420
cgctcttcat ccattagtta tagtcaagag tctggagcag cagctgatga tataaagcca 480
tgtccacgat gtgctgctta tataataaag atgaatgatg ggagctgcaa tcacatgaca 540
tgtgctgttt gtggttgtga gttttgttgg ntgtgtatga aagaaatctc aaatttgcat 600
taactaantc catcangatg tacttttggg ggaagaaaac ctggagccga aagaagaaat 660
attgtggcaa ctggggaaca ctgggttggn gctcctgtcg gaatcc 706

<210> 3863
<211> 719
<212> DNA
<213> Homo sapiens

<400> 3863
aaaaagccgg cttccggaag ccgggacgat gtccgcatga caaccgacgt tggagtttgg 60
aggtgcttgc cttagagcaa gggaaacagc tctcattcaa aggaactaga agcctctccc 120

0956946.0720

tcagtggtag ggagacagcc aggagcggtt ttctgggaac tgtgggatgt gcccttgggg 180
gcccgagaaa acagaaggaa gatgctcctg ctgctgtcct atgacctctt tgtcaattcc 240
ttctcagaac tgctccaaaa gactcctgtc atccagcttg tgctcttcat catccaggat 300
attgcagtcc tcttcaacat catcatcatt ttcctcatgt tcttcaacac cttcgtcttc 360
caggctggcc tggtcaacct cctattccat aagttcaaag ggaccatcat cctgacagct 420
gtgtactttg ccctcagcat ctcccttcat gtctgggtca tggtaagagt ggcagtctga 480
attcttttt taatttttat tttaaataga ggtggggtct tactttgtta ccaaggctgg 540
tctcaaactc ctgagctcaa gcaattctcc tgcttctgcc tcccaagctc aagcaattct 600
cctgcttctg cctcccaaag tgctggaata caggcatgag tcactgtgcc ccggcctgaa 660
ctctgaattc ctgaatcgct aaagggctag gaataacttt nctttncttt nctttcttt 719

<210> 3864
<211> 805
<212> DNA
<213> Homo sapiens

<400> 3864
aaagattcaa gttttataaa aatttataaa aacattttct gtattatttt gctgcatgtg 60
aaactttccc ttataattta acaaaagatt tcattcacat tggcaattgt tcattaataa 120
ccaaaacaat aagtaaccta atttcgcaag acctaagaaa attggcacta ggttctttta 180
tacattttaa ctgtactgga ctacagcgta agtttcagaa attttacttc tatttttga 240
aggtacatag tgtaactgct taagatcaat ttggatttca ttttcatcgt aaaaatgtct 300
tgataaattc catacactgt agaataagcc tttcactaag gctggcatca acataaatgc 360
agttattgca tatctggcaa aaagaggtca ttaacagaaa aaaatgacta gccattcaat 420
gagacaaata aaaatacaaa aagttataat ctcatttggt aacacattat ttactatgaa 480
cagaaatttc ttattagccc tcaacactgt catctggtaa tggctccaga cagtactttc 540
acgtaatatg ggcatattaa ctaatttttc caatcacttg ttcaaaactt ggtcttaaga 600
aagcaaatca tgcctggagg agaaaaaaga agctaaaang taaatangga atgaattaaa 660
aactagacta tggtatgctg aatgagaaat atagtaagta tatttaatca taacctgata 720
attacnttaa tggggccacg aaaataatgg atttactaca tttccttgaa gaaaatattt 780
caatnnctaa ggaancctaa ccttt 805

<210> 3865
<211> 781
<212> DNA
<213> Homo sapiens

<400> 3865
aaagagcttt ttctttctca aataagaacc tgttaacctc taaatccact tatcttcaat 60
agcgccttag ggaggtgatg gagagagttc tggctggggc accttccttg ctccccctga 120
gtagcactaa gtaatctcac aggacaggca aggcctttct gaagaggtct tagagtgcag 180
ggaattgcat gacaggtgct gttagccacc ttggaagaac tgcaggcctt gcgtggtgcc 240
accttgtttg cgggaagccc agccctgtcc attcccctgg ccctagcatc tgtttatcta 300
atagcagtac caatttttat tgttaggata agttgtagga gaaattagca aaggttaact 360
gactgctgtg ggtagacagt acaattcttc ttcagtttct gacttaggag tgtttccgaa 420
aagttaagtg aaaacaaaag tttgaagtgt ttccctttta gttacataac agacactcat 480
tacggaattg aacagtttta gacccataaa taattaagtt aaaagcataa caaaatcctg 540
ttaggaaact gatgaaaaat ttgtttctaa aacactttag attttaaact tgaacacgta 600

0960450-070800

gtgaaatgtc ttttaaaaca atgaagatgg gtgcagtgtt cacaggcctc tccactaagc 660
agatgtctac tgagaacaca gtattanggg atgtgggtgg gaanaaagat gcaatgggca 720
aagcctcaac ctgggcgaac tggggcaagc tcgctctctc aaggcaacaa gtnaaggaaa 780
g 781

<210> 3866
<211> 674
<212> DNA
<213> Homo sapiens

<400> 3866
gagcgcggcc cctgggttcg aacacggcac ccgcactgcg cgtcatggtg ctggcctggt 60
atatggacga cgccccgggc gacccgcggc aaccccaccg ccccgacccc ggccgcccan 120
tgggcctgga gcanctgcgg cggctcgggg tgctctactg gaagctggat gctgacaaat 180
atgagaatga tccagaatta gaaaagatcc gaagagagag gaactactcc tggatggaca 240
tcataaccat atgcaaagat aaactaccaa attatgaaga aaagattaag atgttctacg 300
aggagcattt gcacttggac gatgagatcc gctacatcct ggatggcagt gggtacttcg 360
acgtgaggga caaggaggac cagtggatcc ggatcttcat ggagaaggga gacatggtga 420
cgctccccgc ggggatctat caccgcttca cggtggacga gaagaactac acgaaggcca 480
tgcggctgtt tgtgggagaa ccggtgtgga cagcgtacaa ccggnccgct gaccattttg 540
aagcccgcgg gcagtacgtg aaatttctgg cacagaccgc ctancantgc tgcctgggaa 600
ctaacacgtg cctcgtaaag gtccccaatg taatgactga gcagaaaatc aatcactttc 660
nctttgcttt taaa 674

<210> 3867
<211> 670
<212> DNA
<213> Homo sapiens

<400> 3867
agtgcgcctg cgcggagctc gtggccgcgc ctgctcccgc cgggggctcc ttgctcggcc 60
gggccgcggc catgggagag gccgaggtgg gcggcggggg cgccgcaggc gacaagggcc 120
cgggggaggc ggccaccagc ccggcggagg agacagtggt gtggagcccc gaggtggagg 180
tgtgcctctt ccacgccatg ctgggccaca agcccgtcgg tgtgaaccga cacttccaca 240
tgatttgtat tcgggacaag ttcagccaga acatcgggcg gcaggtccca tccaaggtca 300
tctgggacca tctgagcacc atgtacgaca tgcaggcgct gcatgagtct gagattcttc 360
cattcccgaa tccagagagg aacttcgtcc ttccagaaga gatcattcag gaggtccgag 420
aaggaaaagt gatgatagaa naggagatga aagaggagat gaaggaagac gtggacccca 480
acaatggggc tgacgatgtt ttttcatctt cagggaagtt tggggaaagc atcagaaaat 540
tccagcaaag acaaagagaa gaactcctca gacttggggt gcaaagaagg ccanacaaac 600
ggaagcgcaa ccggggtcac cnacaaagtc ctgaccgcaa acagcaaccc ttcaattcca 660
ntgctgccaa 670

<210> 3868
<211> 711
<212> DNA
<213> Homo sapiens

0960345.0720000

<400> 3868
gaaaatgctt gtgtcgcctt tggtgggcca tgtcctaatt agtttcatct gcttccctgg 60
gaacttacta aggggcccag agcactgttg gaagtctggt tagagtcccc agagagttac 120
tctaagttaa aatgagccac tgaccttggc tcaccttaga ggaatttcct cgagaacaac 180
agagataaga aaagaaccag cctggccaat ccttcaacag ctctagagcc ccttttctct 240
gctggcaggg gctttgttta ccagctcact gtttaggcta aatgttaggg accagatcac 300
tgcagttgaa aacaggcact ccaggcttag tgacagtggc agcagaaaca gtgttggctg 360
cctttctgac caccccactt tcctgccctg agacagcacc ccagggcagg tgcttcatat 420
tcagaccagg taagcctcat ttgcacaaca gtcaaattgt ttgttccttt aaaaaggaca 480
caattagcct ggcacggtga ctcatgcttg taatcccagc actttgggag ggcaaggcaa 540
gcggatcacc tgaggtcagg agtttgagac cagcctcacc aacatggnaa aaccccatct 600
ctactaaaaa aatacaanat taaccagggg tgatggcaca ttcctgtaat cccagctact 660
cgggaagccg aggcaagaga atcgcttgaa cccggggaag gaaaaggntn a 711

<210> 3869
<211> 711
<212> DNA
<213> Homo sapiens

<400> 3869
gactggcgag ccatggcgct ggggctgcag cgcgcaaggt cgaccacgga gctgcgcaag 60
gaaaagtccc gggatgcggc ccgcagccgg cgcagccagg agaccgaggt gctgtaccag 120
ctggctcaca cgctgccctt cgcccgcggc gtcagcgccc acctggacaa ggcctctatc 180
atgcgcctca ccatcagcta cctgcgcatg caccgcctct gcgccgcagg ggagtggaac 240
caggtgggag caggggaga accactggat gcctgctacc tgaaggccct ggagggcttc 300
gtcatggtgc tcaccgccga gggagacatg gcttacctgt cggagaatgt cagcaaacac 360
ctgggcctca gtcagctgga gctcattgga cacagcatct ttgatttcat ccacccctgt 420
gaccaagagg agcttcagga cgccctgacc ccccagcaga ccctgtccag gaggaaggtg 480
gaggccccca cggagcggtg cttctccttg cgcatgaaga gtacgctcac caagccgcgg 540
gcgcaccctc aacctcaagg cggccacctg gaaagtgctg aactgctctg gacatatgag 600
ggcctacaag ccacctgtgc aaacttctcc anctgggaac cctgactcaa angccccgc 660
tgcaattgcc tggtgctcat cttgcgaaag ccatccccca acccaangca a 711

<210> 3870
<211> 624
<212> DNA
<213> Homo sapiens

<400> 3870
aaacatgggg cggggcggcg cggccgggga agcgtgatga aggcctacga gtgcggcgcg 60
gcctgaaggg gcacgcgggg gacctgcaaa gctagtgagg ggcggggcag gcggcgcggt 120
gggggcgggc cgagcccgga ggccagatgt gcggacacag ccccacgcgc ggggccatgc 180
aggtggccat gaacggtaag gcccgcaaag aggcggtgca gactgcggct aaggaactcc 240
tcaagttcgt gaaccggagt ccctctcctt tccatgctgt ggctgaatgc cgcaaccgcc 300
ttctccaggc tggcttcagt gaactcaagg agactgagaa atggaatatt aagcccgaga 360
gcaagtactt catgaccagg aactcctcca ccatcatagc ttttgctgta gggggccagt 420
acgttcctgg caatggcttc agcctcatcg gggcccacac ggacagcccc tgcctccggg 480
tgaaacgtcg gtctcgccgc agccaaggtg ggcttccagc aagtcngtgt ggagacctat 540

0962946.0702800

ggtggtggga tctggagcac ctggtttgac cgtgacctga ctctggctgg acgcgtcatt 600
gtcaagtgcc ctacctcang tcng 624

<210> 3871
<211> 699
<212> DNA
<213> Homo sapiens

<400> 3871
ttcattgtac ctcaaggttg tgatgaaatt ttaatgaatt aagttgaata gctcaaaagt 60
atatacttcg taacactcag tttcagttac agtcactgac tgatgtagtt ctgctggcac 120
ctgacagctc tcagttacta agcttctgcg atatgctagg cactgtgctg gatgataaga 180
cagcacccct gccctctaga agctcgggca gttaaaatgg agcagaggga agcaacggag 240
actcagaaaa taactataca cactaaggga gagcttggtc tggggctggt gaataggaat 300
ctgttaggga agtgacagat gcaaagctgg aaatgttaat cagatggcta aattcaggcc 360
aaaatttaaa tatcttcaat tttcaactca agaaaggcat ttggcagaaa ccatgtttgg 420
aaaagaaatt aaaatttaca agaattttta ttaagcactt tgcctagcaa aagatttttg 480
ttaaaaaaaa aaaaaaaaac ttgtcatccc tactttcagg gagtagaatc ctggaatttt 540
tgaancatac tgtaagatgg tgattatatc tcaaaagggg ttccgtggtg tctgtaccct 600
ctctgccaca ggcaatactg agcaccatag gcttgagtat gccatttaac tgtttggttt 660
tggttcnant tggcacttta tacaatgttt ganaatatc 699

<210> 3872
<211> 653
<212> DNA
<213> Homo sapiens

<400> 3872
aggggatagg acgaagaaac cgaagggaaa gctcagttgc agcggcgact ttcagtttca 60
tttccacgga ccctcctgcc tgggccgcag ccgccgccgc gatgcccagt aagttcagct 120
gccggcagct ccgggaggcg ggccagtgtt tcgagagttt cctggtcgtt cggggactgg 180
acatggagac agatcgcgag cggctgcgga ccatttataa ccgcgacttc aagatcagct 240
ttgggacccc cgcccctggc ttctcctcca tgctgtatgg aatgaagatt gcaaatctgg 300
cctacgtcac caagactcgg gtcaggttct tcagactcga ccgctgggcc gacgtgcggt 360
tcccagaaaa gaggagaatg aagctggggt cagatatcag canacaccac aagtcactgc 420
tagccaagat cttttatgac agggctgagt atcttcatgg gaaacatggt gtggatgtgg 480
aagtccaagg gccccatgaa gcccgagatg ggcagctcct tatccgcctg gatttgaacc 540
gcaaagaggt gctgaccctg angcttcgga atggcggaac ccaatctgtt accctcactc 600
anctcttccc actctgccgg acaccccagt ttgctttcta caatgaaana cca 653

<210> 3873
<211> 632
<212> DNA
<213> Homo sapiens

<400> 3873
ggttggctct gagctccttc caaaagatga attaaatgat ctgatcgacc gagccttcag 60
cagattccgt cacagagaag tggtccatct gtccaggttg aggaatgggc tgaacgtgtt 120

0960345.0728

ggagctgtgg catggcgtca catatgcatt taaggacctg tccctgtcct gcacaacaca 180
gttcctgcag tacttcctgg agaagaggga gaagcacgtc actgtggttg taggaacatc 240
tggggacaca ggaagtgctg ccattgagag tgttcaaggg gcaaagaaca tggacattat 300
cgttctgctg cccaaaggtc actgcacaaa gattcaggag ctccagatga caacggtgct 360
gaagcagaac gtacatgtgt ttggagtgga gggaaacagc gatgagctcg atgagccgat 420
caagactgtg tttgccgatg tggcttttgt caagatangc ctgcccatcc gtctggtcgt 480
ggcagtgaac cgcaatgaca tcatccacag gactgtccan cagggagact tctctctctc 540
tgaggctgtt aaatcaacct tggnatcagc tatgggcatt caagtgccct acaacatgga 600
naaggtgttc tggctgctct ctggntctga ca 632

<210> 3874
<211> 733
<212> DNA
<213> Homo sapiens

<400> 3874
gtaagtaagc ctgccagaca cactgtgacg gctgcctgaa gctagtgagt cgcggcgccg 60
cgcactggtg gttgggtcag tgccgcgcgc cgatcggtcg ttaccgcgag gcgctggtgg 120
ccttcaggct ggacggcgcg ggtcagccct ggttcgccgg cttctgggtc tttgaacagc 180
cgcgatgtcg atcttcaccc ccaccaacca gatccgccta accaatgtgg ccgtggtacg 240
gatgaagcgt gccgggaagc gcttcgaaat cgcctgctac aaaaacaagg tcgtcggctg 300
gcggagcggc gtggaaaaag acctcgatga agttctgcag acccactcag tgtttgtaaa 360
tgtttctaaa ggtcaggttg ccaaaaagga agatctcatc agtgcgtttg gaacagatga 420
ccaaactgaa atctgtaagc agattttgac taaaggagaa gttcaagtat cagataaaga 480
aagacacaca caactggagc agatgtttag ggacattgca actattgtgg cagacaaatg 540
tgtgaatcct gaaacaaaga gaccatacac cgtgatcctt attgagagag ccatgaagga 600
catccactat tcggtgaaaa ccaacaaaga gtacaaaaca gcaagctttg gaagtgataa 660
aagcagttta aaaggagaaa aatgaanatt anaaacgttg ctcaaaatga aggcttccgg 720
ttcaaccttc can 733

<210> 3875
<211> 761
<212> DNA
<213> Homo sapiens

<400> 3875
gtcgcactcc ttctccccga gacttggtac tgggagatag gacgggagtc tcctacacgc 60
agtcaacact tgccacgagc ggctagactt aggacaggca agttgccctg ccatccttct 120
atcgccccca cccctccttt acttaagggc gatggcagag acgtcctcct ccccccttctc 180
ctcctctttg gtgcctccag ccaggaggcg ggagcgatcc acagcagctg acccagctca 240
ggcactgcct ctctcacagc cctcaagaca caccatgggc ccagaggcag gtttgctaca 300
cagcagcgac gacgcgggcg gcggccccag cgactcgcaa ctgcctccct gaccacagcg 360
gccaccgccc aacacccccg agaagccatc gccaccaccg gcaggagaac ctagggtcca 420
taaagccatc ttcgcgatcg actaaagcta cgtcaacaac tatggcgggc gacgggcggc 480
gggcagaggc ggtgcgggaa ggatggggtg tgtacgtcac ccccagggcc cccatccgag 540
agggaagggg ccggctcgcc cctcaaaatg gcggcagcag cgatgcgcct gcgtacagaa 600
ctcctccgtc gcgccagggc cggcgggaag tgaggttctc ggacgaagcc gccagaagtg 660
tacggggact tcgagcccct ggtggncaaa gaaaggtccc cggtggggaa aacgaacccg 720

0050250.0050450

gctagaaaaa gttccggtcc ganttctgcg aaaagaggaa n 761

<210> 3876
<211> 747
<212> DNA
<213> Homo sapiens

<400> 3876
ttttatttat tgctgtggaa ggcttcctct ttgaagctga tttgggaagg aagccaccag 60
ctatcccaat aaggtactat gccataatgg tgaccatgtt cttcaccgtg agcgtggtga 120
acaactatgc cctgaatctc aacattgcca tgcccctgca tatgatattt agatccggtt 180
ctctaattgc caacatgatt ctaggaatta tcattttgaa gaaaagatac agtatattca 240
aatatacctc cattgccctg gtgtctgtgg ggatatttat ttgcactttt atgtcagcaa 300
agcaggtgac ttcccagtcc agcttgagtg agaatgatgg attccaggca tttgtgtggt 360
ggttactagg tattggggca ttgacttttg ctcttctgat gtcagcaagg atggggatat 420
tccaagagac tctctacaaa cgatttggga aacactccaa ggaggctttg ttttataatc 480
acgcccttcc acttccgggt ttcgtcttct tggcttctga tatttatgac catgcagttc 540
tattcaataa gtctgagtta tatgaaattc ccgtcatcgg agtgaccctg cccatcatgt 600
ggttctacct cctcatgaac atcatcactc aagactccta cttaactggg gagagaaatg 660
tctattaaat gtctctcctc tttctctggg tcaaagacca tgtaatttta tgcttcagan 720
atnaagatac ggtttgntta caaagag 747

<210> 3877
<211> 726
<212> DNA
<213> Homo sapiens

<400> 3877
gataaatgcc ccatatatat aaaagtgaaa acaatactgt accaatgagg aagagagttt 60
tgtaaaagca agcaggctgg ctgtcattaa aagttatctt aaataacttg tcgcagccca 120
ctcccaccag tcctgaaaat agttcattca agtggtaaaa taagacaagg cagaggacga 180
tgtctctaac ttccctgatg tgagatctaa agccccattc ctaactcttg gttttagaat 240
tgaggaaagt ggaataaatg catttggaaa ggatctgttt tcttcccagg tttcctgcct 300
gggttgaaaa taaggtttca ggggatggaa gcaactttga ggaacataaa gaggtattgg 360
ggttcatcaa ttcatctttg tttcaagatg gttccccccc accctccaca atgcaagtta 420
attaggagat aatttagcta ccttgtgaat tagttttaag ataagtatct ttttaagctt 480
tgtcacttta attgccccac tgattgataa gaagtagtta tttctaattg acacttttt 540
gatgtccatt ggaagcattt atttggaact ttttgggggt ggaaggaaag ttaattaatt 600
ttatcaagtc taccccaaa aggactctgc ctaattttgt tgaanaagac aaaggaagtg 660
aaggaaacca aataaaaaat caatctcaag ggattttaat tantaaaggg acactttggg 720
nttaaa 726

<210> 3878
<211> 712
<212> DNA
<213> Homo sapiens

<400> 3878

0602463.0002000

gttcggtgcg cggccggggc cggagttcgc tgcaagtcgg cggaaagttt ggctgcgcgg 60
gttcccccga agttcagagt gaagacattt ccacctggac acctgaccat gtgcctgccc 120
tgagcagcga ggcccaccag gcatctctgt tgtgggcagc agggccaggt cctggtctgt 180
ggaccctcgg cagttggcag gctccctctg cagtggggtc tgggcctcgg ccccaccatg 240
tcgagcctcg gcggtggctc ccaggatgcc ggcggcagta gcagcagcag caccaatggc 300
agcggtggca gtggcagcag tggcccaaag gcaggagcag cagacaagag tgcagtggtg 360
gctgccgccg caccagcctc agtggcagat gacacaccac cccccgagcg tcggaacaag 420
agcggtatca tcagtgagcc cctcaacaag agcctgcgcc gctcccgccc gctctcccac 480
tactcttctt ttggcagcag tggtggtagt ggcggtggca gcatgatggg cggagagtct 540
gctgacaagg ccactgcggc tgcagccgct gcctccctgt tggccaatgg gcatgacctg 600
gcggcgggca tggcggtggn caaaagcaac cctacctcaa agcacaaaag ttggtgctgt 660
tggccaacct gctgagcaaa ggcaaaaccg ggccacggga gcttggnaan cc 712

<210> 3879
<211> 680
<212> DNA
<213> Homo sapiens

<400> 3879
cagagagcgt tgagctggga acagtgncaa gtgcttatca agttccttca ctctcaacac 60
ggttgacaag aactgatggc attatggaac acatcacatg tgatacccaa tgaagcagca 120
cacagaggta ccataagacc agtcaaaggc cctcagacat ccacttcgcc tgccagtcct 180
aaaggactac acacaggagg gacaaaaaga atggagacca ccaccacagc tctgangacc 240
accaccacag ctctgaagac cacttccaga gccaccttga ccaccagtgt ctatactccc 300
actttgggaa cactgactcc cctcaatgca tcantgcaaa tggccagcac aatccccaca 360
gaaatgatga tcacaacccc atatgttttc cctgatgttc cagaaacgac atcctcattg 420
gctaccagcc tgggggggagg tgggctgggc tggctctggg agttctggaa gctcccaagc 480
tttgtagctc aggccaacag agcccagnga canaggcaga gccccacagg ggtgncaccc 540
cctctgagtc ccattcgctt cacctatctt ctatggccgc cccatagcca tactgcccat 600
tagcgtggcc gccangcatt acagctcaga ggcatcgccg ctacaaagct ttggnggcat 660
cagngccgct cagtgtgcgg 680

<210> 3880
<211> 630
<212> DNA
<213> Homo sapiens

<400> 3880
accaagaatc aatactacaa ctgcaggagc tccttcatct taaattcggt gtagccacag 60
aaatacttct caaacaagct agtactttgg cagatctgga cagtggaaat atggaaaaag 120
tcattaaaga tgaaaatgtt actctgtatg tgtgggcaaa cctcaagaag aatccaaggc 180
acagaagtgt tagattctct gaaacacaaa ttggatttga gattccaagg atattagcaa 240
caagtgacat tgctgtacga ctcctgcata cccactatga tcatgtttct gcactgcacc 300
ctgtttcaac accatcaaaa gaatacactt ctgcagtaac tgagcttgtc aaagatgatg 360
ttaagaatgt agaaaaagca atcagcaagg aggtcgaaga agagtccaaa caacaagaaa 420
gagggtctca cttaattcag gaggaagaaa taaaagttga ggaggaacaa ggtgatattg 480
aagtgaaaat gagttctgct gaggaagaat ctgaagccat aaaatgtgaa cgagagatga 540
aagtattaag tgaaactgtt tcancaacac aattgttgcc gggaaaagaa atcctccgga 600

0000000000000000

aaagncaana tttctttgaa gacaatgtgg 630

<210> 3881
<211> 737
<212> DNA
<213> Homo sapiens

<400> 3881
gatcaataat tgcaatcagc ctgtcagaat acgtaaaggg aatccatgta attcacaggc 60
gggagttgtt atttctgtag taaagacctg actgcagcat ttacacatga taaataggaa 120
atggcaaacc tggggaagca agtttgaact caatctggaa gtaatagcct aagcagcttg 180
ctcttcacac tgtgtttccc atgtcaccct tttcctctta ggtatcttgc ttctccctct 240
catttcaatc tcctccttcc ttctgttcct ccatccttcc atccctccct cctgtctttc 300
tctgacacaa tgactcagct agtttaagag aatggtatta ttttgaagtc tgaaaatgtt 360
tctgtgatat tttgcttttt actgatcttt aangcaactc acagaagtgt attagcctta 420
gatacgtaat caccccttga gatatatagt caacagtaca cactgacatg ttcatagtaa 480
aaactgcctt tatgtttcac tgcattcaag caagtagata tttgtttgtt tcacgtattg 540
caaagcctat gttcttaagc atgtaccaaa atcacattta nttcattaat ccatttactc 600
attcaccaag aatgtaacaa aatttagtga atatctgcta tgtgtcaggc acttttcttg 660
gctcctgata tacaaatgat attcaaataa aactcaaaan cctggtaagg ggaaggtang 720
gagacaaant atgtacc 737

<210> 3882
<211> 789
<212> DNA
<213> Homo sapiens

<400> 3882
acatgcgcag gaggctcaat gacagtcgag ctttggctaa ggctccgggg aaagggtcta 60
gccatgctgc atgtgacccg gggggtctgg gggtccaggg tccgagtatg gccactgttg 120
cccgcgctcc tcgggccccc ccgggccctc tcatcgctgg cagccaaaat gggggagtat 180
cgcaagatgt ggaaccccag ggagccccgc gactgggccc agcagtaccg cgagcgcttc 240
attcccttct ccaaggagca gctgctccgc ctcctaatac aggtaacagg aattccactc 300
gagtccggca gagaaggcgg ctttggaggc gttctcagcc cacgtggact tctgcaccct 360
gttccactac caccaaatcc tggcccggct gcaggcctta tatgacccca tcaaccctga 420
cagggagacc ctcgatcagc catcactaac ggatccccag cgtctgtcta atgagcagga 480
ggtgcttcgg gctctggagc ccctgctggc ccaggccaac ttctccccgc tgtctgagga 540
caccctggcc tacgcgctgg tggtccacca ccctcaggat gaggtccang tgacagtaaa 600
tttggatcag cctggttggg agtcttggct ncatggcacg gnccctcct gtcattcttt 660
cctctacctg actgacactc ttcctacaag aagatccttg cncgcttcct gtgtgggctt 720
caagtggtcc ccttgnctac aggagccccc caccttttcct tgcccaagaa ccccttantt 780
ggtccccaa 789

<210> 3883
<211> 714
<212> DNA
<213> Homo sapiens

0062969.0720

<400> 3883
gtatttgcaa agtcagatat gcatgttttc ctttatgagt ttatttttat gctgcgaaag 60
gcctttccta cacttggttc agataaatgt gcgcatcttc ttattccttt attcattgat 120
ttcagtttag ttccttagtt cagttggaat tttatttcaa tatgtgggag ctaatttttt 180
ttttttatt ccaaactatc accatcttgt ttcaatattg gttatggatg tccattctcg 240
tgctatgatt ttgaaatgct cttttatcat ctactaaatt ctttgacata cttaggttga 300
tctctggtca ttctattctg ttctggtgct ctgtcttctt tcattattct ttttcaaaat 360
ttccttgact agccatgcat ttgccattta tttttataga tgtgttttgt aatatttta 420
tcaagttcca agtgcctcag cggtaggggc cggggaagtg tctgtagcgt ccctccctct 480
caaccacaat aacaggcgga gggtcggcgt ancatcttca ccagaagtag atttcatctc 540
aacaaaccac tttctttggt catctataag aagcaacttc tcatctgttc aagttttaac 600
atgagattgc agcaattcag tcacatcttc aggctctaca tccgattgta gttctcttgc 660
tatttcctcc anatctgcaa gcgacttcct ccactggaag gtccttttgg nngg 714

<210> 3884
<211> 790
<212> DNA
<213> Homo sapiens

<400> 3884
gagaatgtgt aataaccaaa taagtatttc gatataggat caaataacga gataaaaatg 60
tcgttttggg acacttttaa ggtttattta aatgtgaaaa tttgagacta ttgaacctat 120
gttttacagt ttggtaagca gttatgtttc taccttgggg agagaaatgt aaagcaatca 180
tctttcagac atctatttaa acaaactgaa aagccatttc tttatgattt ttgtattcat 240
catctgtgat ttgctgaaag catacaactg acttgtgaat cattcactgt cagatataga 300
ttcagtttaa catttttat aagccgtcta tatatttggc actctacaag gtgctttcat 360
ataccttcac tcattttatt tactttctta gtaaccctca taggtgtcat tgtccacatt 420
tgacaagtaa agctaagaga tgttaaataa ctaggacaca gtcatattaa tgagtaataa 480
aaccaggact tgaatacaag tcctagatct ctgagcacaa tgctattgtt aggatctttt 540
ccccattggg tattaaatcc ttttagtgga tcttgcttgg aagtctttat tgagcttttc 600
ttccagtcag catatcaatt agatgtatca gaaataantg gttaaatgac ttcagtcatt 660
taaatgagga aattcccttt tagaatccta actacctaac tgtgtaatca tgtnataaca 720
gttatctact acaaaggggg ggagtttccg gtttaactcc ccaatttttt ccttangnag 780
tagcaaccta 790

<210> 3885
<211> 683
<212> DNA
<213> Homo sapiens

<400> 3885
gtctcgccct cttgcagtct gcagcttctc ctgtcatcgg aaatgccagg ccaaggtggc 60
tgccccctgc gttcctccat ccaaccatga gctggtgccc atcaccactg agaatgcacc 120
aaagaatgta gtggacaagg gagaaggagg ctcccggggt ggaaacacac ggaaaagcct 180
cgaggacaac ggctccacca gggtcacccc gagtgtccag ccccacctcc agcccatcag 240
aaacatgagt gtgagccgga ccatggagga cagctgtgag ctggacctgg tgtacgtcac 300
agagaggatc atcgctgtct ccttccccag cacagccaat gaggagaact tccggagcaa 360
cctctctgag cggagacctg acatcacgaa gctccatgcc aaggtacagg aatttggctg 420

0005945-0005946

gcccgacctc cacaccccag ccctggagaa gatctgcagc atctgtaagg ccatggacac 480
atggctcaat gcagaccctc acaatgtcgt tgttctacac aacaagggaa accgaggcag 540
gataggagtt gtcatcgcgg cttacatgca ctacagcaac atttctgcca gtgcggacca 600
ngctctggac cggtttgcaa tgaagcggtt ctaatgaggg ataagattgt gccccaaaat 660
ttttgggggg gnccccccna aaa 683

<210> 3886
<211> 683
<212> DNA
<213> Homo sapiens

<400> 3886
gattctcatc cctgtgctca gagctctcaa gcacccacga tggccttctc aggccgagcg 60
cgcccctgca ttatcccaga gaacggagaa atcccccgag cagcccttaa cactgtccac 120
gaggccaatg ggaccgagga cgagagggct gtttccaaac tgcagcgcag gcacagtgac 180
gtgaaagtct acaaggagtt ctgtgacttt tatgcgaaat tcaacatggc caacgccctg 240
gccagcgcca cttgcgagcg ctgcaagggc ggctttgcgc ccgctgagac gatcgtgaac 300
agtaatgggg agctgtacca tgagcagtgt ttcgtgttat agaaggtgat gtggtctctg 360
ctcttaataa ggcctggtgc gtgaactgct ttgcctgttc tacctgcaac actaaattaa 420
cactcaattt ctagaaaatt tctccacana ctgagagctc cagaattgat gactcagagt 480
gaaccganga gatcactact gtgcacaagt ttgcctccaa acaactgggt gatgcctcca 540
aacagacctg gaatcatcca tttctccaag gatctctgct tcttcttgta aaataggcta 600
tttaaggact acaatctgag cattaatggg tatcaaactc ttgggctttg ggaaccaaaa 660
aaattttccc ccngntttcc ccn 683

<210> 3887
<211> 677
<212> DNA
<213> Homo sapiens

<400> 3887
taacaatgac acagttgact ttggggactc ggggaaaggg tgggaaggga gtgagggata 60
aaagactaca aattgtgtgc agtgtgcact gctagagtgc actaaatctc acataccact 120
aaataactta ctcatgtaac caaacaccac ctgtttccca aaaacctatg gaaattaaaa 180
aaaaaaagtt aatctcatct ggaaaatacc ttttcagcaa catgtcgtct ggtatttggc 240
caaatatctg gttactgtga cctagtcaag gtgatgtgta aagttatcca tcacaaacag 300
ctagattcat tccacctaca cttcaaggga tcgccttgaa gaagtcagta tttttgcaga 360
gatgcgtctc cacccaaagg tcctaggtac ctttgagcaa ttgtgaaagc cataacccct 420
caccccgaaa tgacctgtcc tcatgcatat agaatcttac aatcacaggg gttatggatc 480
ctatttagag cctatattga aatcttgagg acgtcagtag ttctctagaa tccctgttcc 540
aggcgcctct gttcctgagc agtgttatgt gaacagtgtc ctctgtctgt ggctctgtgt 600
cctggctgan aaaggcagcg ctgccttcag ggaactgggc ccattgcctg ggggggggaaa 660
aagggttttn ccaangg 677

<210> 3888
<211> 666
<212> DNA
<213> Homo sapiens

09629459.072800

<400> 3888
aggtgctgaa ggagctgttg gagacgtggg gcagcagcag tgccatccgc cacactcccc 60
tgccgcagca gcgccacgtc agcaaggctg tcctcatctg cctggcgcaa ctcggggagc 120
cggaactgcg ggacagccgg gatgaactgc tggccagcat gatggcgggc gtgaagtgcc 180
gcctggacag tagcctgccc cccgtgcgac gcctgggcat gatcgtggca gaggtcgtta 240
gtgcccggat ccaccccgag gggcctcccc tgaaattcca gtacgaagag gatgaactga 300
gcctcgagct gctggccttg gcctcccccc agcctgcggg tgacggcgcc tcggaggcgg 360
gcacgtccct cgttccagcc acggcagagc cccctgcaga gacccccgca gagatcgtgg 420
atggcggcgt cccccaagca cagctggcgg gctctgactc ggacctggac agcgatgatg 480
agtttgtccc ccacgacatg tcgggggaca gagagctgaa gagcagcaag gctcctgcct 540
acgtccggga ctgcgtggaa gccctggatg tgctgactct ggctgcccaa gagctgtcta 600
aggcctgggt gcctcgggna ggactcccca acctgggctc cccaaagtcc caagnaaccn 660
cccccc 666

<210> 3889
<211> 656
<212> DNA
<213> Homo sapiens

<400> 3889
ttacctgtca tgcccgatgg ctctgtgctg ctggtggaca atgtctgtca ccagtctggg 60
gaagtctcca tgggctcctt ctgccgccta cccgggacct ctggctgctt cccctgcccg 120
ctgaatgccc tggaggaaca caacttcctg tttcagctga gaggggggtga gcagcccccc 180
ccaggggcca aggagggcct ggaagttccc ctgattgctg tggttcagtg gtctacccca 240
aagctgccct tcactcagag catctacacc cactaccgcc tgcccagtgt ccgcttggac 300
cgcccgtgtt ttgtgatgac cgcttcttgt aagtcccctg ttcggaccta cgagcgtttc 360
actgtcacct acacgctgct taacaatctc caagacttcc ttgctgtgag gctcgtgtgg 420
accccagagc atgcacaggc tgagtggctt tgagaatcag atgagactgt gctggcgaan 480
gccctgtggg aatgaggaac gctgtantgt ttgctggtcc ctgtttctgc ccccaaggaa 540
agcagctgtg tgaggaggag cgccgggcca tgcangctgc cctggactcc gtcgtctgcc 600
anacgccccc caacaacctt ggcttttccc ggaagggcaa cncgctcaac ttcaag 656

<210> 3890
<211> 658
<212> DNA
<213> Homo sapiens

<400> 3890
gcagtgaagt gtttgtctga atttgcgtgc aatgcagctt tcccagacac aagtatggaa 60
gcaattcgac ttattcgcca ttgtgcaaaa tatgtgtctg atagacctca ggctttcaag 120
gaatacacaa gcgatgatat gaacgtagca cctgaagaca gggtgtgggt gagaggatgg 180
ttcccaattc tctttgagtt atcctgtatc atcaatagat gcaaattaga tgtaagaacc 240
aggggtttaa cagtaatgtt tgaaataatg aaaacatatg gccacactta tgagaaacac 300
tggtggcagg atttatttag aattgttttc agaatctttg acaatatgaa attgccagaa 360
caacagacag agaaagctga atggatgaca acaacttgca atcatgcact ttatgcaatc 420
tgtgatgtat tcactcagta tttagaagta ctcagtgatg tacttttgga tgacattttt 480
gctcagctct actggtgtgt gcagcaagac aatgagcagt tagcgcgatc tggtacaaac 540

0052056-0002

tgtttagaga atgttgttat tctgaatggt gaaaaattta ccctagaaat ctgggataaa 600
acttgcaact gcacactgga tatcttcaan ancacaatcc cacatgcgct ggtttngg 658

<210> 3891
<211> 659
<212> DNA
<213> Homo sapiens

<400> 3891
acgggatggg gagctggacc aggctggagt gcaatggcgc gatctcagct cactgcagcc 60
tccgcctccc gggttcaagc gattcttctg cctcagcctc ccgagtgaca gcggcatgga 120
catatgcccc aggctttcct gctggggtcc atccatgagc ctgcaggtgc cctcatggag 180
ccccagccct gccctggaag cttggctgag agcttcctgg aggaggagct tcggctcaat 240
gctgagctga gccagctgca gttttcggag cctgtgggca tcatctacaa tcccgtggag 300
tatgcatggg agccacatcg caactacgtg actcgctact gccagggccc caaggaagta 360
ctcttcctgg gcatgaaccc tggacctttt ggcatggccc agactggggt aaagggtttg 420
gcttccccag tgggtggagt gggggttct aggtggatgc ttggctgggt gtgctgtgga 480
gaaggagcat gtgcatggct gtanacatgt gtaggtcctc ccgccccatt ctgtctcaac 540
acatatactg gctcctgtgg tccggggccc tctcccagcg tctctgcccg taattaacca 600
agcacattaa tgggnanttt cgttttccct gcgagctggc cantaatttg cccttcccc 659

<210> 3892
<211> 571
<212> DNA
<213> Homo sapiens

<400> 3892
tgtcctgcgg gtccaggact gtccgcgggg ttgagggaag gggccgtgcc cggtgccagc 60
ccaggtgctc gcggcctggc tccatggccc tggtcacagt gagccgttcg cccccgggca 120
gcggcgcctc cacgcccgtg gggccctggg accaggcggt ccagcgaagg agtcgactcc 180
agcgaaggca gagctttgcg gtgctccgtg gggctgtcct gggactgcag gatggagggg 240
acaatgatga tgcagcagag gccagttctg agccaacagc accctagttt cattctcaac 300
tctagccctg cacactcacc tatggcccgg gagattgaca acttctaccc tgagcgcttc 360
acctaccaca atgtgcgcct ctgggatgag gagtcggccc anctgctgcc gcactggaag 420
gagacgcacc gcttcattga ggctgcaaga gcacagggca cccacgtgct ggtccactgc 480
aagatgggcg tcagccgctc ancggccaca gtgctggcct atgccatgaa gcantacgaa 540
tgcagcctga acangccctg cgccacgtgc a 571

<210> 3893
<211> 680
<212> DNA
<213> Homo sapiens

<400> 3893
aagtatatcc ctcctccctt tcaaagataa gtggatccat tctcaatgaa cttattggac 60
ttgtgagatc acccttattg cagggggggag ctcttagtgc catgctagac tttttccaag 120
ctctggttgt catggaacaa ataatttagg atacatggat ttgttgcgca tgctgactgg 180
tccagtttac tctcagagca cagctcttac tcataagcag tcttattatt ccattgccaa 240

0050450-0050800

atgtgtagct gcccttactc gagcatgccc taaagaggga ccagctgtag taggtcagtt 300
tattcaagat gtcaagaact caaggtctac agattccatt cgtctcttag ctctactttc 360
tcttggagaa gttgggcatc atattgactt aagtggacag ttggaactaa aatctgtaat 420
actagaagct ttctcatctc ctagtgaaga agtcaaatca gctgcatcct atgcattagg 480
cagcattagt gtgggcaacc ttcctgaata tctgccgttt gtcctgcaag aaataactag 540
tcaacccaaa aggcagtatc ttttacttca ttccttgaag gaaattatta gctctgcatc 600
agtggtgggc cttaaaccat atgttgaaaa catctgggnc ttattactaa aaagggccca 660
aaanccnttt gggggtttgg 680

<210> 3894
<211> 786
<212> DNA
<213> Homo sapiens

<400> 3894
caatagtatc ttaattttta cttgcggtga ctattcttgc cacaatattg gagaataatg 60
atagatgata tactagattt ttcaaagtgt gaaaaccttt agacttttt tagcaattag 120
tttgacattc gctactatag taaccaagca ctcattatat atgcatcctc caaatgtttc 180
atgcttattt ataggaaagt tatattaatg agattaataa tgtgaaatac agttttcctg 240
caaaattagc attagagaat tgattttaga taacagattt ttaaagtttt agagaaaagt 300
acagtaatac agtaaactga aagagtatat agatagcaat aaaataacat aagtggacat 360
gtttatagta aatactctga agtaaacaac cgtttttatt aactgcatct cattagggaa 420
agtttatatg tcttgttatt ttttattaac attttattta ccattcagag tgaaaattac 480
taatttgagt attaacaaat aactgaataa atggatcatt acagttaggt tttctcaaat 540
tgcaaaattt gccttagcaa ttatctttga acatcccgaa ccagattttt aaatcccatt 600
tttgtttaat aagggtaaaa ataccatcaa aatgacttct cataccaaag aataagccat 660
catatttttt cggtgttgga aacaacattg aaagtcagaa ttgggntttg nttttaattc 720
cttatacggg ttacataagc aatatcctgg ccccttaat taataaggat taatggtcgn 780
ccttca 786

<210> 3895
<211> 709
<212> DNA
<213> Homo sapiens

<400> 3895
tatgtagatt caaaccccat tattaagtaa gttttcttct aagtagacaa cctcttcttt 60
acccagaact tctctttgta accgtttcat ccatattagg ctgtgtattt taaacaaaca 120
aataaaaata agttgatatt tatcttcctt cttagtcaaa atgcttcttg gaggttgggg 180
actctttctt tgacgtgttc tgtagagtat atttcagttt gtctttttag taaagatggc 240
aacatctcat tggattagga aaaattgaaa accatatgtt ccatgtaaag aaatcattta 300
ttgtttcgat atttgtgcca ctcaaacact gaatgcttta tttctgcaaa agcatattga 360
ttcgttttct gcagtgaatc ttatattttt caaccttctt aaacaatata ttctgaactt 420
gatttagtct ttacatgatg atttcctgat aatcattatt gtattaagtt tcctagggct 480
gccataatag aatatcataa attgggttgt ttaaacaaca gagatttatt ggatcacagt 540
tctggaagca agaagtctga gatcaagcta ttagaaggga tggttcctta taagggttgt 600
gggagggaat ctgtttcatg cctcttgctt agtttctgga gtttatggca atcgttggaa 660
ttccttgacc tgtaaggnat ctccctgatt tctgccttca tcnttaana 709

0560450.00400

0002703450

<210> 3896
<211> 539
<212> DNA
<213> Homo sapiens

<400> 3896
ccgagacgat ggggctcagg acctgtgccg gtgaatccaa ggactatgcc ctccatgcgg 60
gtgacggctc ttccgacccg gaggtgctgc tgaacataga aaaccaaaga cgaggtcaag 120
agctgagtgc cacccggcag gcccatgacc tgtccccagc agccgagagt tcctcgacct 180
tctctttctc tgggcgagac tcctccttca ctgaagtgcc acggtccccc aagcacgccc 240
acagctcctc cctgcagcag gcagcctccc ggagcccctc ctttggtgac ccacagctat 300
cccctgaggc ccgacccagg tgcacttcac attcagaaac gccaactgtc gatgatgaag 360
aaaaggtgga tgaacgagcc aagctgagcg tcgccgccaa gaggttgctt ttcagggaga 420
tggaaaaatc ttttgatgaa caaaatgttc caaagcgacg ctcaagaaac acagctgtgg 480
agcagaggct acgccgtctg cangacangt ccctcaccca agcccatcac cactgaana 539

<210> 3897
<211> 717
<212> DNA
<213> Homo sapiens

<400> 3897
aattatttca cagtatatca agctatgatc caattccaca gttcatactc aggcaaaact 60
gccttctcaa ataacaggag tttggtacag aagctacaaa accagggcaa aggatgttaa 120
attgatactt ccaatgtgcc ttattttgag cctgatacta tggaattttg cctgctatta 180
cagtacccaa ttattgcttg gaacaatttt gcatttcctc gcattttaca gagcatggct 240
tgactgacaa tttgacaatc agatagccta ggctgatgcc attgtatcta tttaataact 300
ttgttaacca attaacacaa gcagacaatt cccataataa ttgagtatta aaaagcacaa 360
caacaaataa acaatggaca cttagaacaa acatctgaac actgttttag cccagttgcc 420
ttcttttcct gaaagctcca aagacataca cacacacata cacatacaca tacatacaca 480
catgcacaca cacacacgaa gaagcacaaa gaaggcaaag tacatttcat tttgggattg 540
aatttttact ctggaaccca gtataaagct ctaacaggta ggctgatctt caaggaaagg 600
ctctttttct gtgtaaatgg taggntactt cccttcaaga ncctatgtg aatctagaat 660
ctaaaccatg gatggcgggg atggcgacac ctggtgctaa aggtttgnga aaaagtt 717

<210> 3898
<211> 681
<212> DNA
<213> Homo sapiens

<400> 3898
actccagcct ctctcgctac cctccaatct ccctgtccag tcttttttctt ctctagtaga 60
gacaaaggag acacatttta tccgtggacc caaaactctg gcgctggtca cagactcagg 120
aagacagtct tcccttggtg tctaatcact gcggggacgc ctgcctaatt attcacccac 180
attccactgg tgtctgatca ccttggggat gcctgccttg gtcattcacc cacattccca 240
tggtggcaag tcatttgcgg ggacgcctgc tttggctgct caccccgcc cttctccgtg 300
tctctacttt tctctttaaa cttacctcct tcactttggg caatcttccg ccctccattc 360

ctccctcttc ccccttagcc tgtgtactta aaaacttctc ttaaactaac acctgatata 420
aaactcaaac gtcttatttt cttctgcaat tactgcttgg ccgcaatata aacttgacaa 480
tggntccaaa tggccagaaa acggcactta tgatttctcc atcctacaac ccatttcaat 540
tttatatgga tgcaccttct tactcagcca caatcttgtt ccagacacca agnccccctgg 600
gcaactatct tccagtcctc taacaagcta nacaggaaat ttgcaaactg ctaatcntct 660
cttgcctaat ccagattccc a 681

<210> 3899
<211> 726
<212> DNA
<213> Homo sapiens

<400> 3899
ctccgcccat ttatgttggg tcttctccaa ctctgaagaa ttatgttaga gttgtggagg 60
tttggtggga tgaatataaa gactacttct atgctagtcg tcctgaatcg caggcattac 120
catatgggga tatatcggag ctgaaaaaat ttcgagaaga tcacaactgc aaaagtttta 180
agtggttcat ggaagaaata gcttatgata tcacctcaca ctacccttg ccacccaaaa 240
atgttgactg gggagaaatc agaggcttcg aaactgctta ctgcattgat agcatgggaa 300
aaacaaatgg aggctttgtt gaactaggac cctgccacag gatgggaggg aatcagcttt 360
tcagaatcaa tgaagcaaat caactcatgc agtatgacca gtgtttgaca aagggagctg 420
atggatcaaa agttatgatt acacactgta atctaaatga atttaaggaa tggcagtact 480
tcaagaacct gcacagattt actcatattc cttcaggaaa gtgtttagat cgctcagagg 540
tcctgcatca agtattcatc tccaattgtg actccagtaa aacgactcaa aaatgggaaa 600
tgaataacat ccatagtgtt tagagagaaa aaaataaacc aataacctan ctactgacaa 660
gtaaatttat acaggactga aaaccgcctg aaacctgctg caactaatgg tantaaccnc 720
tgtata 726

<210> 3900
<211> 675
<212> DNA
<213> Homo sapiens

<400> 3900
agaaaaaatg tgctgcgttc tgaaaaataa ctccttagct tggtctgatt gttttcagac 60
cttaaaatat aaacttgttt cacaagcttt aatccatgtg gatttttttt tcttagagaa 120
ccacaaaaca taaaaggagc aagtcggact gaatacctgt ttccatagtg cccacagggt 180
attcctcaca ttttctccat agaagatgct ttttcccaag gctagaacga cctccaccat 240
gatgaatttg ctttttaggt cttaattatt tcacttcttt ttagaaactt aggaagaagt 300
ggataatcct gaggtcacac aatctgtcct cccagaaatg aacaaaagtc atcacctttt 360
ctgcttgcta cacaggcaac gattccccca tcagctgccc ggacccttg gcctggcttg 420
gtgtgcaagc ctgtctgttt gcttaaagtc agtgggttct ggtgcaggga gtgagaagtg 480
ggggaagtga aagggaaagc atccgtgaga aagcggncac ggttttccct ccttgtgtgc 540
ccatggggca ccagctcatg gnctttttca agtcatccca gtttgtacaa gacttaagct 600
tctgaactct aagaatgcca aaggggaccg nacgaagact ccccatcaca agcgaagctc 660
tgtccntaaa angta 675

<210> 3901
<211> 650

09/25/2006 - 09:56:50

<212> DNA
<213> Homo sapiens

<400> 3901
gacatgtctg ctagccaagg agcaccacga gtggccagca gccaccagag ctgggagaga 60
ggcctgggac ggccttgccc tccagcctcc agctggagcc agccctgccg ccaccttgac 120
ttcagactta cggcctccag agctgtgagg aacgaatccc tgttgtcctt aactgcccgg 180
gctgtggtgc tttgccacag cagctccagg acattgagac aggtgacctc ccagggccac 240
tgtttctccc accctgcact tacttcacca gctggagtga aggcagggaa ccctgggtcc 300
cccaggagca gcagctgctg tgagcatcac agaaaagcag ccccggagag caggcggtcc 360
aggcaggggc ttgtggtccg ttcatctggc tgcacagccg cgacctcatt ggcaggacgc 420
cccggggaca aggagcatcc attagtaatt ggttttggtt ttgattttgn tttcntgaga 480
tacggtcttg ctctgtcgtt cagcctggca tgcagtggca caatcttggc ttactgcagc 540
cttgatctcc caagctcagg tgatcatccc acctcggnct cccgaatanc tgggactgca 600
ngcacgcatc aacatgcctg gctaagtttg gatatttttt agagatgggg 650

<210> 3902
<211> 643
<212> DNA
<213> Homo sapiens

<400> 3902
gagaggcgcc caggcggcgg cggcggcggc ccagcttctt ctttcctcgc acagccaggc 60
ggcccctgct cgagtcccgc gtcgccatgg ccgcggttcc cgagttgctg cagcagcagg 120
aggaggaccg cagcaagctg agatctgtat ctgtggacct gaatgttgat ccctcgcttc 180
agattgacat acctgatgcg ctcagtgaga gagacaaagt caaatttaca gtgcacacaa 240
agaccacact gcccacgttt cagagcccag agttttctgt tacaaggcaa catgaagact 300
ttgtgtggct acatgacact cttattgaaa caacagacta tgctgggctt attattccac 360
ctgctcctac gaagcccgac tttgatggtc ctcgagagaa gatgcagaaa ctgggagaag 420
gtgaagggtc tatgaccaaa gaagaatttg ccaagatgaa acaagaactg gaagctgagt 480
atctcgctgt gtttaagaag actgtgtnct cccatgaagt ctttcttcag cggctttctt 540
ctcaccctgt tctcagtaaa gatcgcaact ttcatgttat cctggaaata tgatcacnga 600
tctaagtgtt aggcggaaaa aatactanag agatgttntg cgg 643

<210> 3903
<211> 779
<212> DNA
<213> Homo sapiens

<400> 3903
tttagtactt aagtgagcat gttaccaagg cactgttcta ggtattggtt atgatgaaag 60
agctgtcctt agcaaagagt ctggcagaaa attctgtttc cttctaatta cagaaagaac 120
agataagagg atttgtaaaa atttttaagg ctgagagaat attcgaattc aagcaagatg 180
tattgtctat tatgtgccca aacattttta tttatatttt ttatttatct cttaagaatg 240
aggatacatt ctgagaaatg catcatttgg tgatcttgtc attatccaaa cattatcaag 300
tgtacttaca cagccctata tggtacagcc tactatagcc tattgctcct aggctataac 360
atatatagca tgtcactgta ctgaatactg taggcagttg taacacagtg ataaatattt 420
gtgtatctaa acatttctaa atacagaaaa ggtacaataa aaatatggta ttacagtata 480

0960450-020800

tgggacaata gtcatctatg tgatccaaca ttgattgaaa tgtcattatg tggtgcatga 540
ctgnatatta tctcatttaa ggacatgaca ttttaaaaat attttttac tcagagttct 600
tcagaacact cactaagtgg ggaattctag tcatacaagg gctcttaggg gggggtgttt 660
gtgctatttt catagattag cctaattcta ccaaacagta tttctagtaa ttcatacatc 720
cttaatccca agggccgtgg acttcactgc ttgnccntgt caccccaaca accntggga 779

<210> 3904
<211> 694
<212> DNA
<213> Homo sapiens

<400> 3904
gtgcttcctg tggctgacgt catctggagg agatttgctt tctttttctc caaaagggga 60
ggaaattgaa actgagtggc ccacgatggg aagaggggaa agcccagggg tacaggaggc 120
ctctgggtga aggcagaggc taacatgggg ttcggagcga ccttggccgt tggcctgacc 180
atctttgtgc tgtgtgtgtc caggcacggt tccttacgcc ccatgtgtgc tgtgtgtgtc 240
ctgcctgtat atgtggcttc ctctgatgct gacaaggtgg ggaacaatcc ttgccagagt 300
gggctgggac cagactttgt tctcttcctc acctgaaatt atgcttccta aaatctcaag 360
ccaaactcaa agaatggggt ggtgggggcc accctgtgag gtggcccctg agaggtgggg 420
gcctctccag ggcacatctg gagttcttct ccagcttacc ctagggtgac caagtagggc 480
ctgtcacacc aagggtggcg cagctttctg tgtgatgcag atgtgtcctg gtttcggcag 540
cgtanccagc tgctgcttga ggccatggct cgtccccgga gttgggggta cccgttgcan 600
agccagggac atgatgcaag cgaagcttgg gatctgggca agttggactt tgatcctttg 660
ggcanatgtc ccattgctcc ctggancctg tcaa 694

<210> 3905
<211> 472
<212> DNA
<213> Homo sapiens

<400> 3905
acgcagcgcg gttgctgggc acctcgacta tcacctgacc gtagtaatat ctcccgctac 60
gcgcgttgtg accaatgctg catacaggag atgagggagg acggccagac acctggaagc 120
cggaaaatgg tgaaaggcag gattgggaac cccacagacc gcagctcctc ccaggagaac 180
cccacacatg agtctggatc ctcgccatga tcctcccgtg gcccccacac aatctgggga 240
gacgcggggc cgcgggcact gcgctgccga gagggctccg gactgaggct gcagttgctg 300
cgcagggacg gctcaggatg cccggggtcc cggctgctgg cccagcccca ccctgtggcc 360
gaggggaccc agggacgagc tgcgccaggg agactcgggt ccgcagaccc cggaatcgct 420
gctgacaggc ccgggtccca ccacagcang tcccanccan cccctcctcc ca 472

<210> 3906
<211> 575
<212> DNA
<213> Homo sapiens

<400> 3906
ctttctccat ttgccaagcc catggcattg ctgccaccct gatggagcgc cctctcatct 60
ggcaccttcc tggcctcttt cccaggcccc agttctgtcc atgcagctgt gggtgcttcc 120

0050450 = 0050450

tgcattgcgg gtctcacggg gaggagacga gagtgcccct ggttgagtca ggaaagaatt 180
ctatcttcac gtcgctgcca gcaaatgacc acagcagctt cacgacctct gcaggaacct 240
atcttggtaa agaaacgggg cctatgtggt ggccgagcct caggtgtggc cgagcttcag 300
gtgtggccct tatgcacagc acagcccaag cctgtgggca ccactcgccc tgggctgcct 360
ggcacctgga ctccttccca tccttggccg aggtctgcgt ggcccttcag ggccgaatct 420
gacactgtct tcctcctgag tctgcccccc gggcttcctg cccaccccca ggctgtttca 480
tggcctctgc agggagcttc gtanaggtga ggctggtgcc atctgtctgc ttcanaccan 540
ctcaggctct gcgtgcctca aagtcccctc tgcac 575

<210> 3907
<211> 788
<212> DNA
<213> Homo sapiens

<400> 3907
gttagccaag attacaatga aggactactc caaattagga gtccatgaca tgaacgaccg 60
caaacgtctc ttccaactta tcaaaattat taagattatg caagaagaag ataaagcagt 120
cagtatccca gagcgtcatc ttcagacaag cagcctgcgc atcaaatctc aggaattaag 180
atctggccct cgcagacagc tgaattttga ttctcctgct gacaataaag acagaaatgc 240
cagcaatgat gggtttgaaa tgtgcagttt atcagatttc tctgcaaatg aacagaagtc 300
cacttaccta aaagtgctag aacacatgct accagatgat tcccagtacc atacaaaaac 360
aggaattctg aatgccacag ctggtgattc ctatgtgcaa acagaaatca gcacttcact 420
cttttcacca aattaccttt ctgcaatact gggggattgt gatattccca ttattcaaag 480
aatctctcat gtttcagggt ataactatgg aatcccccat tcttgtatca ggtaataaat 540
tttatctttc tttcttttga gggaaagtag cctcaggcaa gggcaggcct ctccttcatg 600
tccagcagac agcatctact ccttatttat agtaaatgaa tataacagaa attatcatga 660
acagcatttg catcaataat aaggatacct ggatgtggga aaattaatga gaaattggga 720
cttccaaggg gggagaaaga tggtatggtc atgtcatcag nanaggtggt acttgcaaga 780
tttgtnca 788

<210> 3908
<211> 475
<212> DNA
<213> Homo sapiens

<400> 3908
taaaattatg aaactcatag aagaaaacag ggacaaatct tcatgacaaa tatgtacaaa 60
tgaccaataa gcacatgaag agtctcagca tccttagtca ttgggaaaat gcaaatcaaa 120
aacacagtga gctgtgactt catgcttact acgatggctg taattaaaaa acaggaaagg 180
gccgggcgcg gtggcttaag cctgtaatcc cagcactctg ggaggccgag gcgggcggat 240
cacgaggtca ggagatggag accctcctgg ctaacacggt gaaaccccgt ctctactaaa 300
aatacaagaa aaattggctg ggcgttgtgg cgggtgcctg tggtcccagc tacttgggag 360
gctcaggcag gagaatggcg tgaacccggg aggtggagct tgcantgagc tgagattgtg 420
ccactgcact ccagcctggg tgacacagtg agactccatc tcataancaa anaca 475

<210> 3909
<211> 722
<212> DNA

09/20/2004 09:46:50 PM

<213> Homo sapiens

<400> 3909
gaaaaataaa taaatggcat agactgggaa agattcatag ttggcacaat tatgtatata 60
taaaatcctc gggaatgtac actttacata ctagaattta aaagtaagtt tagcaactgt 120
gttagttcgt tttcatgctg ctgataaaga catacctgag actggacaat ttacaaaaga 180
aaggtttatt ggacctatag ttccacatgt ctggggaggc ctcacaatca tggcagcagg 240
caaggagggg caagtcacat cttatgtgga tggcaacagg caaagagaga gcttgtgcag 300
ggaaactcct gtttttaaaa ccaccagatc tcatgacacc cattcactgt caggagaaca 360
gcatgggaaa gacccacccc catgattcaa ttgtctccca caaggcccct cccataccac 420
atgggaatta tgggagctac aagatgagat ttgggtgagg acacagagcc aaaccacatc 480
agcaacatgt cagaacacag aaaaaatgta aaatatcact gtatttctat gtactagtag 540
tgaactgtct cctagcttgt ttgtttaaaa aaaaaaatcc catggncttc aatttggtca 600
tttaaaaata atctacaagg tatactgttt ttctgttctt gttatttccc taacttttaa 660
gggttccnat tttttccacc ctggttagaa tcttgntccn cacctaagag aaataaattt 720
cc 722

<210> 3910
<211> 602
<212> DNA
<213> Homo sapiens

<400> 3910
acacacaggg ctccccccg cctctgactt ctctgtccga agtcgggaca ccctcctacc 60
acctgtagag aagcgggagt ggatctgaaa taaaatccag gaatctgggg gttcctagac 120
ggagccagac ttcggaacgg gtgtcctgct actcctgctg gggctcctcc aggacaaggg 180
cacacaactg gttccgttaa gcccctctct cgctcagacg ccatggagct ggatctgtct 240
ccacctcatc ttagcagctc tccggaagac ctttgcccag cccctgggac ccctcctggg 300
actccccggc cccctgatac ccctctgcct gaggaggtaa agaggtccca gcctctcctc 360
atcccaattc tcgggggccc ctccagtgca agggggctgc tcccccgcga tgccagccgc 420
ccccatgtag taaaggtgta cagtgaggat ggggcctgca ggtctgtgga ggtggcagca 480
ggtgccacag ctcgccacgt gtgtgaaatg ctggtgcanc gagctcacgc cttgagcgac 540
gagacctggg ggctggtggg gtgcaccccc aactancact ggancggggt ttggaggacc 600
ac 602

<210> 3911
<211> 742
<212> DNA
<213> Homo sapiens

<400> 3911
aagggcgtgc agatggacag ggcggtcatg ctgtaccaca aggctggcca cttctccaag 60
gccctggagc tggcctttgc cacccagcag tttgtggccc tacagctcat agcagaggac 120
ctggatgaga cgtcagaccc tgcgctcctg gcccgctgct ccgacttctt catcgagcac 180
agtcagtacg agagggcggt agagctgctg ctggctgtcc acgggggtcg cacacagcct 240
gcgcaccgac atgcacatca gtggagtgtt tgccaccaag gatgctgtcg cagtctggaa 300
cggaaggcag gtggcgatct tcgagctttc tggagccgcg atacggagtg cagggacctt 360
cttgtgtgag acgcctgtgt tagcaatgca tgaagaaaac gtttacacgg tggagtcaaa 420

Docket No.: 0506-1005

ccgagttcaa gttcgaacct ggcaggggac tgtcaaacaa ctcctccttt tctcggagac 480
tgaggggaat ccctgcttct tggacatctg tgggaatttc ctggttgtan ggacagactt 540
ggctcacttt aaaagctttg atctttcccg aagagaggca aagcacactg tanctgcaag 600
agcctggcgg agctggtccc tggggtgggg ggcatcgctt ctctgcggtg caacaacaac 660
cgggaagcac catcaagcat cctccccaan caaagggtga caaacaancc cctgaattcc 720
aaaaatctgn ctttctaacg aa 742

<210> 3912
<211> 742
<212> DNA
<213> Homo sapiens

<400> 3912
caaacagagg tttccactct tgaacaagat catccaggtt cttaaagtcc tccccacttc 60
caccgcttgc tgcgagaaag gccgcaatgc cctccagcga gttcgcaaaa accaccgctc 120
ccgcctgacc ctggagcagc ttagcgacct gttgacaatc gctgtaaacg gaccgccaat 180
caccaacttt gatgccaagc gagccctgga cagctggttt gaggagaagt ctgggaacag 240
ttacgcgctg tctgcagaag tcctcagtag gatgtctgcg ctggagcaga agccagcact 300
acagaccatg gaccacggga cggagtttta ccccgacatt tagggagctg gcgctgcaga 360
gttcactaag ctgttgaata ttttttaat ctatactcat aagctttgat atattatata 420
aatatatatt atattanatt atattatatt atatatatat atatatataa actcacactg 480
aaaattttta aaaaccaagg tgacgcgtcc accagaagcc actgggagat ttcanaaagg 540
aaaaatgttg gaaactgact cttgtctaca aaatttggca gctgcaacat acatggcanc 600
tcattttcac tcacagaagc acgtgctggg gcctcctgtg ttcccaactt actgtccacc 660
aacagcataa gctaaaatga caggtctctg tcatcacctt taggtagcnc attttggtna 720
angttttcaa tttgcggggt gg 742

<210> 3913
<211> 667
<212> DNA
<213> Homo sapiens

<400> 3913
ttggatatca acagggaaac tagaaggtat cactgctcag gaaaagatca gattgttcct 60
tctttgaata cagagtcttc taatcctgtg cttaagaagt tagaaaagct aaacactgag 120
aaggaagaaa ggcaaaaaca gttgcagcaa cagaatgaaa aagagatgat ggaacagatt 180
cgccagcaaa cagatatttt agagaaggag cgcaaagcct tcaagacaat tgaaaagcca 240
agaattggag agtgtttggt ggcaccatct tcctatcagt caaagcaaag agtagagagg 300
ccatcctctc tcctcagctt aaatacctca aataagggag aacttaatgt actggggtcc 360
ctatcattaa aagatgcagc tcttgcccaa aaagacagtt cccctgctca cttaccccca 420
aaggaccgac ctgtcaccgt gttctttgaa agaaaaggaa gtccatgcca atctagtact 480
gtcaaggaat tatccaagac agacagaatg ggcacccagc tgaatgtagc ctgtaaactc 540
tcaaataatc gcatttcaaa aagagaacac tttangccaa ctcagtctta cagccacaat 600
tctgatgacc tttccagaga gggaaatgct anggccantt tcttcactcc aaaggacaat 660
atgagta 667

<210> 3914
<211> 783

09/27/2004 09:42:50

<212> DNA
<213> Homo sapiens

<400> 3914
aaaagttatg catactcata aaaattcaaa caatgctgaa ttgaaaaagg aaaagttagt 60
ggctctttat ccactttatg tcccactgcc cagagatcat caccatgagc agtttggtgt 120
atgacattcc agatacgcac acatatcttc atacatacac acatacaaat atgtatacat 180
ataacaaaag actgtaaaat ataataatat gatcatggac aacttgccat ttggacttac 240
tccattcttt ttttttaatt ttattttctt ggactcaggt cacaaattta ttcttttaaa 300
acactgcata gtactctaca gaatgggagc actttgattt atttaaccaa ttccttattg 360
gattgtgttc aatgcttcaa atcaaaactt tcaaaataaa atttacaggg tgtcttggtt 420
gtgtttctat gtcaatacat agattgacgt tatcttttat ctttttttaa acagatgcag 480
tgtacttcat aatatgaatg gaacacaatt tctttaaaca tgtgtctatc aaaaatcttc 540
caatttttt ttactcttat cagtaatgaa catcggttgc acataatctg tgtacaaaag 600
tacgactgtt tctcaagggt aaattcctan aaggaggata actgggatna aagggtattt 660
acatgtaaaa ttgggaaaca tgttgccaaa tgccccaaga gggtaaaccg ggttaatcct 720
tcaccaaggg gatatgttcc caacaacctc aacaagnttt acccccccntt tcaagncctg 780
gcc 783

<210> 3915
<211> 729
<212> DNA
<213> Homo sapiens

<400> 3915
cagatgttga agaggatatc gcaggaccta aacttgtgat cgtttggggg aggtcacaca 60
cgtttctgag tgggaatgga tgggcgtgaa tgacgtgccc tcttaaaaag cacaacagtc 120
ctttaagagg agcaaaattg agttttccca ttttggccaa gattttgaag acagttcaat 180
gtattctaca tttgacataa gatgagaact ttctaaagta ttctctccaa gagcgtaaac 240
gatgactacc ccagccctgc tgcccctctc tggacgtagg ataccacctc tgaacctggg 300
gccgccttcc ttcccacatc acagggctac cttgagactt tctgagaagt ttattcttct 360
ccttattctt agtgccttca tcactctgtg ttttggggca ttctttttcc ttccagactc 420
ttcaaaacac aaacgctttg atttgggttt agaagatgtg ttaattccac atgtagatgc 480
cggtaaaggg gctaaaaacc ccggagtctt cctgatccat ggacccgatg aacatagaca 540
caggaagttc acaaatgggt gctaccatag tagatgcttt ggataccctt tatatcatgg 600
gacttcatga tgaattccta natgggcaaa gatggattga agacaacctt gatttcaagt 660
gtgaattcan aggtgtctgt gtttgaaagt caacattcna gtttaattgg agggctactt 720
gcancaata 729

<210> 3916
<211> 676
<212> DNA
<213> Homo sapiens

<400> 3916
ttggtctact gggttattct taaacaaggc tttgtccaag gacatttggc tcgcaggcac 60
agagctgatt aactcgttat gtatcttttg ataataaggc agcgatcatt aagaaaaacg 120
tgtagccaat gaaataacat gttctgggcc ccaccactgg actgggaggt gcagcgcatc 180

0962946.0072000

caagcagagg ctgcctcctg ccctccacgc ctgctgctct cgcaggcagg ggctctgctg 240
cttacagcag tgcggccatc tcggcttctc tccacatcgt ctgtcacgcg ctggtcccca 300
ccatacctct cgccaccccg tgcctctgtc cccgtgcggc ctgaggagct ccagctttcc 360
ctgccagcgg tgctctggga gtggggacgt gatgcagggc gagcatgatg caacggggca 420
ccccagaccc ttccctcccg tgggggggagg ggtgtggcac gcanaggggc agagggcggg 480
gacactggcc ccgtggggga agaaggtgct gtcacagccg ttactgtccc ccgtgggacc 540
cancctggag ccccccatcc tttggctcct gcctgtggcc actcagctct caagtgggca 600
catgcacatc ccctgctcct tccctgngca nctgccctgc ccaatggnct ttctggtccc 660
agctactgaa accggt 676

<210> 3917
<211> 762
<212> DNA
<213> Homo sapiens

<400> 3917
aaacaaggga agcaagccgt ccaaaatcca gggttcctag agccgtatct cagaatttta 60
tgcacacagg ttgcagttaa gtcttgctca aagttttctg ggagaactaa gaactttcat 120
tgttaatgga agtgtggcaa ttggagcagg tgacaaagaa caagcccttt cgagtccccc 180
cttcattcac tccacacatg ggttgccttt ggcgtctggg ccacttggtc tccaatggta 240
gcagaacaca gcaagaatcc atgtgttctg cctggtggct gtgtgtggtt ggcctcctgg 300
gggcctgcgg gctgggcatg gacgccgtgg aggacactcc ctgtgctaga ctggctggag 360
cgagggcaga tagagtggac agggcttgga cattctggat gaagagccag tggcctcagg 420
gcagaaatga caccagggta actcatcaaa atgtgcctcc caaggctcta gaaaatccct 480
ggtanggtct gtgtggcctt tgcaggagca tctggcccat ctggaggtgg gtttgagggg 540
acggggccac aaggaaatgg aaacagtagt ggggttcaca tgtgcgaaca ttcacaagat 600
gccaaagtag gcactcggna caatccgctt antagctctc atccaagacc acgtgcaacc 660
aatgatgaag gctangatgg gggatgcggt caagggcact agccttgaaa agggggggaca 720
agggagaanc ttcaaaaaca agtggnggaa aggcatcaac aa 762

<210> 3918
<211> 698
<212> DNA
<213> Homo sapiens

<400> 3918
ttggcggggg ccgtgccggg cgccatcatg gacgaggact actacgggag cgcggccgag 60
tggggcgacg aggctgacgg cggccagcag gaggatgatt ctggagaagg agaggatgat 120
gcggaggttc agcaagaatg cctgcataaa ttttccaccc gggattatat catggaaccc 180
tccatcttca acactctgaa gaggtatttt caggcaggag ggtctccaga gaatgttatc 240
cagctcttat ctgaaaacta caccgctgtg gcccagactg tgaacctgct ggccgagtgg 300
ctcattcaga caggtgttga gccagtgcag gttcaggaaa ctgtggaaaa tcacttgaag 360
agtttgctga tcaaacattt tgacccccgc aaagcagatt ctatttttac tgaagaagga 420
gagaccccag cgtggctgga acagatgatt gcacatacca cgtggcggga cctttttat 480
aaactggctg aagcccatcc agactgtttg atgctgaact tcaccgttaa ggtangaaga 540
gttctagagt taaggagaaa agtgtttatg aatgtttatt tttggttgtt ggtctgtttc 600
ctttgacagt tcatatttgc ttttttcca taaaggtctt tattgnttta atttcataaa 660
gccttacact gaagaaagaa aagtggnaaa aatttgna 698

0956045.0972800

0002376-0002800

<210> 3919
<211> 775
<212> DNA
<213> Homo sapiens

<400> 3919
atgacgcgag accccgcccc cgcagcgccc gcttccaaga tggcggcagc gatgcctgcc 60
cggctgttgg ggtggcggtg acgacaggca gcaaaagacc agctggtccc agattcgctg 120
ctggagtgct ggatggagcc tttctctgcc ctctgtgaca tttccaattt tagataatgc 180
ctcacatctc tgtccccccg ggacccccctg gagcccccat gatccctaag aagacagctt 240
gaacctagat ctcaccccca ggatgttgcg gaggctgctg gagcggcctt gcacgctggc 300
cctgcttgtg ggctcccagc tggctgtcat gatgtacctg tcactggggg gcttccgaag 360
tctcagtgcc ctatttggcc gagatcaggg accgacattt gactattctc accctcgtga 420
tgtctacagt aacctcagtc acctgcctgg ggccccaggg ggtcctccag ctcctcaagg 480
tctgccctac tgtccagaac gatctcctct cttagtgggt cctgtgtcgg tgtcctttag 540
cccagtgcca tcactggcag agattgtgga gcggaatccc cgggtagaac caggggccg 600
gtaccgccct gctgctctac cacctgcacc ccttcttgca gcgccagcag cttgcttatg 660
gcatctatgt catccancaa gctggaaatg gaacatttaa caaggcaaaa ctgttgaacg 720
ttggggtgcg aaaagncctg cgtgattaaa aagtgggact gcctgttcnt gcaac 775

<210> 3920
<211> 910
<212> DNA
<213> Homo sapiens

<400> 3920
aggggtggc gctctccgtt cggcggcgct cccatggcgc acattaccat taaccagtac 60
ctgcagcagg tgtacgaagc catcgacagc agagatggag catcttgtgc agagttggtg 120
tcttttaaac atcctcatgt tgcaaaccca cgacttcaaa tggcctctcc agaggagaag 180
tgtcaacaag tcttggaacc cccttatgat gaaatgtttg cagctcattt aaggtgcact 240
tatgcagtgg ggaatcatga cttcatagag gcatacaagt gccagaccgt gatagtccaa 300
tcattcttgc gagcattcca ggcccacaaa gaagaaaact gggctctgcc tgtcatgtat 360
gcagtagcgc ttgaccttcg agtgtttgcc aataatgcag atcaacagtt ggtaaagaaa 420
ggaaaaagca aagttgggga catgttggaa aaagcagcag agttactgat gagctgtttc 480
cgggtctgtg ccagcgacac ccgtgctggt atagaggact ctaagaagtg gggcatgctg 540
tttctggtga accagctgtt taaaatctac ttcaagatca acaaactcca tttatgtaaa 600
cccctaatta gagcaattga cagctcaaac ctgaaagacg attacagcac tgcacagaga 660
gtaacataca antactacgt tggacgcaag ggctatgttt gacagcgatt ttaagcaagc 720
tgagggagta cctgtcaatt tgcctttgag cantgtcacc gttctagtca gaagaacaaa 780
nnggatgatt ctgatcaatt gcttccagtt aaaaatgcta ttggggtcaa atgccactgt 840
gggagccccc gaaaaagttt cacccggatg caattttgcg gaagntaacc anaacttttt 900
aaccnaaggg 910

<210> 3921
<211> 666
<212> DNA
<213> Homo sapiens

0956456-070200

<400> 3921
aaaggccgga ccagaatatg gccaagggat gaaccctatt agccgcctgg cgcaaattca 60
acaggccaaa aaggaaaagg agccggatta tgttttgctt tcagaaagag gaatgcctcg 120
acgtcgagaa tttgtgatgc aggtgaaggt aggcaatgaa gttgctacag gaacaggacc 180
taataaaaag atagccaaaa aaaatgctgc agaagcaatg ctgttacaac ttggttataa 240
agcatccact aatcttcagg atcaacttga gaagacaggg gaaaacaaag gatggagtgg 300
tccaaagcct gggtttcctg aaccaacaaa taatactcca aaaggaattc ttcatttgtc 360
tcctgatgtt tatcaagaga tggaagccag ccgccacaaa gtaatctctg gcactactct 420
aggctatttg tcacccaaag atatgaacca accttcaagc tctttcttca gtatatctcc 480
cacatcgaat agttcagcta caattgccag ggaactcctt atgaatggaa catcttctac 540
agctgaagcc ataggtttaa aaggaagttc tcctactccc ccttgttctc cagtacaacc 600
ttcaaaacaa ctggaatatt tagcaaggat tcaaggcttt cangtatgaa ttaaaagcaa 660
nancaa 666

<210> 3922
<211> 786
<212> DNA
<213> Homo sapiens

<400> 3922
aagctggact taaagagttc aaattggagc tggaattgct ctaagcaatt ccagggcctt 60
gcaattttac aattaaggaa gacttaaata tatacatagt cagggtggca aggtaaaagg 120
aggtctgatt tcctctgcga tgttcttcag ctaagaccta aattctgaaa ccgttaaaac 180
ctgaagtgcc tttaaatata ttatttcatc agagccccag gttcattgtg tcacttatca 240
aggtctgatt tagggtcctc aaggactaat cttgttagtg tttaaaagca actaggtttt 300
gtttttggca ttttagttcc atcttctaga ttctgttgtc ttgcagatag agatcaggga 360
gcccagctac acattcattc ttctagtccc ttgtactcat tgtatttcct tctgccttag 420
ggccttagtt tgtgctgttc cctgtaccag gaactctctt tgctgtttct cggtttcttg 480
ctcaaatgtc acttcaagga aggctttcct gactgacttc ttatttttta agttgttaca 540
acattgtgta cctttgtttt atagcactta catttatttc tatgaatatt tccttaatgc 600
ctatattcct tcctaaatcg taaagctgca cnagagcang atcatttgtg tctgccttac 660
taacctttc atcctgagtg cctggcaaaa gtgcttggta nctggattga tacttaataa 720
atatttgcta agcaaatgta nggtaacctc aaatccaagg gcnaagtcaa gctccaagga 780
attcca 786

<210> 3923
<211> 656
<212> DNA
<213> Homo sapiens

<400> 3923
gcgacaccat ggacttatgc ttatctcttc aagtatatca tcatcggaga cacaggtgtg 60
gggaagtcat gtctcctcct gcagtttaca gataagcggt tccagcctgt ccacgacctc 120
acaataggtg tggagtttgg agctcgtatg gtcaacattg atggaaaaca aatcaaactg 180
caaatctggg atacggggag cagctggagc actgctggtg tacgacatta caaggcgtga 240
aaccttcaac cacctgacct catggttaga ggatgcccgg cagcactcta gttccaacat 300
ggttatcatg ctcattggga ataagagtga cctagagtcc cgcagggatg tgaagagaga 360

agaaggagag gcctttgcta gggagcatgg acttatattc atggaaactt cagccaaaac 420
agcctgcaat gttgaagagg ccttcattaa cacagccaaa gaaatatata ggaagatcca 480
gcagggttta tttgatgtcc acttcccact aagaattagg gtcaaagaca ttctatttga 540
acacttgcaa ttacctagat ctaattggnc tttggntgat agattctctg cctcggnatt 600
tcattgagtt tttttcctcc ttgcctttgg gtgtctgctt gccacttcct aaagaa 656

<210> 3924
<211> 821
<212> DNA
<213> Homo sapiens

<400> 3924
gcttcctcgt tgcccccgcc gcgggcgcga gatggattcc gggtgctggt tgttcggcgg 60
cgagttcgag gactcggtgt tcgaggagag gccggagcgg cggtcaggac cgcccgcgtc 120
ctactgcgcc aagctctgcg agccgcagtg gttttatgaa gaaacagaaa gcagtgatga 180
tgttgaagtg ctgactctca agaaattcaa aggagacctg gcctacagac gacaagagta 240
tcagaaagca ctgcaggagt attccagtat ctctgaaaaa ttgtcatcaa ccaattttgc 300
catgaaaagg gatgtccagg aaggtcaggc tcggtgtctg gctcacctgg gtaggcatat 360
ggaggcgctg gagattgctg caaacttgga aaataaagca accaacacag accatttaac 420
cacggtactc tacctccagc ttgctatttg ttcaagtttg cagaacttgg agaaaacaat 480
tttctgcctg cagaaactga tttctttgca tccttttaat ccttggaact ggggcaaatt 540
ggcagaggct tacctgaatc tggggccagc tctttcagca gcacttgcgt catctcagaa 600
acagcacagt ttcacctcaa gtgacaaaac tatcaaatcc ttctttccac actcaggaaa 660
agactgtctt ttgtgttttc ctgaaacctt gcctganagc tctttaattt ctgtggaagc 720
gaatagcaat aatagccana aaaatgagaa agctctgaca aatatccaaa aactgtttgg 780
canaaaaaga gaagaaacaa gtggttgata anagaactca a 821

<210> 3925
<211> 635
<212> DNA
<213> Homo sapiens

<400> 3925
tattatagac cataatatgc ctgtcataag cagactgttt ttgttgactt tcttgacctt 60
ctggggtagg tagtgccacc tccttggaag aaagatcctt ttcgtgatgc cagggcaatg 120
attaacacat ggaaaattgg agcaaatgaa actgcaatta atactgctca aacagattgc 180
agagtatgat gaagaacttg gatgtcattt tattgcagcc tctcctgggg acaccattat 240
tttatcacct ttgacttttg gatgtatagc tccatttgac atctcttgtc ttttcctgct 300
ttctttcttt attcttccca gtgggagtta gatgaagaat gtctggcttg cagaagccag 360
acttggccat tctgggagat gtgcagactt tcagattggc tttgacagtc ttacagagct 420
gttcccagga tatgaagcac agctgcaaag caggcagttc ggctttgcct tctcttactt 480
tcaagatgtg tgatgggang cggggaacat acaaccccca gctgcttaaa ctcttcttta 540
tccagaattc cccttccttt ancttggga ggcttcanat atcactcagt tgactgatta 600
aatatcaagg gataggaatc tatccccaag ggngg 635

<210> 3926
<211> 756
<212> DNA

0080-5650-9700-8000

0052045-0052045

<213> Homo sapiens

<400> 3926
aaaactaatg actgagcaca aacctgttga agatgcagtt cttcttggta gcctaaatag 60
gattatcttg gacctaagat agtgaccttg ttttttttc ttaatttttc cattgaaata 120
catggcctta aggaaatatg caaaaaaaaa aaaaaatgaa cctggaaaaa aaaggtcctg 180
gaccaggtgg atgcctcata tattaagaaa tccccgaggc cgggtacagt ggcttacgcc 240
tgtaatccca gcactttggg aggccaaggc gggcggatca cgaggtcaag agatcgagac 300
catcctggct aacacggtga aaccctgtct ctactaaaaa tataaaaaat ttggtgggcg 360
cctgtagtcc cagctacttg ggaggctgag gtaggagaat ggcgtgaacg caggaggtgg 420
agcttgcggt gagtggagat tgcgccaccg cactccagcc tgagcgacac agcgagactc 480
cgtctcaaaa aaaaaaaaag aagaagaaaa agtatccccg gtactattca aatggaactt 540
tatcactaat aancacaagg gaagaccatg ccccatgtta gcaatgcaaa ttattgctac 600
agctgcctaa gataatttgg nccttagttg ataatatnca agagaatgtg gacttctaag 660
tccctttgcc ttgcatcctc tgtttcaaat ganttaaagg ggttgtgtag ggaaagcaag 720
ttantaaaac ttaggagaaa nccttcccaa gattta 756

<210> 3927
<211> 669
<212> DNA
<213> Homo sapiens

<400> 3927
tggtgaggga agagagagac cctctcatat tgttttatac tcagaaaaga aaagagaagc 60
aaaactaaag gcaggtagcc tggcacctag gaacagaccc aaaaccaagg aaccagaccc 120
gaaaccaggc ctgggcctgc ctgacctaag cctagtagtt aaaattctac ccctgaccta 180
gcaactgatg ttatctctag attatagaaa gacattgtaa aacttcccgg tctgttctat 240
ttcactctga ccaccgttgc atgcagcccc tgtcacgtac cccctgcttg ctcaatcgat 300
catgaccctc tcacgcggac ccccccttaga gttgtgagcc cttaaaaggg acaggaattg 360
ctcactcggg gagctcggat tttaagacac tagcctgctg atgctcccag ctgattaaag 420
ccactccctt cactatcttg gtgtctgagg ggttttgtct gcggcttgtc ctgctacatt 480
tcttggttcc ctgaccagga agcgaggtga ttaacggatg gttgaggcag ctccttangc 540
gactttagcc tgccctgtgg aacatccctg cgggggactc caaccagcca aagcaacgcg 600
gatcctgana gtgctcctgg gtangcactt gccctgatgg gacgccttgc caaagcantg 660
tgtggaagg 669

<210> 3928
<211> 755
<212> DNA
<213> Homo sapiens

<400> 3928
aaaaaaaaaa aaaaaaaggt ttgtctccgc tgtttcatct ctatggctgt cagaggtggg 60
cggctttgac cgagaggctg ctggagctcg tgtttggacg cgatgtttcg tctgaactca 120
ctttctgctt tggcagaact ggctgtgggt tctcgatggt accatggagg atcacagccc 180
atccagatcc ggcgaagact aatgatggtg gctttcctgg gagcatctgc agtaactgca 240
agtactggtc ttttgtggaa gagggcccat gcagaatctc caccatgtgt agacaaccta 300
aaaagtgaca tcggtgataa agggaagaat aaagatgaag gggatgtttg taaccatgag 360

aaaaagactg cagatcttgc ccctcaccca gaagagaaaa agaagaaacg ttctggattc 420
agagacagaa aagtgatgga atatgagaat aggattcgag cctactccac gccagacaaa 480
atcttccgat attttgccac cttgaaagtc atcagtgagc ctggtgaagc agaagtgttt 540
atgacaccag aagattttgt gcgatccata acacccaatg aaaaacaacc agaacacttg 600
ggtctggatc aatatataat aaaacgcttt gatggaaaga aaatttccca ggaacgagga 660
aaatttgctg atgaaggcag tatattttac acccttggag aatgtgggct catatccttt 720
tcagactaca ttttcctcan aantggtcnt tccaa 755

<210> 3929
<211> 714
<212> DNA
<213> Homo sapiens

<400> 3929
aattagaact ggaaagaaat cggaagcgac tagagactct gcagagtgtc aggccatgtt 60
ttatggatga gtatgagaag actgaggaag aattacaaaa gcagtatgac acttatctgg 120
agaaatttca aaatctgact tatctggaac aacagcttga agaccatcat aggatggagc 180
aagaaaggtt tgaggaagct aaaaacactc tctgcctgat acagaacaag ctcaaggagg 240
aagagaagcg cctgctcaag agtggaagta acgatgactc ggacatagac atccaggagg 300
acgatgaatc cgacagtgag ttggaagaaa ggcggctgcc caagccacag acagccatgg 360
agatgctcat gcaaggaaga cctggcaaac gcattgtggg cacgatgcaa ggtggagact 420
ccgatgacaa tgaggactcg gaggagagtg aaattgacat ggaagatgat gatgacgagg 480
atgacgattt ggaagacgag agcatttctc tctcaccaac caagcccaat cgaagggtcc 540
ggaaatctga acccctggat gagagtgaca atgacttctg acccttttgc caagggaccc 600
tggcagatta aaaccctcag acttgtaggt aaatgggaac ttanaaggtt aggaaggtaa 660
nccctgtttt gtttactaag ctggntggac tcatgatcac tgaagcaata ctta 714

<210> 3930
<211> 632
<212> DNA
<213> Homo sapiens

<400> 3930
gtgcccagct gagagcagca ccaacaccac ccaggatgag cagcgcaggt ggccaggctg 60
tgaccagcag gacgagatgc tcaacctggg cttcaccatt ggttccttcg tgctcagcgc 120
caccaccctg ccactgggga tcctcatgga ccgctttggc ccccgacccg tgcggctggt 180
tggcagtgcc tgcttcactg cgtcctgcac cctcatggcc ctggcctccc gggacgtgga 240
agctctgtct ccgttgatat tcctggcgct gtccctgaat ggctttggtg gcatctgcct 300
aacgttcact tcactcacgc tgcccaacat gtttgggaac ctgcgctcca cgttaatggc 360
cctcatgatt ggctcttacg cctcttctgc cattacgttc ccaggaatca agctgatcta 420
cgatgccggt gtggccttcg tggtcatcat gttcacctgg tctggcctgg cctgccttat 480
ctttctgaac tgcaccctca actggcccat cgaagccttt cctgcccctg aggaagtcaa 540
ttacacgaag aagatcaagc tgagtgggct ggncctggac cacaangtga caggtgacct 600
cttctacacc catgtgacca ncatgggcca aa 632

<210> 3931
<211> 776
<212> DNA

0052945.0720

<213> Homo sapiens

<400> 3931
atcaagcagg ggcagggctg gcgctgcggc gggagatgct gtcgggccgc ggcggcgctt 60
ggcagccagg agctctgcat tgaaggcact ggggtaaagt gaatgccgaa gacagaagat 120
ttggatgata caccactgac tttctttgtt tggaatacac gttatgaacc ctttctggag 180
catgtctaca agctctgtac gcaaacgatc tgaaggtgaa gagaagacat taacagggga 240
cgtgaaaacc agtcctccac gaactgcacc aaagaaacag ctgccttcta ttcccaaaaa 300
tgctttgccc ataactaagc ctacatctcc tgccccagca gcacagtcaa caaatggcac 360
gcatgcgtcc tatggaccct tctacctgga atactctctt cttgcagaat ttaccttggt 420
tgtgaagcag aagctaccag gcgtctatgt gcagccatct tatcgctctg cattaatgtg 480
gtttggagta atattcatac ggcatggact ttaccaagat ggcgtattta agtttacagt 540
ttacatccct gataactatc cagatggtga ctgtccacgc ttggtgttcg atattcctgt 600
ctttcaaccg ctagttgatc ccacctcaag tgagctggat gtgaagagag catttgcaaa 660
atggaggcgg naccataatc atatttggca agtattaatg tatgcaagga gagttttcta 720
caagattgat acaagcaaag ccccctgaan ccaaaaggct tgcaagtact ggtntn 776

<210> 3932
<211> 733
<212> DNA
<213> Homo sapiens

<400> 3932
aagggctcgc agcggccaga aacccggctc cgagcggcgg cggcccggct tccgctgccc 60
gtgagctaag gacggtccgc tccctctcgc cagctccgaa tcctgatcca ggcgggggcc 120
aggggccccc cgcctccccc ctgaggaccg aagatgagct tcctcctcag cagccgctct 180
tctaaaacat tcaaaccaaa gaagaatatc cctgaaggat ctcatcagta tgaactctta 240
aaacatgcag aagcaactct aggaagtggg aatctgagac aagctgttat gttgcctgag 300
ggagaggatc tcaatgaatg gattgctgtg aacactgtgg atttctttaa ccagatcaac 360
atgttatatg gaactattac agaattctgc actgaagcaa gctgtccagt catgtctgca 420
ggtccgagat atgaatatca ctgggcagat ggtactaata ttaaaaagcc aatcaaatgt 480
tctgcaccaa aatacattga ctatttgatg acttgggttc aagatcagct tgatgatgaa 540
actcttttc cttctaagat tggtgtccca tttcccaaaa actttatgtc tgtggcaaag 600
actattctaa agcgtctgtt cagggtttat gcccatattt atcaccaagc actttgattc 660
tgtgatgcag ctgcaaagan ganggccaac tcaacacctc cnttaagcac tttaattttc 720
cttggtcaag gag 733

<210> 3933
<211> 762
<212> DNA
<213> Homo sapiens

<400> 3933
tatgaaatgt ttcatattga aaacacaaga tgacctttct aatgagctgt atgagaggtg 60
aatctcctca ctgtcactgc catagccaag catcctcatg agagtgagca catcggcaca 120
gcatgcatcc agctctggag gccacggtgc aggcatagct gcctgctgct ctggcagagg 180
ccagtaaata cagttcctag aagcagcctt tgctgtcttt ttacactgta tgcggtttgg 240
aaatgaatgt agaaacttac tgtgggcatt tacctttctg tgccagtttg gcttttattg 300

0095-09-2008

cctgaacctt atgctgacct ggagaggaga tgggggacag tgctgttgtg gggccagcag 360
tgaatctgta tgcggagagt tgtgttgtgc tgatgtggcc gttggtggtc aggtaagagg 420
ctcggcacct tcttggaaga aatcatgtct gagggtgtac gtttgatatg atcatgccag 480
attggagaag atccaagcca ggaagatggg cttgaagcaa actgcattat caggagtacc 540
ttggtgagag gatcagtgta aatcctaata ggtacaaaga cttttgtgtt ttggctttgt 600
cacagattta ttgaaaaact tttttgcttc tgcttccatt tttagcattt tagtttctgg 660
ttttcatttt tggngaatcc ttgcctttta aactcgtggn ttttctctca ttttcttccc 720
tctctccctc catctctgac cancccccaac ctaacccccc aa 762

<210> 3934
<211> 749
<212> DNA
<213> Homo sapiens

<400> 3934
aaaccgagtt ctggagaacg ccatcaagct cgctgcttaa aattaaacca caggttccat 60
tatgggtcga cttgatggga aagtcatcat cctgacggcc gctgctcagg ggattggcca 120
agcagctgcc ttagcttttg caagagaagg tgccaaagtc atagccacag acattaatga 180
gtccaaactt caggaactgg aaaagtaccc gggtattcaa actcgtgtcc ttgatgtcac 240
aaagaagaaa caaattgatc agtttgccaa tgaagttgag agacttgatg ttctctttaa 300
tgttgctggt tttgtccatc atggaactgt cctggattgt gaggagaaag actgggactt 360
ctcgatgaat ctcaatgtgc gcagcatgta cctgatgatc aaggcattcc ttcctaaaat 420
gcttgctcag aaatctggca atattatcaa catgtcttct gtggcttcca gcgtcaaagg 480
tgggtctgtc tccttccgag gactgcgatg ctcatacacg cacatcatta agagctctgc 540
gtttgggaac aggcatagca gagattataa tttcaagtat tgaaatgatt tcaaaactgc 600
ttttttcaaa attggtatta agttccttaa ccacagatct tttgctctcg atgtgagcca 660
gtggtaaaat taaattaaaa tgtgggggta tttttgccct ccctttttant ctttctaatg 720
ggncatggna aatgaacatc aaactggga 749

<210> 3935
<211> 784
<212> DNA
<213> Homo sapiens

<400> 3935
gtgcaaagtg ctgggttctg ggtttctgga ttcgcgggcc gttcacacgt agcctgtgcc 60
ggctcctcgg gtgagtccgt ccgcgcgcgg tgccccggga cggcctaggc tgccgggggt 120
ccggggcccc aggcattccg ggctgcagat tgacggggat cccggatgca ccgcgcgccc 180
ccgcgccctc accgacgggt ccagacctgg tgggaagaag gtgcggggac gggtccctga 240
ggatcccgat gcctacgagc caagatgctc agctttatag gtgtgaccta cacatgtgac 300
ttcacctcag ttttgtgatc cgtaaaatgg acaaattcga agctacttca cagtgctgtt 360
gagaggatta aatgaaacaa tgcttgtaaa gctctttgca ggagggagcc tcggaagcag 420
ggcctggccg gcagagcaca cctgctgtca ccagggacca caggcagcat gaagacccca 480
gtggagctgg ccgtcagtgg gatgcagacc ctcggccttc agcaccgctg ccgaggtggc 540
taccgggtca aggccaggac gtcatatgtg gatgaagact ctgtttggca gcccaacang 600
cacccggcct accccaccgg acttcgattc gccctgggtg gagaaggcta acagaaccag 660
aggcgtgggc aaggcanggca tccaagggcc ttgggggggca aaaggggaag cttgtgagaa 720
ccaaccccct caaaggggggc aannaacccc caaccctcaa aaccaaaggg aaagaangaa 780

0052045.0002

acaa 784

<210> 3936
<211> 99
<212> DNA
<213> Homo sapiens

<400> 3936
acctgatgtg ttnaaagcac ttcatnaggc cccggttttc ctttggcttc tgcttttcag 60
tgantggnat gactgcctat gtgggtggca atgccaccc 99

<210> 3937
<211> 688
<212> DNA
<213> Homo sapiens

<400> 3937
tggtcttgca caagacttca gatagggcca caattatggg agctggaaag aatctggctc 60
ccttaccacc agtgggtcct ttcccctgcc tcacaggcat gcacatgctc tctctgtagg 120
taaaaagtac agcatctggc ttagcttcag atacttccag ttttctaaag accagtgctt 180
tgaatgcttt ttgttactta ggtaagctcc atcaactgta aaataagtat tggtggattt 240
atggatttca aaaggcagaa caactaacat actgaattcc tgattccagt ctatgttcta 300
ctggagttgt cagaatgcca aatgctaacg caaacagtgc ttttttcttc taaaaggagg 360
aaagagggtg ggaatgagag gatgaattcc tatcagttta ggaggatgtt gccattggga 420
gttcttgcgt aatttgagat tgtaaaacct agaaggtttc ttgtctttgt tatgtangag 480
gaaacaggaa ttcttggttt aacttaggct gggcctggga agagtttgct gtttacaatg 540
agatctaacc ccttattgga gatgatttta aaaatctctg gccacctcta tgggcatctt 600
tggcaagatc tgcatttggn atttaatagc aaccacattt attaaagcaa agaaatttcc 660
ctcaattgnt gtcccaagta ntccaata 688

<210> 3938
<211> 796
<212> DNA
<213> Homo sapiens

<400> 3938
gctccacctc cgccccatgg acagtagatg accgttaatg gcttttaagg aaagatgcaa 60
cctggaaaaa aataaaaaaa acttgtttta gaatggtaac cactggcaat atgaagaata 120
attagactaa agaagagagg taggataatc atgggcattg gcagtggaat tgaaagagta 180
atttcagaag cagaatggtc agatgttgga ggtgattggt tatagagttt aagaattgta 240
ctgattttct attgtgtaac aaactacccc aaaacttaat ggcttaaagc aactattatt 300
tctcctgatt ctgtggttga ctggatggtc gtctgctgct cttgcttaga cttaggcatc 360
tgcatttagc tgagggttca gccagggctg gacatccttt aatggcctca ttcccatgtc 420
tggggcctca ggtcagatag ctgggactac cgggtctcac tccagaagag gcttcttcag 480
agcatggtag tcttggggtt ctaagagaat gagagtagaa gctgcaaaac ctcttgaaac 540
tggggcttgg gagtcacaca tgactttctc cacattctgt tcgtcaaaag cgaatcataa 600
ggacagcaca gactcaaggg ataagaaagg agattccatc tcttgatgaa gaagagctgc 660
aaagggcata tttaatcagt cacangagtc taatgctaca aagtagtttt ttaaaaagat 720

0062040.0002

gactagattg gcaagttcaa gggtaatcct tttaattggt ttaattanat atcacttagc 780
tggnantcag taaagc 796

<210> 3939
<211> 486
<212> DNA
<213> Homo sapiens

<400> 3939
gaataaatta gaggggatct cggtgcgaac tttccttgac ctcgacccca aagaggcttg 60
ctggggccga gaagaaaacc cgtgcgggat gtggaggggc ccggggcgcc ggggtccccc 120
gcccgcgaga cccgctccac caggcgcctt ggagagcagc gccagcggtc gtcctccagc 180
tcccgcaggg gtcgccccgc cggcgcgagg gacacaatgg gtccgcgggc cacgcgaacg 240
ggcctcggcc cggcggcagc acgggagaga tgtgaggagc gcgcggaagg ggagcgcggc 300
cggggagatc ccagcgcggt caggcccggg agccgaggct cgggggcccg ggaactgggc 360
ttcccacagc agaagaccca acaaagacac caggggagcc cggcgggctg ggcgcgagaa 420
gacgtggtag caggttcgct cctccgagca gacgggaggc gccatcatgg gggggggggg 480
gtcnnn 486

<210> 3940
<211> 607
<212> DNA
<213> Homo sapiens

<400> 3940
gaccctgttt caaagagaaa aaaaaaaaag ctggagagga gaggggcag gtttgtggca 60
gggtggctgc agtggccatg gggaggtgtt tggacctggg ggttggagac agctccatga 120
gccctgctga ggatcatggt agccaggctg ggatcctggg cccagagcag tgctggctga 180
cacataggtc tgtggcccag gtgtggtcta cgacacgttc atgctaaagc accagtgcat 240
gtgcgggaac acacacgtgc accctgagca tgctggccgg atccagagca tctggtcccg 300
gctgcaggag acaggcctgc ttagcaagtg cgagcggatc cgaggtcgca aagccacgct 360
agatgagatc cagacagtgc actctgaata ccacaccctg ctctatggga ccagtcccct 420
caaccggcag aagctagaca gcaagaagtt gctcggcccc atcagccaga agatgtatgc 480
tgtgctgcct tgtgggggca tcggggtgga cagtgacacc gtgtggaatg agatgcactc 540
ctccaagtgc tgtgcccatg gcaatgggct gcctgctgga nctggncttc aaggtggctg 600
cangaga 607

<210> 3941
<211> 646
<212> DNA
<213> Homo sapiens

<400> 3941
gaagcgcgct cccggggagg tgttgcagcc atggctacgg cagccggcgc gacctacttt 60
cagcgaggca gtctgttctg gttcacagtc atcaccctca gctttggcta ctacacatgg 120
gttgtcttct ggcctcagag tatcccttat cagaaccttg ggcccctggg ccccttcact 180
cagtacttgg tggaccacca tcacaccctc ctttgcaatg ggtattggct tgcctggctg 240
attcatgtgg gagagtcctt gtatgccata gcattgtgca agcataaagg catcacaagt 300

0050250-0702806

ggtcgggctc agctactctg gttcctacag actttcttct ttgggatagc gtctctcacc 360
atcttgattg cttacaaacg gaagcgccaa aaacaaactt gaagttgtct gaaagcttgc 420
tctacacttt tacattcatc ctcacccttt tttttgtggg gtanaggagg tgcagtaatt 480
tactcagtga tctttctact ttctagaaac tgtccttcaa agctctttaa gacccccctcg 540
ttagtcagtt tcttctctta tatgctctgg ttgagcttga atanaccagt tgttacttaa 600
gaaagaaaca gnnaaagatt ttagcttttc aatcctattt ggcaaa 646

<210> 3942
<211> 654
<212> DNA
<213> Homo sapiens

<400> 3942
gaagaaaaag gggtgcccaa acaagtcacc ttaaaatttg atgcctgtgc tgtcattaat 60
agtaataagt taggaataaa gtgtggttct cttaattaga aaagaggcta tatggcagaa 120
aataagtaca tctgtcataa attaggactg tgtggaaata aatgtaaata ctggtcttgt 180
gtcatttagg ccacttggat taaaaaaaat gaaaaggatc cagtccacct tcagaaagga 240
aaaaaatggc ccttcctgtg ctaagggaca atgtaacccc ttagagctag taataaccaa 300
tccccttgat cctcgctgga aaaaagagta gcgtgtgacc ttaggaatca atggggctgg 360
actgaatccc cgagtaaata tcttggttcg aggagaagtt tacaaatgct ctcttgagcc 420
agtgtttcaa actttctatg atgaactaaa tgtgccaata acagaatttc caggaaaaac 480
aagaaatttg tttttgcaat tagccgagca tgtagcccag tctctcactg tcacttcatg 540
ttatgtatgt ggaggaactg taatancaga tcaatggnca tgggaagccc gagaattagt 600
acctacagac ccagttccct gatgaantcc agctcaaaag aatcaccctg aaaa 654

<210> 3943
<211> 682
<212> DNA
<213> Homo sapiens

<400> 3943
aacaccctcc tggaggatgc tggtgagagg cagggaccag gggtccggct cccggctcgg 60
gcctatcgtt aggcgctggg cccccaggcc ctctcctttg cagagtctcg ctgcctccct 120
cgacgcagag ccttcaagcg ccgcagtccc cgacggcttc cccgcgggcc ccactgtctc 180
cccaagacgc ctggcgaggc cgccggggct ggaggaggcg ctgagcgcgc tggggctgca 240
gggagaacgc gagtacgccg gggacatctt cgccgaagtc atggagtacc tgggtctggc 300
tggtgacaca ctttatctgg cggttcacct gcttgattcc tacctgagcg ctggccgcgt 360
gcgtctacat cgcctgcagc tgctgggcgt ggcttgcctg tttgtggcgt gcaaaatgga 420
agagtgcgtg cttcccgagg aaactgaggt ccggaacttg gggcctttcc agggcaagga 480
gtaaagagcc cggattcaag actccttcaa ctccccccgc atcccccatc tgcancccgc 540
cttcctctgc ctcctgancg cggactcctt ctcacgggcg gagctgctgc gcgccgancg 600
tcgcatcctg agccgcctgg atttccggct gcaacaancc cgggcccgct gctgttgcct 660
ccgggctgct gggccncccct gg 682

<210> 3944
<211> 556
<212> DNA
<213> Homo sapiens

0056456.0720800

<400> 3944
ttgaggtcac accttcagtc cttcgagcaa atatgcctct tcatgttcga cgcagtagtg 60
acccagctct aattggcctc tccacttctg tcagtgatag taatttttcc tctgaagagc 120
cttcaaggaa aaatcccaca cgctggtcaa caacagctgg cttcctcaag cagaacactg 180
ctgggagtcc taaagcctgc gacaggaaga aagatgaaaa ctacagaagc ctcccgcggg 240
atactagtaa ctggtctaac caatttcaga gagacaatgc tcgctcgtct ctgagtgcca 300
gtcacccaat ggtgggcaag tggcaggaga aacaagaaca ggatgaggat gggacagaag 360
aggataacag tcgtgttgaa cctgttggac atgctgacac gggtttggag catataccca 420
acttttctct ggatgatatg gtaaagctcg tagaagtccc caacgatgga gggcctctgg 480
gaatccatgt agtgcctttc agtgctcgan gcggcanaac cctggggtta ttagtaaaac 540
gattggngaa aggtgg 556

<210> 3945
<211> 689
<212> DNA
<213> Homo sapiens

<400> 3945
gtcatttttg tatatctttc ctttcttact tcaggggtgt gtcttcaaga tttctacccc 60
ctatttgcaa tgaatttcat acctcatcta aaatacattc atataccaga aatatgaaga 120
gtggcccttc taaaagtttc cctaatgatg gaagctgtca gttgtcctat ctgtgcagaa 180
tgtgagtaat agtggcagaa ataagtgtga caacaatgct ttgcctgttg ttctttttac 240
ttgctaggta atttgtaaag tggggataaa gatgtaggga aagtaaacct ctctctcact 300
gttacggaaa gcctggactt gagttaggta gactgcctta aagaagaaga aatatgtcct 360
tttctttggc atcatggttt tgttgagtgg cagactgttg aagtgagttg agacttaaga 420
acgccagaaa agttgtctag cctggcccca gtagacagaa tttgttcttc tctcaagtaa 480
aaaattacct ttttatagcc tttatattat ttagatgaaa aaataccatt atgaacataa 540
ttccatggcc ctttgtgtac aaagcatatt ttgaattaaa tacctcaagg tccacctaga 600
cctctatgga taaaatcata agtttangat ttttanctcc tgtgagtgtt gggggcaaac 660
tacacagaga agacatgggg gtgggntca 689

<210> 3946
<211> 606
<212> DNA
<213> Homo sapiens

<400> 3946
agctctccgc cagtaggagt ttccggaagg agtttgaatt tttgtgattt ttatgcttgt 60
ttggtcggtg gaatatgttg ggatttatgt ttgcctctga acaagtgtct tgctcacatc 120
gtaaatgact ttctctccga aacgctaaat attctttccc gcaggagctc atatccttat 180
tttccatgac ggatcttaac gacaatatat gcaaaagata tataaagatg ataactaata 240
tagttatact gagcctgatc atttgcattt cgttagcttt ctggattata tcaatgactg 300
caagcaccta ttatggtaac ttacgaccta tttctccgtg gcgttggctg ntttctgctg 360
ttgttcctgt tctgatcgtc tctaatggcc ttaaaaagaa aagtctagat cacagtgggg 420
ctctaggagg gctagtcgtt ggatttatcc taaccattgc aaatttcagc ttttttacct 480
ctttgctgat gttcttcttg tcttcttcga aactcactaa atggaaggga gaagtgaaga 540
agcgtctaga ttcagaatnt aaggaangtg ggcaaangaa ttgggttcaa ggtgttctgt 600

0552918.0720

aatgga 606

<210> 3947
<211> 665
<212> DNA
<213> Homo sapiens

<400> 3947
gtaccaactt aatatatgtt atagactaaa tgtttatgtc ctcccaaact tcatattttg 60
gaagccagac atggtgactc acacctgtaa acctaacact ttgggaggcc tagttgggag 120
gattgcttga gtccgggagt tcggaaccgg cctggacaac atggtgagac cccgtctcta 180
caaaaaaaaa aaaaaaattt ttaattagcc aggtgtggtg gcatgcacct gtagtcccag 240
ctactcagga ggcttgcctg agcccagagg tttgagactg cagtgagcca tgatattgcc 300
agcctgggtg acagagcaag accttgtctc aagaaaaaaa aaaaaaaatt gccaattgcg 360
atggctcacg cctgtaatcc cagcactagg aggccgaggt gggtgaatca cctgaggtca 420
ggagttttga gaccagcctg gccaacgtgg caaaaccccg tctctactaa aaatgcaaaa 480
attaccggga cgtgttggtg agcacctgta atccctgcta ctcgggaggc tgaggcaaga 540
gaatctcttg aacccagggg gtggaggttg cactgagccg agatcatgcc attggacttc 600
acctgggcaa caagagggaa actgtntcca aaaaaaaaaa atttggaggg ctgggcaccg 660
nggnt 665

<210> 3948
<211> 861
<212> DNA
<213> Homo sapiens

<400> 3948
gttgaaagat gtgagacagt attcaagaat aatgaagata ataataatga ttattataat 60
aatgatgatg attccaagga aaaaacctac agcgaatgtt ccatttctac cccgcacgca 120
gacactctcc ctaacactga taacctgagc ccccagcact ggacggaaga atgctggcgt 180
ctccgtgtgt actggttcag ggttctggcc ccagccttgt caggaccccc tggtgtccag 240
agcccccacc cctcccgcaa caagcagctg atgccccagt gattctctat acatttttca 300
cctcggccaa tatgtccagg aaaactgctt acttctcttt tcttgcctgg agcttcattg 360
ttcaccctta cgttgcaata taggaattaa tgctacaaaa taaaagtaaa gcttacctga 420
aaagtgcata gtttggggca atggtatcta catctcccac tgtgggaaaa ccagcaaagc 480
atcaaaactc tcaattctcc tgttaccgaa tgcagatctg aattataaga tgtttatgtt 540
tgaccattgt ttcaacaatg ggattttgtt acgaattatc cctttaactg aaaccctcag 600
ttttactgtt tacattatta ngaaaacagg gatatctttt gaatctaaaa atttgatgta 660
cagcatgtga tttttgaagt ttacatgtaa agtcacagta taggtgaaat aacgtttgtc 720
atattttgag acgtatcctg gaaaccaatg tttttacgtt nagtggtttt aagtcaaaag 780
ttcaatgggn aanacaagtc cttttcacaa attaaaaagg ggaaaaaggg gatttttttt 840
ttccctccca aaaatggttt n 861

<210> 3949
<211> 878
<212> DNA
<213> Homo sapiens

EP 2 305 809 A2

0052045 0-07-2008

<400> 3949
tggaaaacct aaaaagaagg gaaatacttt ctgggtagtg tcagatacat tatcctaggg 60
gaatgtcagt gaggccctcc aacagctatt ccacttgatt gttgcatgag ctaatggcca 120
taaaactcct tagaaaagca caaagcaaaa ctaaagaaga gtatttacta gtgttggata 180
tatttgtaaa agtgagatta caaatcatgt atctggctat ttttttctta aacatgttcc 240
ttcaagaatt tttctgttcg ttcattttaa atatttatta aatgttctga tttcttatgt 300
tcactgctag ctaattaaca aggatggaat ttttcttgcc ttggttatat ctaaaagatt 360
gtaaaaactt tgagaaagca atgttgccct ctttccacag gagtattttg gtagctgtaa 420
gagaatgcac attgcaaatg actcaaatgt ggtaaaatgt tggtttcata attctgaaat 480
ggcctcttcc ccaaaagtga cagtaacacc ctagctccag gctcaaccac atccagcaca 540
tagccaacat ttaacagatg ttgacaaaat agttaataat aatattatta aggaaccagc 600
cagagtttca tgcttattaa atacttttc aaccagaagg tctgcaaagg ttgatttctg 660
aatatgacgt tagctctctc tagacctatt aatttacgac atttcaaatc agaggtaaac 720
cagcagacct attantttc aatgataaac tataaacagt ttttgaantc aactaattcc 780
tttcctttaa attgggcaga attcatcagg aagtcagaca accaattata aangctcctc 840
atangcaatt ctcacctcac cactgagtaa attaaatg 878

<210> 3950
<211> 452
<212> DNA
<213> Homo sapiens

<400> 3950
gtatgcaaat gtagcggcgc ggcgggagcg cgcggctgat acccgggact gggctgcggc 60
ggttagtcct ctcccggccg ccgtcgcctc cgacatattg cccgcaggag ctgcggcggc 120
gaagcggaga gcaccggggg gaggagatgg gaggacgaag aggtcccaac aggacatctt 180
actgtcgaaa tccgctctgt gagccgggat cctcgggggg ctctagtgga agccacactt 240
ccagtgcatc ggtgaccagt gttcgttccc gcaccacgag cagttctggt acaggcctct 300
ccagccctcc tctggccacc caaactgttg tgcctctaca gcactgcaag atccccgagc 360
tgccagtcca ggccagcatt ctgtttgagt tgcagctctt cttctgccan ctcatagnac 420
tcttcgtcca ctacatcaac atctacanga ca 452

<210> 3951
<211> 615
<212> DNA
<213> Homo sapiens

<400> 3951
aaagccgggc tcgggccgca agcggggcga ggggttcggg gagcggcggc agccgcggga 60
gcccctgggc agccgtccgc ccgcgcagcc gccgccgccg cgggagcccg tcgccgggag 120
caggagcggg cggaagacaa cggaggggcc gagcgtccga gccactccgc ggggaccgaa 180
cgagcanccc gaagcggcgg cggccgagga cggggacagc gacgacgcgg aggcagagaa 240
gggaacgccc ggcccagccc cgtagcacag gcggagtgca gcggaggccc ctgccgctgc 300
cgtcatgccg ttcccgtttg ggaagtctca caaatctcca gcagacattg tgaagaatct 360
gaaggagagc atggctgttc tngaaaagca agacatttct gataaaaaag cagaaaatgc 420
tacanaagaa gtttccaaaa atctggttgc catgaaagaa attctgtatg gcacaaatga 480
aaaagagcct catacagaag cagtagctca acttgctcaa naactctata atagtgggct 540
ccttacaccc tgtagctgat ttacagctca ttgacttttg anggcaaaaa agacgtngct 600

caaattttca acaat 615

<210> 3952
<211> 300
<212> DNA
<213> Homo sapiens

<400> 3952
gagacaatgt gcccagtgcc cgctgcagct accagcaacg tccatatggt gaagaagatt 60
agcatcacag agcgaagctg cgatggagca gcaggcctcc cagaagttcc tgccgaatcg 120
tcttcgtcac ccccggggtc cgaggtagcc tcccttacac agcctgagaa gagcacaggc 180
cgagtgccca cccaggagcc cacccacagg gagcccacca ggcaagcagc ctcccaagag 240
tccgaggagg ccgggggcac cggngggccc ccggnaggcg tgcgatntat catgaaacgg 300

<210> 3953
<211> 539
<212> DNA
<213> Homo sapiens

<400> 3953
attgatcggc agaaagctaa cttcccccca aggctagaaa ccagagttgt taaattcttg 60
ttttccttat acacatacgg tcttaactgc tggtgattaa tcttgattac atcatgcagt 120
ctcttttctg aaagaccaaa gcatatcgcc accttaaagt tctcagttta ttttttgcaa 180
gcttatttag ttcttcctcc tttgtgtcat tgcatcatcc gcggaacaag ctctcagtcc 240
ttacgcagtc tcggtgcagt ctaggtggag gtagctgtgg tgtgggcagg cggnggatca 300
gggtcttgtc tcccatgttc agctgcatgg ctttcttcat atgaggcttt ctctttccat 360
ttttttcatt ttgttttgtt tgtttgtttg ttttgagaca gagtctcgct ctgttgccca 420
ggctggagtg cagtggcacg atctcggctc actgcaacct gcgcctcctg ggttcaaacg 480
attctcctgc ctcannctcc caagtanctg ggattacagg tgtgtggcac taaccctgg 539

<210> 3954
<211> 597
<212> DNA
<213> Homo sapiens

<400> 3954
cacagttcat ggtaaagccc aagactgtac ctgcccatcc actgcctttt ccatgtatcc 60
tggaactgag catagacctc ttcccaggca gagctgacag caagtaaagg agatcataat 120
caggggacca aacaactttg tctaaagtgt gaatgtcacc taaggagaag ctgtgagatc 180
agaagggtgg ggcagaggag cagacaccat gagggagagt ccttgggggt acatctgcca 240
gactgacact gtctggcctg ggcagtggag gggctagcag gaaccacagg tactggtggt 300
gtggctacta ccgttacaac tgcctgtgct tggacatgga ccctctgcaa tatgcggcag 360
tttcattcat tgccccctac attctacacc aagtagaaat ggaaggcaat tggntacttc 420
acagacaaga tctaagtgga gaangaatgc gtcctgtggc tgcagagatc cttggngctt 480
ggaggggaga gcttgagccc cactgatgat gacctcccac agctcgccaa ctcaggcctc 540
cctaantccc catcgggggc caattctcac tctgggggtt gggggganctc cacnaat 597

<210> 3955

0096294603 - 07-2006

<211> 726
<212> DNA
<213> Homo sapiens

<400> 3955
acttcccttt ttccggtccg ccggattatg aatgacggcc ggcgcgagta ttttccacat 60
aagctggctg tcgtttttct cctggcctct gtggaggcga gtggtctgcg ggcagcagct 120
cccagaggca gccttggaat tccagctcgg actgggcggg aaggcgcagg cggcccaggt 180
cgccgacacg ctcacgcacc ctccctgcct ggccgcgcct ctgcgaccag gtgacccaat 240
gaaagaagaa aatgaaagcc ataaagaaaa gtcttacaga agaagaatac ctgtacctgg 300
acttttctca ccaaacagaa ggatgcatct ttcctcttca tacatctgta actttatttc 360
tgttatctta ctgtgactgt aaaatcttta aaatttgctt agttgtcacc aaagaggtga 420
gtagagatag ttcactacta agagatgacc tgatccagga tgttgaaata cggattattt 480
caaggcagga gctcccacca atagtccaaa attgctgttt gcctgcagta gtagaacgat 540
cagacaattt ttgtagagca ggacttgctg ttgtattgag acacataatc cagaaatcct 600
atgaagcaga ccccttaaag aaggaacttt tggnacttct gggctttaaa aagacttgct 660
tgaaagcctg tgctgaagtt agtcantgga ccaagctatg tgaactcaca nccctttggc 720
taattg 726

<210> 3956
<211> 703
<212> DNA
<213> Homo sapiens

<400> 3956
actaagacaa ggcagttgag gaggagggag cgcttgaggg ggactggcct ggcgtgcact 60
ccgcacctcg gggacattat tgcgcgtgga acggctgctt ttggaaggca caacttcctg 120
aatggaccat gactcccacc aaagatccct gtctctgatt caccaaacag cttcaaccct 180
gaaaccagga cgagaagttg acaacatctg agtggacagc taattgacct aagacttcag 240
accaggcctg tatgatctcc tgtctaaaca ttcttagagt attatattta ctttggggac 300
tattggcctt gtctgctttg actcagatta taggatatat aacctggtta atgtttctgt 360
acacatgatg gccacctatg tatatacact tgacttttca gggtctctgc tggggatgga 420
aaaatagttc attagccaaa ctctcctaaa gtgtggcaga tggaggcagt ctctcagatt 480
gctggatttg tcaccaagct tccaagggcc attcaagatc attacatgct acttgttgca 540
ccagagattg atttttctga cactccaaat gttaccatat acttacatca nttccctcca 600
aatgtcactt tccaaattca aattcaactt ctaaagccag gccatatttt caatctgtgc 660
ttagtaataa nccctaantc tcaaccttcc ccaacgnccc caa 703

<210> 3957
<211> 849
<212> DNA
<213> Homo sapiens

<400> 3957
ttcacaaaaa aagaaattcc aaagcagaag tcctggtatg ttactattcc agacaaatct 60
gatatgagaa agcactaaag ataattgaaa cattaattta ataattaatt aattaaaata 120
gtacagtcct ggatgtcttt tttgtgcttt ctttaatttc tttccagcta tatataaatg 180
tgtcttggta tgaatttaag tgcctgggaa tgaatagtac tgtcccccag gataataagt 240

09/05/2005 03:09:03 PM

tattagcaaa ttaatacctt gcttctgtta gttgtcaaca tgttgcaagt aaacattgtt 300
gataggcact gtggatctac taagggtaag atatcatcct ttcacaaaag gatagctatt 360
aaacctgact gtaggtaaag ttaaattgca actaaacata tgtagacata tactaagatt 420
ttaaacatta cacaatattt ctgaccaata aaatataaac tagagtctaa actgtttggt 480
taagaatttc attgctagag tacccttaca agttctaact gaatttccaa aaatctaaca 540
ttttgttctc aataaaataa aatgtgttta ataaatatga agcaaaaaac aaaatcctaa 600
acaaaagcaa acactgttga tcagtcaatt taacatggaa tattattgct attatttta 660
ttgaccaata gtttattcct gactttcctc agatatgga cactattgat gggacggtgg 720
ccatctgagt ggaattgcat catgcagtac cgctggccca tggcatgttg caggacacac 780
agancacatg gcgtggagac ccgtcctngc ccaggacgct ggcgccccta tgtggagaca 840
gcagtgaac 849

<210> 3958
<211> 737
<212> DNA
<213> Homo sapiens

<400> 3958
gtcacctgga atgccgggag cccctgctca tcccgatcct ctccttgtac atgggcgcac 60
ttgtgcgctg caccaccctg tgcctgggct actacaagaa cattcacgac atcatccctg 120
acagaagtgg cccggagctg gggggagatg caacaataag aaagatgctg agcttctggt 180
ggcctttggc tctaattctg gccacacaga gaatcagtcg gcctattgtc aacctctttg 240
tttcccggga ccttggtggc agttctgcag ccacagaggc agtggcgatt ttgacagcca 300
cataccctgt gggtcacatg ccatacggct ggttgacgga aatccgtgct gtgtatcctg 360
ctttcgacaa gaataacccc agcaacaaac tggtgagcac gagcaacaca gtcacggcgg 420
cccacatcaa gaagttcacc ttcgtctgca tggctctgtc actcacgctc tgtttcgtga 480
tgttttggac acccaacgtg tctgagaaaa tcttgataga catcatcgga gtggactttg 540
cctttgcaga actctgtgtt gttcctttgc ggatcttctc cttcttccca agttccagtc 600
acagtgaggg cgcatctcaa cggggtggct gatgacactg aagaaaacct tcgtccttgc 660
ccccanctct gtgctgcggn tcatcgncct catcgccagc ctcgtggggc ctaacctaac 720
cttgggggt gcaacgg 737

<210> 3959
<211> 762
<212> DNA
<213> Homo sapiens

<400> 3959
gcgatgaaag cagcagctgc tgcccctgcc tcagaggatg aggacgatga ggatgacgaa 60
gatgatgagg actatgaccc aaattgtgag gaagaggaag aagaagaaga agacgaccct 120
ggggacatag aggactatta cgtgggagta gccagcgatg tggagcagca gggggctgat 180
gcctttgatc ccgaggagta ccagttcact tgcttgacct acaaggaatc tgagggtgcc 240
ctcaatgagc acatgaccag cttagcttct gtcctaaagg tatctcattc agttgctaaa 300
cttatattag ttaatttcca ctggcaagtt tcagagatat tggacagata caagtccaat 360
tctgctcaac tgcttgttga ggctcgagtt cagcctaatc catcaaaaca tgttcccaca 420
tcccatcccc ctcaccactg tgcagtgtgt atgcagtttg tgcgaaagga aaacctactc 480
tctctggcct gtcagcacca gttttgccgc agctgctggg agcagcactg ctcagttctc 540
gtcaaggacg gcgtgggcgt gggagtctct tgcatggctc angactgtcc actccgtaca 600

09/2009 09:45:56

ccagaggact ttgtgtttcc attgcttccc aatgaagaat tgagagagaa atacaggcgc 660
tacctcttca gggactatgt ggagagtcat taccagctcc anctgtgccc tggtgcaaac 720
tgccccatgg gttattcggg gtacangagc ctanagctcg cc 762

<210> 3960
<211> 553
<212> DNA
<213> Homo sapiens

<400> 3960
gaaaaacatg ggtagtagaa atgtatagaa aatgtatgag gtctcttaac cattgtgtta 60
aacttgcatt aagcttcttt tttagcaata tcgatgtcag tgttacctct tctttccttt 120
ttatttattc tttttgagac agagtctcat tctgtcgccc agactggttg gagtgcgatg 180
atgcgatcgc ggctaactgc aaccgctgcc tcccgggtac aagtgattct cgtgccttgg 240
gctcccgagt agctgggatt tttagtggag aacaggtttc accatattgg ccaggctggt 300
cttgaactcg caacctcagg tgatccaccc acctcagcct ccccaaggtg ttgggattac 360
aggcatgagc caccgtacct ggccccttt gttgttttga ggggcaggca gtaagaagca 420
gggatttctt caaatgctag taagcacaaa gagagggaga agtttttgta agtaacgaac 480
agggccgggc atggtggcgt gagaggccga ggtgggcgga tcacgaggtc aggagttcga 540
gaacanncct ggn 553

<210> 3961
<211> 737
<212> DNA
<213> Homo sapiens

<400> 3961
gtaaactttt ttcacttaaa aaagtccctc cccccacctc acagcatatg aatgcgttct 60
ctactgagta aatcaagcct gagctttctc atgtgggctc ctctgtgctc catccacttc 120
tctcttggaa gacagggtgt ctttctgcct tccaaggctg atgcctctcg tccccctccc 180
aggggctgca ccctcagcca cccccagctg gtgttttcag tttgcttctc tgataggtgg 240
cctcttttat cttctggttt gttgctgctg ccttctgaat ttacaggcag cctgtggatc 300
cttctgttgg tatttttctc tcctaggtga actcttggaa ggaggtggtc ggcattcact 360
gttacctcgg gccctttcca ccttggcact gctcatcatg ctatgatttg gctcctatcc 420
tgcccactct aataaacaat cacgagtttg gcagttctcc ttattgccaa atttaatggt 480
catttacaac tcgttttcct gaantcttct tctttttttg acaccataga cgtctctctc 540
tgtgtcactt tctgattttt cttccattga ttctctgact tggctcctga actggttcct 600
gatttctcct gcctggcact ttagttgttc cctaagagtt ggttcttcac ctcttaactt 660
ttccaggact tttgtttggn atttgacact gttgactaaa cacctctttc ntgaaattgn 720
ctggcattca actccaa 737

<210> 3962
<211> 680
<212> DNA
<213> Homo sapiens

<400> 3962
agccgctgtg ngatggggaa gtggaggcgg aggggagcgg agcccggagc gtcgtggaaa 60

0050203.00050203

gcattggaca catttccacc atgctaatgg cattttaaat atatttggca attttcccaa 120
ttttttactg aagaaaactg taagtttata cttgaggact gaagtgtgac tctgccgatt 180
atcaggcttt caagatgaat ctggaaaaac tcagcaagcc tgaactcctg acactattta 240
gtattcttga aggagagctt gaagcaaggg accttgttat agtggcctac agagccctcc 300
atccagggat ttatccccca ccctcataga caactctgcc gccaagcagc tggcccgaaa 360
cacagtcact caggtgctct ccagattcac tagccaacaa gggccaatca agccagtctc 420
tcccaacagc tctccctttg gcacagacta tcgaaatcta gccaacactg ccaatccaag 480
aggtgacaca agccattcac ctactccagg gaaagtgtcc agtcccctga gccccctgtc 540
tccaggaatc aagtccccaa ccatgccaga gctgagagag gaaaccctcc acccatccca 600
cccaagaaac ctggcctcan cccttctcca tctgctgaga gcaggcaccg aaaggtgatc 660
ctagaccttg anggaanaaa 680

<210> 3963
<211> 600
<212> DNA
<213> Homo sapiens

<400> 3963
gaaaatatgg ggtgaagatc taagacattt aatagtatcg agaagtacac aggcaccact 60
aataatcaga cctgattctg gaaaccctct tgacactgtg attaaaggtt ttggagattt 120
taggtaagaa gtttcctgtt actgagaact caaagggtta caagttgctg ccaccttatc 180
ttagagttat tcaaggggat ggagtagata ttaatacctt acaagaggta tgtgttttac 240
attaaagttt caatacggca tttcttataa ttaantttgt ttatgtttga taaagaacac 300
aatataaata caattttaag tctttgtaag tgtttatgtt ggtataaatc tctgtgcatt 360
gcttaaggtt tagaaataat actagtttaa gatacagagg tgccagccaa gccatactta 420
ctcttccagt tgtcattgga caccctgaat gatgagtcta aagaagtatc attgtgaaac 480
aaggaaatgt cactcacaga antattcctt ggcatataaa acaaagcctt gactctgctg 540
gcataagtct gagttttcat aaactggagc ttcacaaatc tgtaaanctc ataanattaa 600

<210> 3964
<211> 728
<212> DNA
<213> Homo sapiens

<400> 3964
aatttagtaa gagttctctg tatagtctct aatcttagaa aaatgttgga agggtaattt 60
ttaagtgtag tggtttgaag aacaaaccag aagcgcacaa acctttgtgt attttagaat 120
atatttgtct tcattctgcg gagctcttgt gttgtaaagg tgcagaacta cgtaaaaata 180
gtgttgggca gacttacata gtacatctga aatcagatac tggtttattc gaccatattt 240
ctaagggcat ttttccagta aaattgtttt atttttgag tagccttcct atagtggtac 300
atgttacatc agttgcgcat atcttgattt tacagaatct gtcttaagta ccaattttgg 360
tttttcaaat caatgtttct gaaatttttg aacactgaaa gtggttttaa atgaatattc 420
tgaatctagt tctttagaat cctctttgaa ttgtgaaatg caaaataatt gttagcagtt 480
taacctgaaa gatcttttta catgataaat gggggaggag aaagactgaa atgaaaatgt 540
tgaagaccct gatttgaaat tgagtgtaaa ggctagatac tgtaagtttt agagtanctt 600
tagagacaaa gctagtatcc cacttgggga gatcaagtaa cttgtggntt aaaatttaaa 660
gtaaccagtg ggccatttta cttcactaat ttcncttggg ggggctaatt tttattgccc 720
aagattgn 728

0962960.0002

<210> 3965
<211> 817
<212> DNA
<213> Homo sapiens

<400> 3965
cttacctctt aaaaggtgaa aaattaggga cttggatgtt taattctaaa atgatcccaa 60
gatttaacca ctgaaagaag caaacaaggg aagagctggt ctttgcagaa atagttttaa 120
gtgtgcatat tagagcacta atttgtttct ctctttcaaa gaactggatg aattgcctcc 180
attgtctcca atgcagccaa tttcagagga agaggctatt cagattattg cagaccctcc 240
attgccacca gcttcattca cacttcgaga ctatgtggat catcctgaga ctctgcagaa 300
gttggttctt ctaggcgtgg atttgtccaa gatagaaaaa catccagaag cagcaaacct 360
ccttctgaga ctggattttg aaaaagacat taagcaaatg cttctgtttc ttaaagatgt 420
gggtatagag gataaccaac tgggagcatt cctgacaaaa aatcatgcaa ttttctctga 480
agaccttgaa aatctgaaga ccagggtggc ttatctgcat tcaaaaaatt tcagtaaagc 540
agatgttgca cagatggtca gaaaagcacc atttttgctg aacttttcag tggaaagact 600
ggataacaga ttgggatttt ttcagaaaga acttgaactt agtgtgaaga agactagaga 660
tctggtagtt cgtctcccaa ggctgctaac tggaagtctg ggaacccgtg aaagaaaata 720
tgaagggtta tcgtcntgaa cttgggttta aacataacga anttcaacat atgatnacca 780
gaatccaaag atgttaactg caaataaaat ggaaact 817

<210> 3966
<211> 640
<212> DNA
<213> Homo sapiens

<400> 3966
gcagtgcctt gcggctgtaa tggctgcccc cagctggcgc ggggctaggc ttgttcaatc 60
ggtgttaaga gtctggcagg tgggccctca tgtcgcgagg gagcgggtga tccctttttc 120
ctcactctta ggcttccaac ggaggtgcgt gtcctgcgtc gcggggtccg ctttctctgg 180
tccccgcttg gcctcggctt ctcgcagtaa tggccagggc tctgccctgg accacttcct 240
cggattctct cancccgana gttcggtgac tccttgcgtc cccgcggtgt ccatgaacag 300
agatgagcag gatgtcctct tggtccatca ccctgatatg cctgagaatt cccgggtcct 360
acgagtggtc ctcctgggag cccccaatgc acggaagtca acactctcca ancagctact 420
gggccgaaag gtgttccctg tttccaggaa ggtgcatact actcgctgcc aanctctggg 480
ggtcatcaca gagaaggaga cccaggtgat tctacttgac acacctggca ttatcagtcc 540
tggtaaacan aanaggcatc acctgaagct ctctttgttg gaagatccat ggaagagcat 600
ggaatctgct natcttgttg tggttcttgt ggatgtctca 640

<210> 3967
<211> 631
<212> DNA
<213> Homo sapiens

<400> 3967
tgttgagctt cctctgaggt gctgcacaag gagtgggtgt gggatgcact gttgcgtgct 60
cgtcgtctct gagggcgccc gggtgggttt ccgctgtctg aagagttggg cctatttttg 120

0050450.0076800

tgcacgtgtt tggngggctt gtgttgtttc tcttgggaac gtgcccgggg ggaaggctgc 180
atcccaggag ttcaagatgg cggtgagcta tgattgcacc actgcactcc agcctgggca 240
acagagcaaa cccatctcta aaagaaagaa agaaatttta aaaaggagga aaggaaagaa 300
aggagaaaan aggaaaggaa aaaggaaagg aaactgttcc cattaaacac taactcccca 360
ttcctccctg ccccccagcc cctggcaacc accgttgtct tttctgtctc tatgaattcg 420
acaaccctgg gaacctcatg agtagaatca tacagtattt gtcctgttgt gatgagctgc 480
tttcacttag catagtgttt tcaaggttca ttcctgttgt aacatgcgtc caaaatttct 540
tttcaggacn gtataagatt ccacggtctg tatacaccan cttttgttta tccattcatc 600
tgtggataac aatgctgctt canacatggt g 631

<210> 3968
<211> 709
<212> DNA
<213> Homo sapiens

<400> 3968
cgttcaatga gctttcacat aggaaacata tccagaccaa gaatagaata tttccaggtc 60
ctcagaaggc tcccccatgc cccttcacag ttatacttcc ccaaggctac aactattctg 120
acctgtatca ccacaggtta cttcagaact ttctagttat ttaatgctat ttaggtcaac 180
ttttaatgct atattaggtc aagtttcaag aaaaagtttt agttggaaat tcttcttatt 240
ttgggaggat gcattgaagg cataatttta gccactttaa attttgtgag gagaatgtct 300
ctaaaaccat attatccata agaaagatca tcaataaaga agatagagtt gtgaaaaaag 360
aataaaatga agagaaaaat cggctgcccc aagtatcttg cttttctgtg caccacaagt 420
gaaaatcatc tctttaggat ggtaaatgta gtatactgac cacaagagtt caaaacaaat 480
tcagattttg gataaacttc agatttattc aagaatccca gaagtccatt cgatgatggc 540
aatgttctgt tttcaggtaa cagttgtttt tacacccagt cgtttggctg ttgtgaccaa 600
ctcatccact tattggccct cattcngtta gaactgttta atgatctgct cnccttcct 660
ttaatcancc tttccttact ttctctcctc atcatctcag acaacctgg 709

<210> 3969
<211> 666
<212> DNA
<213> Homo sapiens

<400> 3969
aagagtagca gcgagcagcc gcgctggtgg cggcggcgcg tcgttgcagt tgcgccatct 60
gtcggaaggc ccgcctcggc cgcgccggag gagggcgggg agaggaccat gtgagtgggc 120
tccggagcct cagcgccgcg cagtttttt gaagaagcag gatgctgatc taaacgtgga 180
aaaagaccag tcctgcctct gttgtagaag acatgtggtg tatataaagt ttgtgatcgt 240
tggcggaaat tttggtaagt gttgctgcat ttacttctaa tgcctcttgc tgtaaaatgg 300
tgctcacgaa gggaagctgt tgccttgttc tgtccatctt ttacttctgc actaaactca 360
ggcagaatgg agttctataa ttaaatgtga cattgaattg atgttttctg acagtgtgat 420
acttttttctt gttattgctg atagtattaa gcaatatggg gttttctaaa acgtaataag 480
tgtatattta gaaaagtttc cggatgccgg ttaaagaata cccttggcaa gtttatgtgc 540
taagccagcc atataatata agagtaataa acttgcagac ccaaagaata aaataaattc 600
tccaaagcag anagattcgt gtgacccata tattaaaaga aagagaacaa gcancttang 660
aaatgg 666

0 5 0 5 2 0 5 0 5 0 2 0 0 0

<210> 3970
<211> 555
<212> DNA
<213> Homo sapiens

<400> 3970
agtagggcct gatgtaaaca cccgagccgg gctccaaggc ccgggaggtc agaaaaccgg 60
gccgcgggcg gcaccgacag ctggggcccg ggtcagggac acgcggaggt caggccggtg 120
aaggcggcag gaagctggag cacgatccca ggaggaacaa tcctgcacca tgactcaaca 180
gccacttcga ggagtgacca gcctgcgttt caaccaagac caaagctgct tttgctgcgc 240
catggagaca ggtgtgcgca tctacaacgt ggagcccttg atggagaagg ggcatctggg 300
tgagctgttg gcaggggagg ggcaatgggc agaacagctg ggctgggcat tggctcccac 360
ctccactgac accctggtcc ctgtccagac cacgagcagg tgggcagcat gggcttggtg 420
gagatgctgc accgctccaa ccttctggcc ttgatgggcg gtggtagtag tcccangttc 480
tcagagatct caggtaagtg ccctcancct gcccctttggc ccaagatttc tcggattcct 540
ggcctcccan aggca 555

<210> 3971
<211> 762
<212> DNA
<213> Homo sapiens

<400> 3971
agcgcgagga gaaagatggc ggcgatggcg gtcgggggtg ctggtgggag ccgcgtgtcc 60
agcgggaggg acctgaattg cgtccccgaa atagctgaca cactaggggc tgtggccaag 120
caggggtgag ggccggacct ccacgagcgg aatgcgaggt ccgagcctgt agggagaagg 180
accgtgaccc tgaggcccag tttgagatgc cttatgtggt acggctgcac aacttccacc 240
agctctctgc accccagccc tgtttcacct tcagccatcc caacagagat cctatgattg 300
acaacaaccg ctattgcacc ttggaatttc ctgtggaggt gaacacagta ctacatggct 360
ttgccggcta ctttgagact gtgctttatc agcacttcct aaaagatgat ggtgtgagca 420
tccccgggga gtacacttcc tttctggctc ccatctcttc ctccaagctg tacaatgagg 480
tccgagcctg tanggagaag gaccgtgacc ctgaggcacc aaccaccact cagagaagga 540
gttctgctcc tacctccaat acctggaata cttaagccag aaccgtcctc cacctaatgc 600
ctatgaactc tttgccaagg gctatgaaga ctatctgcag tccccgcttc agccactgat 660
ggacaatctg gaatctcaga catatgaagt gtttgaaaag gacccatcaa atactcncag 720
tnccaacagg gcatccataa atgtctgcta gaccgagtnc ca 762

<210> 3972
<211> 711
<212> DNA
<213> Homo sapiens

<400> 3972
acaacaagtt tggaatcaag accatgttgg agacagaaga aggaatccta ctgctggtca 60
gagccatgga tcctgctgtt cccaacatga tgattgatgc agctaagctg ctttctgctc 120
tttgtattct accgcagcca gaggacatga atgaaagggt tttggaggca atgacagaaa 180
gagctgagat ggatgaagtg gaacgtttcc agccgctgct ggatggatta aaaagtggaa 240
ccactattgc actgaaggtt ggatgcctac agctgatcaa tgctctcatc acaccagcgg 300

0 0 0 1 0 3 5 0 5 . 0 2 0 0 0 0

aggaacttga cttccgagtt cacatcagaa gtgaactgat gcgtttgggg ctacatcagg 360
tgttgcagga ccttcgagag attgaaaatg aagatatgag agtgcaacta aatgtgtttg 420
atgaacaagg ggaagaggat tcctatgacc tgaanggacg gctggatgac attcgcatgg 480
agatggatga ctttaatgaa gtctttcana ttctcttaaa cacagtgaag gattcaaagg 540
canagccaca cttcctttcc atcctgcagc acttactctt ggtccgaaat gactatgagg 600
gcagacctca gtactataaa gttgatttga agaatgtatt tcccaaatag ntctgcacaa 660
gaacggggct gatcctgact tcaantgccg gnacctccaa gattgagaat t 711

<210> 3973
<211> 694
<212> DNA
<213> Homo sapiens

<400> 3973
tttaagttct cttgcacacc cagttcccag gcatggctct ccaatctcag ctccctcctt 60
tctctccgga ttttaggtgg ttatgatgga tgaccaacct ctgacctttg actttcgtac 120
tgaggtctca gcctttgcag cttctccctc caaagcagct tttcttctga ttcctgatct 180
cagttcagtg ctcaaaatag cctctcctta ttttctcctg gtgtcagtgt taggcctgaa 240
taacatctca tgctgttcgt taaacagatg tctgctgcca aaaagttgtt ctgatagaaa 300
atccaaaatc atcgacccca aaagccaagt ctgtcattgg gctaaagtgc cattcctact 360
aatcctttgc ctcacctgat tcatttggaa taaagggcca ggagcttgag tcacccccat 420
gccaggacct ctgttgctat ttgctggctg ctggagaggt ggggtcttgc gggccctgga 480
gaggtggggt cttgtggggc agagctggag cagatgctgc atccagcagt aagcatgaga 540
atgagcactc acagttttgg gtcctgtgct gggacactgt gcaagtcctg tgcatatatc 600
acctgttgca tttcccacag tgacccaatg aagtanatac tgttatcttt accaatttat 660
anatgagcaa cctgaggntt cacaaaattg caca 694

<210> 3974
<211> 526
<212> DNA
<213> Homo sapiens

<400> 3974
atgtatttgg gtaaaaattg cttcttttag aaaatgcaaa ggtttatttg tcttaataaa 60
ttgaatacta ggtgttgtaa ggaagtgaga ccagaaggac aagctaaatt atgcattctt 120
acttgaggga tcggaatgga tggggcggag ttctcttcag gctagccttc tgggaaaagt 180
ggatgtcttt ttcagagatt catcatacct tgacctgtac ctcttctctg ccctccactt 240
ccctgccctg gagtccgttt ctggagacta gaaatgtatc taaattgggg gaacagaatg 300
aatgaattaa tgaatgagag ttcctttgct ttaaccattc ctggatgcct gcaaagtaag 360
gaataatgca gtttttatgt atctganttt ataaggggtt actctttcaa gagtaacaaa 420
aaaatgcaaa ctgnaatgaa actacattgt gtttctaagt gtgaaaacga caggctgccc 480
cgtttttacn aattgcattt gcattttaag gnactactga aggtca 526

<210> 3975
<211> 743
<212> DNA
<213> Homo sapiens

0950450.0020

<400> 3975
gctgatgttc gttgttctgt ctttaagtgt ctgccaatga ttttggacaa caaactgagc 60
cacccattgt tagagcagct ccttccagct ctcagataca gtctccacga caattcggag 120
aaagtgaggg tagcttttgt ggacatgctg ttgaagatca aagctgtgag ggctgctaag 180
ttttggaaaa tatgtcccat ggagcacatt ctggttcgtc tggaaactga ttctcgacct 240
gtgtctcggc gcctggtgag cctcatcttt aattctttcc tgcctgtgaa tcagccggag 300
gaggtctggt gcgagcgctg tgtcaccctg gtgcagatga accacgccgc tgccaggagg 360
ttctatcagt acgcccacga acacaccgcc tgcaccaaca tagcaaagct gattcacgtt 420
attcgtcatt gcttaaatgc ctgtatccag agggcagtga gagagcctcc agaggacgag 480
gaggaagagg acggaaggga gaaggagaat gtgactgttc tggacaaaac actgtcagta 540
aacgatgttg catgcatggc aagtttacta agaaatcatt gtgattctct ggaaaagtat 600
tgacagaagt atggnaaata ataaagaggg caaactttac acgattaaca agtttgcctc 660
tgtgcttcca anagtatctg aaagtattta anggatgatc gctgcaaaga ttcctttaat 720
caagccaaan gtccctttaa gcc 743

<210> 3976
<211> 757
<212> DNA
<213> Homo sapiens

<400> 3976
actgctctgc cggccactcc tgcatcttta ccgtcccagg gacttccagt tgctgccccc 60
tcccagaggc cgtggcatgc ggggatggcc atcactgctg cccacggggc ttccactgca 120
gtgcagacgg gcgatcctgc ttccaaagat caggtaacaa ctccgtgggt gccatccagt 180
gccctgatag tcagttcgaa tgcccggact tctccacgtg ctgtgttatg gtcgatggct 240
cctgggggtg ctgccccatg ccccaggctt cctgctgtga agacagggtg cactgctgtg 300
tgtgacctga tccagagtaa gtgcctctcc aaggagaacg ctaccacgga cctcctcact 360
aagctgcctg cgcacacagt gggggatgtg aaatgtgaca tggaggtgag ctgcccagat 420
ggctatacct gctgccgtct acagtcgggg gcctggggct gctgcccttt tacccaggct 480
gtgtgctgtg aggaccacat acactgctgt cccgcggggt ttacgtgtga cacgcagaag 540
ggtacctgtg aacaggggcc ccaccaggtg ccctggatgg agaaggcccc agctnacctc 600
acctgccaga cccacaagcc ttgaagagag atgtcccctg tgataatgtc agcagctgtc 660
ccttctccga tacctgctgc caactcacgt ctggggagtg gggcttgctg tccaatccaa 720
aaggcttgnc ttgcttgntt ggaccaccaa ncacttg 757

<210> 3977
<211> 640
<212> DNA
<213> Homo sapiens

<400> 3977
atgctagaca aggtactatg cctgtatctc tgctgaaggc tcatgaagct gaaatgtggg 60
aagttcactt tcacccatcc aacccagaac atctttttac ctgctctgaa gatggatccc 120
tctggcactg ggatgcttcc acagatgtac ctgaaaagtc gtcactcttt caccaaggag 180
gaagaagcag tacttttttg tctcatagca ttagtaacca agctaatgtt caccagtctg 240
tcattagctc ctggctcagc actgatcctg caaaagaccg aattgaaatc acaagcttac 300
ttcccagtag gtctctgtct gtgaacactt tggatgtttt aggtccttgt cttgtttgtg 360
gaaccgatgc agaagcaatt tatgttacta gacatctttt ttcgtagaag tactataatt 420

0956045-0970609

ataagatttc agatagaaca tgcaattagc cttttgaaat ccagcttctg tgcaaaattt 480
tagtatcaga aaatacgaga tttgcagggg aaacatcagt aaactaccat taatgtcaat 540
gcccagtttt gacttttgnt agcctgacac tnccaaacag ttgtagaatc cgatanatga 600
ctgatggcaa aagattgtga acatgtggaa gaaaatcagt 640

<210> 3978
<211> 510
<212> DNA
<213> Homo sapiens

<400> 3978
aatnaatgtt cagtgagaac cataatgtga atagtataac ccagcatgat tttggtgtga 60
ggataattga taatcattnn cttccagcag acctacccat ctcggtggga tttgcttcaa 120
gtgatgtata tgcaaattaa tttgcatctc ctggtcatat actaattggt tggtgagtgg 180
ttagtagcca agaaacactg cttatggcaa gagaaagtca agtgaaagat taaagaaaat 240
catgattaat aatctgccag ctgataaata agatagttat aacaccactt tggtgaggtg 300
tacgcttttg gccatgtgta cactggtgca ttttcaagac agtggctatc ttttcacttc 360
tgtttggcta atcatgttat gttgttctga agttactgct gccctatacc cacttcacac 420
agcctgagct ctgtctcctt ccaatgaaca tgaanatctt ttgattccnt agttcctggt 480
tctgntctga ttccgacagg atgctggcat 510

<210> 3979
<211> 739
<212> DNA
<213> Homo sapiens

<400> 3979
aatggcaaaa gtggaactca ggacatccag cctggccctc tttttaataa taatgctgat 60
ggagtggcca cagatataac ttctaccaga tccttaaatt acaaaagcac tagcagcggt 120
cacagagaaa tatcatcacc taggattcag gatgctggac ctgcttcccg agatgtccag 180
gccactggca gaatcgcaga tgatgctgac ccaaaagtag cacttgttaa cgattcttta 240
tctgatgtca caagtaccac atcttctagg gtggatgatc atgactcaga ggaaatttgt 300
cttgaccatc tgtgtaaggg ttgtccgctt aatggtagct gcagcaaagt ccacttccat 360
ctgccttacc ggtggcagat gcttattggt aaaacctgga cggactttga gcacatggag 420
acgatcgaga aaggctactg taaccccgga atccagctct gttctgtagg aagttataca 480
atcaattttc gggtaatgag ttgtgattcc tttcccatcc gacgcctctc cactccttct 540
tctgtcacca agccagccaa ttctgtcttc accaccaaat ggatttggta ttggaagaat 600
gaatctggca catggattca gtatggagaa gagaaagaca aacggaaaaa ttcaaacgtc 660
gactcttcat acctggagtc tctctatcaa tcctgtccca nggggagttg tgccatttan 720
gcggctcacg gaactatna 739

<210> 3980
<211> 736
<212> DNA
<213> Homo sapiens

<400> 3980
agattaacgg ccgtcccgaa tatgcagcag aggcacaggt ctcccctact catttcaaaa 60

US 2005/0255509 A1 Nov 17 2005

tatattagcc ttgctctaat tagatattaa attttaattc cgttaaactt ttttcttaag 120
tgcacaaagc atcgtactcc ctggaggcaa acacatcggg ctgcttcagc gttagcggga 180
tgcttagcat tttgaatatt gtggcaaaaa aattaaaagt tcacttatta atatttatca 240
gcagtatcat aatttccatc ctcttatttc agaatttcac ttgaggcaaa aataccacaa 300
gtgtaattac tctagcacag ctattaatgt gctggatgat aggccactgc gtcacatgac 360
cttctattgt tcatgggttt aaagagaaag cagggctttg tatttctttt tcttctttta 420
aagtcgactg tagcatcttg gcttttgtct ggggtgggga ggatctgggg tctggttcac 480
tttgtaaaag taaaccatgt ctgtttaaac aatagaggtg tttaagaaga ctctttagtt 540
ttcctgcaga ttgttcaaga ttacatgata atcacacgga gtatttattt cctactgaca 600
aaccaagtac ttgttacatc accaatggta ccaggagatg aagaccnggt tttgagcagg 660
agcgagatta ccacccaaaa aggagctcct gaggcagccc acttctanca aacttttac 720
atgttgcaca tttcan 736

<210> 3981
<211> 742
<212> DNA
<213> Homo sapiens

<400> 3981
agaaacggca gtggcagcag cgtccggagc agccgcagcc ttctggaagc tccaggcggt 60
ctttctgccg agcctcggtc ccggccccca tcctccccgc cccatcggtt gttgtctggg 120
cggatttaaa cagtcaagtn aaatcaagct gggtaatcat ggcagaaggt ggatttgatc 180
cctgtgaatg tgtttgctct catgaacatg caatgagaag actgatcaat ctgttacggc 240
agtcccagtc ctactgnaca gacacagagt gtcttcagga attaccggga ccctctggtg 300
ataatggcat nagtgttaca atgatcttgg tagcctggat ggttattgca ttgatcttgt 360
tcttactgag acctcctaat ctaagaggat ccagcctacc tggaaagcca accagtcctc 420
ataatggaca agatccacca gctcctcctg tggactaact ttgtgatatg ggaagtgaaa 480
atagttaaca ccttgcacga ccaaacgaac gaagatgacc agagtactct taaccccatt 540
agaactgttt ttcctttagt atctgcaata tgggatggta ttgntttcat gagcttctag 600
aaatttcact tgcaagttta tttttgcttc ctggtgttac ttgccattcc tatttacagt 660
atatttnagt gaatgattat atttttaaa aangttacct ggggcttttt ttgggttgtc 720
ctaaaacttt cnaaacaatt tc 742

<210> 3982
<211> 799
<212> DNA
<213> Homo sapiens

<400> 3982
ataaaaaagt ttctccaaat gagctcatcc tgggctggta agttggggag gtgggggctg 60
gggttaatgg aaggtctctt cgtgattgcc ggtgtctttt gctactggac tggatcttat 120
actcttcctt ttggaggcaa gagtattgca agtgtattac tgactgtgag cagtggctca 180
atgcctgtaa tcccagctgg gaggctgagg caggaggatc acttgagccc agtagttcaa 240
gatcagcctg aacaaaatag tgagaccctg tctctacaaa aacatttttt aaaaacttag 300
ccaggaattt gaagttgcag tgagctatga tcatgccttg ccactgcatt ccagcctgag 360
tgacagagtg cgaccctgtc tctaaaaaac aaaaggaaag tgtgttacct gtaggaactg 420
tgaattcagt gggttttgct ggtggttctg atcctgtggg gccaggatat ttcgaattac 480
cttgtaagtg acttggaatt tttcatcagc actaagtcag cctttgattt tatttgacat 540

0962946.0720800

agttttcggt gtgtgtattg ctcttggcag ttggtgtcac taggtgtcct accngtagaa 600
gtgtccggta ccctgaagac acccatgcca ctgttgtgtt tgatattgac gccacatata 660
gacaggagtc caccactgng tccatttcac aggtaccgct acgggccatg acatcacaga 720
gcactctgng ctgatccatg agttcctaca gccnagaagg cccccaaccc cattcacctn 780
acctgtggac acaagtctt 799

<210> 3983
<211> 613
<212> DNA
<213> Homo sapiens

<400> 3983
attaagatat gacccacctg aataacctca catactcttc ctatctcaaa actcttaact 60
taatcctatc tgcaaagtcc gttttgtcat atacagtagc atgttcatag gtttcaagca 120
tttggacatg gtcctctttg ggaggcatta cgctgcctgt gacagtgctc ttctgataca 180
ttttcagtga tcttctagac ataacaatcc tggtcctggg aacatgcatg gcggggacct 240
aaataagtct atttttaag aggccctacc ctttgcatag atcctaatct tggggtaaag 300
gaaagtttga gatttcactc caccttttt tttggtgctg gtatttccac tgtgggaaag 360
atcattcgga tttaacaacc acatgaagct cctggattat ctggggcatg tttgctgatt 420
cccaaggaag cttgatcttt ttgatggagc acttgagctg gtaagttatt agaagctgag 480
ctataatttt ccttggcatt ggtcattttt gtctaatctt ttatttttt gntttttttg 540
ttttgttttg ttttgttttg agatggagtc tcactgtgtc ccccangctg gagtgcagtg 600
ggtgcnatct cgg 613

<210> 3984
<211> 662
<212> DNA
<213> Homo sapiens

<400> 3984
gtgctcagcg gcagccacta tggaggccgc caggaccgct gtactccggg tgaagcggaa 60
gcgcagtgcg gagccggcgg aggctcttgt gctcgcttgt aaacgcctcc ggagcgacgc 120
ggtcgagtca gcggcacaga agacgtcgga ggatttggag agagcggcgg agaataatgt 180
cttccacttg gtggccactg tgtgctccca ggaggaacca gtccagcctc tcctgcggga 240
agttctgcgc ctgtcacggg acagccagca gcgtgtccgc cgtaatctcc gcgcctcggc 300
tcgggaggtc cggcaggagg gccgctaccg ggtgctttcc agccgccgat ccttggggac 360
cacctcgagc ggncaggagt ccgagtacac gccggggaac ccagaagccg ccgggaactc 420
gggctttcag ttgttagacc ttgtccacga ggaggganaa cctgaagccg cctctgcagg 480
ctcctgcaaa acatctgacc cagatgtgat cctctgcaat tctgtagagt tgatccgtga 540
gcgattgact gtgtctgagg atggaccagg agtcaagcnc caggaagaac aaaaacacga 600
tgactatntg tatgacatta ctacttggag acgccactcc aggctggatt gagaacattn 660
ct 662

<210> 3985
<211> 708
<212> DNA
<213> Homo sapiens

0960245 0960245

<400> 3985
gctggcgggc ggccgggtgg cggcggcggc atggcggagc cgagcggggc cgagacgagg 60
ccccccattc gggtcaccgt caagaccccc aaggacaagg aggaaattgt gatctgcgat 120
cgagcctcgg tcaaggagtt caaagaggaa atctcccgga ggtttaaggc tcagcaggat 180
cagctggtcc tgatcttcgc aggcaagatc ctcaaggatg gggacacact gaaccagcac 240
ggaatcaagg acgggctcac tgtccatctg gtcatcaaga cccctcagaa ggctcaagat 300
ccagctgctg ccactgcttc ttccccctcc acacctgacc ctgcctcagc accctccacc 360
acgcctgctt cacccgccac ccctgcccag ccctccacct ctggcagtgc ctcttcagat 420
gctggcagtg gaagccggag gagcagtggt gggggccct ctccgggggc tggggaggga 480
tcccccagtg ctactgcgtc catactctct ggctttgggg gcatcctggg gctgggcagc 540
ctaggcctgg gctctgctaa cttcatggag ctgcagcagc agatgcancg gcagctgatg 600
tccaatcctg agatgctgtc acagatcatg gagaaccccc tggtccagga tntgatgtct 660
aaccctgatc tgatgcntac atgattatgg ccaaccccca aatcanca 708

<210> 3986
<211> 618
<212> DNA
<213> Homo sapiens

<400> 3986
agcggaaaac caattggttt aaaagaagag ccagtaagtt catgactcac gtggcctccc 60
agtttgcctc cagctatgtg ttttattggc gggattactt tgaggaccag ccccttctgt 120
atcccccagg ctttgacgga agagtcgtgg tgtatcccag caaccagact ttaaaggact 180
acctcagctg gcgacaagca gattgtcaca tcaataatct ttataataca gttttctggg 240
cacttataca acaatctgga ctaacaccag tacaagccca agggagatta cagggaactc 300
ttgcagcaga caagaatgag attttgtttt ctgaattcaa catcaactat aataatgagc 360
tgccgatgta taggaaaggg actgtgttga tatggcagaa ggtggatgaa gtgatgacaa 420
aagaaattaa gctgccaaca gaaatggaag gaaaaaagat ggcagtgacc cggaccagga 480
caaagccagt gcccttgcac tgcgatatca tcggggatgc tttctggaag gaacatccag 540
agattctaga tgaagacagc tgacccttt gcgcttnant tctggtgtgc ttaaccatgc 600
aagcccttcc acctncca 618

<210> 3987
<211> 711
<212> DNA
<213> Homo sapiens

<400> 3987
actgcgcgcc ccgcccggag tccccgccgc cgtcatgcag tccccggcgg tgctcgtcac 60
ctccaggcga cttcagaatg cccacactgg cctcgacctg actgtgcccc agcaccagga 120
ggtacggggc aagatgatgt ctggacacgt ggagtaccag atcctggtgg tgacccgtct 180
ggctgcgttc aagtcggcca agcacaggcc cgaggatgtc gtccagttct tggtctccaa 240
aaagtacagc gagattgagg agttttacca gaaactgagc agtcgttatg cagcagccag 300
cctcccccca ctacccagga aggtcctgtt tgttggggag tctgacatcc gggagaggag 360
agccgtgttc aatgagatcc tgcgctgtgt ctccaaggat gccgagttgg cangcagccc 420
agagctgcta gagttcttag gtaccagatc cccangggct gcagggctca ccagcagaga 480
ttcctctgtc ctggatggca cagacngtca gacagggaat gatgaanagg ctttcgactt 540
ttttgaggag caagaccaag tggcanaaga gggtccgccc gtccagagcc tgaagggcga 600

09052600-070208

ggatgctgaa gaatccttgg aggangagga agcgctggac cctctgggca ttatgcgctt 660
caagaagccc aaanaaacat cggtgtgaaa gggaanggac tgggccctgc a 711

<210> 3988
<211> 741
<212> DNA
<213> Homo sapiens

<400> 3988
ttgcgcctgc gcagtgcatc accgcaggcg ggcctcgcgg gtccgggagc gcggcggaga 60
cgatgcctga gatcagagtc acgcccttgg gggccggcca ggacgtgggc cgaagctgca 120
tcctggtctc cattgcgggc aagaatgtca tgctggactg tggaatgcac atgggcttca 180
atgacgaccg acgcttccct gacttctcct acatcaccca gaacggccgc ctaacagact 240
tcctggactg tgtgatcatt agccacttcc acctggacca ctgcggggca ctcccctact 300
tcagcgagat ggtgggctac gacggcccca tctacatgac tcaccccacc caggccatct 360
gccccatctt gctggaggac taccgcaaga tcgccgtaga caagaagggc gaggccaact 420
tcttcacctc ccagatgatc aaagactgca tgaagaaggt ggtggctgtc cacctccacc 480
agacggtcca gattaaagtg ggctcagagt ctgtggtcta cacgggtgat tataacatga 540
ccccagaccg acacttagga gctgcctgga ttgacaagtg ccgcccaacc tgctcatcac 600
agagtccacg tacgccacga ccatccgtga ctccaagcgc tgccgggagc gagacttcct 660
gaagaaagtc cacgaaaacc gtggagcgtg gtgggaaggt gctgatacct gngttcgcgc 720
tgggcccgng cccangaaca t 741

<210> 3989
<211> 846
<212> DNA
<213> Homo sapiens

<400> 3989
aggattttca ttttcattta tggcacccgt tgtgtttgag aacatggacc aatttatgga 60
ttagttttaa acccccagtc tgtcacactc aatgaacaat tctaagttgg agagaatcca 120
tatgaaagga ttagaatgtg ccacagtgga gcttacacat gactgtttca actaaatatt 180
gcccagctgc ctctcctgca gtattatttt ttttttttg ctacttagtt aaattgctag 240
tgtctctaat ttcacacatt gtcagagctt ttttatttt gtaaatatac tgccacaata 300
aatgtatgtg atgtttcatt tattcaagat ggggtctgat aaactgtagg actaggagac 360
taagaagaga agtcaatttt gagtagaatg tgcatctttc aaataatatt gctgggccct 420
tctttggata ccttgtttga ctgtactcat aaaatagcca gagagtgact gttaagaccg 480
tacacactta atgggttttc aagaagatgg gattgttttt tcttggccat ataatataaa 540
tgtataataa atttgctctc tttgtaatta aaattaagag acagtagctc agctaggcct 600
tttaaatgtc tatataaccc aacaccacca taagtccagc tcaatttttt gtgacctgtt 660
tttctcatgg gctactcaaa gatttttttt ttttaaggca cancaagatg aggttttaaa 720
aangctttgt tagggcaatt agacattttc atttttcaag ctgattatag catttatcct 780
tacattggaa atttagtatt tgcattttgc cttttccnct taaaatgttn ccccaccaat 840
ttggnc 846

<210> 3990
<211> 715
<212> DNA

0032070950260

<213> Homo sapiens

<400> 3990
caaacttcat gtctttcaga atatcatcac ccttgcagaa actggctctc tggacttcag 60
aacattttgt acatcatgtc ttgtgagttt tttcatataa ttttttccg tagtgaaagc 120
aaagtcttgg taacgttgct gatgtaagca tttgtcagat cttcatggta tatttataca 180
cctttgtttt tacccatttc taattttaca ttcctgtctg aacagctttc tgtcttgaac 240
atatggcaga atgatgttta taatctcttg aagttgtctc tggttacatc tctccgtgaa 300
ttatccattg tgtgttttat ttgcttttct ctgtcatgaa gcatatatta gaactaacgt 360
caaatcagag gctcataatg accttagaaa ccacttagtg aaacctctca ttttgcaatt 420
gaggaatcaa gggaggaagt aaattctccc aaattattgg tggtgataaa aatggaactt 480
gggtttcctt cccttggttg agtgcttatt ttgctctgtg gtactgcctc atttctgctt 540
agccagtatg aacaggctct ggaattcaga tcccacttag tgatgtccta atcaaagtag 600
acatatggaa gtaaatacta ataaggcatt ccacagcctc tgtgtgaatt gatggctgnt 660
tangatttgt gccaatgcct ctgngaccta aagttaaaat tttgcttggg atttg 715

<210> 3991
<211> 535
<212> DNA
<213> Homo sapiens

<400> 3991
agatcgctcc gcccccatcc gcaggttcta actttggcct gggactctgc ccctctacct 60
cagcacagaa tcgccccggg tcctactaca gaatcaatcc ttgaacactg cctccacgtc 120
gccggctcaa tctgggcgag aacccagact tccaccgcan ccccgcaatc tgcagacctc 180
agcggcagcg caggtggcag acctgcctcc tttgcctgtg agtcatggca gctcccatga 240
atggccaagt gtgtgtggng actggtgcct ccaggggtat tggccgtggc attgccttgc 300
agctctgcaa agcaggcgcc acagtttaca tcactggccg ccatctggac acccttcgcg 360
ttgttgctca ggaggcacaa tccctcgggg gccaatgtgt gcctgtggtg tgcgattcaa 420
acccggaggt gtccaatccc aaaaagccag gacgagttac caaccagctg caatacctac 480
acaaggtagt gatgaaggct ctgtggaaac atcagntcnc atggncattc cggca 535

<210> 3992
<211> 774
<212> DNA
<213> Homo sapiens

<400> 3992
agacgagacg tctctccgga gcgggggcga gagcggtcac ccacccgcag gagagacggc 60
tcccccagcc ggcggagacg gtctctggag agactcctgg agcagaggag gtcccccgag 120
cgcaggagag ggggctcgcc cgagcgcagg gccaagtcca ccgaccggag gcgcgcacgc 180
tcccccgagc gcaggagaga gcggtccctg gacaaaagga acagagagga cagagccagc 240
caccgagaaa gggaagaggc gaatctgaaa caggatgccg gcagaagttc cagacatccc 300
ccggagcaga gaaggcgacc ttacaaagaa tgtagcaccg acctcagtat ctgagacgct 360
gagtcacatt ccaaccttta ccgtgtcaaa ggttctaaga ggaaagtcac aaacctgaaa 420
ttatttagtt tcttacctaa tgaagcatct gacacctgat gatcctatga ataacaacaa 480
acattttatg catttgaaat cttataagaa aaaatatata tgaaaagtat tgtgcctgat 540
gtatcatatt aaagaaagta tttttaaatg catacttttt tggaaattat ttgccaaatg 600

09653405.030800

ctggcccaaa gggatataaa ttttgtttct acgtaacctg tanaatcgtc aagaattgtt 660
cccgttttgg ggcaatcttt ttctctcctg gntaaatggg gcttgttgat cattttctct 720
acntaagggg aatttattgg ttaagtttaa ttaatttgat atanactgtc atgt 774

<210> 3993
<211> 416
<212> DNA
<213> Homo sapiens

<400> 3993
gaattggtgg gggccgcggt ctccgccttc tagaggtggc ggcctactgc ccttcgggtg 60
ttgtgtgcaa agccccgttt cctgctccct gcgcttgtat cctgctgcct tccctcctgc 120
tggtgaagct cgtgctgccc tttgctggcc tgtgctgcca ctgccgaccc gtgtcccgtg 180
gtggagctgt cgtggggctc acgtgacttc ccttcctaca ggcgtccgag ctgggccaca 240
gcctgaacga gaacgtcctc aagcctgcgc aggagaaggt aacgggcagc tccgggtggt 300
tgtgcctgga gcccttcact ccaggggacg tgggtgtgtc aggggtgtta gggggattgt 360
ttgtccanca gctgggactc aatgaggcca ancctcacac ccnacctctc agcaca 416

<210> 3994
<211> 786
<212> DNA
<213> Homo sapiens

<400> 3994
cacttaacac actcttgatg acatatggca ggttcttggt attgacaccc gtgtggctgc 60
aggtggcatg aatcatgcat ggcttgtctg gatctgtctt ctgcagagcc cattctctct 120
gtcttttgct agtctggact ggagagcaac ttccctgagt caggactctt gctgctaatt 180
gcagaaaacc agcagtctct gtgaagttgt ggtgttctca gagttcagct gtaaaatata 240
gaatcctcat taattgtatt tacaactata ttgagcaaac caatgttgtt ctttattaat 300
gtacagacca aaaaagacac ctcaaaagaa aggacgtacg cgtttcttgt aaacacgagg 360
caccccaaga taagaagaca gatagagcaa gggatggaca tggtcatctc ctcagtgatt 420
ggagaaagtt accggcttca gtttgatttt caagaggcag tgaagaattt cttcccccca 480
ggaaatgaag tggttaatgg agaaaattta agctttgcat atgaattcaa agctgatgca 540
ttatttgatt tcttctattg gtttgggctc agtaattccg ttgtaaaagt aaatggaaaa 600
gttcttttag gttcaataga tgatgttttt aactgcaatc tgtcacccag atcatctctg 660
acagagcctc ttttggcaga attaccattt ccaagtgttc tggaatctga agagacaccc 720
accaatttat ctgattgaac tgacattgta ncagttgctc ccgnacttca agcctgtgct 780
agactn 786

<210> 3995
<211> 752
<212> DNA
<213> Homo sapiens

<400> 3995
cttggctcgc tgcgcctctg cctcccaggt tcaagagatt cttctgcctc agcctcctaa 60
gtagctggga ttacaggaaa tgagaacaga agccattgcc agacctctgg aaataaacga 120
gactgaaaaa gtgatgagaa ttgcaataaa agagattttg acacaggttc agaagactaa 180

0092459 0092459

agacctgctc aataatgtgg cctctgatga agctaattta gaagccaaaa tcgaaaagag 240
aaaattagaa ctggaaagaa atcggaagcg actagagact ctgcagagtg tcaggccatg 300
ttttatggat gagtatgaga agactgagga agaattacaa aagcagtatg acacttatct 360
ggagaaattt caaaatctga cttatctgga acaacagctt gaagaccatc ataggatgga 420
gcaagaaagg tttgaggaag ctaaaaacac tctctgcctg atacagaaca agctcaagga 480
ggaagagaag cgcctgctca agagtggaag taacgatgac tcggacatag acatccagga 540
ggacgatgaa tccgacagtg agttggaaga aaggcggctg cccaagccac agacagccat 600
ggagatgctc atgcaaggaa gacctggcaa acgcattgtg ggcacgatgc aaggtggaga 660
ctccgatgac aatgaggact cggaggagaa tgaaattgac ntgggaagat gatgatgacc 720
aggatgacna tttggaagac cagagccttt nt 752

<210> 3996
<211> 786
<212> DNA
<213> Homo sapiens

<400> 3996
gatctgtacc tttacttgtg aaaggtatgc tatataattc agcaagtacc aacttgtgta 60
gctgcagaat aaccaagtgg ctatccagtc aagtaaatac agtttgctta catacttcaa 120
cagtttcata aaacgattcc cctgagtgac acaagaacat aaaatgttaa tatcactaat 180
atagcctgtt aaatcttttg tggagacagg tgcaaatcag aagattgaca aggaagaact 240
tgagcttgct aaataagact tcctaaattt aaaagctcta gttttgctta gtgtgaattc 300
tggcacttta aaaagattaa gcaagtgaaa ttctgctgcc ctccaccatt tatttttaca 360
gtgctttgta atttttttca tcagttcctt aaatgttatt tggaggaaac taagttcttg 420
acctcagtaa ttttatttttt gtttttccct aaatgtttcc ctactagtct ttttggaaaa 480
catgtttgtt ttaatttcat cttccctcac tttatttagg tagaattttt ccccttcat 540
ttctgaaatt ttttgctcac cgccatgttt aaatggggtt gaatcatagc gagccatttg 600
ctcttgccaa agtgagatag atgtctgagg agataattga aaagtcagac tctgtctgng 660
gggctttaat cggagcactg ctggaaatga tgcnnagaat gtagtgcttc atatatccat 720
gaccaagatt gacatgttgc tcacacatgt ccaatttaat gaggagctnc tgttttccaa 780
aattcc 786

<210> 3997
<211> 739
<212> DNA
<213> Homo sapiens

<400> 3997
atcgagtcgg ccttgttggg tgctaggatt tcaagtattt ggtgtctggc cagaaggatc 60
tgatgggaca gatatcaatg cactggtgcg atcccacaat agaaaggtga tagctgttgc 120
cgatgacttt tgtaaagtcc atctgtttca gtatccctgc tccaaagcaa aggctcccag 180
tcacaagtac agtgcccaca gcagccatgt caccaatgtc agttttactc acaatgacag 240
tcacctgata tcaactggtg gaaaagacat gagcatcatt cagtggaaac ttgtggaaaa 300
gttatctttg cctcagaatg agactgtagc ggatactact ctaaccaaag cccccgtctc 360
ttccactgaa agtgtcatcc aatctaatac tcccacaccg cctccttctc agcccttaaa 420
tgagacagct gaagaggaaa gtanaataag cagttctccc acacttctgg agaacagcct 480
ggaacaaact gtggagccaa gtgaagacca cagcgaggag gagagtgaag agggcagcgg 540
agaccttggt gagcctcttt atgaagagcc atgcaacgag ataagcaagg agcaggccaa 600

0960456.0720300

agccaccctt ctggaggacc agcaagaccc ttcgcctcgt cctaacaccc tggcttcagt 660
gcaactcttt tccttcagct gcatgtgatt ttgngataaa gttcaggtaa caggatgggc 720
antgattgga naatcactg 739

<210> 3998
<211> 739
<212> DNA
<213> Homo sapiens

<400> 3998
ttattcaggc accctaatgg gcagattgtc cagcttctac ctttgcatca gcttcgaggc 60
tctaataccc agcccaactt acagcctgtc atgtttcgga acccagggtc tgtgatggga 120
atccggttac ctgctccttc caaaccctct gagactccgc catcttccac ttcgtcctct 180
gctttctctg tcatgaatcc tgtaattcaa gctgttgggt cttcttcagc agtgaatgtt 240
atcactcagg caccatcatt gctttcctct ggagctagtt ttgtgtctca ggctggtaca 300
ttgaccctga ggatttctcc tcctgaacca caaagctttg caagtaaaac aggctctgaa 360
accaaaataa cttatagctc aggaggacag cctgttggta cagccagtct tattcctctc 420
cagtctggta gttttgcctt gttacagctc ccaggacaaa agcctgttcc tagctccatt 480
cttcagcatg ttgcttccct tcagatgaaa agagaatctc agaatccaga ccagaaagat 540
gaaacaaact caataaaaag agagcaagaa acgaagaagg ttctacagtc agaaggagag 600
gctgtagacc ctgaggctaa tgtaataaaa caaaactcag gagctgctac ctcagaagaa 660
actctgaatg attccttgga agataggggt gatcatttgg atgaaaaaat gcctttcana 720
aanaaggttg ngcaactgt 739

<210> 3999
<211> 585
<212> DNA
<213> Homo sapiens

<400> 3999
gagcgccttc ccgttcccgg tgaccgtgtc gctgtgccac atcctggctc tgtgcgctgg 60
gctcccgccg ctgctgcgcg cctggcgcgt gccccccgcg ccgcccgtct cgggccccgg 120
acccagtccg catccgtcgt ccggcccgct gctgccgccg cgcttctacc cgcgctacgt 180
gctaccgctc gccttcggca agtacttcgc gtccgtgtca gcgcacgtca gcatctggaa 240
ggtgcccgtg tcctatgcac acaccgtcaa ggccaccatg cccatctggg tggtcctcct 300
gtcccggatc attatgaagg agaagcagag caccaaggta tacttgtcac tcatccccat 360
catcagcggt gtcctgctgg ccaccgtcac cgagttgtct tttgacatgt ggggactcgt 420
cagcgccctc gccgcacgct gtgcttctcg cttcagaaca ttttctccaa aaaggtcttg 480
cgagattcac ggatccacca tctncggctg ctcaacatcc tgggctgcac gccgncttct 540
ttatgatccc cacctgggtt ctggtggacc tctcggnttt cctgg 585

<210> 4000
<211> 683
<212> DNA
<213> Homo sapiens

<400> 4000
atttccattt cctagcagat ttcatatact acatacagag cttaatggtt tttgttttac 60

US 2005/0255500

taattagatg atgtaaaaca gagatttgga ttatcaatgt gaatgaattc agggtgggaa 120
agacccacag acaaggtctc tactgccttc tctttgtatt gcttttgtgg gaggttggag 180
atacgaagtt caattggtag aatattctag atcactggtg gacagcaggc cccaagtctg 240
tctgtccttg cacagtattc ttaattctgt atatctggaa cctgaatggt caatttttt 300
ttttttcccc cagagtggtt atcaagtcct gggaaatcct gactcatagg gctcaaactc 360
agacatattt atgtcagaga agcaatttaa gaaccatttt acatgtaaaa taaaagtttt 420
tcactgggga aagcataaac ttttaaatct aaaccaacta tacagggctc ttatgaggat 480
aaattaatca atttaccatg ccaggcacat agtaggttgc tttaaaagta tgtcatcttc 540
gttttttctt aagagatggt aggaatataa ttggttgagc aggaaaggaa cacatgtatt 600
gaggcacgaa gttttgctgt tcaaaggttt ctgggttagt aatgcttggg tttcaaagct 660
gncatcatct tatagncnct ttg 683

<210> 4001
<211> 262
<212> DNA
<213> Homo sapiens

<400> 4001
cacacagctg ggacgtgacc ccgcctcttg ggggtggtcg cgtgttgctc agtgctgaag 60
tggggttctc attccggccc ccctggagat gaccccggag gaggccacag ccaaccatga 120
cagtgctggg gctctggctg ccttctccac ccaccccacc cctcactcag gtcgtgtttt 180
caggagctca aggctggagt gtcttgacag taaggggagg ggagcggagg cggaggcncc 240
tcangcagcc tctccatcta cn 262

<210> 4002
<211> 615
<212> DNA
<213> Homo sapiens

<400> 4002
taaaattgac ctggaatcaa ccattgacat gtcctgtgct aaatatgaat tcactgatgc 60
cctgctgtgc catgatgatg agctggaagg gcgccggatt gccttcatcc tgtacctggt 120
tcctccctgg gacaggagca tgggtggtac cctggacctg tacagcattg atgaacactt 180
tcagccgaag cagattgtca agtctcttat cccttcgtgg aacaaactgg ttttctttga 240
agtatctcct gtgtcctttc accaggtgtc tgaagtgctg tctgaagaaa agtcacgttt 300
gtctataagt ggctggtttc atggtccatc attgactcgg cctcccaact actttgaacc 360
ccccatacct cggagccctc acatcccaca agatcatgag attttgtatg attggatcaa 420
ccctacttat ctggacatgg attaccaagt tcaaattcaa gaagagtttg aagaaagttc 480
tgaaattctc ctgaaggagt ttcttaagcc tgagaaattc acgaaagtct gtgaggcctt 540
ggagcatgga catgtggaat ggagcagccg aggtcccct aacaaaaggn tttatgagaa 600
agctgangan agtaa 615

<210> 4003
<211> 697
<212> DNA
<213> Homo sapiens

<400> 4003

0838726.5+5525.0

ttttaaaaaa ataattgcgc ccccccgccc cgtgccttgg agatagtaag aattggagca 60
gagcactggg acttcaattc acgcatggaa agagatcttt gttagttgga ggaaggagaa 120
cttgcctgag cttcgggcct ttgttttgtt tttgtgagag ggacgtgtct cctaaatgaa 180
tgtttgctcc agcgttgcac ctcaaataag tcacctaaat atccacgccc tctttatcca 240
ccccctcttt actcgtgtga ctagaatagt tttcattttt cttctcaagg gaatggctaa 300
acagctccta tctgggcgtt tgatggactg tcattcaaga atgagtgaag ttgaggtgcc 360
tataagcaac tcagaaattg ttgtggccac gcttggggga aatagagccc tacactcagg 420
tgatgagagg agacctcaga ggtgaccgat ccagggcctt gctccctgcg ccaccccagc 480
tcgtacctcc agtggaactt ggctgggctt atcaagagct cctttcattc attgcaactt 540
catttgttag aaagcttctc tgtgtattta gtaggcattg ncttcaacat gtaccactgg 600
tctggctttt ggtaggccca ttaatagtgt catgtgacag cctttcaagt ataggtgctt 660
cccggcttac ngggggtcn cattccagtn aacacat 697

<210> 4004
<211> 651
<212> DNA
<213> Homo sapiens

<400> 4004
atgctataat gtctgaacag ccactgcact tgggcaacat agcaagaccc tgtctcttaa 60
aaaaacagtc tccatttata tagcattcag gaataggaaa aactacaggg aaggcaaaca 120
catcaatggc ctcctgagct gggaatggga gttaattaca aagggacatg agggaatttt 180
taggggtggt gtgacttcaa tatcttgact gctgatgatt gattgattac atgtttgaca 240
gaactcacag aactctacac ttacgaagga aaaaaagttt tgtttttcta gcttaaccaa 300
agtggtacca aacctttaaa atatcaagct tagaagaagg gctagaacat gtccatattt 360
tacctcatta gaaataaaga ataggatgtt gaaaatggtt tgtgctttaa gaagactgaa 420
ccaagctagt agctcggatt tgggtgtcca ccacctcacc ttccaggctt ataactggta 480
attctgctca agaatctgtc ctcagtgttt tcaacatcga gaattaattt gagacaaact 540
acatctagtt cataaacaaa gcttgaatta aaaaggattc ctgtcacagg ccaaaactag 600
tctacaaacc cttanggtgg ccaatcttgc ttttacaccn ccaaagatnt t 651

<210> 4005
<211> 813
<212> DNA
<213> Homo sapiens

<400> 4005
ttagctgtca gtaacaagct tcctcgagtc tcacagtcac aggattgtct tagttctttg 60
cagttggctc tatgtacaca agaacatgct gcccatagac acagcgctcc cttcaggatc 120
taattcactg cctctgctct cgctgcagag acagaaaaaa aagtgatgtc tgctctttgt 180
ttgctgttat attcccaact agtatacata agtaatagcc aaccattcaa tgcatcaggc 240
actatgctaa acccatatga ctcaaatatt aagcaatagg cttaagatca cctactcagg 300
aaataacagg cttcaaacct tgagtcgctc tgtgcaaaag ctcctacttt taacctgtat 360
tccacacttg ctgtttggtt ggattttctg caattccttc ctaataagga gtcataaaaa 420
tgcctaagca gtaagtatgg agaatcacta gcaatctttg aacagcagct catgaaaagc 480
ctttcgttgt gaaagaaaac caggaagcac ttgtttcctg gggatatgat ttaggagaaa 540
aaaatgcatt tgtttgtagc agtgaaagtt cttgnttcta tatcctccta aaatatatat 600
attattgaat taatgaaagt ccagctttga tcctatcttt gagagggtta tttatgtctt 660

0050450250 - 20200902

atatttttca aaccatttac tcctctggtg ccagatctgg taactttctt ttaaaaataa 720
gacaaaacct aatgaaaact gaaagcccat tgttccatga aaaacttnnt gaaaataaag 780
ggaactttct ggaattttgg gggaaggtna aaa 813

<210> 4006
<211> 745
<212> DNA
<213> Homo sapiens

<400> 4006
aaaaacatga aggacagata tgttgaagtc cttcagtgtt cagctgagga gatgaacttt 60
gtgttaatgg ggggcacttt aaatcgaaat ggcttatccc caccgccatg taagttacca 120
tgcctgtctc ctccctccta cacatttcca gctcctgctg cagntattcc tacagaagct 180
gccatttacc agccctctgt gattttgaat ccacgagcac tgcagccctc cacagcgtac 240
tacccagcag gcactcagct cttcatgaat tacacagcgt actatcccag tgtttgaaag 300
atgtatggtg atcttgaaac ctccagacac aagaaaactt ctagcaaatt caggggaagt 360
ttgtctacac tcaggctgca gtattttcag caaacttgat tggacaaacg ggcctgtgcc 420
ttatcttttg gtggagtgaa aaaatttgag ccagtgaagc caaatcgtaa cttacagcaa 480
gcagcatgca ncatacctgg ctctttgctg attgcaaata ggcatttaaa atgtgaattt 540
ggaatcagat gtctccatta cttccagtta aagtggcatc ataggcgttt cctaagtttt 600
aagtcttgga taaaaactca ccagtggcta ccatctccac catgaactct tgttaaggaa 660
gcttcattnc gnatattccc gctctttttc tcttcatttc cctgncttct gcttaatcat 720
gccttcttgc ttaagtaatt caagc 745

<210> 4007
<211> 597
<212> DNA
<213> Homo sapiens

<400> 4007
agtacacacg cacctgagtg agtggcacca gaggaccctc tccatgttta gggacctcct 60
gggcctcagg agcgtggcgc ccgcccctgg gcggactccc cccatccgcg ggcgcggatg 120
gtccgggccg cgtccgcagt gctgctggct gctccctggt tgctgggtgc aaagtgctgg 180
gttctgggtt tctggattcg cgggccgttc acacgtagcc tgtgccggct cctcgggtga 240
gtccgtccgc gcgcggtgcc ccgggacggc ctangctgcc gggggtccgg ggccccaggc 300
attccgggct gcagattgac ggggatcccg gatgcaccgc gcgcccccgc gccctcaccg 360
acgggtccag acctggtggg aagaaggtgc ngggacgggt ccctgaggat cccnatgcct 420
acgagccaag atgctcagct ttataggtgt gacctacaca tgtgacttca cctcagtttt 480
gtgatccgta aaatggacaa attcnaagct acttcacaag tgctgttgat aggattaaat 540
gaaacaatgc tngtaaagct ctttgcanga aggagccttg gaagcaaggg cctggcc 597

<210> 4008
<211> 681
<212> DNA
<213> Homo sapiens

<400> 4008
ctgcacaagg gcgccaagcg caagggcatc aagtcgtcca ttggccgcct gtttgggaag 60

0562464.0-0702

aaggagaagg gcaggctgat ccagctgagt cgggatggag ccacaggcca tgttctgcta 120
acagactccg aattcagtat gcaggagcct atggtgcctg ccaagctggg gacccaggca 180
gagaaggacc ggcggctaaa gaagaaacac cagctgcttg aagatgcccg caggaaagga 240
atgcccttg cccagtggga tggtcctact gtggtctcct ggttggagct ctgggtgggg 300
atgcctgcct ggtatgtggc agcctgccgg gccaacgtca agagtggtgc catcatgtcc 360
gctctgtcgg acacagagat ccagcgggag atcggcatca gcaatgccct gcaccggctc 420
aagctccgcc tggccattca ggagatggtg tcattgacca gcccctctgc ccacccacct 480
tcaggacttc ttctgggaat gtctgggtca cccatgaaga gatggaaact cttggaaaca 540
tntactaaaa caaccctgcc tatggggaca tgaaccatga gtggattggg aatgaatggc 600
tcccagcctg gggctccgca gtacccgnag ctacttcatg gaatgcctgg tggacncccn 660
catgctggac caccttacca a 681

<210> 4009
<211> 652
<212> DNA
<213> Homo sapiens

<400> 4009
taaaaaatgt catcacttgc caagcctggt ggctcatgcc tgtaatccca gcactttgtg 60
aggctgaggc aggaggatta cttgagtcca aaagattgaa gctgcagtga gctgtgattg 120
ggccactgcc ctctagcctg ggcaacagag caagacccta ttcaacaata acaaaaaaag 180
gaattaggtg atgggaaatg cctaccattt gaatctataa agataagcaa ggcagggtgc 240
agtggctcac gcctataatg ccaacatttt gggaggctga gacaggagga tcgcttgagc 300
tccagagttc aagaccagcc tgggcaacat agtgagatct agtctctaca aaaataaaca 360
aatttagctg ggtgtggtgg tgcgtgcctg tagtctcagc tacatgggag gctgaggtgg 420
gaggattgag tgagctcagg aggttgagac tgcaatgagc catgattacg ccactgcact 480
gcggcctagg tgacagcaaa acctgtctca aaaaagagag agagagagat aagcaagagt 540
tactcatgat gcttggactt gggggaagat gccaactctg gcacatgtca nttactacat 600
naaaagtcaa gtgcaatgtc aaatccagag cntcaagagg aaaaaaagtt ca 652

<210> 4010
<211> 730
<212> DNA
<213> Homo sapiens

<400> 4010
aaggaatttt ttgagaagtt acaacacaca ctggatcaaa agaagaatga aattctgtct 60
gactttgaga ccatgaaact tgctgttatg caagcatatg acccagagat caacaaactc 120
aacaccatct tgcaggagca acggatggcc tttaacattg ctgaggcttt caaagatgtg 180
tcagaaccca ttgtatttct gcaacagatg caggagttta gagagaaaat caaagtaatc 240
aaggaaactc ctttacctcc ctctaatttg cctgcaagcc ctttaatgaa gaactttgat 300
accagtcagt gggaagacat aaaactagtc gatgtggata aactttcttt gcctcaagac 360
actggcacat tcattagcaa gattccctgg agcttttata agttattttt gctaatcctt 420
ctgcttggcc ttgtcattgt ctttggtcct accatgttcc tagaatggtc attatttgat 480
gacctggcaa cttggaaagg ctgtctttca aacttcagtt cctatctgac taaaacagcc 540
gatttcatag aacaatcagt tttttactgg gaacaggtga cagatgggtt tttcattttc 600
aatgaaagat tcaagaattt tactttggtg gtactgaaca atgtggcaga atttgtgtgc 660
aaatatnaac tattataaaa tctgtttcaa gtatgcagtt ttcttttggt agaaattggt 720

0002705450

agagaatnna 730

<210> 4011
<211> 671
<212> DNA
<213> Homo sapiens

<400> 4011
agcaagaacg ccagggacgg ggtctccgcg cctgcgcagt gaagctgggc gccttcgggg 60
cttgagcttc tgagggtcgg gtccagcgcg tgggctgctg gatggcggaa ccccaggcgg 120
agtcggagcc cctgctgggc ggggcccgcg gcggtggcgg cgactggccg gcggggctga 180
ccacttaccg cagcatccaa gtcggccctg gtgccgcggc caggtgggac ctctgcattg 240
atcaggctgt ggtcttcatc gaagatgcta ttcagtaccg ctccatcaac caccgggtgg 300
atgccagctc gatgtggctt taccgacggt attactcgaa cgtatgccaa cggactttga 360
gcttcaccat cttcttgatc ctgtttttgg cttttatcga gaccccatcc tcactcacca 420
gcacggcgga cgtgcgctac cgcgctgccc cctgggagcc gccctgcggc ctgaccgaga 480
gtgtcgaggt gctctgcctg ctggtctttg cggccgacct ctctgtgaag ggttacctgt 540
tcgggtgggc ccatttccag aaaaaccttt ggctgctggg ctacctcgtg gtgctggtgg 600
tgtctctggt ggactggacc gtgtccctga ntctcgtgtg tcatgacccc ttgcggatcc 660
gncggctttn t 671

<210> 4012
<211> 737
<212> DNA
<213> Homo sapiens

<400> 4012
gctcaggcct cggaggcggg gcgatggcca cctcccaccg agtggcgaag ctggtggcct 60
ccagtctcca gaccccggta aatcccatca ctggagcgcg ggtcgcccag tacgaacgcg 120
aagacccctt aaaggccctg gcggcagcgg aggcgatctt ggaggacgaa gaggaggaga 180
aagtggcgca gcccgctggg gcatcgagat ggggtttcac catgttggcc agattggtct 240
tggattcctg acctcaagtg acccaaagtg ctgggattac aggcatgaac cactgtgcct 300
ggccaattct gttgattttt cgagtgaaaa ctgcatactg gattcagaca ctgctactaa 360
aacgaactgc tgctgcccag atgaataacc gttgctagac tgacacaagc cgacaggaag 420
cagtcagagg gctaacagaa aggagctgat ttgaacacca gcttttctgg ggtggatgaa 480
catgcaccga taagctatga ggactttgtg aactttcctg atattcacca ctctaatgag 540
gagtatttca agaaagtaga agagttgaag gctgcccaca tagaaactat ggcaaaatta 600
gagaaaatgt accaggataa attacattta aaggaagttc aaccagtggt catcagagaa 660
gactctctta gtgactcttc cagatctgta tcagaaaaga ctnctatnac cctgnctcat 720
taatgacatc attttca 737

<210> 4013
<211> 705
<212> DNA
<213> Homo sapiens

<400> 4013
tcaataaagt tttagcccac ttcgtcgcta tgtgtgatac aaatatgcca tttgtaggac 60

0050150.00200

ttcggttgga gttgtccaat ctggagattc cacatcaagg agtgcaagtg gaaggtgatg 120
gcttcagcca tgcaattcgc ttattaaaaa ttcctccctg taagggtata actgaggaaa 180
cccaaaaggc tctggaccgc tctcttcttg attgcacttt ccgattacaa ggtagaaata 240
accgcacttg ggtagcagag ttagtgtttg caaattgtcc acttaatggc acttctacta 300
gggagcaagg accatcccgg cacgtttacc tgacatatga aaatctgttg tctgagcctg 360
ttggtggtag aaaggtggtt gaaatgtttc ttaatgactg gaatagcatt gcacgattat 420
atgagtgtgt gttgaaattt gcacgttctc taccagacat acctgctcat ctaaatattt 480
tctcagaagt tcgtgtttat aattaccgag aacttatctt gtgttatgga accaccaagg 540
gaagctcaat tagtatccaa tggaattcga tccatcaaaa attccacatt tctttgggaa 600
ctgttggccc aaactcangt tgcagtaact gcacaatacc attctccatc agcttcaaga 660
aatgttcaac aaacaccaaa tgtgggtcaa ntnttacagg tactg 705

<210> 4014
<211> 797
<212> DNA
<213> Homo sapiens

<400> 4014
gaaatcaatt atgcaaagga ggaggcttgt cggctgagag agctaaggga gggagctgaa 60
tgtgaattga gtagacgtca gtatgcagaa caggaattgg aacaggttcg catggctctg 120
aaaaaggccg aaaaagaatt tgaactgaga agcagttggt ctgttccaga tgcacttcag 180
aaatggcttc agttaacaca tgaagtagaa gtgcaatact acaatattaa aagacaaaac 240
gctgaaatgc agctagctat tgctaaagat gaggcagaaa aaattaaaaa gaagagaagc 300
acagtctttg ggactctgca cgttgcacac agctcctccc tagatgaggt agaccacaaa 360
attctggaag caaagaaagc tctctctgag ttgacaactt gtttacgaga acgacttttt 420
cgctggcaac aaattgagaa gatctgtggc tttcagatag cccataactc aggactcccc 480
agcctgacct cttcccttta ttctgatcac agctgggtgg tgatgcccag agtctccatt 540
ccaccctatc caattgctgg aggagttgat gacttagatg aagacacacc cccaatagtg 600
tcacaatttc ccgggaccat ggctaaacct cctggatcat tagccagaag cagcancctg 660
tgccgttcac gccgcacatt gtgccgcctc gcctcacctc agcgagctca cttgctccac 720
acgcccccan ccgtcacacc cttgggaccc ttaccacccg naacacacac cacactnctt 780
gccttcccct gatccaa 797

<210> 4015
<211> 662
<212> DNA
<213> Homo sapiens

<400> 4015
acacgcgtcc tcccctcggc ggggaggccg gctaggggca ggcgggcagc gatgcctgcg 60
tcggccacag ctgcctggca ctgccctcct ttgtgcctgc ctcctctgcc agcctccgct 120
ccaacctccc cccccaaccc cgcaacgagg cctgctcctg ggcccggccg cagggcccgt 180
tgcccacaga gcgcccaccc tgcgcccacc cggggtgccc tcaccttctg ggcccctggc 240
tcctggcctc gggtcctgct ggtgcccagg tcgcccggcc ccgtcctccg tgctccgcgt 300
ttgccccacc ctgctgcccg agctcggcgg cgagcctggc acggtgccag gctgcctggg 360
agcccagccc gggcagggcg aactttccag cgagggttgg tctcaaactc ctgggctcat 420
gcaatcttcc tgcctcggcc tcccaatgtg ctggaattac aggtatgagc taccgcgctc 480
agcccaaacc cagggctctt aaccacccta ctatgtactg tgctggcccc cggtcaaggg 540

0956945.0076000

agagaactca cgtcaggcaa aaatgtttta caagagaggc anctaagtct tttccacagn 600
ggatgacaca agtnccccct acaaaaccac ccacagatcc aaccccaagg aaactcttgc 660
tt 662

<210> 4016
<211> 824
<212> DNA
<213> Homo sapiens

<400> 4016
gtctggaatc aagcgaacca tcaaagaaac cgaccctgat tacgaggatg tatctgtggc 60
ccttccaaat aagcggcata aagcaattga gaattcagct cgagatgctg ctgtgcagaa 120
gattgagact attatcaaag aacagtttgc tcttgaaatg aagaataagg aacatgaaat 180
tgaagtcatt gaccagcgac tgattgaagc aagaaggatg atggataaac tgcgtgcctg 240
cattgtagca aactactatg cttctgcagg tcttctaaaa gtttctgagg gatcaaagac 300
atgtgatacg atggttttta atcatcctgc tatcaagaaa tttttggaat caccatctag 360
gtcatcatct cctgccaatc agagagcaga aacaccatca gccaatcatt cagaaagtga 420
ttctttatct cagcacaatg acttcttatc tgacaaagat aataacagca atatggatat 480
agaggaaaga ctctcaaaca acatggagca gagaccaagc cgaaatactg gaagggatac 540
ttctagaatt actggctccc ataaaacaga acagcggaat gctgatctca cagatgagac 600
ttcacgactt tttgtaaaga aaacaatagt agtgggcaat gtgtccaagt atatacctcc 660
ggataagang gaagaaaatg accagtcaac tcataaagtg gatggtatat gtccgagggt 720
cccgtanaga acccagcatt aatcattttg tcaagaaggt ttggntcttc cttcatccta 780
ctttaaccaa atgaccttgt ggaanttaga gagcctcctt tacc 824

<210> 4017
<211> 613
<212> DNA
<213> Homo sapiens

<400> 4017
tgtttgcaaa taaaccattc tgataaatta tttttgttgc ttaaaataag aggaggaacc 60
gctgtgtgtt agcaagaatg tccatacctg atatgaaaga gtcatgttgg cttcagttcc 120
tactgccctg tggacttccc attccctcct tacttgagtc aaccatccac tcagtacttt 180
ccacaaatct aataatgagg tgctctctgt aggtaaatcc tttcactatg gcttgtcctc 240
aaacctccca agaaaaggtt caactgctca atctcttaac ctttttaatt ccattccctt 300
gcaggtatcc cggccctgca taacaagatg atcccaactc aaggaaaggg gtttagcagt 360
gttggatctt ggcgtatgtg ggatttaacc aggcagaaag gcagacaaga gtaagattct 420
aggcagagag agcaaatgcg tcgagcatgg gtatgaacat gtgagggata gagaataatt 480
ctgcaggaag tttgctggat ggaagggcct tatagggtta gaaaagctgg tgtcagattg 540
tcaaggactt tgaatgtcat ggggcttctc ttccaggaac acccaanttt tgggggggg 600
nnaaaatttc ccc 613

<210> 4018
<211> 587
<212> DNA
<213> Homo sapiens

0502950.0007800

<400> 4018
gaggtgccca tttaagctag atgtgcatgt caccacagat gagtttcagt tagggcttat 60
agcagcacat ggagtgcctg agcatgccaa taggcttttg gtcccaacta tggaagggag 120
ctgagctcca gtatttcttg gtagagaagc agttagtaac agcaggatgg gtgtgttcat 180
gggtaaccac cccctcaact gggaaaacag taactgcata tgctgccctt taggctcaca 240
aaagtgtgtc aggatgggtt acagtcatcg tatgggccac ttacctagta gcgggagggg 300
tgtgttcatg gggaacaacc ccccagacag ggaaggcaca gacatccact ttancaaagt 360
ggggtgccta cttggagcan caaagtatgc caagtcccct agcagcaaag ttgcaaaaag 420
tcttgggacc tgtagtccta atgcaaaata agactgtggg gcctaaggca tccctagacc 480
ctatgctttc accattagga agagcgtccc cccattccta atagggcatg gtatacagat 540
gggtctagcc aaggtgctac tgctgcctcg actgttgttg caaannn 587

<210> 4019
<211> 598
<212> DNA
<213> Homo sapiens

<400> 4019
agcaaaatct acattgcaac agacagttcc cctgtggata tgcaatctta tgaactttgc 60
tgtgacatga tcgatgttgt aattgatgtg tcttgtatat atgggttaaa ggaagatgga 120
agtggaagtg cttatgacaa agaatctatg gcaattatca agctgaataa tacaactgtc 180
ctttatttaa aggaggtgac taaatttttg gcactggtct gcattctaag ggaagaaagc 240
tttgaaagaa aaggtttaat agactacaac ttccactgtt tccgaaaagc tattcatgag 300
gtttttgagg tgggtgtgac ttctcacagg agctgtggtc accagactag tgcctccagt 360
ctgaaagcgc tgacacacaa tggcacgcca cgaaacgcca tctagtctga atcccagcgt 420
cggggctctg tgccagctta ctcttcactc cagggtcgga tgccacgtgc tacaggacat 480
gggagctgct gcttgtggga atctggtgcc tgttccacta gagacaaggg gtagagtttc 540
tcatttggat gaaaacccct tcaactggtg gtgtcaaccc ntttggggna aaaaangg 598

<210> 4020
<211> 568
<212> DNA
<213> Homo sapiens

<400> 4020
agccgtagcc agatccgttg aaaggagtgc agagaggtct cattgcgctc ccgaacagac 60
ctgacgtaga tccgaagtgg cccgcgccat ctcaactatg aggggacacc cgtaggcggc 120
gggagaggga cgccgcgagg agccaataaa gctccgcaac cggaagtgtc ttctgggagg 180
ggtcgtaccc ggaagtgtgg cacctcccgg gccgcacccg gaagtgtgat gccaccgccg 240
ctacggggaa gtaatggtat ccggccaatt gagattcgga gttaaaacag ggatgtgcag 300
atggaggtcg gaggagacac tgctgccccg gccccggggg gcgcggagga cttggaggac 360
acgcagttcc ccagtgagga agctagagaa ggtggagggg ttcacgcggt cccgccggat 420
cccgaagacn agggcctgga ggaaacagga tccaaggaca aggaccagcc acccagccca 480
tcaccaccgn cccantcaga ggccctgtca agcacctctc ggctctggag tcctgcaccc 540
ctgagaatag tcccacatgt ancctga 568

<210> 4021
<211> 603

09050500-20030800

<212> DNA
<213> Homo sapiens

<400> 4021
aaaaggtaat gtatggaaag gaaccaacca tctgaaataa tagtcctaaa tccaactaga 60
taatctttta aagctgtaag agtcagagat ggagatttct aaactttcaa agaaaacttg 120
attgcaaatg agaaacctgt gcatttttga atgcttattg aatttgaatg tctgtgtggg 180
ccaaaaagaa tcagagggac aaatggaagg caggaaagaa aaggtgtaaa ttttagatgt 240
gttttaaatt aatgtattta atgacatatt agactcatta caattttatt gactttccct 300
ttacatttga atgtaatttt ttactagccg atgcaagctg caaaatggcg agtcttctaa 360
ggtgcctttc cttccctggg atcctcatct tagaatgagc agaggcacat cgataagaac 420
tggaccttga tttcacaacc tcatacaaag ccaggcaatt cttgagccaa acaaaggggg 480
tgtaagctat ttcatttatt ttgataatcc tcctcttgca cgggagcatt ttgctgtctt 540
tgtcaaagtg aatgacaaca atttggccaa ctctctcttg ggaaaagnnc ccctttttggg 600
ncc 603

<210> 4022
<211> 598
<212> DNA
<213> Homo sapiens

<400> 4022
tccttgcaca ccatggcagc ctctccttgc accttctcct gcctctccac actccaggtt 60
ccctcaggct tgtgtcccca ctgctgcatc gtggcggggt gtcacagacc ctctgcagcc 120
cctggctgcc ctggactgtg cagagatgcc tgactccang gaaacctgaa agcaagaagt 180
taatggactg tggccttctg tgacgcgcag tcgacgcagg aaatccacga gaaggttcta 240
aacgaagccg tgggcgccat gatgtaccac accatcaccc tcaccaggga ggacctggag 300
aagttcaagg ccctgagagt gatcgtgcgg ataggcagtg gctatgacaa cgtggacatc 360
aaggctgccg gcgagctcgg aattgccgtg tgcaacatcc cgtctgcagc cgtggaagag 420
acagcggact ctaccatctg ccacatcctc aacctgtacc ggaggaacac gtggctgtac 480
caggcactgc gggaaggcac gcgggttcag agcgtggagc agatccgcga ggtggcctcg 540
ggagcggccc gcatccgtgg ggagacgctg ggcctcattg gggggnnccc ttttttttn 598

<210> 4023
<211> 650
<212> DNA
<213> Homo sapiens

<400> 4023
caggagggcc catgtgctta ccctgttttg cccacgaaga aacagctcag tgttgcgggt 60
caatgcccac atcacacagc atctagcacg taactgcacc ccgggagtcg tgggcatctg 120
ctggcctcct gccggtctcc tgccctgctg acagcttgct gtgccgcctg cctgccccag 180
tacgagcggg ccctggacgt ggcggcagag cccaagcacg agcggcagcg ccgagcccag 240
atacgcaaga acatcacgga gactctggtg tccctgaggg tccacactgt ggatgacatc 300
cagcagatcg ctgctgcgct ggcccagtgc atggggccca gcagggagct cgtatgccgc 360
tcgtgcctga agcagacgct gcacaagctg gaggccatga tgcgcatcct gcaggcagag 420
accaccgcgg gcaccgtgac gcccaccgcc atcggagaca gcatcctcaa catcacagga 480
gacctcatcc acctggccag ctcagacgtg cgggcaccac agcgctcaga gctgggagcc 540

gagtcaccat cgcggatggt ggcgtcccan gcctacaacc tgaccactgc cctcatgcgc 600
atnctcacgc gctcccgcgt gctnaacgag gagcccctga cactggcggc 650

<210> 4024
<211> 775
<212> DNA
<213> Homo sapiens

<400> 4024
tttgtgatgc agctcgccag gcctacgggg aggtaaagga cttgccaggc tgaagtaact 60
tcagaagcag aaaaacggag gattaaaacc acaagtcgtt gtgatgtgaa atttcgtggg 120
gcaagaaagg gccggaagta ggtagtctgc acggctctgc tagagagagg atcacaagat 180
cacacaaatg tgatctactt atgactggaa aaaatgtgta ctttcagagc cagcttgagg 240
cattccattg cctccaatat gagctcttcc cttcaagatt gactataaat ctcttagtta 300
caactcacat ccccttccc cagacaaaac cccacatagc ccggtgtgta tttactgaaa 360
gcagtaagat actgctgggg ctttgggtgc aagatggaga gtgctcagag ataatgacag 420
gggcctggtc ctgcagggcc ttacgtagaa agtcaaggaa tttattctct gagcaattga 480
aaatcatccc gaaagatctg cattttagaa ataccatgtt gagtagttgc ataagaaacc 540
agttaggagg ccccttttta ttggaggtag agaataatga gagactgaac tacagaagtg 600
gggaaggaag acagctgtag atccaagaaa tagtatccgg aagagaggct tgagaagtga 660
tcaaggagaa ttccacagtt atcanagacc ctgtcttcct tgttcaccac tatattaccn 720
gaacataata caaataatgc tattggtatt gggtggcatt atttggntag taggt 775

<210> 4025
<211> 623
<212> DNA
<213> Homo sapiens

<400> 4025
ctggttcttc cagctggact ctagtgcagc tgagctcctc ccccagcccc ggctctgtcc 60
ctgcaccagg tgtccagcag gccctggaat ccgcaaaggc agaaggggaa gttggggtgc 120
tgggtgctgg gcaggggtg ctgaggcctc acagcccggc ggcttggccc ccacccaccc 180
cacggtggtc ccgcgcccca cacttcctct cctctcctgt ggtttctcct tccactcagt 240
gcctcccccc cgggtagatc ctactaacag catcaaagaa ataatgaaat aatctctcct 300
tggtgtgttc ttaccgtcct aataggcaca aggggactct tcagtgcatt ttccaaaacc 360
tgtacaaact ctcttgacat aaatgcagtg agtttacaat aaaatcgcag tgggaggtaa 420
cgtcaggctt cagaggcaga catggtcctg gagcctttgg gaggggagga gaggagaggc 480
agcgggcgcg gggcggcgtc cangggctg aacgaggtct gggcaggang acagagctga 540
ccttgggctg ccctggcccc tgcgcaggac acacagtgac cggggctggg gtgggcaccc 600
cggttctacc gtcnggagtc ngc 623

<210> 4026
<211> 622
<212> DNA
<213> Homo sapiens

<400> 4026
tactgtgtcc ggagaaactg tgattataca ccgcttctcg ttccccttcc tgtgccctca 60

0950250-0702300

gtgttaattc actttataaa aatataaata tataatatat ttttcttttt acaaataagc 120
caatggagat aatttagtat tactaacata gtatttatag gcttaagaca aatgtacttg 180
tgggcgatca aatgtaatta ctgttacaga ctttacaaaa ccgtacgtgg ttctcaggca 240
acacaaagta gagagggaat tctgtttttt aaaaactgtc aaaaaggaaa ttgagagtca 300
tcctagactt aacatgcttg cgtcctcaac tcctgctttt cgttcccacc ccaactcccc 360
ttttttgtct ccttaataaa tggctttatt tttttaattt ttaaaattct atattaatca 420
agaggagaca ttaactttac tgctgacgca aaactgtatt cagctagatc cacaatatga 480
aaatgtataa gctcaacatc aaattattta catcttctct tttttaactt aattagagtt 540
ttagctcctg tgcctcattt tttacaatgt atgagaatct anatgtttan ctaacatctt 600
ttctttttgg ggggaaaggg tn 622

<210> 4027
<211> 796
<212> DNA
<213> Homo sapiens

<400> 4027
gcggtaggtg ccggttgggg ccggctgtga ttgttatctt ggtgctgcag aggacagcag 60
aagaggagat tgggtcagaa aactgccctg ccgcaccaga gcacagcgca ctagtgggac 120
aggggtcctg actcagactt aactggctgt gtctcgtggt ttttcactgt cctggaaaag 180
gcctgaagtg gcactgaaat gaggcataga tgagtcccca cgacagtccg gtttgtagat 240
tccctgatct gcaattcttc ccgttccttc atggatttga aggctctcct ttcttccttg 300
aatgactttg catccctctc gtttgctgag agttgggaca atgttggatt actggtggaa 360
ccaagcccac cacatactgt aaatacactc ttcctgacca atgacctgac tgaggaagtg 420
atggaggagg tgctgcaaaa gaaggcagac ctcattctct cctaccatcc gcctatcttc 480
cgacccatga agcgcataac ctggaacaca tggaaggagc gcctggtgat ccgggctctg 540
gagaacagag tcggtatcta ctctcctcat acagcctatg atgctgcgcc ccaaggcgtc 600
aacaactggt tggctaaagg gcttggagct tgtaccttca ggcccataca tccttccaaa 660
gctccaacta ccctacagag ggaaaccacc gatagaattc aacgttaact acacccaaga 720
cctggacaaa gtcatgtctg cantgaaagg aattgacggn gtttctgtcc ttcttttctg 780
ctaggactgg taatna 796

<210> 4028
<211> 541
<212> DNA
<213> Homo sapiens

<400> 4028
attggagttc agctaccaaa aggaaacctt cctctgggtc ctggagtatt tggcctgaaa 60
ttgggaactc ggaagttgct gctccagggc gctccctgcg gagctccgcc gcccgcctct 120
ccgcccggcc tttcccggcg tccccacgcg gggcgcaacc gcgagaaaga aacgcaggtc 180
gcaccgtcag cgcccagagc agcgccagtt tccgggcccg ggctgctctc ggagccatga 240
gctgcggccg ccccccctccc gacgtggacg gcatgatcac cctcaaggtg gacaacctga 300
cctaccgcac ctctcccgac agcttgaggc gcgtgttcga gaagtacggg cgcgtgggcg 360
acgtgtacat cccgcgggag ccccacacca aggcgccccg gggcttcgct ttcgtccgct 420
ttcacgaccg gcgcgacgcc caagacgccg aggccgccat ggacggggcg gagctggacg 480
gacgcnagct gcgggtgcag gtggcgcgct atggccgccg ggacctgccc cgcanccgnc 540
a 541

0500436-050800

<210> 4029
<211> 762
<212> DNA
<213> Homo sapiens

<400> 4029
gagtgtccag tacaatggat aaaaataaat ccattatcaa cacatcacta acatttcaaa 60
atcttcatgg agaagattct gtaagtttct ggggagagag agaaaaaata catcacatac 120
agaggatcac ttaccaggac tgctttgaac ttaatagcaa tggtaaaagc aaacagacaa 180
gcaactactt caaaatgttg aaaagaaaat tatttccagc tttcaattct atactcagac 240
aagctatcaa acaaatagag ggagccagcc atttttagac atccagggtc tcatttacct 300
tccatgtacc cttttcaaga agttaggatg tgctccacag aaacaaaaat aaaaccagga 360
aatggaacac tttggaatgt agaaaatggg ataatcaaca tagaggatag gcaagaggaa 420
tttctgggag catggtcaag taggattcca gcaccacagt tgtgcttctt gatgtagaga 480
gcagtcagtc cagaatcaag cagcatgact cacattgatg gctattatca ctaagatccc 540
tgctgccatt gtatcatctt tttaatctga ggacattatg cccaggcaag cctggctcag 600
attcttaccg gtatttgcct tgtcttgacc atgtggtgat gaaattcctg ctctcttctg 660
tgctgngctg ctggccaact gaggacactc atttttaccc ttctttttca acctattcct 720
gaaagctgat gttgggccgt tggtgagctt aaagcnnaaa at 762

<210> 4030
<211> 704
<212> DNA
<213> Homo sapiens

<400> 4030
gtgtgaacgt gctgccgccg atcagtcacc cagtcggctg gagtcggagg cgatatttct 60
aggggtgtac ttgttggggt cagggtaagc accagccaca aaaacctaca aaagaaggga 120
aattactgtc tttaaatatt aaaaaaaaac aagatccatg agtgggcatc gatcaacaag 180
gaaaagatgt ggagattctc acccggagtc cccagtgggc ttcgggcata tgagtactac 240
aggatgtgta ttaaataaat tgtttcagtt accaacacca ccattgtcaa gacaccaact 300
aaagcggcta gaagaacaca gatatcaaag tgctggacgg tccctgcttg agcccttaat 360
gcaagggtat tgggaatggc tcgttagaag agttccctcc tggattgccc caaatctcat 420
caccatcatt ggactgtcaa taaacatctg tacaactatt ttattagtct tctactgccc 480
tacagctaca gagcaggcac ctctgtgggc atatattgct tgtgcctgtg gcctttcat 540
ttaccagtct ttggatgcta ttgatgggaa acaggcaaga agaaccaata gtagttctcc 600
tctgggagaa ctttttgatc atggctgtga ttcactatca acagtttttg tggttcttgg 660
aacttgnatt gcantgcanc tggggacaaa ccctgattgg atgt 704

<210> 4031
<211> 546
<212> DNA
<213> Homo sapiens

<400> 4031
gtgtgctcca cttaaatgag aaaagcaacg agcaataagc ccagggtgaa gatttggtta 60
cataccctgc ttctcaggtt ttgcttaagt ttagcgccca ccaggaagaa agaaaacgat 120

0962904569-070808

tatctgcctc cttgactttt gcatcatttg tctttcttct gatgaaagtg ggactaatca 180
ctgagttagg gtttccttat ttttagtcta caccatgttg ctttatccta aaaggataaa 240
tatgggctgt gtgatggttg accacctttc ttcttccttc tatgaaggtc tgaaagggca 300
caagacaggt aaaaaggaaa cagcttttct ttagtaacta agttgctaga tttttgatct 360
catggccctg agctacacgt gaatgacttt gacctgtaat ctgaaataag atagacttca 420
gagttcacct ctcccaccat ttcactccaa aggtgagata aggtanagtt gctaaaggtc 480
agtatgaagg gcatgtggca ttttantgtt gacagtatgc cagctctaan acctgcttct 540
tcatct 546

<210> 4032
<211> 653
<212> DNA
<213> Homo sapiens

<400> 4032
tgacctaaga ggtgagaagg aaccaccctc cctagagtct taggtactgt gaagcatggc 60
atccactctg caaaccatta aattcgaatc cccatttgtt gggtgattta tgtggcactc 120
ctggggcccc atgaagcaat tatatacaat cataccgttc accacttgtg aattcggtag 180
cagtatgatg tattgactga ggacaaagtc acaggtttga tctcggtgct ctgctttgtt 240
cctgaccaga ttaaactggg gaaaaagttg gaaatggttc tgcaaaaatc tgtcaccatg 300
gtgggaaaaa cctaggctca tttccttctg ctgatgggtc tgtgttgcat ctagttttac 360
tttcaaacag ctgcagatat cctggaaatg ggaagtggaa gtgtctgaac tatagaggaa 420
acaaggccca ggaaaggatt tctccagcca cgtggagctc cctgagcttc ctaaagatag 480
gagtcccacc cttccaacct ccatccatga atagcaccaa catccaccca gttgttcaag 540
ccagaaaccc atccttcact tcttcctccc ttccctttac cttccacatn caaatccatc 600
ancgagttca cttatagccg ctgcaatcat cctgaatctc tgnatctcat cct 653

<210> 4033
<211> 690
<212> DNA
<213> Homo sapiens

<400> 4033
gcgtcccggg agcccggcct cgtgcgccgc gctttgagca gcagactgct cgacaaacac 60
tgcgccaaga gctcctcagc agaagctcct cgcatcagat cctctgtgct gggaatcctc 120
ccctcttgag cacactctgt gctcctcttc cagttacggt gcatgtgaag caatggtatg 180
ggaaaattgt ttgcagaagg atgaaaaggc tttattgcca aactgaacac aggactcacc 240
gctgtagata cttgcagaag cactgaagct cctggagggt ctcctttgca gtctggaaga 300
ttccctccac gagaaacaag tccactaagt gggcacagac atcctcacag caacgggcca 360
cacggaccct ctggtctgtc tctactgcat tcctagaaac agggcaatca gcatggaaga 420
cactgcactt ggggcccaca gacactgagg gcttgcttga aaagtgcaag agtcagtcag 480
gcgcggtggc tcacgcctgt aatcccagca ctttggaagg ccgaagcggg tggatcatga 540
ggtcaagaga tccagaccat cctggctaac atggtgaaac cctgtctcta ctaaaaatac 600
aaaaaaatta gcctggtgtg gtggcggcgc ctgtagtccc agctactcgg gaggctgaan 660
caggagaatg acntgaagcc cggaggcana 690

<210> 4034
<211> 605

0822704.6+52250

<212> DNA
<213> Homo sapiens

<400> 4034
agctagcttt gcaatatggc ggccgaggcg gacggaccgc ttaaacggct gctcgtgccg 60
attcttttac ctgagaaatg ctacgaccaa cttttcgttc agtgggactt gcttcacgtc 120
ccctgcctca agattctcct cagcaaaggc ctggggctgg gcattgtggc tggctcactt 180
ctagtaaagc tgccccaggt gtttaaaatc ctgggagcca agagtgctgc tggattaaaa 240
aaggaggatg aggcccgtcc cgtgaggtct gcgtccatga gggttagagg tgggttaggg 300
gcatgggggc accagcaagg ggagggttgt atggagtggg agagccaggg ggcaggtagt 360
gggtataggt gggcagcagt tccccctgga gcctagggtc actctgaggg agggagcacg 420
gtgaggggggc ttccagtttg cagtgggaag agctgcagag agaaacaaga ggttagaggg 480
cacttccctg ggttggaggt gagtctggcc agttctgggc agacagggta gagcgtgcca 540
cccacccagc cctggctacc cancccgctg ggcgcancan gcatggaagc cgaccccggg 600
atgga 605

<210> 4035
<211> 637
<212> DNA
<213> Homo sapiens

<400> 4035
atgttgtccc ctcagcgagt ggcagcagct gcctcaagag gagcagatga tgccatggag 60
agcagcaagc ctggtccagt gcaggttgtt ttggttcaga aagatcaaca ttcctttgag 120
ctagatgaga aagccttggc cagcaccctc ttgcaggacc acatccgaga tcttgatgtg 180
gtggtggttt cagtggctgg tgccttccga aagggcaagt ccttcattct ggattttatg 240
ctacgatact tatattctca gaaggaaagt ggccattcaa attggttggg tgacccagaa 300
gaaccgttaa caggattttc ctggagaggg ggatctgatc cagaaaccac tgggattcaa 360
atctggagtg aagttttcac tgtggagaag ccaggtggga agaaggttgc agttgttctg 420
atggataccc agggggcatt tgacagccag tcaactgtga aagactgtgc taccatcttt 480
gctctaagca ctatgactag ttctgttcag atttataatt tatctcanaa cattcaagaa 540
gatgatcttc aacagctgca gctcttcaca gaatacggtc gtctggcaat ggatgaaatt 600
ttccaaaagc ctttncagac actgatgntt ttggnta 637

<210> 4036
<211> 659
<212> DNA
<213> Homo sapiens

<400> 4036
aggaagtgcg cgcggccccg cccccgccgg ttcgcgtctc tctgctgcgg cgcggggacc 60
gctgtgctct cggaagccat cttcgacaag agcacaggga aggttgtttt gaagacgttc 120
agcctctaca agaagctgct gactcttttc agagctggcc acgaccaggt ggtggtcctg 180
ctccatgatg tccgtgatgt gagcgtggag gaggagaagg tccggtactt cgggaaaggc 240
tacatggtgg tgctccggct tgcgacgggc ttctcccacc ccctcacgca gagtgcagtc 300
atgggccacc gcagtgatgt ggaagccatc gccaagctca tcaccagctt cctggagctg 360
cactgccttg agagccccac agagctgtct cagagcagcg acagtgaggc cggtgaccct 420
gcaagccaga gctgacagcc ccactgtgcc tgagcccgtg caccgcccac aggacccatg 480

0962946 0972800

gcacattccc ggtgtgcctg agcccgtgca ccgnccacag gacccgtggc acattcccgg 540
tgtgcctgag cccgtgcacc gccacaggac ccgtggcaca ttcccggtgt gcctgaaccc 600
gtgcaccgcc acaggacccg tggcacattc ccggngtgcc tgacccntgc accgncaca 659

<210> 4037
<211> 695
<212> DNA
<213> Homo sapiens

<400> 4037
agtaggaagc cgcggggtgg tggcgagaga ggacccaggt gtcctagcag tgggcgccgc 60
ggggcacacg ctgggccaag gtgcaggcgg ccagggtggg agactgttcg ccccgccctg 120
agtactccta tcttgtttct ccacctgttc gggagttgga gatgtgcacc taaaggaggc 180
gcatctgggg acggacacat ctggcactga ggccctcgcc acctgcctcg ccacctggcg 240
accctgaccc caccacactg ccttgaggta ggaaaaggag gctcctcaac cacaacttct 300
gacctcccag ggtgtctgag gcctctaaag agcttagttt gcccctctgg gaagtgaatc 360
cttggcttat ggtgccgggg ggaccctgga ggccccctca cacgaaggct gcttcttgca 420
gagtcgctca aaagtagggc cccagggctc gcagcagcat gggcaccgag aaagaaagcc 480
cagagcccga ctgccagaaa cagttccagg ctgcagtgag cgtcatccan aacctgccca 540
agaacggttc ttaccgccct cctatgaana gatgctgcga ttctacagtt actacaagca 600
ggccaccatg gggccctgcc tggtcccccg gcccgggttc tgggacccca ttggacnata 660
taagtgggac ncctggaaca gtcttggcaa natga 695

<210> 4038
<211> 483
<212> DNA
<213> Homo sapiens

<400> 4038
accctcggcg cgccgcgcgg gatcagcgtc ctccagccgc gctgccccgg cccaccgtgc 60
agctgtagcc gnggcgcggt ggcgcggtgg cgcagggcgc tgctgggccg tccattgttg 120
agcgcgttgg gccccgccgg cgatgccgag cgccgncttc tcggagcggc ggcgaagttt 180
gaacttggcg tcggcctgga gccccgagca gcccgggggc ggctgccgtg aggcgagcgg 240
cgatgagatg tgtgcacaga cccatgccat gcagatactg gtgcctctaa cttcgtcagc 300
ccttagaaca tgacttgctg tccccagtgg agaagaaacc agaagctaca gccaagtatg 360
tcccctccaa agtccatttc tgttcagtgc ctgaaaatga ggaggatgcc tccctgaaga 420
gacatctcac acctccccaa ggnaacagnc cacattccaa tgagaganag agcaccccca 480
cct 483

<210> 4039
<211> 617
<212> DNA
<213> Homo sapiens

<400> 4039
actctgcccc acagccacag cccctgactg ccgcagcccc cacagagccc gccgcgcacc 60
ccacgtcccc cacgccagcg cccagccatg gaggccatca agaagaaaat gcagatgctg 120
aagttggaca aggagaatgc catcgaccgc gcggagcagg cggaggcgga taagaaagcc 180

0020080045900

gctgaggaca agtgcaagca ggtggaggag gagctgacgc acctccagaa gaaactaaaa 240
gggacagagg acgagctgga taaatattcc gaggacctga aggacgcgca ggagaagctg 300
gagctcacgg agaagaaggc ctccgacgct gaaggtgatg tggccgccct caaccgacgc 360
atccagctcg ttgaggagga gttggacagg gctcaggaac gactggccac ggccctgcag 420
aagctggagg aggcagaaaa agctgcagat gagagtgaga gaggaatgaa ggtgatagaa 480
aaccgggcca tgaaggatga ggagaagatg gagattcagg agatgcagct caaagaggcc 540
aagcacattg cggaagangc tgaccgcaaa tacnaggagg tagctcgtaa gctggtcatc 600
ctgganggtg agctgga 617

<210> 4040
<211> 670
<212> DNA
<213> Homo sapiens

<400> 4040
tcatgtgctc tgacgccctc ccattaggtg catccaagct gcaatgccca cttcctcctg 60
gcaggggga cccgcaggca ccttctgctc agaggtgcac ttgtctggtg gccctgctcc 120
ttcctggtac tgttgacctt tctgtgtgtt tgttttaaat ctcttgcatg gtaaatagct 180
gcattttgtt actgataaga gtgagtttaa atccactgtc atatcttttg cgtctttgtt 240
acacattttg ttttttaaaa atcttctttc ttgtcctttt ttagattgac agtgtccctc 300
ttacctcact ttctccactc agtttgtaat cctgcagtct gttgcttttc ttttagcgtt 360
tgccctaaag gtggctgcat gtgtcctcac tgaagtccag catgggcccc aaatgcaggc 420
tgaggtctgg gtctggctgg gctgctgggc gcccgagtca tcatgaccat tgttcctggg 480
cacagccggc gttgacttgt atttcctccg tgattaccgc ctggctcatc aatcactgtt 540
ttcgttttcc gtggaggcgt ggctcacaca aagggcaagc acggagtcac tgggtcctgc 600
aggactttcc aggtcaaggc anangaggtg tccggcccca acaggctcct gtgtgcccct 660
cantccccta 670

<210> 4041
<211> 653
<212> DNA
<213> Homo sapiens

<400> 4041
caaggagaat gcgctcttca agcggatctt gaggtgttat gaacataaac agtatagaaa 60
tggattgaaa ttctgtaaac aaatactttc taatcccaaa tttgcagagc atggagaaac 120
cttggctatg aaaggattaa cattgaactg tttggggaaa aaggaagaag cttatgaatt 180
ggttcgtaga ggtttgagaa atgacttgaa gagtcatgtg tgttggcacg tttatggcct 240
tcttcagagg tcagacaaga agtatgatga agccattaag tgttacagaa atgcactaaa 300
atgggataaa gacaatcttc aaatcttaag ggacctttcc ttactacaga ttcaaatgcg 360
agatcttgag ggttacaggg aaacgaggta tcagttactt cagcttcgac ctgcgcagag 420
agcatcatgg attggttatg ctattgctta ccatttatta gaagattatg aaatggcagc 480
aaagatttta gaagaattta ggaaaacaca acagacatcc cctgacaagg tggattatga 540
atatagtgaa ctactcttat atcagaatca agttcttcgg gaagcaggtc tctatagaga 600
agctttggaa catctttgnc ctatgaaaag canatttgng ataaacttgc tgt 653

<210> 4042
<211> 721

0960202 "0 5h2950

<212> DNA
<213> Homo sapiens

<400> 4042
aaaacccagt gactcacctc cgccgtgcta actcctcgct agctctccct ctcacacacg 60
ctcacacccg gctcgagatg gcggcggcgg cggcggcggc gggggactcg gactcctggg 120
acgccgacgc cttctccgtg gaagacccag tgcggaaggt gggggggcggc ggcactgccg 180
gcggggaccg ctgggaaggc gaggacgagg acgaggacgt caaggataac tgggatgacg 240
atgatgatga aaaaaaagag gaagcagaag taaaaccaga ggtaaaaatt tcagaaaaga 300
aaaaaatagc agagaagata aaagagaaag aacggcaaca gaagaaaagg caagaagaaa 360
ttaaaaagag gttagaagaa cccgaagaac ctaaagtgct aacaccagaa gaacaattag 420
cagataaact gcgactaaag aaattacagg aagagtcaga cctcgaatta gcaaaggaaa 480
cttttggtgt taataataca gtttatggaa tagatgctat gaacccatct tcaagagatg 540
actttcagag tttggaaagt tactaaaaga taaaattaca caatatgaaa agtcactata 600
ttatgccagt tttttggaag tcttagttcg agatgtgtgt atttcattgg aaattgatga 660
cttgaaaaaa attccaattc actgctgtgc tttgcantga aaaacanaag ccagaaaagc 720
n 721

<210> 4043
<211> 699
<212> DNA
<213> Homo sapiens

<400> 4043
attctcggga gaggaatcgg ttaggagaag ggggattcct cactcagctg tgcgctctga 60
tttcgtgcgc ttcctcgtcc ttcatgttgg atggccagtt tttcgtttgt gcgtcatcct 120
ctacctgaga aatggtcgct tgcccctagt ctagacacgc attaaagggc agtatttaaa 180
gtcagttggc aagcagtgga ataagatttt tgtaaagaaa ccttgtgcag catggattct 240
ctaccagatg aatttttttgt gaggcatcct gctgtggagg atcagaggaa ggaagaaact 300
gagaataagc tagaaaaatc atctggtcaa ctgaacaaac aggaaaatga catacctact 360
gatcttgtcc ctgttaacct actattagaa gtgaagaagt tattaaatgc aattaatact 420
ctaccaaaag gtgtggttcc tcacattaag aagttcttac aagaagattt ttccttccaa 480
actatgcaga gagaagttgc agctaacagc cagaatggtg aggaaattgt tcctgctttg 540
actttacgtt tcttgattac acagctagaa gcagcactta ggaacattca agctggcaat 600
tataccgcac accagattaa tattggttat tatttgacat tactggnttt atatggagta 660
gcnctcactg aaagangaaa gaaagaggat tattcagaa 699

<210> 4044
<211> 647
<212> DNA
<213> Homo sapiens

<400> 4044
attgagatta cttcagtgga tcttgctctg ggcaatgaga cgggaagatg tgtggtttta 60
aattggcagg gaggaggagg agatgctgct tcctcccaag aagccttaca ggcagctcgg 120
tccacaatga tcatatccag agtcccaaac atttctgtac atctgctaca tgaaccccct 180
gcactgacta atgaaatgta ttgtttggtt gtgactgttc agtcccatga aaagacccaa 240
atcagagatg tgaagctcac tgctggctta aaaccaggac aggatgccaa tttaactcag 300

0956294.0276.0800

aagactcacg tgactcttca tggaacagaa ctgtgtgatg aatcctaccc ggctttactc 360
actgacattc ctgttggaga cttacatcca ggggaacagc tggaaaaaat gttgtatgtt 420
cgctgtggaa cagtgggttc cagaatgttt cttgtatatg tttcttacct gataaataca 480
accgttgaag aaaaaggaat tgtttgcaag tgtcacaagg atgaaactgt aacaattgaa 540
acagtctttc catttgatgt tgcggttaaa tttgnttcta ccaagtttga gcacctggaa 600
agggtttatg ctgacatccc ctttctgntg atgaccgncc ctcttaa 647

<210> 4045
<211> 758
<212> DNA
<213> Homo sapiens

<400> 4045
gctccaactc ctgcagagct gagccggagg ggaatccgga agggacacgc tgaacaggca 60
cagaaatgaa taaaagtcgc tggcagagta gaagacgaca tgggagaaga agccaccagc 120
agaacccttg gttcagactc cgtgattctg aagacaggtc tgactcccag gcagcacagc 180
ccgctcacga ttccggctac ggtgatgacg agtctccgtc aacctcgtct ggcacagctg 240
ggacctcctc tgtgccaggg ctacctgggt tttactttga ccctgaaaag aaacgctact 300
tccgcttgct ccctggacat aacaactgca acccccctgac gaaagagagc atccggcaga 360
aggagatgga gagcaagaga ctgcggctgc tccaggaaga agacagacgg aaaaagattg 420
ccaggatggg atttaatgca tcttccatgc tacgaaaaag ccagctgggt tttctcaacg 480
tcaccaatta ctgccattta gcccacgagc tgcgtctcag ctgcatggag aggaaaaagg 540
tccagattcg aagcatggat ccctccgcct tggcaagcga ccgatttaac ctcatactgg 600
cagataccaa cagtgaccgg ctcttcacag tgaacgatgt taaagttgga ggctccaagt 660
atgggatcat caacctgcaa agtctgaaga cccctacgct naaggtgttc atgcncgaaa 720
accttacttt accaaccgga aggtgaattc ggngtgct 758

<210> 4046
<211> 492
<212> DNA
<213> Homo sapiens

<400> 4046
gttgtatatg ctttttttt ttccaaataa acttgtcacc ctgcatgccc ttggcaaata 60
agtgaagcag aaataggaac acagtccaca ttcaagttga ggaacagtgt atctttaaga 120
gctgaccttt gggtgacctg gaaaggggga aagatggcta agcatggaga gaaacgaggc 180
aagagacaag ctatgataca acaccgcttc agcccctgcc ctcaatagca cacaacccac 240
atatcagctt tctctagaga aggaacctac tgtttagtgc tcctcacttt gcaatgtttg 300
tgctacgcca gaatttctcc agtttttttc attatcatcc ccctgagaaa aaaattacat 360
tgaatttaaa ttttccctaa taagagaaat taaatatgaa agaataggat tttgttgggt 420
aagattgagc tttggaaggt cacgaaccat tattctatct aaggtgtgtg ttttgntttg 480
gtntttttg gn 492

<210> 4047
<211> 386
<212> DNA
<213> Homo sapiens

0059769.0059

<400> 4047
gagtctggcc tgcctgggct cggggtgggg ggtgtttaca gacgcaccaa ggcaggagag 60
atggaagccg cccagagaac tgccactcca taacctgtgg gcatccaggg gtgagcggca 120
gcgatggcgt cccatggagg aaacacactg gaaatcgtgc agaaaatggg aagatgcagg 180
ctggagtgcg gagaaagact gagaccctgc ctggtagacg gcaccgtcac agcagccgtc 240
tgcctgctan gaggagcgtc tccaccagca acaggccggc ccctgaggga gacagcagag 300
agctggagtc ctggccagcc aggcggggat ccttcagcan gacacanggg acacagcagg 360
caacaggagc tcanaacgct ctcagc 386

<210> 4048
<211> 712
<212> DNA
<213> Homo sapiens

<400> 4048
tgttataggt gagacagttg tagtaacatc tttctaagta gacacaacct taaacaagat 60
gaatatgttt ttataatgtg ctagagcagc ttgtgtgtag gacttaagta tgtatcacta 120
aaacctgaaa cttaaatttt tctgaaacag aagcagtgaa gattctccct ggtaacaact 180
taagtaaatc aagccaacaa atacgagtcc aaataaacat ttaatgagaa aatactgcct 240
acttttaat tttattgtta atatcctttt gtattctgta ataattactg catgtggagt 300
gatttatcct tcacctttgg tgatctggta acttagcaga atgcttgtct gcagaacagg 360
tatgtgctaa atgctgaaaa gcaaaggaca ttcagtctca ctaaaaatgt ctcccaacaa 420
gcaggctgct ggggggtttg tagcgcttgt agggtggctg agttatttct ttctgcaaac 480
actcctgtca gcattataga gacttgcact atctgttaag taaatgtgac ttaggagaag 540
gaatgacacc acccattcat ggggtcatgg ctgcaagtta ctgccctact ggttttctct 600
ttacctgata actctcaata attctaaagt ttatcttana gaaaagtctt tgagtcacct 660
attttggaat ttgagcccat gaaatgataa gcncctgcan tttggatcac gt 712

<210> 4049
<211> 675
<212> DNA
<213> Homo sapiens

<400> 4049
acacggcggg ggcgccctcg gaggcaccgg acctcagctc tctggacttc ccgggaacct 60
ggctccccgc gcgtggtccc gggatttagt cgggcgctcc ccacctctgg cagctgcggc 120
cccggactcc gccagcgctg tcttctctcc ctcaggtcca gccgccgcag ggaatgacgc 180
cggtgctcct acagccacgg ctccgggcgg ggaaggcgag ccccacagcc ggccctgcga 240
cgcccgcctg ggcagcaccg ataaggagct gaaggcagga gccgccgcca cgggcagcgc 300
ccccacagcg ccagggaccc cctggcagcg ggagccgcgg gtcgaggtta tggatccagc 360
gggcggcccc cggggcgtgc tcccgcggcc ctgccgcgtg ctggtgctgc tgaacccgcg 420
cggcggcaag ggcaaggcct tgcagctctt ccggagtcac gtgcagcccc ttttggctga 480
ggctgaaatc tccttcacgc tgatgctcac tgagcggcgg aaccacgcgc gggagctggt 540
gcggtcggag gagctgggcc gctgggacgc tcttggtggt catgtcttgg agacgggctg 600
atgcacgaag tggtgaacng gcttatggga nccggcctga actgggaaga ccgccatnca 660
aaaagcccct gggta 675

<210> 4050

0050250.000800

<211> 633
<212> DNA
<213> Homo sapiens

<400> 4050
gtctcttcat ttgtgatacg taaagtccgt tgttacctag ataaatgtag gtttgatttc 60
ttggaagcaa tcacttaaga ctttccattt tcttcaaagc atcttactta acctgcatgt 120
gggatctgta ctgagcaatt agagattcaa aacaactgtc acacacgaca gaggtggtaa 180
ccgcccaaca ggttcacctc ttccgccgcc tacacagagc cgatttatca agacaggaat 240
tgcaatagag gaagagtaca cagagctgct tgtgcaggag actggagtct tattagtact 300
caaatcgatc tccctgagca ttcggggatc agagttttta aggataattt ggtgggaggg 360
ggaaggccag tgagtcaagg gtgttgattg gttgggtcgg agatgaaatc ataaggaatt 420
gaggtgtcct tttgtgctaa gtcagttcca gggtgggggc cacgagatca gatgagccag 480
ttaatcgatc tgggtggtgc cagctgatcc gtcgagtgca ggtctgcaaa atatctcgag 540
caccgacata ggagcagttt anggagggtc anaatcttgt agcttccagc tacatgactn 600
ctgaaccata attctaatct tgaggctaat ttg 633

<210> 4051
<211> 721
<212> DNA
<213> Homo sapiens

<400> 4051
atttttattt tacagacggg aaagactgag taaatgtgag aaaattagct gaatagccac 60
tacttttttt ctggcataac ctacccctgc ttaagaactt ccacgggcct ttgattgggg 120
tttttaacca ctttaacaaa ccatgtaacc ctgagagcta tgcttgttgg acaacatggt 180
gtaatgtacc acaggctgta gagccagata ctggggtttg aatccttatt caacatggga 240
acataggagc tatatgacat taaacaactg tcttgtcttc actaaatttc tatcaactca 300
tttgtattgt ggggataata gagcctgctt ttacagggta agtgagataa aatgaataaa 360
gtgtctagac aatatcatag catagtaggt attcaatcct ggtgagatcc tgtttataag 420
gcccactact ttgtcttatc aggcagaata acaaaggaac aatatttaaa aagcaactag 480
ctcaaatctg tccccagaag gaaaaacata tcttggcctt ggtccttaaa aaatttcctc 540
tggcactgtc tagaatcagc acctaagaac acaggcgttt agtgttgact ggaataaaat 600
ggaatcgggt gctggtgcag ggagattgan cagggatgaa nagagaaaat cacagagtgg 660
aaagggatca ggtttggana agttcaatgg ggggcttgcc aggacataag cctaatatgt 720
g 721

<210> 4052
<211> 648
<212> DNA
<213> Homo sapiens

<400> 4052
aagaaacaat ggctgaaaac ataatgaaag acattaatct acacatacaa aaagctcaat 60
gaattgtaag tagggtcaac tcaaagagac actcagtgtg acattgaaac acattataat 120
catactgtcc aaaagcaaag caaatcctga aagcagaaag agccactgga cacgtacaag 180
aaatcttcga taagattaat agccaatttc tcatccaaca tcatggaagt gagaaggcaa 240
tgagatgaca tattcagtgt gctgaaagga aaatcttggg tggtcttgat acttgtagat 300

0084750950

gttcttctgt gtctgagcat tgaagagtta ggtatttatc atagtcttca cagtctgtgc 360
ttgtttgtac ctatccttct tgggaaggct ttccagatat ttgaatggct tgggtgttgt 420
gctctaagct gtatatgctt aaggattcac cccaagccca ataacacttt ggttttttt 480
tagcctcata gagttactgc cttgatggtc ttggacaaga ttcaggattc tctggattac 540
catacagaga ctcttgttca ttccgttact gnctcccaaa caaagggagt ccctttctct 600
gntctaagcc cctgaactgg gggtgaaagg acacaagcnc ccctgtgg 648

<210> 4053
<211> 573
<212> DNA
<213> Homo sapiens

<400> 4053
aatactatgt aagtgatgat gtactcttct cagtgtattg gcttggagat acaggatgtc 60
agtttgtcat gttattttat tagaaatgat aattctaatg ccttagttgt gatggtgtcc 120
tttgggtttc tgcactgcaa agttgctatt ttttcctttg tatttaataa gtaatttgtg 180
gaaaggctaa atatcctgtt cctcttcaaa ctttttaggg attttagtgc cagtgataat 240
tttttcttta gtcagttatt actgtaatgg ctgcaaaata gtgattatgt aactcttatt 300
tctcttaaca tttattagtt ggcattctac tttaaaaatg agctttccca ctccgccact 360
tatcacttag actcataaat tcttatttta tgtgtgagaa agtgtgtatg tgtgacttac 420
aaatgtagct tatttgtata catggtgttt aaaccgtatg tatgatttat atatactgta 480
attcattttg atgtgaacat cagattgttc ctcttcaaac ttgctctgtg acctttgata 540
tgtctccatc atgtnnnttt ttttagggtg ttt 573

<210> 4054
<211> 773
<212> DNA
<213> Homo sapiens

<400> 4054
ggtaatgatg agggataggt agaaaagatg ggaaggggt cagcttgtag ataacctaga 60
ctagcaggtg tatgacttct agtctctgaa ctggagccat ctgagatcag tttgagatat 120
ggtgtcttat aaatgtattg agagaggttg aggagttgtc tatagaatgg aatggagtga 180
ggtcagagat cagtggcaag gaagaccaca taaaggtttt tgcacaaact tgccttgatg 240
gcaagtcctc aaaagtacaa ttatcaagct ttctgtttaa acatgcataa gtcagtaaat 300
ataaacatta aaatttgccc aagactctta actcagttgt atttcataat taaagtgtac 360
attaaaaagc caaactagtc atgaaagtat tacatacagc aagggcagtt tagataagtt 420
aatgttgcta tgggaacccc agcagatctc cttgtgtctc cgtttaaaaa tcatggccca 480
aggtggtttc aaaaacaaca gaaggtaaaa ttattctcac attctcacac atgtaaattg 540
tactgtctct ctcagttcta aatagcggat tcaagccagc ctcttgactg gcacantaaa 600
attcggcttc gtgtctttct ataatgtatt acagcatgtg agtttaacct ttagaagctt 660
caaaaataca tcaaccaaat ttgggactgt gagacacaaa ctggtctctt ttgggctctg 720
tccagcatag ccttcctatt ccacatggct tgcncacang gccatttnca cca 773

<210> 4055
<211> 584
<212> DNA
<213> Homo sapiens

09620469.0972600

<400> 4055
gatcagaaag agaaggccac cctcctgggc aacatgaagg actactggga ttacttctgt 60
gcctgcctgg ccaaggtgaa aggagccaat gatgggatcc gatttgtcaa gtctgtctca 120
nagctccnaa catccttggg gaaaggaaga gcatttattc gctactcctt ggcgcaccag 180
aggttggcag acaccttaca gcagtgcttc atgaacacca aagtgaccag tgactggtac 240
tatgcaagaa gccccttttct gcagccaaag ctgagctcgg acattgtggg ccaactctat 300
gagctgactg aggttcagnc ngacctggcg tcgaggggct ttgacttgga tgctgcctgn 360
ccaacatttg ccaggaggac gctgaccact ggctcttctg cttacctgtg gaaaccccct 420
agccgcagct ccagcatgag cagcttggtg agcagttacc tgcagactca agagatggtg 480
tccaactatg acctgaacag ccncctaaac aacnaggcat tggagggctt tgatgagatg 540
cgactagagc tggaccantt ggaggtgcgg gagaagcagc taca 584

<210> 4056
<211> 664
<212> DNA
<213> Homo sapiens

<400> 4056
aaaaaaaaaa aaaaaaaacc ctgctctatt gcaattccct attatattct gcatcagaaa 60
aacaaacaaa acaaaaacaa ctttaaatgc ttgtagcaga accccgggtc atctcatgtc 120
agaaaccttt aatccaggcc taaatttgca tagacctgac attcagctgc cttgcagttg 180
cttcctccca tgagccaagg tggtgtcaga gggcaactgg atgactcgca gtaccacagc 240
actgggacag acagaagcca cacctttctt ttgggttttt gccaagcctc ctccatctcc 300
catcagtgct gtgggctggc tgcaagcctc gaaacagttc tcctggaagg gaggtttttg 360
ctttaccccc gccagcactt ccgcacacaa tcatagagaa cctctctgct ctctgctggc 420
ctacagcttg tctgtttctc aagcagaggc aggaagagct agtcttagca tttatatttt 480
aataggaagt tgactcccag catgtaaaag tgatccacgc agccggagtg tatgccggga 540
gctaagtggt ctatgggtga acatatccca ccttgcttcc tgagtccttg gtcccaatct 600
tctnattngg tcctctcgtt ttaaattttt tccccccaac tntttgatg taagagtcag 660
tttg 664

<210> 4057
<211> 547
<212> DNA
<213> Homo sapiens

<400> 4057
agagcggggt cccggcaccg cggcgctcgg gtgtttttgg gggcccgggt ggagggcccg 60
ggtgccgggg cccaaggtgc ggcctcgcta gcgggagagg gagcgggatc accggcccgg 120
agagagctct cagggccaga gcggggcagg aggatgcttt cccagcccca ccatggagct 180
gcgctgtggg ggattgctgt tcagttctcg ctttgattca gggaatctag cccacgtgga 240
gaaggtggaa tctttgtcca gtgatgggga aggggtagga ggtggggcgt cagccctgac 300
cagtggcatt gcctcttccc ctgactatga attcaacgtg tggacccgac cagactgtgc 360
tgaaacggaa tttgagaatg ggaacaggtc atggttctac ttcagcgtcc ggggaggaat 420
gccaggaaaa ctcatcaaga tcaacattat gaacatgaac aagcagagca agctgtattc 480
ccagggcatg gccccctttg tgcgcacact gcccacccgg ncacgctggg aacgcattnn 540
agaccgg 547

0950450-050800

<210> 4058
<211> 632
<212> DNA
<213> Homo sapiens

<400> 4058
tttgatgctg tcttggaggc cctgagccgg ggtgagcccg tggacctctc ctgcctgccc 60
cctncacccg accagctgcc cccagaccca ccgtcaccac cgtcgcagcc tccgaccccc 120
gctacggcgc cctccacaac agaggtgccc ccacccccga ggaccctgct ggaggcgctg 180
gagcagcgga tggagcggta ccaggtggcc gcagcccagg ccaagagcaa gggggaccag 240
cggaaagctc gaatgcacga gcgcatcgtc aagcaatacc aagatgccat ccgagcccac 300
aaggctggcc gagccgtgga tgtcgctgaa ttgcccgtgc ccccaggctt ccccccaatc 360
cagggcctgg aggccaccaa gcccacccag cagagtctgg tgggtgtcct ggagactgcc 420
atgaagctgg ccaaccagga tgaaggccca gaggatgaag aggatgaggt gcctaagaag 480
cagaacagcc ctgtggcccc cacagcccag cccaaagccc caccctcaag aactncccag 540
tcgggatcag ccccaacagc caaagcgccc cccaaagcca catccaccag agcccagcan 600
cagctggcct tcctagaggg ccncaagaac ag 632

<210> 4059
<211> 778
<212> DNA
<213> Homo sapiens

<400> 4059
aaagaaagaa tacatgtgaa gaacttggaa cagtgcctag aacatagtat aggggttcag 60
gtgttactaa ttataattat ttataattgt tatttttatt tataattata attgttaact 120
tttactgtta ccattatttc ctggctttac attggtttaa gataatatct gtagggtata 180
gtataatgtt atccaaatat taaattacat atagtatgtt tagttttatt tagcattgtt 240
aagattactc agtgtcaaag ggagcatttt aaaattattt agtttttgag acggggtctc 300
acactcaccc aggttggagt atagtagcac aatctcagct cactgaagcc tctgcctcct 360
gggctcaagc agtcctccca cctcagcctc ctgagtagct tgagaataca ggtgtgcaca 420
ccacactgca ctgcttttta aatttttttgt agatgtgaag tctcactgta ttgaccaggc 480
tggtctcgaa cttaggagat caagcagtct tcctgcctca ccctccaaag gtgctgggat 540
tacaggcatg agctactgca cctggccaga ggcaacatta aaaaaaaaaa aaaaagattg 600
ntgaggcttt ttaactcaca actcttggag acctaaaact tctggtatct caggcccttg 660
gtaaatctga agcttcagag aaaaganggt caggggggtag gacatggacc atttcagtta 720
tggtatagac cttaatntgg gaacccctta tattagggcc ttgacatttt tattngaa 778

<210> 4060
<211> 719
<212> DNA
<213> Homo sapiens

<400> 4060
gctgntactt ctgttactcc ggttgttctg gcttgcanaa aacctttcga tgaaggtaag 60
ggtaggaagc ataaattctc tacgaggtaa tgtcccctga ggagagaggt gaagtgtgaa 120
tctgtgaaga atccagggtg cctgtgaggt caagcgagga tcaacacaaa cattttccca 180

09629469.070800

gcatgcgcga cggcgggaga gttcgtgaga cttttggaag cacttcacgc cctacactta 240
gcattcagtt tggtcatctc atccctcttc taggtgctag tcacaggccc accccaacct 300
cataggatgt gtttgcacac agggccactt aataaatgtt atggctgcct tatttgctgt 360
gaactcttgt ctgtattcct gggccttggt agacctggga tgcccagtgg ctctgccttt 420
cactgtaggt tttgagtgat gaggtgaaga ggaagcagta cgatgcctac ggctctgcag 480
gcttcgatcc tggggccagc ggctcccagc atagctactg gaagggaggc cccactgtgg 540
accccgagga gctgttcagg aagatctttg gcgagttctc atcctcttca tttggagatt 600
tccagacccg tgtttgatca gcctcaggaa tacttcatgg anttgacatt caatcaactg 660
caaaggggt caacaaggag tcaccgtgaa cntnatggac acctgtgaac cctgaacgg 719

<210> 4061
<211> 638
<212> DNA
<213> Homo sapiens

<400> 4061
ttatcgagct gtttggttga tagtttattg tatagcaatt taagcaaatc tcatttgaat 60
tatgatacag tttgaacatt ccaaatctga aaaatatctg aaatctgaaa ctcttctggt 120
cccaggcatt tcagatgaga gatacttaag cctgtactaa tttaattatg ttaaaggacc 180
caatatcttt acaaagaaag ctgctttttc cctggggaca actaaacata tgtgactatt 240
ttttcttagt ttttcttcct ctaaacttca aggatctgtg tgtatgggta ttgccaccac 300
cattgtcttc acactgacag tgaacatagt ggagggagaa gtaggggctc tctttcttaa 360
gatgtgactg atgtaacccc ataagtccct tgggagtgtg tgttcatttt aggaacccag 420
tggcagtgta gtggaataag aagggctttg gacccaggaa ggcatggctt ggtgaactgg 480
ctctgctact tattagctga tgcagtcatg agaaactttc ttaggctcca agggccttca 540
gtttctcatt ggtaaaatta aagnaagaaa attttccctt ancattggtg taaggagtna 600
atgggaattt atatagaaca tctagcaaag taaatttg 638

<210> 4062
<211> 628
<212> DNA
<213> Homo sapiens

<400> 4062
gaaaaaaata aatgatcaaa atgagttcat acaaagagga atcaaagttc agagaaggaa 60
gggggaattc ataccagtag aaagtaaaag gtcactgagg atggagtggt gtaacttgac 120
ccaagccttg aaggacaggg agaatttggg caagccagac aacaaatcag acttcccaga 180
tggtgacatt atttttttag gtggtcttgt gggacattct ctgcctatct gaaggttaaa 240
gaagcatctg acaattcctc atcatgctga cattttcaaa ggctaatgag ttctcatttc 300
aaaacataga gccttgggag ccctagaccc tttttttttaa attttagtcc acttacagct 360
taaatctgct gtggctacct gctctgctta cagacacttc ccaaagcttt cagtatccag 420
ggtccctaag aagtggaggg ttgctcgaag tgaggagccc acagttcccg aatctcacta 480
gaaaatccca atgtgctaaa tcgtgctatt gatcctgact ggggagccag ccagctcaat 540
attggaggtg gcttttctag taagggtaca gtacaggtta gaattgaatt aaattttgct 600
gtgccccang gtagactatt ngggtgng 628

<210> 4063
<211> 545

0083270 5945950

<212> DNA
<213> Homo sapiens

<400> 4063
aggagagcgt ccggattccc tgctctaggt cgcggcggga cagtgccagt gggcgtgtgg 60
ggcggngcag ggcagggaag ggaagggcgg agctggggtg agggtccaag gggcccagga 120
cttggccggc gtgatctcag ctctgcanac cctgcggtgc tgggagccac catggagagt 180
aggtgctacg gctgcgctgt caagttcacc ctcttcaaga aggagtacgg ctgtaagaat 240
tgtggcaggg ccttctgttc aggctgccta agcttcagtg cagcagtgcc tcggactggg 300
aacacccaac agaaagtctg caagcaatgc catgaggtcc tgaccagagg gtcttctgcc 360
aatgcctcca agtggtcacc acctcagaac tataagaagc gtgtggcagc cttggaagcc 420
aagcaaaagc ccagcacttc ccagagccag ggactgacac nacaagacca gatgattgct 480
gagcgcctag cacgactncg ncaggagaac aagcccaagt tagtcccctc acaggcagag 540
ataga 545

<210> 4064
<211> 672
<212> DNA
<213> Homo sapiens

<400> 4064
aaccaaaaga gtcttcagaa actttgctag acctgaagta cttgaacctg tgtcccctga 60
atctttctta cagcatctgg gacaaatccc tggccctgtg acatccgaag cagaactgtg 120
ccctgctctc tccttctgtg atgaccaagg atggtgaact caagttgttc tctacaagcc 180
aggccagcaa cctaaatact tggagaggaa cttttagaaa ctataatcct gacaaaatag 240
aaaagtttcc cataggggca taccataata ctataataac ctcccaggaa ctattgtttg 300
ccaaaatgta gttaatatat tttaagatat atgcttttt gcataggact agaaccagaa 360
aagacaccaa atgccccctt gacatcaatg tcctttctag tgggacaatt tggtctccat 420
taatgccaaa cctttctgaa caggatacat ggcttttaaa gggcagatgt ttctcctgct 480
gctagaagtt cctcagttta ctagagcaca atgaggagag tattcaacct ccctactgcc 540
aaggaattcc ctgcttctcc cccaccgcca tcatcttgcc aagctatcan aagcaacctt 600
ctagagataa tctaacaatc ctgattanaa ttgctcccat atccctggtg accacaggct 660
tnattcaaat tg 672

<210> 4065
<211> 560
<212> DNA
<213> Homo sapiens

<400> 4065
atttttggct gcctctgtcg gtctgttcag ttaccacgtg aaccgccgac ggagacccgt 60
agtgggggag gcggcggcag cgttaagtga gaaaggaaaa aagacaacga ggaaaaagga 120
ggtgtccggg tagggcaacg cggcgacacc cgaggcctgg tggtggcggc ggatcgagat 180
attcaaggct gaagcagcta cggaacggca gcggcggcgg tcggacaaac tgactgaccg 240
agccgggtgg tggcgggagc agcgggagca gccggaacga tgccggccgt gagcctcccg 300
cccaaggaga atgcgctctt caagcggatc ttgaggtgtt atgaacataa acagtataga 360
aatggattga aattctgtaa acaaatactt tctaatccca aatttgcaga gcatggagaa 420
accttggcta tgaaaggatt aacattgaac tgtttgggga aaaaggaaga agcttatgaa 480

0960946 0720800

ttggttcgta naggtttgag aaatgacttg aagagtcatg tgtgttggca cgtttatggc 540
cttcttcana ggtcanacaa 560

<210> 4066
<211> 690
<212> DNA
<213> Homo sapiens

<400> 4066
gcgccgccac cgtctgaact aggatgtccc gacatgaagg tgtcagctgt gatgcatgtt 60
taaaaggaaa ttttcgaggt cgcagatata agtgtttaat ttgctacgat tacgatcttt 120
gtgcatcttg ttatgaaagt ggtgcaacaa caacaaggca tacaactgac cacccaatgc 180
agtgcatatt aacaagggta gattttgatt tatactatgg tggggaagct ttctctgtag 240
agcagccaca gtcttttact tgtccctatt gtggaaaaat gggctatacg gagacatctc 300
ttcaaggaca tgttacttct gaacatgcag aaacatcaac agaagtgatt tgtccaatat 360
gtgcagcgtt acctggaggc gatcctaatc atgtcacgga tgactttgca gctcatctta 420
cacttgaaca cagagcccct agagatttag atgaatcgag tggtgttcga catgtacgta 480
gaatgtttca ccctggccgg ggattaggag gtcctcgtgc tcgtagatca aacatgcact 540
ttactagcag ttctactggt ggactttctt cttctcagag ttcatattct ccaagcaata 600
gggaaccatg gatcctatag ctgagctttt atctcaattn tcaggagtga nacnttctgc 660
aggaggacag cttaattcct ctgcccttcc 690

<210> 4067
<211> 605
<212> DNA
<213> Homo sapiens

<400> 4067
atcttaacag cgcgttcccg ttggcgtctg aggaacagca tctctgcctt cctgttcacg 60
gtgaccttcg cttggtgtcc tcctggcctc agcaacctga caattctgtc gtgtcccgat 120
catctttctc aagatgtttt ctgtcttcat gagtcaaaat ttgaagagga aaggatggtg 180
gctgggtggt tgacaaatta ctctcaggac tcagtgacct ttgaggatgt ggctgtggac 240
ttcacccagg aggagtggac tttgctggat caaactcaga gaaacttata cagagatgtg 300
atgctggaga actataagaa tctagttgca gtagattggg agagtcatat taataccaaa 360
tggtcagcac ctcagcagaa ttttttgcag gggaaaacat ccagtgtggt ggaaatgaat 420
tcagagtaaa agggagaatc tcaatgaaat aaatttggaa aacttctatg aaccatcatt 480
aattttcacc aacaggagag aaaccatttt gganaggaac tgtttgactt tanccaatgt 540
gaaaaacctt gagtgaacac tcatgcctta agactcacag gagaacttac tttanaaaga 600
aaacc 605

<210> 4068
<211> 648
<212> DNA
<213> Homo sapiens

<400> 4068
acaagcatgt gccaccacat tcggctaatt atttgtacag atggggtctc cctgtgttgc 60
ccagctggtc tcaaagctct gggctcaagc agtcttcccg cctcagcctc caaaactgct 120

0003790950.0

gaaactacag gtgtgagcca ctgtgcccag tctacacaat ttaatcctaa aatactttga 180
agggaagaaa gaggaaacga gtaaaaactg aaataatgca caatttctag ccttttgaaa 240
taaattctca gaaaactggg agagcgaagc acatttaaga gtaaggtgac taaaaatgag 300
ccattggtac caggtaccag tgacattttt gcctcaaatg ttttatttat ttcaaaaaat 360
tccaaatcta cagaaaaact gaaagaatga tcctctatat atccttcatg tagactgatc 420
aatcatgaac atgtgccacg tttccctcct ctccctctct gtgtatactc acacacaatt 480
tttgctatgc catttgaaag cgatttgcag atatcacagc acttncctgc taaatgtttc 540
agaagcatat tctaaaaagt cgttttcgta cctatccata acaccattct cacataagaa 600
acactgcacc agtgactttt ttttttaag ctaaaagacc ntnnagac 648

<210> 4069
<211> 612
<212> DNA
<213> Homo sapiens

<400> 4069
aggtgcgcat gcgcagtgcg cgtctgcgag accgacttgg acggagccga gctgaggctc 60
ggcttcctgc tgatggtcag ggttttggca actccccggt gtgagagggg tagggagtgc 120
tcccggcggc gacgggacct taaggcctct gtgtggcaga aggatcagct ggtgacacag 180
ccgcactggc aagaaaatgg acccaccttt tccagcacac cttaccgnta ccaggcctgc 240
aggtttgggc aggttccaga ccagcctgct ggcctgcgac tnttcacagt gcaaattccc 300
cacaagcgcc gggcgccaga gctgtaccgg gctccgttcc cgttgtacgc gcttcaggtc 360
gaccccagca ctgggctgct catcgctgcg ggcggaggag gcgccgcaag acaggcataa 420
agaatggcgt gcactttctg cagctagagc tgattaatgg gcgcttgagt gcctccttgc 480
tgcactccca tgacacagag acacgggcca ccatgaactt ggcactggct ggtgacatcc 540
ttgctgcagg gcangatgcc cactgtcaag ctnctgcgct tccangcaca tcaacagcag 600
ggcaacaagg ca 612

<210> 4070
<211> 550
<212> DNA
<213> Homo sapiens

<400> 4070
tcccactgga attaaaaaca gatgagtcgt ttctaagaaa ataacttttt cttttacata 60
ggtttgttct atactttgtc ataattcttc agtctttcct cagtctttac atggagttca 120
ttttttcagt ttatataaat ccaaagagaa attgatggct tcataatttt tttagactga 180
caaaaaatga catgttttct ccagcctttt acgtcccaga agaatgtaaa ttaaaatgat 240
ttgttccaga ggaagaaaac atttttttaac ctaagagatg ctactgctga agcatattgt 300
gctttctgta gtctctgata aatctagctt tttaaggacc ttaggtttgg ggtttctttg 360
ttttgttttg ttttttttcat ttattttcta gagacagggt ctggctctgt cgcccaggct 420
ggagtgcagg ggtgcaatca tagattactg cagcctcaaa ctcctggact caagtgatca 480
tcctgcctca gcctnccaag tagctaggac tacaggcatg caccaccatg tccagctaat 540
tnttttattn 550

<210> 4071
<211> 605
<212> DNA

0050250-0050350

<213> Homo sapiens

<400> 4071
gtatttaatt tctgtgcctt aaatcaatga acaaattggt aaatttgtta aaatcaggaa 60
atttagtgaa ttttcatggt attttgattg catcatgcta agaatatttc atcatgtaat 120
tactaatagt ctatattcaa agcaacatta ttggctctta ttttactgag acccttccta 180
aaacacatag ttggaggttt tgtttttaat attcactagt aataaataac atactgtaag 240
tgaatagtaa agagggaaat gatggcagca ttccacatat gtagcagttg ttcacacaca 300
tttctcccga tgtggtaata ctctgtccac caagtaatac cagcgaggca tggcaagcca 360
aggaagaata cagtagcatt gaacactttg gccatttatt ctgcattctt ctaggaatgc 420
ttatttcact tctaatcttt atggatttca cactaatttc gatagctcag ttgccctaac 480
cttccttcag tctcgcaaag ctgtcttcat ttaccttcca taagagggtg ggagtcgtgt 540
gtgtgtgtgt gtatggaatt gatttaatng gaaaatatcc ttttaattgn gttaagtgtt 600
gntaa 605

<210> 4072
<211> 739
<212> DNA
<213> Homo sapiens

<400> 4072
ggttatacaa ggtggagcca cagctggctg aggaccagcc cgtgcacggg gaccttgacc 60
tcgtcatgaa cctcatggat gcacacaagg ttttccagaa ggaactggga aagcgaacag 120
gaaccgttca ggtcctgaag cggtcaggcc gagagctgat tgagaatagt cgagatgaca 180
ccacttgggt aaaaggacag ctccaggaac tgagcactcg ctgggacact gtctgtaaac 240
tctctgtttc caaacaaagc cggcttgagc aggccttaaa acaagcggaa gtgtttcgag 300
acacagtcca catgctgttg gagtggcttt ctgaagcaga gcaaacgctt cgctttcggg 360
gagcacttcc tgatgacaca gaggccctgc agtctctcat tgacacccat aaggaattca 420
tgaagaaagt agaagaaaag cgagtggacg ttaactcagc agtagccatg ggagaagtca 480
tcctggctgt ctgccacccc gattgcatca caaccatcaa acactggatc accatcatcc 540
gagctcgctt cgaggaggtc ctgacatggg ctaagcagca ccagcagcgt cttgaaacgg 600
ccttgtcaga actggtggct aatgctgagc tcctggaaga acttttggca tggatccagt 660
gggctganac caccttatt cacngggatc aggagccaat cccgcanaac attgccgagt 720
taaaaccctt atcgctgac 739

<210> 4073
<211> 805
<212> DNA
<213> Homo sapiens

<400> 4073
aattctttc actcttgtga ctatctcagt cctctgctgt tttgtaactg gtttatctct 60
atagtttatt tatttttaaa ttataaacac ttttcagctg ctagtatcag aaccacatga 120
agttatagcc tctaaagcct gtggtatttt atataatatt tttataactt taagagactg 180
tagtaattga cctaaaaact tatgttagct tcagtaaaag tacttttatt gtaaataaac 240
aatcatgaac tcaacactct gcctgaatat atgccagttg tctttcataa tcaatgttta 300
gataaatgat tgccactttt tatatggttg tttagtttca agcaatatga tgtacattac 360
ttttgagaaa cagtattttg actaggacct ctcttatttg tcagcacaga actgattaat 420

0962045960 - 07-28-2006

atgtaatgct acctgctaat taaaatgtaa aatcaagtaa agaaaacatt ttaaaattac 480
aattagcaga gcagttcatg tttaagggca tcacttttat tagtattggc aatattattt 540
gtgtaaatga agcatttgaa tgtcatatct ttttaaagta ttttattgta tactgtatca 600
tagaagttgg aggtatataa atagaacatt ttgctaaagt gaaaaatttc caagttctct 660
agcataactt ttacatttaa tttttcatat gaaatagcaa ttagttacct gctgggttac 720
attgggatgt ttatgtatgg caatggtttt ggctttacag cntaatttat atngcttttt 780
caaatgatgg anctgcataa atggg 805

<210> 4074
<211> 757
<212> DNA
<213> Homo sapiens

<400> 4074
cccagaagat ggaagccaat gccagctcag caaaacaaca gatgagtggt ccagcctgag 60
tagaggatct caggccagga agacttagtt ttttccatca tattagtcac tcatttatca 120
tccaaattct gaaagtgctg ttaataaggc agaagttggc cttagattcg gatttcctag 180
cacatgctgt ccccctgtac tgggaggtgc tggctgtgtt ctaggcctgc ctcatgggta 240
tcattctgga ttcttgggcc ttccctgtcc ctcatcctgg gaaccgcttt tgttgcgttg 300
catgtttttc tctttttgg ttcagttcct tgttttaagc agtggatctt tcagtagctt 360
tctgaggaag agtctgtggg agttaaattt ctcacatcct tgtatgtttg taatcgcttc 420
attctaccct gatttttag agatagctga gctgggtacc cttattcttt agagatagtt 480
gagctgggta taaattcacg actggaaata gttcccctca ccatttcaaa gacatttttc 540
tatttttatc ttgcttccca tgttgaagac attcaacatt gtgattccaa aatcattgta 600
ggagacctgc ttttttatct ctggaaactt ttaggatctt ctcattatcc ctagatctgg 660
aattccgngt gtgtgtgtgt gtnctcatca tgctgggtat ctgcanaggg aggctttgat 720
tttgaacaaa tttcttcatt cttggaagct ctacttg 757

<210> 4075
<211> 731
<212> DNA
<213> Homo sapiens

<400> 4075
agagtttcgg aggcggtgac cgtgacgtag aaggtggaga ccgcttcacc ctgatcaggg 60
agtatcggct gcgggtgcgc aaggcgtcca ggagtgacct ggggctgtgg agagcgaccc 120
gtggccttgt gtttcagagt ttaccaccta ggatgacttc agtgactaga tcagagatca 180
tagatgaaaa aggaccagtg atgtctaaga ctcatgatca tcaattggaa tcaagtctca 240
gtcctgtgga agtgtttgct aaaacaatct gccagttatc aagacaggag gcaatcctgg 300
cggcgagcaa gtatgaaaga aacgaaccgg cggaagtcgc tgcatcccat tcaccagggc 360
atcacagagc tcagccggtc tatcagtgtc gatttagcag aaagcaaacg gcttggctgt 420
ctcctgcttt ccagtttcca gttctctatt cagaaacttg aacctttcct aagggacact 480
aagggcttca gtcttgaaag ttttagagcc aaagcatctt ctctttctga agaattgaaa 540
cattttgcag acggactgga aactgatgga actctacaaa aatgttttga agattcaaat 600
ggaaaagcat cagatttttc tttggaagca tctgtggctg anatgaagga atacataaca 660
aagttttctt tanaacgtca gacttgggat cagctctgct tcactaccag caggaggctn 720
aagagatatt g 731

US 2005/0059800

<210> 4076
<211> 647
<212> DNA
<213> Homo sapiens

<400> 4076
agttcactcg gcagcggcgc cgggcggagg gggagagcgc gggccgcgcg ggcgggaagc 60
gaagaggcgg gcgggccagc gaggagcgcg gagagaaaag gcgcgagcgg ccaggagggc 120
tcaggccgag acaccttgca gctgccgccg ccgccaccga gccgccgctg tgctcactga 180
tccgcctcca gggccaccgc catgtcgagc cgcggtggga agaagaagtc caccaagacg 240
tccaggtctg ccaaagcagg agtcatcttt cccgtggggc ggatgctgcg gtacatcaag 300
aaaggccacc ccaagtacag gattggagtg ggggcacccg tgtacatggc cgccgtcctg 360
gaatacctga cagcggagat tctggagctg gctggcaatg cagcgagaga caacaagaag 420
ggacgggtca caccccggca catcctgctg gctgtggcca atgatgaaga gctgaatcag 480
ctgctaaaag gagtcaccat agccagtggg ggtgtgttac ccaacatcca ccccgagttg 540
ctagcgaaga agcggggatc caaangaaag ttggaagcca tcatcacacc acccccacca 600
aaaagccaag tcttcatcca naagaacctg tatctaaaaa agcanga 647

<210> 4077
<211> 711
<212> DNA
<213> Homo sapiens

<400> 4077
agagcgtgga gcgctgcgcg gcgcggcggc cgggccctcg agacggggac ggacacacca 60
gcccctcaga taccacttgg ccactcccgc tgaggccact cccactgcgt ggctgaagcc 120
tcgaggtcac caggcggagg cgcggagatg cccctgcatc agctggggga caagccgctc 180
accttcccca gccccaactc agccatggaa aacgggcttg accacacccc acccagcagg 240
agggcatccc cgggcacacc cctgagcccc ggctccctcc gctccgctgc ccatagcccc 300
ctggacacca gcaagcagcc cctctgccag ctctgggccg agaagcatgg cgcccggggg 360
acccatgagg tgcggtacat ctcggccggg cagagcgtgg cgtgcggctg gtgggccttc 420
gcaccgccgt gcctgcaggt cctcaacacg cccaagggca tcctgttctt cctgtgtgcg 480
gccgcattcc tgcaggggat gactgtgaat ggcttcatca acacagtcat cacctccctg 540
gagcgccgct atgacctgca cagctaccag agcgggctca tcgcagctnc tacgacattg 600
ccgctgctct gctaccttcg tcagctactt cgggggctca ggcacaaccg nctggctggc 660
tggggcgtct gttatggcac ggttcctgtg ttccctgcca cttacgntgn c 711

<210> 4078
<211> 596
<212> DNA
<213> Homo sapiens

<400> 4078
tttgctaaag ccaccataaa ggaaatagtt gtgtggccca tgttgaggcc agacatcttt 60
actggtttaa ggggaccccc taaaggaatt ttgctctttg gtcctcctgg gactggtaaa 120
actctaattg gcaagtgcat tgctagtcag tctggggcaa cattctttag catctctgct 180
tcatccttaa cttctaaatg ggtaggtgag ggggagaaaa tggtccgtgc attgtttgct 240
gttgcaaggt gtcagcaacc agctgtgata tttattgacg aaattgattc cttgttatct 300

US 2005/0272090 A1

caacggggag atggtgagca tgaatcttct agaaggataa aaacagaatt tttagttcaa 360
ttagatggag caacaacatc ttctgaagat cgtatcctag tggtgggagc aacaaatcgg 420
ccacaagaaa ttgatgaggc tgcccggaga agattggtga aaaggcttta tattcccctc 480
ccagaagctt cagccaggaa acagatagta attaatctaa tgtccaaaga gcantgttgc 540
ctcantgaag aagaaattga acagattgnc agcagtctga tgccttttca ggagca 596

<210> 4079
<211> 694
<212> DNA
<213> Homo sapiens

<400> 4079
aagtttatag aaaatgcttg ttttatagtt ggttgttatt gagatgagag tccctcaagg 60
aactccctat gctttaggga gctttttgtt ttaaacctac tggttagact tgtgggtttt 120
aatgttttca gctgtggttg taagaaacac attttaaatt gcacctagta tagacataca 180
tgtaaaacaa acaaaatttt tacgaagtag tacttgtatt aagagtgatg tactctgcta 240
tcttctattt catttttta aagttgatat tgctgcctta aattgatttt ttcaaccact 300
aatgagtcag gacccactat ttaaaaaata ctggtgtgtt ctcttgctgt tacgaattaa 360
cccaaaactt agtggtttaa agcaataaac ttgtgtttat ctcatgtagg ttctgtgggt 420
caggaatctg ggagtagctt acttaggtgg ttctgggtca gggtttttca tgtggctccg 480
cgctctgctc cagccaaact tctgcagacc atgtgcagcc gaggcgagga aacttctctc 540
cacctattgg ggctggaggc ctgagtcaca agccccttgt ttacataaag tgtttaaggt 600
agcacaagtc cttgagatgc tcggggtaga gatgganaac cactgcttcg tatccttctg 660
ccgcttctgc ttganatctc tngccttacc cttg 694

<210> 4080
<211> 758
<212> DNA
<213> Homo sapiens

<400> 4080
gctggaaccc ggcgccgaga gtagagaaaa ggggcctctg gtgaccgccc ctacctggca 60
tccctctaac ccaggaggag cgtggggaaa ggggctgtgg gcctctcggg gagcgagctg 120
cgggtagcgg cgcactgggt acaggcgcgc gcttggctgt cgcctctgcc gctgtgtttg 180
ggaggactcg aactggcgcc aggaaatatt aggaagctgt gattttcaaa gctaattatg 240
aaaacattta tcattggaat cagtggtgtg acaaacagtg gcaaaacaac actggctaag 300
aatttgcaga aacacctccc aaattgcagt gtcatatctc aggatgattt cttcaagcca 360
gagtctgaga tagagacaga taaaaatgga tttttgcagt acgatgtgct tgaagcactt 420
aacatggaaa aaatgatgtc agccatttcc tgctggatgg aaagcgcaag acactctgtg 480
gtatcaacag accaggaaag tgctgaggaa attcccattt taatcatcga aggttttctt 540
ctttttaatt ataagtaagc atctccaccc taatattgtc tctgagtgaa tgggggggata 600
aaaaccctg tgaactaagt atgctgtatt ttagcccctt gacactatat ggaatagaac 660
tatttcctga ctattccata tgaagaatgt aaaaggagga agangtaagt ttttgaacca 720
tctttgggag ttgtaattca aaacaaaaaa tgtanaan 758

<210> 4081
<211> 734
<212> DNA

0960294 .09/12/00

<213> Homo sapiens

<400> 4081
ctcggatgtc cggaggctcc tgggctgagc cggcgacaga gcccgggaag gcagcgagac 60
gtgggcgccg gcccagcccc ctcccgcgtc cttcagcccc aagccccgag cccctctgac 120
ccttccgcag ccctccctcc agccgcgccc ggcctccggc agctccctgt acgcctccct 180
ccccctgccc gcccctccct cccacagccg cccatgacgc cctctcggca cctcttccca 240
ctctgccacg cgtccttttc ctgcaccttc gccccgcgta cctactcctg ccccgccctg 300
ccattcctct cccctccctt ctctctgcga cccctccctg ttaggcccca gcctcttctc 360
ccctcacagg tcttctctgt cctggcctca ccgccttatc ctattcctct cccttgccct 420
gtgtcttgtc tcagagcccc ctcggggtgg gagtaggttg tggagcagca caactgggct 480
caccccaaag cagaacttct caatccatga ggacaatggg gaggccttta ggccggccca 540
catgtgacaa tggagggctg cggcttcctt gcggagagca caagtgagct cactgccctg 600
gactccaggg aatcagagtt ctggccgcgg ggtgacccag ctcctctgct accatgaata 660
gggcccctct gaaancggtc caggatcctg cacatggcgc ttgaccgggg gcctnagaac 720
cccttnttgc aaaa 734

<210> 4082
<211> 652
<212> DNA
<213> Homo sapiens

<400> 4082
gaggctgaga ccggtgcgcc gcgcgctagt ggccgctctt ccgcgggcta gcgggcggtg 60
ggggcgccag cagcgcggaa ggcgggcacg cgggccatgg ctccctgggc ggaggccgag 120
cactcggcgc tgaacccgct gcgcgcggtg tggctcacgc tgaccgccgc cttcctgctg 180
accctactgc tgcagctcct gccgcccggc ctgctcccgg gctgcgcgat cttccaggac 240
ctgatccgct atgggaaaac caagtgtggg gagccgtcgc gccccgccgc ctgccgagcc 300
tttgatgtcc ccaagagata tttttcccac ttttatatca tctcagtgct gtggaatggc 360
ttcctgcttt ggtgccttac tcaatctctg ttcctgggag caccttttcc aagctggctt 420
catggtttgc tcagaattct cggggcggca cagttccagg gaggggagct ggcactgtct 480
gcattcttag tgctagtatt tctgtggctg cacagcttac gaagactctt cgagtgcctc 540
tacgtcagtg tcttctccaa tgtcatgatt cacgtcgtgc agtactgttt tggacttgtc 600
tattatgtcc ttgntggcct aactgtgctg anccaantgc caatggatgg ca 652

<210> 4083
<211> 700
<212> DNA
<213> Homo sapiens

<400> 4083
gaggccgcag cagtcgccgc gcgaacatgg cggccgaaat ccactccagg ccgcagagca 60
gccgcccggt gctgctgagc aagatcgagg ggcaccagga cgccgtcacg gccgcgctgc 120
tcatccccaa ggaggacggc gtgatcacgg ccagccagga taatggagct gtaatggaat 180
ttcacgtttc tgaagatttt aataaaatga actttatcaa gacctaccca gctcatcaga 240
accgggtgtc tgcgattatc ttcagcttgg ccacagagtg ggtgatcagt accggccacg 300
acaagtgtgt gagctggatg tgcacgcgga gcgggaacat gctcgggagg cacttcttca 360
cgtcctgggc ttcgtgtctg caatatgact ttgacactca gtatgctttc gttggtgatt 420

US 2005/0059005 A1

attctgggca gatcaccctg ctgaagcttg aacagaacac gtgttcagtc atcacaaccc 480
tcaaaggaca tgaaggtagt gtcgcctgcc tctggtggga ccctattcag cggttactct 540
tctcaggagc atntgacaac agcatcatca tgtgggacat cggaggaagg aaaggccgga 600
cgctgttact tcagggccat catgacaagg tgcagtccct tgtgctacct tcagctnacc 660
aggcagcttg tcttcctgtt cctnggacng cggaattgca 700

<210> 4084
<211> 639
<212> DNA
<213> Homo sapiens

<400> 4084
gttcaaaact tgttgaagtc cgaagaggat tcctcatata aacctgtgaa gaaagcttgt 60
actcaacttg ttgataacct agttgagcac attcttaaat atgaggaatc tctagctgac 120
tctgacaata aaggtgtgaa ttctggaaga ttggtggctt gcataaccac tttgttctta 180
ttcagcaaaa taagacccca gctcatggtt aaacatgcaa tgactatgca accatacctt 240
accactaaat gtagtacgca aaatgatttc atggttatct gcaatgttgc aaaaatccta 300
gagctagttg taccactgat ggagcatcca agtgaaactt ttcttgccac tattgaggaa 360
gatctaatga agctcatcat caaatatggc atgactgtag tgcaacattg tgtgagctgt 420
cttggagctg ttgtaaataa agtgacacaa aattttaaat ttgtgtgggc ttgtttcaat 480
agatactatg gtgccatttc aaaattaaaa agtcaacacc aagaggaccc aaataacact 540
tcacttctaa caaacaancc ancacttctt agatcccttt tcaccgttgg agcactatgt 600
ccngcatttt gantttggat ctggaagatt ttaaaggna 639

<210> 4085
<211> 583
<212> DNA
<213> Homo sapiens

<400> 4085
cagagtattt gaaatatccc attagcttac tgttagtagt tgtcttagga acttcttact 60
aacggtgaat agtaaccgct atttgttgag catttactaa gcactgtgtg tgtgtgtgtg 120
tgtgtgtgtg tgtgagagag agagagagag agagagagag agagagagag agaaagagag 180
agagagtctg tgggttattc ccatttgaca gattggaata ttaaggcaaa aagatactaa 240
gtattttgtc caatacctca tagccattga cagagatggg aataaaaatt ggcctatgta 300
acatcaccaa agcccacgca gtgcctgtgg gaaaaatgaa tttcagattt agcttaatgt 360
cacacacaca cagcccacaa ggaaatgcct gacaattacg ctccatgttc tgaaactgac 420
gtgtcatcat caccacagaa ttgccacttt atgcctcagt ttacccaact tcanagtaga 480
gaaacatttc aacatttaat tttacttgcc angataatgt atgaattagg taatgcntat 540
aaagaagtgg tttgatgagg ggaaaagctc tanccnaaaa gcn 583

<210> 4086
<211> 561
<212> DNA
<213> Homo sapiens

<400> 4086
gaaaactgaa agccggaccc caggccgccg cgctgccgcc cggcctcccc gccagcgcgc 60

0055245.0002

caccatgggc agtcccggtt tccccttgta aagatggcgg tgagggatcg ctgcaacctt 120
tagactaatg actgtccgaa acatcgcctc catctgtaat atgggcacca atgcctctgc 180
tctggaaaaa gacattggtc cagagcagtt tccaatcaat gaacactatt tcggattggt 240
caattttgga aacacatgct actgtaactc cgtgcttcag gcattgtact tctgccgtcc 300
attccgggag aatgtgttgg catacaaggc ccagcaaaag aagaaggaaa acttgctgac 360
gtgcctggcg gacctttcc acagcattgc cacacagaag aagaaggttg gcgtcatccc 420
accaaagaag ttcatttcaa ggntgagaaa agagaatgat ctcnttgata actacatgca 480
gcangatgct catgaatttt taaattantt gctaaacact attgcggaca tccntcagga 540
ggagaagaaa caggnaaaac a 561

<210> 4087
<211> 674
<212> DNA
<213> Homo sapiens

<400> 4087
gcggaagctc ggcagtgcgc gtgcgcccgc acccgcactc caaattagaa aggggacgtc 60
tagtgggttg cccgggaggg gtggcgggag cggtcctgga aataatctgt cctctgtcgc 120
cgggaactgg cgaggtagtt ccttcgcggt ggagagacct ggaatggcca aatatcaagg 180
tgaagttcat agtttgaaac tggatgatga ttcagttata gaaggagtaa gcgaccaagt 240
acttgtggca gttgtggtca gtttcgcttt gattgctacc ctggtatatg cacttttcag 300
aaatgtacat caaaacattc acccagaaaa ccaggagcta gtaagggtac ttcgagaaca 360
gcttcanaca gaacaggatg cacctgctgc cactcgacag cagttctaca ctgacatgta 420
ctgtcccatc tgcctgcacc aagcctcctt cccggtggag accaactgtg gacatctttt 480
ttgtggtgcc tgcattattg cttactggcg atatggttca tggcttgggg caatcagttg 540
tccaatctgt agacaaacgg taaccttact cctaacagta tttggtgaag atgatcangt 600
ctcaaggatt tctgagattg catcagggat attaatgatt annaaccggg agattcccan 660
gggcaaaccc agnt 674

<210> 4088
<211> 666
<212> DNA
<213> Homo sapiens

<400> 4088
attgtcactt gggttctcaa gtttccttca tactcttatc agttcttttg gagtcggtcc 60
agcgcgtcat gtgcccatgc ctgttgctgt aaattatcac tgcaccgtga acatgtgtac 120
attactaggg caagagctag cctgggaaac ctaagtctgc acattttccg ccgtgttgca 180
tgttttctgt tctctgcctc tgtgtgtgtg caagacagag agataggcta tttgtcaagt 240
cagctagttg cctaggtatc tttgtctcac atctggctgt ttcctcctag agaaccatcc 300
agttggcttt ccaggcctgg aggtgagcta atggatgagt gaatattagc agtgggtgtt 360
cctcatctct ttgaggattt gcctcagagt tcactaccaa gggatttctg gaactaggag 420
ccattcttta catcagttct tgaggcttct ttgatatcag gggcaaaatg atcccttctc 480
ttttctttct taaatcctgt gctttgtctc ctgggtgatt tctcttcaag tcanttgtgg 540
gaggtgccta agaacaacgc taacacgggg ctcaaataag tttggcanat atagttgatt 600
ttgggcaaag gttgttgaac agtccannaa aatttcttga gaagagaaaa ngaaggtnga 660
aagggg 666

0962959.0002000

<210> 4089
<211> 559
<212> DNA
<213> Homo sapiens

<400> 4089
agtttttaag actgtgtgtg tatgagacag gtcgcgtcct agagcaaacg gttttttttg 60
taaacagacg gcatcctaac aggggcggtg ctacccagtc tgcggggagt cgctcgggat 120
cgaagcacct cagagctcct tcgagcgtat cccttcggga aagccccacg ccttccccga 180
ggcgcctcct ccggcctgca gcacgccctc gtcctgcact tcctcctcgg aatctgcaag 240
acagagtcta gctctttcac ccaggctgga gtgaagtggt gcaatctcag ctcantgcaa 300
cctccgcccc ctgggttcaa gtgattctcc tgcctcagcc tccccagtag ctgggattac 360
agtgatatcc tgagagaaga tgggaaaggg ctgcaaggtt gtggnttgtg gattgttatc 420
tgtggggaaa actgcaattt tggagcagct cctttatggg naatcatact attggaatgg 480
naagattgcg aaacaatgga agatgtatac atgggttcag ttngaaacag accggaggag 540
taaaaggaan anttacatc 559

<210> 4090
<211> 791
<212> DNA
<213> Homo sapiens

<400> 4090
aataatattc ttcaagagat ttacagagtt ccttgagtga attgttggtt tgttcttaat 60
actgaatttc ctattcaaat ttatttagaa gttcatttct tacagtgatc tcatctccta 120
ttaagatatt cttcaagatc tggaggccat cctttaagct tcttgcaaca gtctgggagc 180
aaagagttta ctcgccactg ggtagtgggc catggacacc ccagtctcca ccagaagttc 240
gggattgcaa aatgggactc tggcagcaaa tttcaaactg tatgccagac ctggcccttt 300
gcaggtgtct ggaaagatgg ctgaatagga acagctctgc tctgcagctc ccagcgagat 360
caacgcagaa ggagataatt tctgcatttc caactaaagt acccagctca tctcattggg 420
actggttaga cagtgggtgc agcccacaga aggcaagcag aagcagggtg gggtgtcgcc 480
tcacccggga agcgcaaggg gtcagggaac tccctccccct agccaaggga agctgtgagg 540
gactgtgccg tgaggaacgg ggcattccgg cacagatact atgctttccc caagggcttt 600
gcaacccaca gaccaagaga ttcccttggg gtgcctgcac caccaagggc cctggggttt 660
caagcagaaa actggggcaa ccattttggg gcagacactg ggcctagcaa caaggagttt 720
tttttcaana cccctangta gcccctanaa aggccaagcn aagacagaaa ctggttcaat 780
cccctgnaaa a 791

<210> 4091
<211> 647
<212> DNA
<213> Homo sapiens

<400> 4091
aagtgcgcat gtgcgcgagg agtcgctcgg gcacttattg agcgccgact gtctacgggc 60
ggccgggggt gatgggcaga ggcttcagtg tccccttcgc ctccgcagga gaggagaggc 120
agcagcatgg cgagtgtcct gtcccgacgc cttggaaagc ggtccctcct gggagcccgg 180
gtgttgggac ccagtgcctc ggaggggccc tcggctgccc caccctcgga gccactgcta 240

05025450.07280

gaaggggccg ctccccagcc tttcaccacc tctgatgaca ccccctgcca ggagcagccc 300
aaggaagtcc ttaaggctcc cagcacctcg ggccttcagc aggtggcctt tcagcctggg 360
cagaaggttt atgtgtggta cgggggtcaa gagtgcacag gactggtgga gcagcacagc 420
tggatggagg gtcaggtgac cgtctggctg ctggagcata agctgcangt ctgctgcaag 480
gtggaggagg tgtggctggc agagctgcan ggcccctgtc cccaagcanc ancctggag 540
cccggagccc aagccctggc ctacaggccc gtctccaaga acatcgatgt cccaaagagg 600
gaaatccggn cgcantggga aatggntgaa natgatggng ggcatgg 647

<210> 4092
<211> 658
<212> DNA
<213> Homo sapiens

<400> 4092
ttttctgggc tcggacctag gtcgcggcga catggccaaa cgtaccaaga aagtcgggat 60
cgtcggtaaa tacgggaccc gctatggggc ctccctccgg aaaatggtga agaaaattga 120
aatcagccag cacgccaagt acacttgctc tttctgtggc aaagtaagta aggcaaagtc 180
tctggtgaga ggagagggag ggcaggtttc ttacccaagt gaggcctgac ttcaaggtat 240
tttataagcc gtgtgctggt gggcagttgg aattactcat accgttgatt atgagtttta 300
agataaaagt gttgatggta acttcagatt ttgtgagacg tttttcattt aaagaaaacc 360
gcttaaacgt taatgggtaa aataatcatt tgacagagtg cccccagcct aagccaaacc 420
tgctttgtgg gaaatgattc catcagtttt gtctactgat gtttctgcac caactcccaa 480
aatgtctgtg catctaatac cattctactt gttctgcgag ggatttttgt ttgataaang 540
tttgaacgtt tatgtgcaaa atactgcatt acagcaatcc ttggtttgtt tttgagggag 600
aaanggaggc tttcanaatc cctgacaata aaggngaatc caaaatttan acntctgg 658

<210> 4093
<211> 680
<212> DNA
<213> Homo sapiens

<400> 4093
ttttgttcgc gcggaagcgc cgcggtaggg tgggaaccca agcgggagag ccgcgggatt 60
tgcggccgcc gccatgccgt cgtccccgct gcgggtggcg gtggtgtgct cgagcaacca 120
gaaccggagc atggaggcgc acaacatcct cagcaaacgg ggattcagcg tccgatcctt 180
tggaacaggg actcacgtga agcttccagg accagctccc gacaagccca atgtttatga 240
tttcaaaacc acatatgacc agatgtacaa tgatcttctt aggaaagaca aagaactcta 300
tacacagaat gggattttac atatgctgga cagaaataag agaatcaagc cccggccaga 360
aagattccag aactgcaaag acctgtttga tctgatcctc acttgcgaag agagagtgta 420
tgaccaggtg gtggaagatc tgaattccag agaacaggag acctgccanc ccgtgcacgt 480
ggtcaatgtg gacatccagg acaaccacga ggaggccacc ctgggggcgt ttctcatctg 540
tgagctctgc cagtgtatcc agcacacgga agacatggag aacgagatcg acganctgct 600
gcaggagttc naggagaata tggccgcacc tttctgcana ccgtctgctt ctactgagcc 660
aagngcccgc atgggganccg 680

<210> 4094
<211> 525
<212> DNA

0302369 - 070808

<213> Homo sapiens

<400> 4094
cagctggagc tttgccgcat ctgcgttgct gtgcccgcgc tcttcgggcg aggaagtccc 60
ttctggtgga gggagaaaag ggttacatga gttagattac catggcagct cgagccaggc 120
tctccacttc cgtgagcctt cctctaagtg agatcggggg ggagataatg aaggccacaa 180
ctcccaggag gctccacgcc gggcggtcag ggacgctcgc gaggacgcat gggcccccag 240
gaatgggaac tggttagatc ccaggaactc cgtgccggag acgggaagag aggatgccta 300
gggccctaaa tggaaaggcc agagctggag acctancacc canaatatga gaccgcaatt 360
cgagaatcaa agggccggga gcgatggnga gcgcctgtaa tcccagcact ttgggangtt 420
gaagcgggag gatcctttga ggccannagt tccaagctgc agtgagcccg tgatcgcacc 480
actgcactcc agcctgggcg acagancgca cangtgccag caang 525

<210> 4095
<211> 703
<212> DNA
<213> Homo sapiens

<400> 4095
ggccctgctg cacatcctgt gcaaccttgg gcctctctca gccctgaggg ctggcagaga 60
ggaggtcctt tttggcccca ggtgactctt aactcccagg acagagcaaa ggtcctgagc 120
ccttagttgc ctggaggctt gagtcctggg agcccgctgt ctgctgcctc tgcaagtggg 180
agaggtcact gcccgaggga ggacagggca tgctgccagg ctccagggga ggagccccag 240
ggagggagcc tctggaggtg gtgcccaggc cgttctcctg cctcctgccc tgtgcccgcc 300
tcacttcatg ttcttcctca gatgagaggg agggtgggca cccccaggaa tctcttccct 360
gcaccttggc cccctgcccc tggaggagcc cagcttcttc tccagagcct agcagcccag 420
aatctgagag cagaggccct ggtcccaggc ccagccctgc atcgtcccan gagggcagcc 480
cgcaagcttc aacaccacag ctcangcatt ttgcccaagt ggacactana tgcttcacag 540
tcttcactct tgggagacgg atggggaaca agccaagttc cttgaaagaa aaaggaggca 600
agggaaggcc caaaaccang cnanggaagt aaagagtgaa aggaacaacc aagcctgcag 660
agaatggaga cgtccaacct ganantcacc ttgacttctg caa 703

<210> 4096
<211> 578
<212> DNA
<213> Homo sapiens

<400> 4096
caaaatgtgc tttgaggtag gaagggacct cctgtagagc ggctttggca tgaggtcgac 60
ccgccctggg gtggctcctt ttccctgtgt tggcttgggg ccactgcccc ttcatgtttg 120
gctcacatgg tccagaagca tcagggctct tttaacccag aatagtcaag ccttggtttc 180
cttacccctg cagttttcca gagcagctaa aaaacatcca agctggcaaa ccattcttcc 240
tactccaaac attaggagct tttaccagta agcaaggggt gggaagcttt tcctttcttg 300
aagatgctgc cagcgtagtt tcccttgtag ctgccatcct gggtgcatga cttgcaaaac 360
tgatatgtga gtgacaataa gccagatggc ctttgcaaaa gctctgctta ttttgatttt 420
tgtggntcct tacaaaaggc gaagtgagca ttgatctttg ttggggctgt tgtagctcaa 480
cggnaacatc actgggttgt ttccncantt taattttccc aaaaccttta cccattatct 540
gcagattttc acatctaagc aaaatanggn tcatatga 578

0950249.0720900

<210> 4097
<211> 823
<212> DNA
<213> Homo sapiens

<400> 4097
gtcgtctttc tgtctcggct gaggcagcca tctttctctt gccgcgtgct ggtgttggag 60
gaccctccct gcttcagatt taccaacagc atgaatcaag aaaagttagc caaacttcag 120
gctcaggtcc ggataggggg caagggtaca gctcgcagaa agaagaaggt ggtacataga 180
acagccacag ctgatgacaa aaagcttcag agttctctaa aaaaactggc tgtgaataat 240
atagctggta ttgaagaggt gaacatgatt aaagatgatg ggacagttat tcatttcaac 300
aatcccaaag tccaagcttc cctttctgct aataccttg caattactgg tcatgcagaa 360
gccaaaccaa tcacagaaat gcttcctgga atattaagtc agcttggtgc tgacagttta 420
acaagcctta ggaagttagc tgaacagttc ccacggcaag tcttggacag taaagcacca 480
aaaccagagg acattgatga ggaagatgat gatgttccag atcttgtaga aaattttgat 540
gaggcatcaa agaatgaagc taactaaaag tttggttttt gggaagctgg catggactag 600
atttaacaaa tcagctatgt ggttccaaag ttttacagac atggagaaca tcacctggtt 660
actaagttca agtaatataa ataatttgt atattaataa atgctgtttg gttcnagcaa 720
ttttttcggt cattttgatt tttgcatttt tggcacttcc ctcccaaagg aanatttttt 780
ttgggccaaa aattangaaa ntattgggng caattttgan ggg 823

<210> 4098
<211> 758
<212> DNA
<213> Homo sapiens

<400> 4098
agccgagacg gtgcagggcc ggagaagcac cttcactccc agcctgcgcc ccgatgctgc 60
gcgttctgtg cctcctgcgc ccctggaggc cccttcgggc ccgcggctgc gcttccgacg 120
gggcggccgg gggctcagag atccaagtgc gcgccctggc gggtccggac caagggatca 180
ctgagattct gatgaacaga ccttctgccc gcaatgcctt ggggaatgtc ttcgtcagtg 240
agctgctgga aactctggcc cagctgcggg aggaccggca agtgcgtgtc ctgctcttca 300
gaagtggagt gaagggcgcg ttctgtgcag gtgcagacct gaaggagcgg gaacagatga 360
gtgaagcaga ggtgggggtg tttgtccagc gactccgggg cctgatgaat gacatcgctt 420
cctcggcagt catgggactg attgagacca cgcgagggct cctcccggng gcaggaggga 480
ctcagaggct gccccgttgt ctgggggtgg ncctggcgaa ggagctcatc ttcacgggcc 540
gacgactgag tggaactgag gcccacgtac tgggggctgg tgaaatcacg ctgtggccca 600
naacgaagga gggggaacgc cgcctaccaa cgggcacnaa cactgggccc aaggagnttc 660
ctgccccaag gcccccaatt gcccgttcng gctggggcaa aagttagcca atttaacccg 720
nagggaaccg gaggttggna aattgcaatc tngggant 758

<210> 4099
<211> 881
<212> DNA
<213> Homo sapiens

<400> 4099

0950450 "0200800

tctctcagat gttgttatta actcgctctg tgttgttgca aaacttttg gtgcagattc 60
gtttccaaaa ctattgctac tttgtgtgct ttaaacaaaa taccttgggt tgatgaaaca 120
tcaacccagt gctaggaata ctgtgtatct atcattagct atatgggact atattgtaga 180
ttgtggtttc tcagtagaga agtgactgta gtgtgattct agataaatca tcattagcaa 240
ttcattcaga tggtcaataa cttgaaattt atagctgtga taggagttca gaaattggca 300
catcccttta aaaataacaa cagaaaatac aactcctggg aaaaaaggtg ctgattctat 360
aagattattt atatatgtaa gtgtttaaaa agattatttt ccagaaagtt tgtgcagggt 420
ttaagttgct actattcaac tacactatat ataaataaaa tatatacaat atatacattg 480
ttttcactgt atcacattaa agtacttggg cttcagaagt aagagccaac caactgaaaa 540
cctgagatgg agatatgttc aaagaatgag atacaatttt ttagttttca gtttaagtaa 600
ctctcagcat tacaaaagga gtaagtatct cacaaatagg aaataaaaac taaaaaccgt 660
agatttaaaa aagaacctgc acggggcttt anggtaaatg ctcaatctta aacccccact 720
aanaggggaa agtcctcccc aagtttcaag caaaggacca atttacttaa aggtgaagtt 780
ttgggaaagt tataaagggg gtanggtttt tangcccatn aggattttaa nttttaaatt 840
tttgccttcc tttaaggttc ggttcctaat ttaaangcaa t 881

<210> 4100
<211> 624
<212> DNA
<213> Homo sapiens

<400> 4100
aaaacggcgg gaccagcagc gacggtagca gcagcatggc cgcgatctat gggggtgtag 60
agggggggagg cacacgatcc gaggtccttt tagtctcaga ggatgggaag atcctggcag 120
aagcagatgg actgagcaca aaccactggc tgatcgggac agacaagtgt gtggagagga 180
tcaatgagat ggtgaacagg gccaaacgga aagcaggggt ggatcctctg gtaccgctgc 240
gaagcttggg cctatctctg agcggtgggg accaggagga cgcggggagg atcctgatcg 300
aggagctgag ggaccgattt ccctacctga gtgaaagcta cttaatcacc accgatgccg 360
ccggctccat cgccacagct acaccggatg gtggngttgt gctcatatct ggaacaggct 420
ccaactgcag gctcatcaac cctgatggct ccganagtgg ctgcggcggc tggggccata 480
tnatgggtga tgagggttca gcctactgga tcgcacacca agcagtgana atagtgtttg 540
actccattga caacctaaaa gcggctcctc atgatatcgg ctacgtcata cangccatgn 600
tccactattt ccntgtgcca natc 624

<210> 4101
<211> 732
<212> DNA
<213> Homo sapiens

<400> 4101
atttttgca gatgcaagaa gagagtatcg ggtcactatg tgacatctgc agctgccaag 60
agtgtccatg ctgcccctaa tcctgctcca aaagaactga caaataaaga ggcagaaagg 120
gatatgctgc cttctccgga gcagactctt tctcccttaa gtaaaatgcc tcactctgtt 180
ccacaacccc ttgttgaaaa aactgatgat gatgtcatcg gtcaggctcc tgctgaagcc 240
tcccctcctc ccatagctcc aaaacctgtg acaattcctg ctagtcaggt atccacacaa 300
aatctgaaga ctttgaaaac ttttggtgcc ccacgaccat actcaagttc tggtccttca 360
ccgtttgctc ttgctgtagt gaaaaggtca cagtctttca gtaaagagcg caccgagtca 420
cctagtgcca gtgcattggt ccaacctcca gccaanacag aggaagggaa gactcattct 480

0050205.0050205.seq

gtaaataaat ttgtggacat cccacagctt ggtgtgtctg ataaggaaaa taactctgca 540
cataatgaac agaattccca aataccaact ccaactgatg gcccatcatt cactgttatg 600
agacaaagtt ctttancatt ccaaaaagct ctgacccagn ncaagtncna cagagttttg 660
ctgactgcaa tccgttcggg agaaggtgct gccaaatttg gaaaaggggt taccattcca 720
tcaanattca aa 732

<210> 4102
<211> 801
<212> DNA
<213> Homo sapiens

<400> 4102
tattgacaaa caatacagca acaaataatt tactatcact caggattata aggctggtgt 60
taagcagaac agccattaaa tcagcatcaa aagaacaaat agtaaaatcc aaagtattaa 120
ttacagataa cttttcaaaa attcatcatt caccccttgat ttaattattt ctctggcaat 180
tatttaatag acttctcgga gtctgttaag tacttaaacc aagaactacc attattccta 240
ctgggaaaac ataaacattt ctcaagtgga aagtaaacag tgttggcact atttttatat 300
atggttaaag agacctgtca ttgcaataaa agccagcatt cacaaaatga ggaagataag 360
gaaagtagca taaatatttt ctattaacat ggctttacaa ctgctaaaac ttatagtata 420
aaaatgtact aacaagagac taattcaaga agttgcagga tacacaattt ttaaaaatct 480
catttctaca tcttagcagt gacaaactgc aatttaaaaa gtgtgtttgg ttattaatat 540
atatgagact tttaaagaaa gttatataac tacatagaga taaattaaga aagatgccta 600
aatagaagca agtttaaaga gctatatttt taaacatgga acaanctccc atgggagcca 660
tgccagtggt agtgggaaaa gtagtacatg ggggagatgg ggggagnttt tttggaaaaa 720
ccaggatttc aggttcccaa tttcactact ttccaagttg gtanacccct tggggaaagg 780
tcactcccna agnnaatcta a 801

<210> 4103
<211> 598
<212> DNA
<213> Homo sapiens

<400> 4103
ttttctttca actcgatgag aggaggactc ctcctgggcc tggtgcttcg aggtccagac 60
gagcagacac tggcgcctgt gaccctgcag cggacgccct tcaaagtccg cgtggccgca 120
tttggaagcc tgggcggcgt ggagacggcg ccttcagctt gagataaatg tggccccgtc 180
ccagagcacc acccgagaca tcaggagccc atcgtgggct agggaagatc ctccgggacc 240
taacggccca ggtcttccac ccttggncac ctccccaggt gatgcctgaa gctcaaggga 300
ctgtgtccac cctcaggccc tgcccgtggc tctggatcgg cggtccccat cagaggcctg 360
ngctgagtcc tcaggtcaag aagtggcgct gacctggagc ccctgcctgg ggctggcctt 420
cctcacagtg agctgggcct cctgccatcc tggctctgga gggcgtctga gtggaaagag 480
gctcagcctc acctccacac cctgaanact cactctctgg ccctgggctc tgttgtgtgc 540
accgcctgtn tgcaatggcc caagccttgc ctcgaagcan tcccctgggg aacaagnn 598

<210> 4104
<211> 693
<212> DNA
<213> Homo sapiens

US 2002/0150900 A1

0030250.0045

<400> 4104
caaacatgag gcaaaagaaa aaatacatgt ttttaagaaa acattgagca gagaactgca 60
gccaggatgc gctcagcaga cattcactct ggctgctggg acatcagaaa acaaagtctt 120
catctctctc tccagtttca cccaccccac cctttgcttt catttcaggt gtgttggtct 180
atatgacagg gaggagagta aaggagagca ggagcaattg gctgcctgca aagccagctg 240
gaggtgaagt gcaggaaagg aaaggtcacc ccattctact ccatggcctc tctgctccca 300
gctgtggtag gctcacatan ccagtgtgat cggtttttaa gaggcagtgc ttttcagctt 360
ttctccctga tatatccatt ttgcttccca gcactttta ggagtagtga gagcacttcc 420
tgcccttgtt ggaagcccca gggtggacac tcaagcacga aggtctctcc cttaactgct 480
gcccttccaa gacttgctcc cgagatggag tgggcgtggt cttccaaggc tggnccttcc 540
ttctcctcac cgccaccttc cctgccccaa gccccaagca gccatgggta catgggtccc 600
canctcanct angggttccc gncaagtctg cccagctgca agtactcang ccccatgggg 660
gggattcttg ggtccggttt ttcttggtgg gaa 693

<210> 4105
<211> 604
<212> DNA
<213> Homo sapiens

<400> 4105
attaatattg ggaaaattat gataaaatgc tttaaaaatt aatatgccag attaaaataa 60
ctgaatagtt tactatttca ttcaagcatg tttaaaacaa ataatttcct ttcaccagtt 120
tttcttagta aactcctgaa aaagtaggaa aggtggaaag tatatatcat ttttataaat 180
tttaaattgt acatcagact tttaaaatct gtaatataca agcaagcaaa attattttaa 240
atgacttaat tgtatgctaa tactcatctg ataataaatg cttcttaaag ttgacattta 300
actgctatca caaagtttta tatgtagaaa agtggggtcc ttttgaataa aagatcattc 360
aactaaaaat attaaaattt atttcactgg atggtaatgt aaccttaaaa gcatcataat 420
aggtaaagtc taatattagt tcccttaaca aaatcctaac tgtataccag aattaggtca 480
ctgaaagaac ttgatttgaa ttacgtttag acaaaaatga tttaantgta aattccctaa 540
aactttctaa atgcataant tgggcaaaaa agnnaancca cggttaccag tgtaggaagt 600
taca 604

<210> 4106
<211> 622
<212> DNA
<213> Homo sapiens

<400> 4106
aaatgttttt atgcctaaat cttaantaga atggggaatg catcagcaac ccccacaccc 60
ccctccagat cagccatggn tgccaccaac accaggccca atggncattg ttcctccttc 120
tgaagacagc aacagtcagg acagtgggga atttgcccct gacaacaggc atatatttaa 180
ccagaacaat cacaactttg gtggaccacc cgataatttt gcagtggggc cagtgaacca 240
gtttgactat caggtgaaag atattttgtt gctttaatat tgtanatgtg cacgtaatcc 300
attctttgga agtgtctcat caagaatacc taagatacgt gtttcacttt tcagacttgt 360
ataaataanc acattctgtc tcagttatca atttttgagt attaaaataa ttagaatttg 420
ttttctgatt ttttatttca ttaggaaaat ggtataaaag atcattacgg caaacttttg 480
aaaaaattaa aaatgtataa gtgcaatagc tatatgatgt tttattttct aatttatatt 540

tcaaaatggg natatttaaa tgttaaagac taagagaatg cacagtaatt gaatatngct 600
caanggttaa gacatgantt an 622

<210> 4107
<211> 771
<212> DNA
<213> Homo sapiens

<400> 4107
tacagagtta ggttcctaca agcctctggt cacaacattt tatctactga ttaatatata 60
accacgtatt atgtgtgttt ctgtttaaag attcctcatt taatatatat tgttgattca 120
ctaacattaa gttcatggtc aacatcactc taactcatac ctgaaccaag cttatctaat 180
gtgcatattt ttccccataa ggccttttg cacttaggaa tgccagacag cactttggca 240
ctacatttgg gggccatttt aaacagtgaa gccaccaaaa acacaaaaat gtggcaccaa 300
acagatggtg aaagggctgt tgtggatagt aagagctgaa actagaaagc agcagagatc 360
acagagttca gcttcagctg gggacgtgtg catatggtaa ctcaaatatt ttgccacttt 420
gcacatgtct gcaatgacca cagaaatacc acaagtattg gtttgggggt tacacatgaa 480
ttttagcaaa caggcaaatt cacaaatatg gaatctgtaa atgatcaaga tcaactgtat 540
atacgcatgc atacactcat ataaatatat aggtttgtat gggctgtttt aatttattat 600
ataatgtaaa aacattctgc aagcatagtt tttttaagtt aatgatgtgg cttgtngacg 660
ttttttatga agctacacta agatnaagtt gtantcctan gaagtggata ccataattat 720
tccataatna gggatctacc aataatttta aaccattccg tnctaaatgg a 771

<210> 4108
<211> 661
<212> DNA
<213> Homo sapiens

<400> 4108
gtacaaaaaa aaacttataa aatgtttaaa aaaatgttca aagcttggga gaaaagcttt 60
cttcattagt caaggtgttt tgatatggta ttaaaatgtc taataaaaga tggcactgcg 120
tgattttatt ttaatgaagt gttatacaat caagaaatgg gggcaagggc ctgccccca 180
ctccctcacc tacctcctta gcattccttc aggctgctac tcggggctcc aggtgtgtga 240
attggtcctc agatagtcag gcctgggtgg agggagtggc aagtcaggcg tgcctcctac 300
aagcttccta acctcttaag catcatggaa ccagtcagcc ctctgtggag tcattgtgct 360
ggacctctga aaagatctgc aggggccaag atgttgcagc caccggaggc tgcaaggatg 420
tgggttcttc caggtgtggg cccagccccc ctccttccag cctttgctcc ccatcccacg 480
ttccactcgc cctgcctgtt gttcagtttg cgtctcagtg ctgactcacg ggcatgcttc 540
attgaggccc angaagaggc cctggtttgg ggctgtgcca agctcaganc cctttgacca 600
agaaccaact gctcanggtc acaaaaagtt ggcaaaaatt gcnggnctgg ggcaagganc 660
t 661

<210> 4109
<211> 641
<212> DNA
<213> Homo sapiens

<400> 4109

0609209.0209000

agtccccctt gaacgcacct caggatggcc cgtactttgg aaccactagc aaagaagatc 60
tttaaaggag ttttggtagc cgaacttgta ggcgtttttg gagcatattt tttgtttagc 120
aagatgcaca caagccaaga tttcaggcaa acaatgagca agaaatatcc cttcatcttg 180
gaagtttatt acaaatccac tgagaagtct ggaatgtatg gaatcagaga gctagatcaa 240
aaaacatggt tgaacagcaa aaattagatc cagtcatcac gttcagcctc ccatctaagc 300
tgtttgagac ctttgagaga agaagaaaag atgagtgtac taccacactg tagactcttg 360
gtggtcccac agaacatgct gctgagtcac aggaacttct agcctgcctt ggcctgtggt 420
ttcccaccca ctatacaaac ccactgcttg tttgttgctt ttcttctcat atttattgtc 480
aaagatgaat gtttcaaaaa gaaatgacta aggaaggaaa agaaacaaat gctctaaaga 540
ttttctctcc ccaagcactt ttactggtga aataaaaacc agtnacaatc antatgtaaa 600
aacgggncca cttccctaaa aaaangtant ttttgtagtc t 641

<210> 4110
<211> 749
<212> DNA
<213> Homo sapiens

<400> 4110
gagagaatgg ataaagatct gggatctgtg cagggatttg aagatacaaa taaatccgag 60
agaactgaga gtctggaagc aggagatgac gagtccaagt tagatgatgc acattcatta 120
ggctctggtg ctggagaagg atacgagcca atcagtgatg acgaactaga tgaaattctg 180
gcaggtgatg cagaaaagag ggaggaccaa caggatgagg agaagatgcc agatccctta 240
gatgtgatag atgtggattg gtctggtctt atgccaaagc atccaaaaga accacgagag 300
cctggggctg cactcttaaa attcacacct ggagctgtta tgctaagagt tgggatttct 360
aaaaagttgg caggttctga actctttgcc aaagtcaaag aaacatgtca gagactttta 420
gaaaaaccca aagatgcaga caatctcttt gaacatgaat tgggggctct caatatggct 480
gcattactac gaaaagaaga aagagcaagt cttcttagta atcttggccc atgttgtaag 540
gcgttgtgct tcagacggga ttctgcaatt cgaaagcagc ttgttaaaaa ttgagaangg 600
caccataaaa caagcttaca cgaagtgctc caatgggtag acaatgaatt acttcgattg 660
gagtcctcgg ttantttaan cgggaaagac tactttgcca aggctccaan gacaatgaaa 720
nagactggaa ngataataaa actttcaca 749

<210> 4111
<211> 802
<212> DNA
<213> Homo sapiens

<400> 4111
gcaggagaat caattaaagc cattgtgaaa gatgtcatgt atatctgccc atttatggga 60
gcagtgagtg gaaccctgac agtgacggac tttaagctgt acttcaaaaa tgtcgagagg 120
gacccgcatt ttatccttga tgttcccctt ggagtgatca gcagagtgga gaagattgga 180
gcacagagcc atggagacaa ttcctgtggt atagagatag cgtgcaagga tatgaggaac 240
ttgcggcttg cttataaaca ggaagaacag agtaaactag ggatatttga aaacctcaac 300
aaacatgcat ttcctctttc taacggacag gcactatttg cattcagcta taaagaaaaa 360
tttccaatta atggctggaa agtttatgat ccagtatctg aatataagag acagggcttg 420
ccaaatgaga gttggaaaat atccaaaata aacagtaatt atgagttctg tgacacctac 480
cctgccatca ttgttgtgcc aactagtgta aaagatgatg acctttcaaa agtggcagct 540
tttcgagcaa aaggcagagt ccctgtgttg tcatggattc atccggaaag tcaagcaacg 600

09/09/2005 10:09:00

attacccgtt gcagccagcc acttgtgggt cccaatgata agcgctgcaa aagaggatga 660
aaaatacttg caaaacaata atggatgcc aacgcacagt cacacaagcc ttatcatcct 720
ttgaangccc cgacaaaaac angtgtcncc ggataaccaa acaaaggatg gctgcnttgc 780
ntgggggcaa ttaagaaatt gc 802

<210> 4112
<211> 629
<212> DNA
<213> Homo sapiens

<400> 4112
gttgttggcc acagcgtggg aagcagctct gggggagctc ggagctcccg atcacggctt 60
cttgggggta gctacggctg ggtgtgtaga acggggccgg ggctggggct gggtccccta 120
gtggagaccc aagtgcgaga ggcaagaact ctgcagcttc ctgccttctg ggtcagttcc 180
ttattcaagt ctgcagccgg ctcccaggga gatctcggtg gaacttcaga aacgctgggc 240
agtctgcctt tcaaccatgc ccctgtccct gggagccgag atgtgggggc ctgaggcctg 300
gctgctgctg ctgctactgc tggcatcatt tacaggccgg tgccccgcgg gtgagctggg 360
gacctcagac gtggtaactg tggtgctggg ccaggacgca aaactgccct gcttctaccg 420
aggggactcc ggcgagcaag tggggcaagt ggcatgggct cgggtggacg cgggcgaang 480
cgcccaggaa ctagcgctac tgcactccaa atacgggctt catgtgagcc cggcttacga 540
gggccgcgtg gancaaccgc cgcccccacg caancccctg gacggctcan tgctcctgcg 600
caacgcantg caagcggatt gangggcga 629

<210> 4113
<211> 714
<212> DNA
<213> Homo sapiens

<400> 4113
attttgaatg tgcagctgca gcgggcgtga gttgggggag gacgggttgc cgactcgcct 60
acctagcggt ctcttgattg tcgatatttt gttggcatag gtttatgtag agacgtatac 120
atatatatag acacactgtc tttaaatcta ggcctgtatc cggtgtccga ggcgaactca 180
gtaagatgat gttaagagga aacctgaagc aagtgcgcat tgagtaaaac ccggcccgcc 240
ttcgcgccct ggagtccgcg gtgggcgaga gcgagccggc ggccgcggca gccatggcgc 300
tcgctcttgc cggggagccg gcaccgcccg cgcccgcgcc tccagaggac cacccggacg 360
aggagatggg gttcactatc gacatcaaga gtttcctcaa gccgggcgag aagacgtaca 420
cgcagcgctg ccgcctcttc gtgggaaatc tgcccaccga catcacggag gaggacttca 480
agaggctctt cgaacgctat ggcgaaccca gcgaantctt catcaaccgg gaccgtggct 540
tcggcttcat ccgcttggaa tccagaacct gggctgaaat tgcaaaaagg caaacctggg 600
ncggcaccat tctcaagagc anacctctac nggattcgct ttcgctncac attggagcaa 660
ccttgactgt caaagaacct ttctccaant tggtttccaa atgaactggc tnga 714

<210> 4114
<211> 769
<212> DNA
<213> Homo sapiens

<400> 4114

09/05/2008 15:05:05 - 0 - 2008

attccccaac ctgatagccc tccgcgacgc attacgcacc gcggacagct ggagaggccg 60
aggcgctctc gctttgattt cggcgcctcc gccctcgcgg ggagagattg gctgcggccg 120
cgggacgggg tagtgagcgc gtcacttcct gccgctgcca ggcgcgtcct cccgcgcgct 180
atgacggcca gcgcacagcc gcgcgggcgg cggccaggag tcggagtcgg agtcgtggtg 240
accagctgca agcatccgcg ttgcgtcctc ctggggaaga ggaaaggctc ggttggagct 300
ggcagtttcc aactccctgg aggtcatctg gagttcggtg aaacctggga agaatgtgct 360
caaagggaaa cctgggaaga agcagctctt cacctgaaaa atgttcactt tgcctcagtt 420
gtgaattctt tcattgagaa ggagaattac cattatgtta ctatattaat gaaaggagaa 480
gtggatgtga ctcatgattc agaaccaaag aatgtagagc ctgaaaaaaa tgaaagttgg 540
gagtgggttc cttgggaaga actacctccc ctggaccagc ttttctgggg actgcgttgt 600
ttaaaagaac aaggctatga tccatttaaa gaagatctga accatctggt gggatacaan 660
ggaaatcatc tctangtggg ccganaagat tttgattttc tttaaaaaga caagaaataa 720
ggtcctgggt tangggaatt gaaaaaatgt ntacatttcg gnacaaact 769

<210> 4115
<211> 602
<212> DNA
<213> Homo sapiens

<400> 4115
ctcaggccta cctcctcctg gcctgttcct ttcttggtcc ccatagaact gactgctttg 60
tgtgccgccc tgtatgcccc ttccccttca ttgtcccgcc tggccgcgct ccatcccgca 120
tggcagaagt gctgctcctg ctcctgctcc tttcgctggt gggggggaaga gtgatcaggg 180
ctctcagctg aacctcccag gcccagccca ggacccctag tgggtctgct gtgggggctg 240
ggaaggtgag ttgcttagga aaggagaggg taggagcttt cttgggacct gaacatcagt 300
tcttggaggc ccccttgtaa aacctgcctc agcctctcct ttgcaaagcc agaaacagga 360
aagagggctg gggtccccac ctctggatgg tgctgaggtc tccaggctcc tggagtgcct 420
catgctggct aagttctctc tgggctcctc caggggttct gtgtgctctt ggaggtccct 480
ctgctagtgg tggctaacta gagagtcagc agggggggtga ctgggaaaga gggagaggtg 540
atgttgcctg gtactccccc ccttgcggac ctcataccac gtnacgtggc ngcnttgggc 600
ca 602

<210> 4116
<211> 794
<212> DNA
<213> Homo sapiens

<400> 4116
accaatatag agaatcacca gtatagagaa catttagttt catgagatct cctagggaat 60
gagtgtaagt agagaaggga aaggggactg aaccttggag tactcagatg cttggacttc 120
tggaaggtga gcatctggta aaggaacagc tggtgatgta agagagtaaa aatctgggga 180
agaaagatag atcagctgtg tcagctgctt ctcattggtg gagtacaatg aggcctggtg 240
actgcagaag tcaagggcag cttccctgga ggggctcttg agagaatggg aggaggtaac 300
ttgaaaacaa ctagtttaga gcattttctt gagcggtttg gctaatgagg agagcataga 360
aatgggacag taactgaaag aaaggatatt ggggatcaag caggggtttt tttgaacata 420
gaagttagaa tttttttgta tatagaatgt ttgatctcac taaagagaaa gatcaaatga 480
aaaggaggaa tttggcatga cggaggaagg aggagaattg cttgtctgct atatccaagg 540
cccctgaaaa aggatgggat ccagtgcatg agtggttggg catgcacttc taggagcaag 600

0050205-0050405

ggaaggcana gggaggagaa taaaccttaa aacangtcac accaaaccgg tagtggncaa 660
taagtgcact cttcctccac tgttgatact ggagatttan aatttttaat acaatttttt 720
aaaccnctac acatttgata ggtttgccta aattttacct ttcattacta cnganaataa 780
acttttttcan atta 794

<210> 4117
<211> 731
<212> DNA
<213> Homo sapiens

<400> 4117
tcactagaat gtaaaaatca caaaaggaag ttgtttgttt tgttcacttg tgtatctcta 60
ataactagaa caatgctcag tatatgctgg attgttagat gaatggacag gactttaaat 120
aagtgcttct ttagctatga tgaatgacta gtttttaatt acgaatctgt cacaacctag 180
tacttttgta aaatgcggtg gaaatagtat atatgtattt attagtgtca tgttattaaa 240
atcaacaggc attaaattgt cagattgcta taaaaacttc taaatgtttt caatttttg 300
ctcataatga ccttctaata aacttgttgt ggtcagcacc catttgcaga cgacactatc 360
agtaccactg tactagaaca tatttaccat tttatagtca gcagttaaaa tgtgaaagct 420
aaatgaagga cgtattcttc tccttgctag acaagaagaa gccacttaag agctgatgtc 480
acattatgat ggctgaattc ctgcaggatt attaacttac aaaaaggttt ttttagtaat 540
accaggaaaa tttgataagt accaattcta tgcagagata agtctttttc agtggactca 600
attaaaacat cataatcctc attttaagtc tgtcatttaa tttgaggttt gnttttaata 660
nctggttang tgttattcaa tgaantctca gttttacagg gttaaaaata ttttaaccca 720
agtaaacacn g 731

<210> 4118
<211> 708
<212> DNA
<213> Homo sapiens

<400> 4118
taattgtaaa gttttgttat atatctttta tcacaacttt agttgtaagt aaacaaagta 60
gaggctaaat gctaccttat acatttatag gttgcttaag tcgtgaagca atatgagtca 120
tatatgtagc acataacata tactgtatat aagtcaagtt gtacatagtt taaagaaaat 180
caggtgtgca gaaactcaga ccaaattggg aagtatttgc attataaaat aactcattat 240
aaggattttt cagttagtag atctccatag taaatttcat tcagcaaatg tgtatttttc 300
ctatttattt atttttttat ttattgagat gaagtctcgc tctgttgccc aagctggagt 360
gcagtggcgt gatcttggct cactgcaacc tctgcctccc aggttcaagc gattcttctg 420
cctcagcctc ctgagtagct gggactacag gtgcgcacca ccatgcctgg ctaatttta 480
tatttttagt agaaacgggg ttttactatg ttggtcaggc tggtctcgaa ctcctgacct 540
tgtgatcctc ccgcctcggn ctcccaaaag tgctgggatt acaggcgtga gccactgtgc 600
caggtccaag ttanttantt atttattgta nagatgggct ctcactgtgt tggncaaggg 660
tgggcttgaa ctcctggnct cgagcaatcc ttccatctca gtctccca 708

<210> 4119
<211> 670
<212> DNA
<213> Homo sapiens

0356450.0420300

<400> 4119
attacatggg ttattcaaat cctgggtcct gagctgctgt ttccaatcat gaagaaaaac 60
agtgaatcca gtgaacaggg attctccaag cagtcatttc agggggctcc tgctgacccc 120
gccactcagc agtgcactcc ccggatcaca gcagggcgtt tacatagaaa gacgttttgg 180
tctcgattag ctccgatgct ttgcgctgaa gttgcaaaag atctgtgcac tgaacagtga 240
aggtggcttc cggcacactc cccgctgccc cggaagagac atcctttgac cctctcagca 300
agtctgtgtg tgtgcgtgtc tgtgcgtgtg cgcgcgtgtg tgcatgtgtg tcaaaattgc 360
cagtgttgtt taggcaatgt aacatttacc ggctgtgtac agcaaacaag ctatttttta 420
gaaaccgacg tttcagggaa gaggggagag agccgcgggg tcctgcccgt ggttactatg 480
aatgtattgc tgttggagga catctcgatn caaagaacag ccgttcctgt gcgggccttc 540
gttgccctcc tgctttcaat ttttaaagaa atcttgagtg cttgaaggcc ttggaactga 600
attttttttt ttggtccanc caaatttagc antgtttaaa atgggancta aggtaaanaa 660
caaaacntgc 670

<210> 4120
<211> 751
<212> DNA
<213> Homo sapiens

<400> 4120
atatatcttt gggaaatatc tcctcaagtc cattaccctt tttaaatcaa cttatttggt 60
tttgttattg ttgttgagtt gtaggagttc tgtattttct ctgggtacta acccctttc 120
aaatacatgt tttgaaatct gttctcccat tttgttgcct ttttgctatc agtaatgtcc 180
ttcgatgcac aaaagtttta aatttttatg cagtccaatt tatttttct tttattccct 240
gtgcttttgg tggcatgtct aagaaatcat tgccaaactc aggttcatga agatttcacc 300
ctatgtttc ttctaggagc tctacagttt tagctctatg aaaacaacta cttaggttca 360
aaccaagcct accacccaca cacccactaa cttccatgcc ttatccgctg tcccatcacc 420
ccagctggta gccagtcatg ttggccttgt ttcctcctga ttctaagtgt aaacaataaa 480
gaagtcccct aggttttgtc ttcacagtag acacatctct acaagtgcat ttactgaacg 540
tccagatggc tggtttgtgc agttgagcat gtaaggtcac atggggtcaa gtcagcttta 600
ttcttcccta tgaagttttt cctggtttgt ttttcaaaac cccaagttgg gccgtttttt 660
ggaccacaat aagtatttga atgancgtca ngaanggntt gcaagaaaag cccattgcca 720
atagctaaag gaaataactt tangcctgat t 751

<210> 4121
<211> 567
<212> DNA
<213> Homo sapiens

<400> 4121
tttttctggc agaaggcggg gttctcctcg tacgctgcgg agtctctgcg gggtgtagac 60
cggaatcctg ctgacgggca gagtggatca gggagggagg gtcgagacac ggtggctgca 120
ggtctgagac aaggctgctc cgaggtagta gctctcttgc ctggaggtgg ccattcattc 180
ctggagtgct gctgaggagc gagggcccat ctggggtctc tggaagtcgg tgcccangcc 240
tgaaggatag ccccccttgc gcttccctgg gctgcggccg gccttctcag aacgaagggc 300
gtccttccac cccgcggcgc angtgaccgc tgccatggnt tttccccatc ggccggacgc 360
ccctgagctg cctgacttct ccatgctgaa naggctggct cgagaccagc tcatctatct 420

0054-9-4-5-2-0-0-0

gctggancaa cttcctggaa aaaangattt attcattgag gcagatctca tgagcccttt 480
ggatcnaaat tgccaatgtc tccaacctga aagcancacg aagtagacaa gctatacaag 540
ggtggagaac annccagccc tcanctc 567

<210> 4122
<211> 820
<212> DNA
<213> Homo sapiens

<400> 4122
taaatttaat atctgggcaa ttgagacctt taaacttact ttaaaagtat gatcttgatg 60
tatatgatac tgttttgtct ttgctatatt aacagaatta gaggggtgtt ctgcaattca 120
aataccttat atattccaaa ttttattctc tataatggac ttttaaaata aaaggtatat 180
gtgcttcaag agggcaaaat ttgaatcatg agctaatttg ctaagcatca gattatagaa 240
aagcatcctt gattaatttg gaactgtgaa agggggcggg taaaactgtt ttctgcagaa 300
atttactagt gcagcaacca tttaaattaa atgtttgtta acataatagt gatggcattt 360
tctcctcccc ctccttgtgg ttttgtccaa ctagatgtta cagtggcagt tgcactgact 420
gttaagtgtt taaatgatga caccattatg tgaagtgatt ttgaaatgag agattccagc 480
caagaattac atctgctccc atctccttca aatcatactc tctggcagta cagattatga 540
ttgatttgtt tgtgacagat tgcaggaaac agtcattgat ttttcaatat tttaccttaa 600
aattatttac aagttgtaac catggggagg tattttcatg ggctgtcagc ccctgaaaga 660
ctaggataat attccctgct ctctgacaag acaaattacc tgtaatgagt gcagtaactg 720
aaggggtana cctttaattt aaaataaggn caataacccc cagtgactaa ancgaatatg 780
natttagcaa aaatgaaacc ccggagtaac gtngaaaaat 820

<210> 4123
<211> 514
<212> DNA
<213> Homo sapiens

<400> 4123
gagttcgggg ccagcagccg tctacccggt gtcgcgttct gtgttgtggc ggccctggat 60
ccggcgtcag ggcgaccggg cggacgaggt ggagccagag tctgtcaggc gggttggtga 120
agggcgcggg gccgggcacg gcgttgggag tgcgcggcag ggaccggcca ggcgggctgc 180
aggcacctca gagcccggga caccccctca acgtccgcag gcgcgatgaa ggcactgatc 240
ttagtggggg gctatgggac gcggctacgg gcgctgacgc tgagcacccc gaagccactg 300
gtggacttct gcaataagcc catcttgctg caccaagtgg aggcgctagc cgcggcaagc 360
gtggaccacg tgatcctggg cgtgagctac atgtcgcagg tgctggagaa gggaatggag 420
gcacaggagc agaggctggg aatccgaatc tccaagtccc atgaagaaga gcctttgggg 480
acagcttggg nccctggngc tnggccctga ccta 514

<210> 4124
<211> 780
<212> DNA
<213> Homo sapiens

<400> 4124
cgcttttaaa atgattcgta ccaacgtttc tcatgtggtt ggccagttgg atgacataag 60

0050050-0050050

aaaaaaccct aggaagtttg tttgcctgaa tgacaacatt gaccacaatc ataaagatgc 120
tcagacagtg aaggctgttc tcagggactt ctatgaatcc atgttcccca taccttccca 180
atttgaactg ccaagagagt atcgaaaccg tttccttcat atgcatgagc tgcaggaatg 240
gagggcttat cgagacaaat tgaagttttg gacccattgt gtactagcaa cattgattat 300
gtttactata ttctcgtttt ttgctgagca gttaattgca cttaagcgga agatatttcc 360
cagaaggagg atacacaaag aagctagtcc caatcgaatc agagtataga agatcttcat 420
ttgaaaacca tctacctcag catttactga gcattttaaa actcagcttc acagagatgt 480
ctttgtgatg tgatgcttag cagtttggcc cgaagaagga aaatatccag taccatgctg 540
ttttgtggca tgaatatagc ccactgacca ggaattattt aaccaaccca ctgaaaactt 600
gtgtgttgag cagctctgaa ctgattttac ttttaaagaa tttgctcatg gacctgtcat 660
ccctttttata aaaaggctca ctgacaaaga ggacaagctg ttaatttccc acagcaatca 720
attgcagact aaactttatt anggagaaan cctaatgcca acctggggaa ntganttgcn 780

<210> 4125
<211> 679
<212> DNA
<213> Homo sapiens

<400> 4125
atgatggttg gcagttagct tcctggagtg tggacgggtc cttccctgcc tgactgactt 60
gtccacaggg cagcaagaag atgcgcccct tggtgtgtcc cgagtgtctc ctgtaggcag 120
ctgagctttc gcaggtctgg ctgggagcca aggttaccaa tctgggggct aacccagcca 180
tcatctggat gagcgttggg gtctttctgc tctggattgc agggcagacg tcgttttgtg 240
ctggtcaggc ccctcgcctg cctgattccc ttggagcccc ccaagacagg agatgggcag 300
atgtcctctg aagtggcatg ggctgcttgc tcactggcct tcccaggacc ctgcccaggt 360
ggtgctgctt ggccccaggt cgaattcctg tgctggcagc aagcaggggc ctgggccgtc 420
ggctggctgg ggctcatgca gccatcccct ttgcagccat ccgggtgacc tgcataggtt 480
cctgcggggt ctccaacaag gctaatgaca cagcgtgggt agtggangga gggttacttc 540
aacagttccc tgtcnctggc aaacaagggg agcctgccgc tggaggagca caagcttccc 600
cttccaagtt cctgcttcct gncactngca cccacgtcct ttgagggtcc tttcggggaa 660
gatcntgcaa caannntgaa 679

<210> 4126
<211> 728
<212> DNA
<213> Homo sapiens

<400> 4126
tcgcagttca aacctggtat gccatcaaga aaattcatac aggagaaaag ccttacaaat 60
gtaatcaatg tggcaaggtc tttaatcaag catcatacct tacaagacat caaataattc 120
atactggaga gaggccttac agatgtagta aatgtggcaa agcatttcga gggtgttcag 180
gccttactgc ccatcttgca atccatactg aaaagaaatc tcatgagtgt aaagaatgtg 240
gcaagatctt cactcagaag tcttccctca ccaatcacca tagaattcac attggagaga 300
aaccttacaa atgcaccctg tgcagtaagg tcttcagtca caattctgac cttgcacagc 360
atcagagagt tcattcatga gagtccctac aaactgtgta tggcaaaacc atcatcatga 420
gttctagcat taatcaacat cagtgagtcc atactaagtg gaaatcatat aaatgaaatg 480
tatgtgacac aggctttatc aaggcctgcc aaatcactgg gacatcacca catcactgtg 540
gaggatgaaa gcacacagat gaattgtgtg tacttgggct attattcaag ggccattgct 600

05294500.07200

atagaacacg atagggattt acacaagaag taactctgtc tctgggtctc tgatactaat 660
ctatgatatt gcatgatgca agataanggc taagtcaaaa tangttgaat ccccatgacc 720
cngatggt 728

<210> 4127
<211> 643
<212> DNA
<213> Homo sapiens

<400> 4127
attacaaagg ttgcttaact tctaattatt tgatcactga ggaaaatcca gaaagctaca 60
caacactgaa ggggtgaaat aaaagtccag cgatccagcg aaagaaaaga gaagtgacag 120
aaacaacttt acctggactg aagataaaag cacagacaag agaacaatgc cctggacatg 180
gctccagaga tccacatgac aggcccaatg tgcctcattg agaacactaa tggggaactg 240
gtggcgaatc cagaagctct gaaaatcctg tctgccatta cacagcctgt ggtggtggtg 300
gcaattgtgg gcctctaccg cacaggaaaa tcctacctga tgaacaagct agctgggaag 360
aataagggct tctctctggg ctccacagtg aaatctcaca ccaaaggaat ctggatgtgg 420
tgtgtgcctc accccaaaaa gncagnacac accttagncc tgcttgacac tgagggcctg 480
ggagatgtaa agaagggtga canccagant gactcctgga tcttcaccct ggccgtcctc 540
ctgaagcagc actctcgtgt acaatagcat gggaaccatc aaccagcagg ctatggacca 600
actgtnatat ccttttgngn cccanggaca gnaccaaggg tca 643

<210> 4128
<211> 833
<212> DNA
<213> Homo sapiens

<400> 4128
tcaaaccttg tactactcag ctgatcacaa gttgcttgat gggaacctac tagatggaca 60
ggctgaggtg tttggcagtg atgatgacca cattcagttt gtgcagaaaa agccaccacg 120
tgagaatggc cataagcaga taagtagcag ttcaactgga tgtctctctt ctccaaatgc 180
tacagtacaa agccctaagc atgagtggaa aatcgttgct tcagaaaaga cttcaaataa 240
cacttacttg tgcctggctg tgctggatgg tatattctgt gtcatttttc ttcatgggag 300
aaacagccca cagagctcac caacaagtac tccaaaacta agtaagagtt taagctttga 360
gatgcaacaa gatgagctaa tcgaaaagcc catgtctcct atgcagtacg cacgatctgg 420
tctgggaaca gcagagatga atggcaaact catagctgca ggtggctata acagagagga 480
atgtcttcga acagtcgaat gctataatcc acatacagat cactggtcct ttcttgctcc 540
catgagaaca ccaagagccc gatttcaaat ggctgtactc atgggccagc tctatgtggt 600
aagtggatca aatggccact cagatgacct gagttgtgga gagatgtatg attcaaacat 660
agatgactgg attcctgttc cagaattgag aactaaccgt tgtatgcang agtgtgtgct 720
cctgaatggg gaaggttata catccgttgg tggctccgga tccatatggg ncaaaaaagg 780
gcctggaaaa aattggtgan ggtatttggt cctnggnaac aaaagttntt ggg 833

<210> 4129
<211> 633
<212> DNA
<213> Homo sapiens

0052345.0700

<400> 4129
gatgagcacc taggaggact ttcctcatgt ttgccttttc acacacatgc aaatgtttca 60
ttgaaaatct tctgaaagcc gcaatcttgc cagaatcccc agtaatgagc ttcgttctta 120
gtatactaag aatttagttt atgtgaactt agaaactatt gcactccccc cacaagtaaa 180
aagctgtaag atcatttctg aaataattaa aataactcaa atttaagcaa gatgataaaa 240
acatacatga aaacttaaaa atataaatgt aaatgataaa atttttcatt tgtgtgaagc 300
actgcaaaaa attttcccaa aaaaagctgt gcgaaaaaac acgtagtagt aataggaacc 360
caaaaaactt aatcaccttt ccagatacca gagcaaaatc ataaaggaac ctgccccata 420
gactgtcacc caaatggtgc gtgctactgc cagaatggac cttagccatt ggttccttca 480
ntctggcttt gcagaggaag tttcatgtca gatactgagc ccaagctgca gctaccccag 540
cagagcctca nnggctttcc cgcactgtct tgggaaacat gggcgtactt tgaggtctcc 600
tgcaancgtg ttgtttgggg tcccccaaat gnn 633

<210> 4130
<211> 739
<212> DNA
<213> Homo sapiens

<400> 4130
gcttccatga ctaacttggt caagatgggc tttccttcta aaacagacag ccctagctgt 60
gaatattctc ggtttgattt tgatagcgat gaggacttca atgctttctt caactcctcc 120
cgagcacaac aaggagaggt gatgaggttg gcatgtcgtt tggatcccaa aactagcttc 180
cagatggctg gggagtggct aaagtatcaa ctatcaactt ttcttgatgc tggttctgtg 240
aattcttgtt ctgcagttgg aactggagaa ggaagcctct gttccgtctt ctcaccttca 300
ttcgtgcagt gggaagccat gactcttttt ttggaaagtg ttatcaccca gatgtttcga 360
acactaaata gagaagaaat tcctgttaat gatggaatag agctattgca gatggttctg 420
aactttgata ccaaggatcc cctcatcctg tcctgcgtcc ttactaaagt ctctgcactc 480
tttccatttg tcacctacag accaagaagt tcctgcccca agtcttctct aagctatttt 540
catctggcac ttttgnaact gttgaagaaa gtaaggnccc caagaacccg ggcagtgagg 600
aatgtgagga ggcatgcttg ttcctccaac atcaaagatg tgtcgtgact accccaagct 660
tgtgctgccc aattttgaca tgcttttata accatgtgaa ngcaaactcn tctccaattg 720
agctaactcc ctgnnanaa 739

<210> 4131
<211> 695
<212> DNA
<213> Homo sapiens

<400> 4131
cggcccaggc catggctatg atggggagga gagagcggtg agtgatagct tcgggcctgg 60
agagtgggat gaccggaaag tgcgacacac ttttatccga aaggtttact ccatcatctc 120
cgtgcagctg ctcatcactg tggccatcat tgctatcttc acctttgtgg aacctgtcag 180
cgcctttgtg aggagaaatg tggctgtcta ctacgtgtcc tatgctgtct tcgttgtcac 240
ctacctgatc cttgcctgct gccagggacc cagacgccgt ttcccatgga acatcattct 300
gctgaccctt tttacttttg ccatgggctt catgacgggc accatttcca gtatgtacca 360
aaccaaagcc gtcatcattg caatgatcat cactgcggtg gtatccattt caagtcacca 420
tcttctgctt tcagaccaag gtggacttca cctcgtgcac aggcctcttc tgtgtcctgg 480
gaattgtgct cctggtgact gggattgtca ctagcattgt gctctacttc caatacgttt 540

0052545-5-0720000

actggctcca catgctctat gctgctctgg gggccatttg gttcaccctg ttcctgggtt 600
acgacacaca agctggncct ggggaaccgg aatcacaaca tcagcccngn ngactacatc 660
actgggggcc ctgcangatt tacacagaca tcatc 695

<210> 4132
<211> 772
<212> DNA
<213> Homo sapiens

<400> 4132
acagagcctt tcaattcaag cttggggtga gctgcacttc aggcatgggg atataatagt 60
gtgatgaacc attcttctga aggttcttct gaaaagctgc tggtcttggg atactgtgag 120
agcccctctc attgctcttt agaagtaatt taaatttttc tgctacattg tctgctcagc 180
tcgtattctg gtcatagagg aacctgaagc cagagaaact agacaaaaag gaacctcttt 240
caggagctat aaaagaaagg gaggaatcat gtccacaatt gcagctttct atggcggcaa 300
gtccattctc atcacggggg ccacaggctt tctgggcaaa gtgctaatgg agaaactgtt 360
tcgcaccagc ccagacctga aagtcattta catccttgtg aggcccaagg ctggccagac 420
actgcancag agggttttcc agatcctaga cagtaagcta tttgagaaag tcaaagaagt 480
ttgtccaaat gtgcatgatg aagatcagag ctatttatgc agntccaatc aggaatgact 540
ttgccatcag caaanaggac atgcangagc ttctcnnctg tanaaacata atatttcact 600
gtgcagccac tgtacgcctt tgaccgacac tctcaagaca tgcctgtgca aacttaacgt 660
cactgccaac cgggnagctc cttgcttaag gctactcaga ttccaaagct ggnaagcctt 720
ttatacatat cnccactgcc tattcaaatt gtaaccttga nagccacatc gn 772

<210> 4133
<211> 783
<212> DNA
<213> Homo sapiens

<400> 4133
agacgttgtt gcttgggcgc ttctccgctg cgtgtaggtg aaggggggctt cctgaccgag 60
acatggattt aggtgctatt acaaaatact cagcattaca cgccaagccc aatggactga 120
tccttcaata cgggactgct ggatttcgaa cgaaggcaga acatcttgat catgtcatgt 180
ttcgcatggg attattagct gtcctgaggt caaaacagac aaaatccact ataggagtca 240
tggtaacagc gtcccacaat cctgaggaag acaatggtgt aaaattggtt gatcctttgg 300
gtgaaatgtt ggcaccatcc tgggaggaac atgccacctg tttagcaaat gctgaggaac 360
aagatatgca gagagtgctt attgacatca gcgagaaaga agctgtgaat ctgcaacaag 420
atgcctttgt aattattggt agagatacca ggcccagcag tgagaaactt tcacaatctg 480
taatagatgg tgtgactgtt ctaggaggtc aattccatga ttatggcttg ttaacaacac 540
cccagctgca ctacatggtg tattgtcnaa acacgggtgg ccgatatgga aaggcaacta 600
tagaagggta ctaccagaaa ctctctaagg cttttgtggg actcaccaaa cangcttctt 660
gcaatggnga tgatacagat cacttaaggg ttgactgtgc aaatggcata agggnnctga 720
anctaaggga aattggacac tacttctcan aagggcctgt caantttaaa ncggtttaag 780
gaa 783

<210> 4134
<211> 776
<212> DNA

WO 2005/003300 PCT/US2004/020850

0538303.00200

<213> Homo sapiens

<400> 4134
acattaaccg gcaggatgtc ggaggtgcgg ctgccaccgc tacgcgccct ggacgacttt 60
gttctggggt cggcgcgtct ggcggctccg gatccatgcg acccgcagcg atggtgccac 120
cgcgtcatca acaacctcct ctactaccaa accaactacc ttctctgctt cggcatcggc 180
ctcgctctcg ccgggtacgt gcggccactt catacgctcc tgagcgcgct ggtagtggcg 240
gtggccctcg gcgtgctggt gtgggcagct gagacccgcg cagctgtgcg ccgctgccgc 300
cgcagccacc ctgcagcctg cctggccgca gtgcttgccg tcggcctcct gatgctctgg 360
gtcgcgggcg gcgcttgcac cttcctgttc agcatcgccg ggccggtgct tctgatcctg 420
gtgcacgcct cgttgcgcct gcgcaacctt aagaacaaga ttgangaaca agatcgagag 480
cattggtctc aagcggacgc caatgggcct gctactanag gcactgggac aagagcanga 540
ggctggatcc taggcccctg gggatctgta cccaaggacc tggagaatac accccacccc 600
cagcccataa ttgggaaccc agaagccctt tcccancact taaaacagga gcctanagcc 660
ccctgcccaa acaaaacagg acatctgtga cgtcctaccc nangccatcc ccaaanctaa 720
gatatccctc aaaaccagcc cccaattacc tanggggaca agnagtcctt ccccaa 776

<210> 4135
<211> 689
<212> DNA
<213> Homo sapiens

<400> 4135
aagaagatgt ctcaagagtc tgttggagca tctggtcaac gccctgtttt ctgccctgta 60
cacaaacaag aacagttgaa acttttctgt gaaacatgtg atagattgac atgtagagac 120
tgtcagctat tggaacacaa agaacatagg tatcagtttt tggaagaagc ttttcaaaat 180
cagaagggtg caattgagaa tctactggcg aaacttcttg agaagaagaa ttatgttcat 240
tttgcagcta ctcaggtgca gaataggata aaagaagtaa atgagactaa caaacgagta 300
gaacaggaaa ttaaagtggc cattttcacc cttatcaatg aaattaataa gaaaggaaaa 360
tctctcttac aacagctaga gaatgttaca aaggaaagac agatgaagtt actacagcag 420
cagaatgaca tcacaggcct ttcccggcag gtgaagcatg ttatgaactt cacaaattgg 480
gcaattgcaa gtggcagcag cacagcacta ctatacagca agcgactgat tactttccag 540
ttgcgtcata ttttgaaagc acggtgtgat cctgcccctg ctgctaatgg gagcaatacg 600
tttccantgt gatcccacct tccggggcaa angatgtagt ccaatttang gtaatcctag 660
taatangnga gtaaaccagc tcctggtta 689

<210> 4136
<211> 664
<212> DNA
<213> Homo sapiens

<400> 4136
cgcatgcgca gaaacactgg gcacaggggg aggtaactgc agtaagtccc gcttggccct 60
ggagtccacg cggattttcg aagctggggc tggcaagagg ccgctggaca ccacgctcca 120
gtcgtcagcc cacttcctag ctgaacagcg cgaggcggcg gcagcgagcc gggtcccacc 180
atggccgcga attattccag taccagtacc cggagagaac atgtcaaagt taaaaccagc 240
tcccagccag gcttcctgga acggctgagc gagacctcgg gtgggatgtt tgtggggctc 300
atggccttcc tgctctcctt ctacctaatt ttcaccaatg agggccgcgc attgaagacg 360

gcaacctcat tggctgaggg gctctcgctt gtggtgtctc ccgacagcat ccacagtgtg 420
gctccggaga atgaaggaag gctggtgcac atcattggcg ccttacggac atccaagctt 480
ttgtctgntc caaactatgg ggtccatctt ccggctgtga aactgcggag gcacnntgga 540
gatgttccaa tggggtaaaa actgagggag tccaggggag tacaccgagg aatgggcang 600
tgaangaaag gagacnaggt aattccctac aacaacttga attggaggtc anaaaatcat 660
ncaa 664

<210> 4137
<211> 724
<212> DNA
<213> Homo sapiens

<400> 4137
gagaaatgcc tgaaattgct ccaggctggt gctcagctgc tgagctgggc tagttgttaa 60
aatattcagt ggtccccaac ctttttggca ccagggacca gtttcgtaga aggcaatttt 120
tccatggact ggggaatgaa actgttccac ctcagatcac cgggcattag attctcataa 180
gaagcatgca acctagatcc ctcgcatgca cagttcacaa cagggttcaa gctcctatga 240
gaatctaatg ccactgctga tctgacagga ggcggagctc aggcagtaat gctggctgaa 300
ctgctgctca cctcctgatg tgaagcctgg ttcctaacag gccacggatg ggtgccggtc 360
catgatccgg gggatgggga cccctgaata ttggctagct attgccctga gccctcccta 420
gccaacccca gtcactctga tcttgtcccc aggaccctct aaacctctcc accttccanc 480
anctaaaggg tcccangacc ctcctccatc actatgacat gcacccatcc ccttctgaat 540
ggtcaagtgc ccagctgcac tantttgtta aatattttga atctcaactc cgggtgcaag 600
ggagtcctgg gctccatgaa gaaaagtgag tggggtaaac ttgggggcaa ctttgcttaa 660
actgctctga cctttcccat tcccaanatc cctgcattgg angggttgtg attgggaant 720
tgnn 724

<210> 4138
<211> 667
<212> DNA
<213> Homo sapiens

<400> 4138
gttttgcagt ctttcacttt aaaaactcaa aatggaaaat tatatacttt attttaatat 60
ttacaaatat ttacaaatat ttatttttaa ataaaatgta tataccatgt agtatgttgt 120
atttatttac tcaatgttct tttaagtgtt tcaggctgca tgtaccaagt agttcagacg 180
attggctcgg atggaaaaaa tcttctgcaa ttacttccaa ttcctaagtc ttctggaaat 240
cttataccac tagttcaatc ttcagtcatg tctgatgctt tgaaagggaa tacaggaaaa 300
ccagttcaag ttacttttca gactcagatt tccagctctt ccacaagtgc atcagttcaa 360
ttgcccattt ttcagccagc cagttcttca aactattttc ttacaagaac agtagataca 420
tcagaaaaag atccataatg agatggcatc aacatcagat aaaggtgccc aaggnagaaa 480
tgacaagata gattctcaag gaagaagtaa taaggcatta catctgaaga gtgatgctga 540
atttaaaaag atatttggcc ttactaagga tttgagagng tgccttactc gaattcctga 600
ccatttggac ctctggagaa ggtttccgnt tcctttagca agtttggnaa agagtgggac 660
ttncaan 667

<210> 4139
<211> 814

09513503.030200

<212> DNA
<213> Homo sapiens

<400> 4139
gaatgaaggc ccatgtagca aaatactgat tcaatgtaaa gcaaactttg aaaataagct 60
aatagtcctt aaagaaaaac ttatttcaga tagcaaaaga caagccaatg aactcattag 120
ttttaaaaac caaagtcaag aaaggctgaa taagaaaaag acagattatg aaaaagaatt 180
attggaaaaa agccggaagt tggctttaac tgtaaagggc aaagaattga gtgaggaaga 240
gttacatgag aaattcaatc aactttggaa aaagtgggtg tgtgatgtat ccacaactct 300
cccgcaagtt acagagcctg acattgattt ggattctgaa aacatccttt gggagtattt 360
caaaaacaag acgaatgtcg tgggtctact gacaaattct gcagagaagt ttcaaatcaa 420
ttatgataaa catatcaagg tgaataagaa atataaccat atcccaatga cattaacagt 480
ctttgagaaa gagttcatta atatgactac tgactacatt gtttcaagat ttaataaaat 540
tattaacaac atgtggaaac aacagtgtgg ttacaatcca aattatttcc atgagattct 600
aaagacaata gaagaaagaa gtgaaatctg cctctactca gaagagatac acatttacaa 660
atacatttat cantgactta ngtgtgtgtt taattcaaag gagcaagaga gaaatttaag 720
ggaatgcaca agggcaatca agagagcaaa tggatcccgg taaactacct agaaaagtta 780
gnaaagtggn nttcctcaac naggttttaa natt 814

<210> 4140
<211> 677
<212> DNA
<213> Homo sapiens

<400> 4140
tttaaagcat gccatcacca catatctatt ttgcacttac cctgatgcgc atgagggccg 60
cctttcatat atgagaagca aaaaggtcag caactgtaat ctgtatcgcc ttggaaaaaa 120
gaagggacta cccagccgca tggtggtgtc aatatttgat ccccctgtga attggcttcc 180
tcctggttat gtagtaaatc aagacaaaag caacacagat aaatgggaaa aagatgaaat 240
gacaaaagac tgcatgctgg cgaatggcaa actggatgag gattacgagg aggaggatga 300
ggaggaggag agcctgatgt ggagggctcc gaaggaagag gctgactatg aagatgattt 360
cctggagtat gatcaggaac atatcagatt tatagatagt atgttaatgg ggtcaggagc 420
ttttgtaaag aaaatctctc tttctccttt ttcaaccact gattctgcat atgaatggaa 480
aatgcccaaa aaatcctcct taggtagtat gccattttca tcaagatttt gaggattttg 540
actacagctc ttgggatgca atgtgctatc tggattctag caaagctgtt gaagaagatg 600
actttgtggt ggggttctgg aatccatcan nagaaaaact gtggngttga caccgggaaa 660
agnantccaa tttctta 677

<210> 4141
<211> 765
<212> DNA
<213> Homo sapiens

<400> 4141
ctggggaaat ttcctatcgc acgtctgctg cagcagtctc ctgtttctcc tcctaccttc 60
tccatttttc tagtccctgc agggcataat tggaatatca tttggagaaa gtgtcatgga 120
agttctgcgt ccacagctta taagaattga tggccggaat tacaggaaga atccagtcca 180
agaacagacc tatcaacatg aagaagatga agaggacttc tatcaaggct ccatggagtg 240

0556303-050200

tgctgatgag ccctgtgatg cctacgaggt ggagcagacc ccacaaggat tccggtctac 300
tttgagggcc cccagcttgc tctataagca tatagttgga aagagagggg acactaggaa 360
gaaaatagaa atggagacca aaacttctat tagcattcct aaacctggac aagacgggga 420
aattgtaatc actggccagc atcgaaatgg tgtaatttca gcccgaacac ggattgatgt 480
tcttttggac acttttcgaa gaaagcagcc cttcactcac ttccttgcct ttttcctcaa 540
tgaagttgag gttcaggaag gattcctgag attccaggag gaagtactgg cgaagtgctc 600
catggatcat ggggttgaca gcagcatttt ccaagaatcc taaaaagctt catctaaact 660
attggggaat gtttgggtgc cntttgagtt gaaggaagag attccagcag gncnatgtta 720
agnatgctac aagcaagtgt taaaagaggg aattcattaa ntgga 765

<210> 4142
<211> 663
<212> DNA
<213> Homo sapiens

<400> 4142
tttataaatg ttgctttctg atttttatca agagtgagaa aattaaaatt attgatttgc 60
aagtagtaaa cagttcatat tttgatttcc cctcatttta gtttaatata atttgcaata 120
aatgtacata ttgttgtttg tttcataaag catatcactt taaaatggtt tttactcctg 180
tgattatgtt ggaatatttg gaattttgaa ggagtaaaga ctgtccagca tttggtttta 240
taatgtttgt caccagattt ttattaatgt aaaaaaaatc aatttttaaa aaatagttgg 300
actttggcag cttttaagga aagttggagg tgttttagga ttgctatcaa ttttcagcat 360
tgtgctattt ggaaataagt gttttgcttt tgtctgatgg tctgggctca tttttatgtt 420
tattttagaa aactgttgca tcaatatatt atgtttcttg gcattgttca gcataggtaa 480
tgtgtgcact ttatgtgtac acataatcat atttaagttt tttgcataaa ataaatgctt 540
ctagatgtca tggcagtctt tttaatctct ttaacatatg ctttcntgtg aatttttca 600
tgttaaagag ctnaangtca taacatggat tacagtcaac tctccattan tctatatnaa 660
ata 663

<210> 4143
<211> 625
<212> DNA
<213> Homo sapiens

<400> 4143
actgcggtgt ggactcgagg gctgggcgcg gggccggcgc agaagccgcc agctggagac 60
gatggtggac cacttggcca acacggagat caacagccag cgcatcgcgg cagtggagag 120
ctgcttcggg gcctcggggc agccgctggc gctgccaggc cgagtgctgc tgggcgaggg 180
cgtgctgacc aaagagtgcc gcaagaaggc caagccgcgc atcctcttcc tctttaacga 240
catcctggtg tatggcagca tcgtgctcaa caagcgcaag taccgcagcc agcacatcat 300
ccccctggag gaggtcacac tggagctgtt gccggagacg ctgcaggcca agaaccgctg 360
gatgatcaag acggccaana agtcctttgt ggtgtcggcc gcctccgcta cggagcgcca 420
ngaatggatt agccacatcg aggagtgcgt gcggcggcaa ctgagggcca cgggccgccc 480
gcccagcacg gngcacncgg gaccctggnt ccccgacaag gccacggaca tctgcatgcg 540
cttgcacgca gacgcgcttc tctgccctca ccaagcggcc aacaactgnn cgcaaagttc 600
gggtttccnt ggtctgcgct gaann 625

<210> 4144

0062760.0045960

0050450.00700

<211> 791
<212> DNA
<213> Homo sapiens

<400> 4144
agaagcatcg aaagcgttgg agaggtgtta ccggaacggc ggcgacaagg gtgttcccga 60
actagagtgg ggcatacata atcttgctgc tatgcttcga agctgtagtc tgaatcaacc 120
taagttttaa acagaaggtg aacctctgag atagaaaatc aagtatattt taaaagaagg 180
gatgtgggat caaggaggac agccttggca gcagtggccc ttgaaccagc aacaatggat 240
gcagtcattc cagcaccaac aggatccaag ccagattgat agggctgcat tggcccaagc 300
ttggattgcc caaagagaag cttcaggaca gcaaagcatg gtagaacaac caccaggaat 360
gatgccaaat ggacaagata tgtctacaat ggaatctggt ccaaacaatc atgggaattt 420
ccaaggggat tcaaacttca acagaatgtg gcaaccagaa tggggaatgc atcagcaacc 480
cccacacccc cctccagatc agccatggat gccaccaaca ccaggcccaa tggacattgt 540
tccaccttct gatgacagca acagtcagga cagtggggaa tttgcccctg acaacaggca 600
tatatttaac cagaacaatc acaactttgg tgggaccacc cgataatttt gcagtggggg 660
ccaagtgaac caagtttgac tatcaagcat gggggctgct tttggnccaa cgcaaggtgg 720
gatttcancc tccttantgg gaaaccagga acctccaagg gacctcccag caacctcccc 780
aagaatncna a 791

<210> 4145
<211> 815
<212> DNA
<213> Homo sapiens

<400> 4145
gagctcatgc tacacaatta aatatattcc ttaaatattg tgtgcttgca acttttgatt 60
ttgtaaatgg gttcccacag gacaaaaatg agtcttaaac ataaaattaa accatatgaa 120
tgttagtttt ttagttaatt tcagctgggt ggtagtctat agtcccagct actcgagagg 180
ctgaggcaga aggatcgctt gagcccagga gttcagggct gcagtgagct gtgatcacac 240
cactgcactc cagcctgggg gaagagcaag accctacaaa caaaaaagag ttaattccat 300
tatatttatt tttacatacc cagagtttga ctaaaatata ccagacaatc tcctgtcccc 360
aaatccatgt ccaagcaagg ggagccacgt tttctaagct cacagtttaa aggttaaaga 420
gacacactga ggaaaactca gggaaagaag ctgatttgca tggacactag gcctgtcgtt 480
gattccctca tttcaaaagt tgcatgtgcc atgggaggcg gagtctctga ggacatcctg 540
ggctgtgcct cggtggctct ggactccagc tctacgcaga gcgccttaac actgtactgg 600
aagaaatggg aaatcgcatt gaggacttac agaagaatgt caatgacttt aatggtgcaa 660
gctggcattg aaaattctat taaaggaaca aatgctgaag acctaactgc agcaatgtcc 720
ggtatttggg ngatggggcc tcctacagaa gtcattaang gttacatccg ggtcctgaan 780
gggtgggggg nccntcaatc caaacaaggg attcc 815

<210> 4146
<211> 719
<212> DNA
<213> Homo sapiens

<400> 4146
tatttttcga agatctctct aagtgacaaa tctagtaatc cataaagatg gcaatttcaa 60

ggctaagcat gttctatttg gaaagttttt ccaatctcag aataaataaa atgcttctta 120
ttggtatgta atatcagatt aagcagcagc taagtgaatg ctctgcatca caaagaccta 180
ttagtagcaa catgacttga aacactagcg ttgtatacca cagttttcta acacgaagga 240
gggattaaaa atgcaagctg gtaaaatgtt aatggttcta ttttgtccca cacaaattta 300
tacctttata aattttcccc tcgtgaggga aaaatcaaag atgtcagatt tcaaattttt 360
ttaaacaaaa ctccaactta taaattgggc ttttgaaaat gcatgatgaa acaaaaatac 420
cattccgtga ctgcacttag ttctagcagg tacttttata attagcattt aaaaaatata 480
tttgcattca ttcaatctgc ttcagaaatt tgttatgtag tgcgaaaaac cactttcata 540
agcataagat aaactcttag aagtttttt tgaaggatgc ttttttatta agcattatgg 600
aactaatact gtatttaaga caggaacccc tgggccctaa caagttgatt tatgcttccg 660
anactaaaaa ataaagtatt actgantcct ccacnggagn catttaaagg gnatcctcc 719

<210> 4147
<211> 669
<212> DNA
<213> Homo sapiens

<400> 4147
gaagttggcg catgcgccta aagctgacgg gtttgaaatg gcttcgatgt tagccgggac 60
ccgactcaga tcgatgctat agaagacaaa caagggaagg tttttttcc ttttgcatca 120
tggctcaatt tggaggacag aagaatccgc catgggctac tcagtttaca gccactgcag 180
tatcacagcc agctgcactg ggtgttcaac agccatcact ccttggagca tctcctacca 240
tttatacaca gcaaactgca ttggcagcag caggccttac cacacaaact ccagcaaact 300
atcagttaac acaaactgct gcattgcagc aacaagccgc agctgcagca gctgcattac 360
aacagcaata ttcacaacct cagcaggccc tgtatagtgt gcaacaacag ttacagcaac 420
cccagcaaac cctcttaaca cagccagctg ttgcactgcc tacaagcctt agcctgtcta 480
ctcctcagcc aacagcacaa ataactgtat catatccaac accaaggtcc agtcaacagc 540
aaacccagcc tcagaagcag cgtgttttca caggggtgg gttacaaaac tacatggnta 600
catttgggat ttgtgggatg aagatgtatt ctttcagcnt angtgctgtc aaaggggaaa 660
acccccca 669

<210> 4148
<211> 814
<212> DNA
<213> Homo sapiens

<400> 4148
tagctttcct cacctcagga ttctagcttt tgttctatgg aaagagatga ggaagactct 60
ataatcgtct cagaaggaat aattgaggaa tacctagcat tcgatcacat agatatagaa 120
gagggatttc atgggaagaa atcagaagca gctacagaga aacagaaatt agggtatcct 180
cccattgctc cattttactg catgaaagaa gatgtccttg cttatgtgtt tgacagtgta 240
tggtgcaagg ttgtgagctg tatggagcag ttgacacgta gtcactggga aggatttgcc 300
tctgatgatg agagtaatgt tgcagttacc agacccgatt cagaaagttc ctgtgtgctg 360
agtgaactac atcctttggt gttaccgcga gtgccacagt ctaaggtgct gtacattacc 420
tcaaatccga tgagtctctg tcaagcaagc agacatcagc caaatgtgaa tgatctcttg 480
gttcatggaa tgcctctaca gccaagaaat ctctccctaa tggacaagct cctagatctt 540
gatgacaagc tacttatgag gcctgggtcc agtaccatcc tttcaactcg aaattggcca 600
aatcgagctg tggagtttag tacatcatct ctgtcataca caagtncagt ccaccaggag 660

0050945.0076800

gacgcaatcc accaccacga aactcttcat ccgattangc acgangccat tcatgtgnct 720
ggaaacacca agatctggtg gaaagaaatc ctcaagaggg agcccgagtc ccaantggna 780
cccggactcg ctctcccttc tccctcancg gang 814

<210> 4149
<211> 664
<212> DNA
<213> Homo sapiens

<400> 4149
agaacgcgct ctcagcttcg ggtcctgcgg ctgcggctgc cgccatcatg gtgcggaagc 60
ttaagttcca cgagcagaag ctgctgaagc aggtggactt cctgaactgg gaggtcaccg 120
accacaacct gcacgagctg cgcgtgctgc ggcgttaccg gctgcagcgg cgggaggact 180
acacgcgcta caaccagctg agccgtgccg tgcgtgagct ggcgcggcgc ctgcgcgacc 240
tgcccgaacg cgaccagttc cgcgtgcgcg cttcggccgc gctgctggac aagctgtatg 300
ctctcggctt ggtgcccacg cgcggttcgc tggagctctg cgacttcgtc acggcctcgt 360
ccttctgccg ccgccgcctc cccaccgtgc tcctcaagct gcgcatggcg cagcaccttc 420
aggctgcagt ggcctttgtg gagcaagggc acgtacgcgt gggccctgac gtggttaccg 480
accccgcctt ccttgtcacg cgcagcatgg aggactttgt cacttgggtg gactcgtcca 540
agattaagcg gcacgtgcta aaagtacaat naggagcgcg atgacttcga tctggaaacc 600
tacggatntc ccactttgna atgggntgtc ttttacagat gggaaaactg gagggnctga 660
tgct 664

<210> 4150
<211> 771
<212> DNA
<213> Homo sapiens

<400> 4150
tgaatatgac agatgtaaat gggcagacac ctctcatgtt atcagctcac aaagtaattg 60
ggccagaacc aactggattt cttttaaagt ttaatccttc tctcaatgtg gttgataaaa 120
tacaccaaaa cactccactt cactgggcag ttgcagcagg aaatgttaat gcagttgata 180
agcttttgga agctggttct agcctggata tccagaatgt taagggagaa acacctcttg 240
atatggctct acaaaacaaa aatcagctca ttattcatat gctaaaaaca gaagccaaaa 300
tgagagccaa ccaaaagttc agactttgga ggtggctgca gaaatgcgag ctcttcctgc 360
tgctgatgct ttctgtgatt accatgtggg ctattggata catattggac ttcaattcag 420
attcttggct tttaaaagga tgtcttctag taacactgtt ttttctgaca tctttgtttc 480
caaggttctt ggttgggtat aagaaccttg tatacttacc aacagccttt ctgctaagtt 540
ctgtttttg gatatttatg acttggntca tcttattttt tcctgattta gcaggagccc 600
ctttctattt cagtttcatt ttcagcatag tagcctttct atacttttc tataaagact 660
tgggcaactg atccaagctt cactaagggc ttccgangaa agaaaagaaa gtgaatatca 720
tcancctttg caaaaaactg ggntctccgg gncttcaagn aacaattttg g 771

<210> 4151
<211> 662
<212> DNA
<213> Homo sapiens

0952916-0972600

<400> 4151
tctctccaca caccaagcaa gcactcctcc agcagacaca agctgggtgt cgtgtagttc 60
aattcaatcc taacactgtg tacctggaga taacatcaga ccccacaggt tgagtgctca 120
gtcccccaag agtgtcctcc acttcagatg ccaactgcaa gccccaggtt gtggcctgtg 180
cttccgacag agcagccata aatcagggtt cccatgactc tccttctcag tttctgttaa 240
cttactagag gttctcacat aactcaggga gacacttaca tttacccact tattatgaag 300
gacattataa aaaatacaga tgaacaacca gatggaaaag tgtatagatt aaagtatgga 360
agaagggaca tggagctttc atgctctcac tggcacatta ctttccaaga aactttcaca 420
tgttcagcta cccagaagct gttccaaact ctgccttttt gagtttttat ggtggcttca 480
ttgcataggc atgattgatt atatcattgg ncattgntga tggccaactc aatcttcagc 540
ccctctccct tctccaaagg ttanggctga aaagtctcaa atcctctaaa ttatggtcct 600
ggggctttct gggaaccanc tcccatccct ggaanctatc ttangggttc caacaaccgt 660
an 662

<210> 4152
<211> 746
<212> DNA
<213> Homo sapiens

<400> 4152
acatcttttc ctttccccan aagagatccc taacctattg ttttattgac agccttgctg 60
ttagaggctc tttcccagaa gttggacgaa gaggctcagg cgttgctgtt tcttgtcttc 120
caagtcaagt ggttactctg gtaatggatt gcctctctcc gagctttcac cctggtgaga 180
ctgtccagat ctagtctgta aacccagctt agaagcactg ttgtaaaaat gactgaagag 240
cccatcaagg agatcctggg agccccaaag gctcacatgg cagcgacgat ggagaagagc 300
cccaagagtg aagttgtgat caccacagtc cctctggtca gtgagattca gttgatggct 360
gctacagggg gtaccgagct ctcctgctac cgctgcatca tccccttttgc tgtggttgtc 420
ttcatcgccg gcatcgtggt caccgcggtg gcttacagct tcaattccca tgggtctatt 480
atctccatct ttggcctggg ntgttctgtc atctggactt tttttactag cctccagtgc 540
cttgtgctgg aaagtgagac aaaggagcan gaaagccaag agacgggaga gtcaaacagc 600
tctcgtggca aatcagagaa gcttgtctgc ttgagactga atacgaccaa atgggccatt 660
gggcctggaa aacgtgctcn gaacttggca cccaattcac cangaaacca atggtgggag 720
agaacangac ttggcgnttg ggcnaa 746

<210> 4153
<211> 703
<212> DNA
<213> Homo sapiens

<400> 4153
attttactct tatcgtgctt tccagaaagt ttgcctgctg ggagagtctt tttgatcgtt 60
tcccatgtgt tgtcagatag ctccatagaa ttcagtttct gagaaccagc cagaagcatg 120
cagtgacatt gcacaatctg cctctgaagc tggagatact agctgcagag ctcaggggag 180
ctgctccaca tcaccgacat gaagggaaca ggcatcatgg actgtgcgcc caaggcactc 240
ctggccaggg cactttatga caactgccct gactgctctg acgagctggc tttcagcaga 300
ggggacatcc tgaccattct ggagcaacac gtaccagaaa gcgagggttg gtggaagtgt 360
ttgctccatg ggaggcaagg cctggcccct gccaaccgcc tccaaatcct cacggaggtc 420
gctgcagaca ggccgtgccc cccattcctg agaggcctgg aagaagctcc tgccagctca 480

US 2005/0196800 A1

naggagacct atcaggtgcc cactctaccc cgccctccca ctccaggccc cgtttatgag 540
cagatgagga gttgggcgga ggggcccagc cccctactgc ccaagtctat gaattccccg 600
aacctcccan cagtgccagn atcatctggt gaaaaagact ctcanctttc caaaaacaag 660
ggccatcctc acgcttccca anacctgtcc cggggctcac tgn 703

<210> 4154
<211> 720
<212> DNA
<213> Homo sapiens

<400> 4154
caaattatta ttgtctctta ggtttggata ttgatgggat atacagagta agtggcaacc 60
tcgcagtgat ccagaaacta aggtttgcag tcaatcatgg taagattata tttactgttg 120
ttattcagat gcatcactca taacttttg aactggctta aagtaatttt ttaaaatgtc 180
caattcctgc tgtttttcag atgagaaatt ggacttgaat gacagtaaat gggaagatat 240
tcatgtcatt actggagccc tcaaaatgtt ttttcgagaa ttaccagaac ctctttttac 300
atttaatcat tttaatgatt ttgttaatgc aattaagcaa gaaccaagac agcgagtcgc 360
tgctgttaag gacctaatca gacagttgcc aaagccaaac caagacacaa tgcagattct 420
tttccgacat ctcagaagag ttatagaaaa tggagagaaa aatcgaatga cctatcagag 480
tatagcaatt gtttttggtc ccactctatt aaaaccagaa aaagagactg gtaatatagc 540
aagttcatac tgggtaccaa gaatcagatt gtagaattaa ttcctcctgg aactgagttc 600
catcttcgga cggttgattc ctactgaaga caaccctgtg gnataaaaac tgggattcca 660
tcagatttca aatggttata cacaaatggn antttaattt tttggnccaa agcantgacc 720

<210> 4155
<211> 685
<212> DNA
<213> Homo sapiens

<400> 4155
gattcttccg gtttcaagaa gttaaggctg gtgtcctggc cccagtccac ctctgggagc 60
gcctgcgccg ctccgcggag agtccgtgga tctcacaggt tcccagtttt ccagacctga 120
agtgttttcc agtcaaagcg aagagacgat ctgtggatgt tgaatatgca aggagctgaa 180
gagagagaca ttagaagaga gacttgtcca ggctgggtaa acaagaacaa gcctgctctg 240
gagcaggatg tctgtaaaat tgactcatca gggatagtag taaagaggtt ccaagaggat 300
gaataccaag attctacatt tgaagaaaaa tatgcatgtg agggcatgaa ggaaaactct 360
cctagggaga ttgctgaatc atgccttttc caggaaggag gttttgggag aataactttc 420
atccacaaag aagcaccccc tgaaattatt agtcaaggat ataattttga gaaaagcttg 480
cttttgacct caagccttgt tacacgtctc agggtttcta cagaagagag tctgcatcag 540
tgggaaacaa gtaatataca aaccaatgat atttcaaacc aaagtaaatg tccaactctc 600
tgcacacaga aaaaatcttg gaaaatgtta tgaatggtgg gnaaaacctt tactcannag 660
ctcatccctt acccaacatn agngg 685

<210> 4156
<211> 740
<212> DNA
<213> Homo sapiens

0050503-0040000

0956350.0702000

<400> 4156
atcccacggg atcaagcatc agcaacgtgc agctggcaga cactgtcatg ttcaccattg 60
gagctctgtc tgaatggctg gctgaccacc ccgtcatgat caacagtgtt ctgcccttgg 120
tactgcatgc cctaggcaat cctgagctgt ctgtctcttc tgtgtccacc ctcaagaaga 180
tctgccgaga gtgcaagtat gacctgcctc cctatgctgc caacattgtg gctgtgtccc 240
aggatgtgct gatgaaacag atccacaaga caagccagtg catgtggctg atgcaggcgc 300
tgggcttcct gctgtcagct cttcaagtgg aggagatcct taagaacctg cactcgctta 360
tctcacccta tatccagcaa ctggagaagc tggcagagga gatacccaat ccctccaaca 420
agctggccat tgttcacatc ttggggcttc tctccaacct cttcaccaca ctggacatca 480
gtcatcatga ggatgatcat gaaggccctg agcttcggaa agctgccaag tgccacaggg 540
acccaacccc gtggtggtgg tgctgcanca ggtcttccaa gcttatccag aaggtgctga 600
gcaaatgggt taaatgatgc ccaagttgtg gaagcggtgt gcgctatctt ttgagaaaat 660
ctgtttaagg ngctgctggg attaactttg ccccccatgg gggccacaag ctgtgtttaa 720
natgcntggg tccggnntgt 740

<210> 4157
<211> 776
<212> DNA
<213> Homo sapiens

<400> 4157
attgggtgtt atctaagcca ataaaacatt gttgattata ggtttggtgt tttgaccatt 60
agctgacatt tgattaacct ttttttctat gataagagaa ccatggtcac ttttaagcat 120
ataatgaact tttatatttt taacagaaga taattgtttt aaaatattac acttattacg 180
tgtaattatg tctacagggc tcactcagct atccattttt gttgtctgtt ggggaaatac 240
tccttaagag gattgtgtgc acaatattaa gttatcatta atcaaatatt ctcttctggg 300
agataatttt tatgtgttaa agtagtctca ctatggaaaa acttctaata taactattaa 360
atgtctctcc tcacttacgt tatttttaga gttactgtga caacaacata ctttggccac 420
tctgaacaga tatcccagga gaggtatcag tatgtcgact gtggaagaaa cacaacttat 480
cagttggggc agtctgaata tttaaatgta cttcagccac aacagtataa actggaagag 540
atggatttaa ngaagaaata tctattgnta tttcctatac tctcaatgaa gaggtatttc 600
cnaataggag accttaaatt gaacaaacct aaaggttaca cttctaagag tacagttaaa 660
aagtatgtgg acctgcagtt cttgtaactc tccactctgt gttaatggat aaaattggac 720
canggatcct tttacttgaa atcctaaatt taccngggnt gatttccctt tctcca 776

<210> 4158
<211> 667
<212> DNA
<213> Homo sapiens

<400> 4158
ccgagtgccc cttctcaggg ctcaagtctg accgtagcca cgtcctgcct cgcgccgccc 60
ctcgggcctg acctggaagc tccgtcagct ccgtccttgt ccttagagct gagcccagac 120
cccggggtct ggccgaatcc tcacccccag ggcagtgttt ttggtctgcc accttcagga 180
aaacggctgc ggcctcggcc tcccttcggg cacccaggaa tgcgggggtc tgctcagtcc 240
ccccaccctc catgctccaa ccccccgggg ctgcggagcc tgctgccccc tccccgcggg 300
tggggacgtt ctatgcaata cagggttcca ctttagaagt gcgcgcggct agggtcaccg 360
cccgcccttc ccggcgcagc ccccgagctc cacagctgag gcagcccctc tggcttctaa 420

atccgcggtc gggattcttc ctcctgttta gtttttttagt ttttccttaa aaaaaaacaa 480
cacatcgatg gactttgctt ccctgttctt gaagaatact tgaatgtcgg ggggcctggg 540
ggtgggggcc tcggagaccg tctgccaagc cctgctgccc ctcctgaatc tcgtatgatg 600
gtcacantcc ggtggccgtg ggggtgctct gccttccctg gncccccantg gcccaaaatc 660
tgntggn 667

<210> 4159
<211> 793
<212> DNA
<213> Homo sapiens

<400> 4159
tgttgaatgg gtctatgaat agaagaagca agtacaggtc acaatggagg tatanaggag 60
ggacatttaa cacagactgg aggagacgac acttgtgcta ggggttgaag gaaatgtang 120
tgtgagccag gcaaagaatg ggaggaagat gtttttcagg gatcaagccc aaatccattc 180
attggtaggc caagaattca ttgtcagtaa atctttgggt ctcctgttga gaagaacant 240
gattgtatta gtcagttctc atgctgctaa taaagacgta cccaagtctg ggtaatttat 300
aaagaaaaag aggtttaacg gactcacagt tctacatggc tggggaagcc tcacaatcat 360
ggtggaaggc aaaggaggan aaaggcacat cttacacagt ggcaggcang agggcgcttg 420
tgcaggggaa ctccctttta taaaaccatc agatctcatg agacatatca ttatcatgag 480
aacagcatgg gaaagaccca cccccatgan tcanttacct cccacgacat gcgggaatta 540
tgggagctac aattcaagat gagatttggg tggggacaca gccaanccat atcaatgatg 600
ctaaatcaac ccattggtaa cactcacaga agtaacctgg atcactgagt ccccatgtng 660
gttaaaatta agactgccct tttctgtaan gggaaaatat tttgaacctt aggggcttct 720
caaaaaaggg gttttggtga gancctttgc caancaattc cttantcaaa ggccttcaag 780
gacaaacccn gcn 793

<210> 4160
<211> 755
<212> DNA
<213> Homo sapiens

<400> 4160
tcctttgtca aagatcaagt tgaccatatt tatatggatc tatttctggg ctctctgttc 60
tgttgcattg ctctctatct gttgtccttc ctttcactgc taccatactg tctttgattc 120
ctatagcttt acagttagtc ttgaagtcac aaaagcatgg gatcccccat tagtggatcg 180
tcctggaatt tttaactctc agatttgtac acacctagcc ttcagcaatt tgtgaattac 240
agttcagatt ttcctaccct agcactggtt cccaaagagg tttctgttaa agtatgttgt 300
gattctctcc atctacgact ttctcttcct atttttggga cagaggtttg tcttgtgacc 360
tcacttctct tacagatcta agagtaatgg ttgatttttc aagtttgttc aacttttttac 420
ttgttaggat agagtggtga cttccaagct tcatgcagaa ccggacaaca gaaattgaga 480
gggaaatttc tatgacagaa gagagaaaga agaaaattgc tggaataatg accttgaata 540
gaggaaatgg gatatcatct ggtaagcaaa tagagaagct ggctttagat aagagcctgg 600
acaattcatt catagaatag cagaaaaggc agaatttatg tccatagatg caagtggtaa 660
angtagatat agtgatggga atttgtaaaa agttaccttc caaatgccan ttttttttaaa 720
ngaaattaag gaaancaaan gtcaatcaaa ctcaa 755

<210> 4161

09503403.030200

0050250-070200

<211> 694
<212> DNA
<213> Homo sapiens

<400> 4161
atcaggatgt ctgagaggag agcatggtgt ttttgcttca ttggatccat gcaggtcttg 60
gagggtggtg gcccactctt tctgggccaa gtagagggtg gctcagacac ccccccttcc 120
tccaggcttc tcatctgtaa ctggtgaagc ccggaagagc ttgttgttca agaggaaatc 180
ttgtgttact tctttatgaa ggactccagc ctggtggaga tgaatgagtc ctgaagatgg 240
aatcgaagct gtttgggcac aatactttaa tcagcattta atgacccagt cgaaaattca 300
ttgtttggac ccaagcactg gtgggaaagg caggagggga ggcctgcctt ccttcctccc 360
tcccgagccc tacagcaggc catggagtgg tgagcgagtt cgtacagtgc caaccacatt 420
cccagaaact tccagcagag gttaatcctg ctcctctcaa gtangagaca atgaatggat 480
tttaacaaat ggactccctg tgttagctaa tgccaagtcc ctactcaacc taggatgact 540
ccaatggcgc atgtccccat tcccgggccc taaggctgcg ctaacatgct atcctgcctg 600
ccccttcatt ctccaacctg gcacattccc actcctttcc cctcccaana cggaaagnca 660
tgncctggac ntgggacacc ccttccatac caan 694

<210> 4162
<211> 752
<212> DNA
<213> Homo sapiens

<400> 4162
tanaaanaac atttgccatg aaggactttt caggtgtttc agatgctgac aactcatcca 60
tgaaattgaa ccaggatgtg ctattagtta atgaatcana aaagggaata ttanatgaag 120
ataatgaaaa agaaaaaagg gactctttag gcaatgaaga atctgttgat aaaacagcat 180
gtgaatgtgt aaggagtcca agggagtctt tggatgacct gtttcaaata tgttctccat 240
gcgccattgc aagtggnctt cggaacgacc tggctgaatt gacaacatta tgtttggagt 300
tgaatgtatt gaattctaag atcaaaagca ccagtggaca tgtggaccac actttgcaac 360
agtactctcc tgaaattctg gcttgccagt tcctgaagaa gtacnttttt ctcctgaact 420
tgaaaagagc gaaggagagt atcaagctta gttacagtaa tagcccttct gtttgggata 480
cttttattga aggattgaaa gaaatggcaa gttccaatcc tgtgtatatg gagatggaaa 540
aaggagatct accaacaagg ttaaagttac tagatgacga ggttcctttt gatagtccgt 600
tgttggntgt ttaagctacc cggttgtatg aaaagtttgg ggaagtctgc tcttccgatc 660
cntaatcaag ttctttccan ccattttgcc atcggatatc atnaaacttt ggcancatca 720
acctgctgan gtttttgggg ccaatttaaa ca 752

<210> 4163
<211> 665
<212> DNA
<213> Homo sapiens

<400> 4163
agttggtgag catcatggca accgttacag ccacaaccaa agtcccggag atccgtgatg 60
taacaaggat tgagcgaatc ggtgcccact cccacatccg gggactgggg ctggacgatg 120
ccttggagcc tcggcagctt cctgatgtgg tagaaatgcc atggtagccc cacaggaaat 180
cacctcatgt gcgcctccca cccacaggct tcgcaaggca tggtgggtca gctggcggca 240

cggcgggcgg ctggcgtggt gctggagatg atccgggaag ggaagattgc cggtcgggca 300
gtccttattg ctggccancc gggcacgggg aagacggcca tcgccatggg catggcgcag 360
gccctgggcc ctgacacgcc attcacagcc atcgccggca gtgaaatctt ctccctggag 420
atgagcaaga ccgangcgct gacgcaggcc ttccggcggt ccatcggcgt tcgcatcaan 480
gaggagacgg agatcatcga aggggaggtg gtggagatcc agattgatcg accagcaaca 540
gggacgggct ccaaggtggg caaactgacc ctcaaggacc acaganatgg gagaccatct 600
acgacctgng caccaagatg attgagtccc tgaccaaggg acaangtcca aggncggggg 660
acgtn 665

<210> 4164
<211> 733
<212> DNA
<213> Homo sapiens

<400> 4164
ctttcttgat gccgttacgt ccatggattt ttttccagga ttaaatttgg aaggctatcc 60
taacagagac agtacgaaat atgctgagat ttatggcatt tcttctgctc acactttgtt 120
gcgggggaca ctgagatata agggattgga atgctgaata atggattgga atgttgaata 180
atgttgaata ccttcctatg gtatcctccc taactccttc cccttgaacc acccagcccc 240
atctatggat atatgaaagc tttgaatgga tttgtaaaat taggtcttat aaacagagaa 300
gcgcttcctg cctttagacc tgaggccaac cctctcaccc ggaaacaact cctctgtgac 360
ctagttggga tttcaccctc ctctgagcat gatgtgttga aggaagctgt tcttaagaaa 420
ctaggaggag acaataccca gttggaggct gctgaatggt aggcacccac cactcaactt 480
agagcaaaat atactgggat caatgattgc taatttctac tcaaaaaaag ttaaatattt 540
tacatttgtc tttgattaat tcgttgctcc aatgtgggta gagagattac catgtgccat 600
gttcatgtgg gcataaagag tagattaaag agaggagctc aatgggcaat tnagaatttt 660
gngaaaatgc ttatctcgaa acactttacc actcagttcc caagcatann gggggtattt 720
ttgctttccn ggt 733

<210> 4165
<211> 690
<212> DNA
<213> Homo sapiens

<400> 4165
ataaataaaa tccatatttc ctctcataca gaccccagag ttgctttgcc tgacagtgta 60
gttgatggag aaaataatct ttatccttag cctccatctg gttgcagacc ataaagacag 120
ggaaaaaatg agggtgttgg tagcttcgtt agaaactgaa agctcactga ttttttcaaa 180
acctaaatag cctgtgtttc tccaaataac taatttgcag ccttcggcag ccaggactgg 240
cagggatggg gctaggggga ctggggagaa ctgctctctc ctgagggtgg tctgacccga 300
cagcacgcat gaccttccca cagtcaggaa ctgctcagag acgtgatggc aactccatag 360
aatgaaatac tcttcagcca gtaaaatgta ttttggata aatatttgct ttaaaaaact 420
ttactatatg ttgttaaatg aaaaaaaaac cttaaggnat cagaaattat gtgcagtaaa 480
atctcacttt tgtaaataaa tatacctgtt tactacgtat gcataaaaag aatcctgaga 540
aatataagta ctgtatgcat attggttgtt aaagtanttt ttccggttgc ttatctanaa 600
ntccnaattt tgcttcaaag gaaaaagttt actccgggca atattaaaaa attaanataa 660
ctaattttgg ccttgtcaat caaaaccagn 690

0050250.0070

<210> 4166
<211> 731
<212> DNA
<213> Homo sapiens

<400> 4166
gcaccgggaa aataacaatc gtatttcagg ttgaaagctc ctattactgc tgggttttgg 60
aggctgcgat aaaatcttca tcgacgtgaa ggtaccttct gggttggctt gggtcgtaag 120
tcctaagatg ggggccgtcc ttccctgggg gcagggacgt agggaaccag gcggtgggga 180
gggagaaagg agcgacgagg tcagaggaaa ccttgggttt ccaaggctcc tggggcacca 240
aagggcttcc cgcagtcggg gaattgagcc ctggggagga gccttttgcg agaacgtgag 300
cgcgccccaa cacgcctcag acctcgtaaa cccacttggc aaagaccggg gaagcggctg 360
gcggaccgac tgcggtgaac tcaagaaatt aacctgcgct gcaactaaac gggctgccgc 420
cctttcacac tcacctcgag cgaccgagat agagaaagct cccgaaccgg ncgcgggggg 480
acttggctcc accctcccgt cccgggagaa gangacaaaa aggggagatg gacttggaat 540
ggccccgccc ttcacaagcg ctccaatcct tggaaaccaa acctcctctc caaagcctcc 600
acgtctagaa gggacaaagg cagcgaagga gattcagaga cccgacgggg aaatggtggc 660
tttcaaggct tctgggtgtt gggttgcatg ggggaaaagg tacnatggnn taaactttcc 720
aatcaannaa t 731

<210> 4167
<211> 493
<212> DNA
<213> Homo sapiens

<400> 4167
agccatggag caggcacctc cggaccccga gcggcagctc cagccggcgc ccttggagcc 60
gctgggctcc ccagacgctg ggctgggggc tgcggtcggc aaggaagcgg agggggccgg 120
agaagagagc tctggggtcg acacgatgac acacaataat ttttggttga agaagataga 180
aatcagtgtt tcagaagcag aaaaacgaac tggaagaaat gccatgaaca tgcaagaaac 240
atatactgct tacctcattg aaacaaggtc agttgaacat accgatggtc agagtgtcct 300
aacagactca ctatggcggc gatatagtga atttgagttg ttgagaagct acctttttagt 360
ttactatcca catattgttg tgccacctct gccanaaaaa cgggcaaaat ttggttggga 420
nnaactcccc ngctgaaaca atggnttcaa aattttgtgg gagaaggcaa cgggtttggt 480
ttagaaaact ttc 493

<210> 4168
<211> 664
<212> DNA
<213> Homo sapiens

<400> 4168
aaaaagtgtg ggggcagtgg gcggaacaaa cgcgccgact acagaggctg gacgtaagct 60
tagcggtggc gcgcgtgcgc agcgccggcc cgagttgcca aaacaaaggg gatttggtga 120
tggaggcttt gttagaagga atacaaaatc gagggcatgg tgggggattt ttgacatctt 180
gtgaagcaga actacaggag ctcatgaaac agattgacat aatggtggct cataaaaaat 240
ctgaatggga aggacgtaca catgctctag aaacttgctt gaaaatccgt gaacaggaac 300
ttaagagtct taggagtcag ttggatgtga cacataagga ggttggaatg ttgcatcagc 360

0960345.0372000

aggtagaaga acatgaaaaa atcaagcaag agatgaccat ggaatataag caggagttga 420
agaaactaca tgaagaatta tgcatactga agagaagcta tgaaaagctt cagaaaaagc 480
aaatgaggga attcaagagg aaataccaaa aatcacaggg aagatcggtc tgaaattgag 540
aggttaactg caaaaataga ggaattccgt cagaaatcgc tggactggga aaancaacgc 600
ttgattttac agcaacaagt ancctcactg gnggcacaaa ggaangctct ggctgaacaa 660
tcan 664

<210> 4169
<211> 780
<212> DNA
<213> Homo sapiens

<400> 4169
tactcaacat acaagcactt acactgcaga gaaaccctat gactgcaatg aatgtgggac 60
gtctttcatc tggagctctt accttattca acataagaaa actcatactg gagaaaaacc 120
ctatgaatgt gatanatgtg gaaaagtttt taggaatcgc tcagccttta cgaaacatga 180
acggactcac actggaataa aaccctatga atgtaataaa tgtggaaaag ccttcagctg 240
gaattctcat cttattgtac ataagagaat tcatacagga gaaaaacctt atgtttgtaa 300
tgagtgtggg aaatctttca actggaactc tcatcttatt ggacatcaga ggactcatac 360
aggagagaaa ccttttgaat gtactgaatg tgggaaatca ttcagctgga gctcccatct 420
tattgcccat atgagaatgc atactggaga gaaacccttt aaatgtgatg aatgtgaaaa 480
agcttttagg gactactcag nccttaagaa acatganaga actcattctg gngcaaaacc 540
atataaatgt actgaatgtg gaaaatcctt cagctggagc tcccatctta ttgcccatca 600
gagaactcac acgggggaga agaaaccata taacctgtca ggaaatggtg gcaaancatt 660
cagangaacg ctcaagccct cactaagcat gnggataatt caatctggna tttaagccct 720
atgaatngta ataaaatggt gggaaatcct ggttagccag attggctcaa ccttgttann 780

<210> 4170
<211> 714
<212> DNA
<213> Homo sapiens

<400> 4170
gattttaatg ataatgtttt gtggtgggtt aaagacctcc taacaacagg gggtttttat 60
acaacaacaa gaagttttta aataattgag tttttaaagt ggaaagcagc agtaaattaa 120
actagaagga tatattttat acctagaaat aaataaagct caacttgttt tgtaagcctg 180
ttttaaaaat atttaatcat ttaatttgtg caagtataga gttctcctat ggcaaaacta 240
taccatcatc ttctccaatt gtgcatggca gctgtactaa gttctgcaaa aacaagacat 300
atggatgtgt ttcatacctt ctcagaattg gtatatcaag acacatttaa atataagccc 360
tctggaaatg gatttatata cagtcaacat aaatacccca ttagaaattg gtaatatttt 420
atagccaggt ttaggtttag tgtcaagtat agtgattgct ggnctatcac tactcatgaa 480
gtgggaaccc cctctactca taaaaacccc aatcaaacat atagatgaat agaaccttga 540
taacattaga atgccttggt tctctgaagg cttangaaga caatacgtca gggaaatatg 600
aaggagaagc tgaggaacga naagaaanct tcgacaaaga gaatgggnaa tgtacatgct 660
atagcataac tgnaggataa aattacaggg ttggaggttt taaaaantat atcc 714

<210> 4171
<211> 578

0056250.0002

<212> DNA
<213> Homo sapiens

<400> 4171
ttctttgatg cgacctcagg aaggagatga gggccggtgc ataaacttct cccgagttcc 60
atctcagtaa aagggaagca ggaagaccaa gaaggtacga agatggcaca ttttcacata 120
gctgattttc aaccaaatga aaaaaatcaa gtgcatttca gaagcttttg gaagagcagc 180
ttaattcctc tcagtcggga aatgttttct ctgccttctg ctttgcttgc accaaacatt 240
tctaaacact tgttctgcca tctacatggg aggtgatgaa actcagtggt aactcatggt 300
ttatgacatt gaaaataaag aggaacattg acctgcagac tatggtttgt acaagaaagt 360
ttgtttgaat gtgtagaaga ggaaaaagca acaacagcaa caacatgaag atgataccaa 420
cacanggacc acaaaacaac tagccatgat gggagacagg agtttttac atggaaacat 480
ggcacctgtg tttttatgtg gcaagatctt tatctatagg caanangtat gaaatttccc 540
accagggcta agcanntaan gaagtccatt gccttaaa 578

<210> 4172
<211> 681
<212> DNA
<213> Homo sapiens

<400> 4172
tttgcatgta ttttcataat gggatgttaa tctgtggttt tctcttcttg tgatgtcttt 60
gtctagcttt ggtatcagga tacagctagc ctcatggaat gaactaggaa gtatgccctc 120
ctcttctagt ttttggatga cccatcatct cttacctcac ctacagcagg aaccttgaaa 180
ttggacttct gcctcacacc ctgcaatctc atctccacat tatgaccaga gtgatcttct 240
tttttaaaaa aaacttattg ttactatttc aattgataaa tgaattgtat atatttatgg 300
tgtacaacgt ggtattttga ttgtgtacac attgtggaat ggctaaatca agctaattaa 360
cacaccattt tttgtggtga gaacacttaa aatctactct cagcagtttt cagatacaga 420
ctacattgtt attgactgta gtcaccatgt tgtacagagt gatcttctca gtggacaact 480
ctgtgcacat ccctcagagc cgcaaggcag tgatatccag gttcctgaac agggtctcca 540
aagccctcca cccacgggtc ctttccttcc tggctcgcca catcttccaa gtccatntct 600
caactatgtg agggtccttt ttcaagttcc ctaaagcaca tccccaatgt tanctcanaa 660
gattatgttg cnagcccnaa a 681

<210> 4173
<211> 646
<212> DNA
<213> Homo sapiens

<400> 4173
aaaaaaaaaa aaaaagtcgg cggccggact gggaagatgg acgcagctac tctgacctac 60
gacactctcc ggtttgctga gtttgaagat tttcctgaga cctcagagcc cgtttggata 120
ctgggtagaa aatacagcat tttcacagaa aaggacgaga tcttgtctga tgtggcatct 180
agactttggt ttacatacag gaaaaacttt ccagccattg gggggacagg ccccacctcg 240
gacacaggct ggggctgcat gctgcggtgt ggacagatga tctttgccca agccctggtg 300
tgccggcacc taggccgaga ttggaggtgg acacaaagga agaggcagcc agacagctac 360
ttcagcgtcc tcaacgcatt catcgacagg aaggacagtt actactccat tcaccagata 420
gcgcaaatgg gagttggcga aggcaagtcc ataggccagt ggtacgggcc caacactgtc 480

0052745.0052800

gcccaggtcc tgaagaagct tgctgtcttc gatacgtgga gctccttggc ggtccacatt 540
gcaatggaca acactgttgt gatggaggaa atcacaaggt tgtgcaggac cagcgttccc 600
tgttgcaagn gccanatgcg gtttcctgca aaatttcccg ancggg 646

<210> 4174
<211> 756
<212> DNA
<213> Homo sapiens

<400> 4174
cttttccggc ccgcagcgcg gcctgggctc ccgcgtgttt aaaagtgcgc ttgtggctgc 60
tgctgtctta actcctgtgc ttggcggaca gacaggcgag atggcggcgg aggtgttgcc 120
gagtgcnagg tggcagtatt gtggggcgcc cgacgggagc cagagagctg tactggtcca 180
gttctccaac gggaagctac agagtccagg caacatgcgc tttaccttgt atgagaacaa 240
anattccacc aaccccagga agaggaatca acggatcctg gcagctgaaa cagatangct 300
ctcctatgtg ggaaacaatt ttgggactgg agccctcaaa tgcaacactt tgtgcaggca 360
ctttgtggga attttgaaca agacctctgg ccaaatggaa gtatatgatg ctgaattgtt 420
caacatgcag ccactatttt cagatgtatc aagttgagag tgaactggcg ctagagagtc 480
aagaccaaaa cttacagaga aaagatggat tcttgtattg aagcctttgg taccaccaaa 540
cagaagcgaa gctctgaaca ccaangagga atgaacaaga gttggcaatg aatctttgaa 600
tcgtgcagtg gctaaagctg canagactat cattgatacg aagggtgtga ctgctctggt 660
cagcnatgct atccacaatg actttgcaag gatgactccc tctaaccttc ctccctgcta 720
atgatgattg caagncangg cctgaangac ntggta 756

<210> 4175
<211> 802
<212> DNA
<213> Homo sapiens

<400> 4175
agcataacct gtttgtgaaa ctgcaaaaag gttgacatgg ctgaagcaga agatgggttg 60
gtactgaatg gttgggagag atatgtagcg gctgaccctg aaggacgttg cagcccatgc 120
tatggagacc tgattttatt ttgtaagagg tgggcaaccc ctgaagcatt ttagtgatgc 180
gaacagatgt gtctgttacc aagcaaagcc agttaaagaa ggtcacagag gaggaatgat 240
cacaaagagt ctgagaagcc aactggggcc aaacaagttt tagaacctct actggctgat 300
gccaacatca tcagagatga actgttctta ccagaaactt ctctgctcct gacaccccac 360
ctctccccag aagagaagaa ggagagtggc cacgttgatt cagccaagca cctccaggag 420
gtcccctctg gatgtcccat gaggctgccc ctcagccaca gcccagagca cgtggagatg 480
gctttgctca gcaacatcct agcggcctat tcctttgtct cagaaaatcc tgagcgagca 540
gctctgtact ttgtttctgg cgtgtgcatc gggctggtgc tgaccctggc tgctctggng 600
ataaggatct cttgccacac agactgcaag cggcgtcccg gggaagaagt tcctgcaagg 660
acagagagag caacancgac agcaacgaca gcgaaggatt gcaattaagg acaccgtgtc 720
cgatttcncc ggtgcgggag aaaaccgccg cttcnaaaag gactttngaa caaanaatgt 780
gtttaacctc tgccggnagg aa 802

<210> 4176
<211> 565
<212> DNA

0052045.0002

<213> Homo sapiens

<400> 4176
gtgggattca acaaaaggag caacaagcat tgaaaagtat gatctccgta caaatatgtg 60
gactccagta gcaaatatga atgggaggag gctacagttc ggtgttgcag tgctagatga 120
caaactgtat gtggttggag gaagagatgg actgaagact ttgaatactg tagagtgcta 180
caaccccaaa acaaaaactt ggagtgtgat gccacctatg tccacacata gacatggcct 240
tggtgtggct gtactggaag gtcccatgta tgccgtagga ggacatgatg gctggagcta 300
tctgaacaca gtggaaagat gggaccctca ggctcgccag tggaatttg ttgccactat 360
gtctacccct aggagtacag taggtgtggc aagtactaan tggaaaactt tatgcaagtt 420
ggtggtcgtg atgggaagtt cttgtctcaa atcagtagaa tgtttttgat cctcatacta 480
ataangtgga cactgtgttg cacagatgtc aaaanggaaa aggtggcntt aggagtgacc 540
nacctgggaa tggactgctg tatnc 565

<210> 4177
<211> 563
<212> DNA
<213> Homo sapiens

<400> 4177
ttttttcata ctattagacc atatctcata aaacctttg aattaatgaa ggtacttgtt 60
tcctttctca ataatgaaaa taggcttcta gttttagaag gctgagccga aactacacct 120
tgcctaggga tcagccccac tgtcttttct ttgtataact aaatctgcat tttcaaatgt 180
tgtcaatcac atttttctta gagctgaata tccaggctgt aattctctaa acccttttc 240
ttgacctcat tgcatcattc cacaggnctt gccccgattt tgtctancag ctacccattt 300
ctggagtcag gatgtgaaac ctctgttcct ctgacctcat taagctgggg gtctgtctaa 360
gttaacgttt gccctatttg gnaacacaaa aacacaccag acttttaac cgtacgctca 420
nctaacatgn tttgngaaat tcataaccag gcactcaaat atccttggta gcctacgaaa 480
agtgagtaag gnaataaatt ttgcctttgg tagggaagaa ctacaaaagt tgnnaatcct 540
ttaaagctgg nccatttttt aan 563

<210> 4178
<211> 689
<212> DNA
<213> Homo sapiens

<400> 4178
ttccactaca gtaagttttc actggatctc agaactgcca atcattctcc caaaggaggt 60
gacaaaaagg catcaaaaca tttctgctgt tttggcacag acctagctct tttgtgtctg 120
ctcttttaac acaagccttc cccttccttc caaaagcaga aagtcacaat gactctagta 180
ttttaaaatg aagaacccac gtgcggagga gtgaagccaa tatagtaata tctgaatgcc 240
atctaaaaat gttttgagtg gtaaataaag gggtcataaa gaatagcatc ttaacctgaa 300
atgcctatgt ccactacagg aaaaattcat gagagaaaag agggcaacac atgaaacatg 360
cctgcactgg ctctcatgag cctccctgta gatacttgtg agagcctccc caggtatatc 420
catctagtgg agtacatgaa acaataacca tgccatgaca ttcaaataca tacacatcaa 480
aatgtagtat tgactcatgg gtcaattatt tttatttgc tgcttaaaac ttttgttttc 540
cacattttcc tcaaagtgca tgtttttggt tttgntttc ttaactagaa aaaatatccc 600
ttactaacgc actgggggaa ttacaaaggg gggggggggg nagaacaata tccccttctt 660

0052-0403-0200

caaaaagtcc tangngnttt gnccctggg 689

<210> 4179
<211> 662
<212> DNA
<213> Homo sapiens

<400> 4179
agacccatcc cgcggtgcag ccgccggccc ggtaggcgcc aggaccccga gcctcggcgg 60
cggcggcggc ggcggcagcg ctgccttcac tcacctcgtc ctcgctcccg tcctaccccg 120
ttccgcgctg ggtggagtcc aagtctgatt gcgagagtcc ggaacgccgc ctcgggggct 180
tgactccagc cccggggatc gagaacggcg cccaggggtc cctacgtctg ccttgggggc 240
tcgagtcccg ccctgggcgt ccgtgacgtc gcccaggggt ctccacgttt gtcctggaac 300
ctggagagcc gccgtggggg ccccggaagc cgcccaggag tccccacgtc tgccctgggg 360
gctcgagtcc agctctcagg gtcccggacg ccacccaggg ggtccccatg tctgctttgg 420
gggctcgagt ccagccatgg gggtcctgga cgccgcctcg gcgtccccgc gtctgccttg 480
ggggcccgag tcccgccctg ggggtcctgg acgccgcctc ggcatccccg cgtctgcctt 540
gggggctcga agtcccgccc tgggggtccc cgatgccgcc cgggggtcct caagtntacc 600
ttggagaact ggagttcccc cgttgggant ctcggnangc caaccccgga gtcancgtgt 660
ca 662

<210> 4180
<211> 831
<212> DNA
<213> Homo sapiens

<400> 4180
gggaaaaaat caaaaagtgg taaactgagg aaaaagggta acatgaagat aaatgagacg 60
agagaggaca tggatgcaca gttgttagaa caacaaagca cgaactcaag tgaatttgag 120
gctccatccc tcagtgacag tatgccttct gtagcagatt ctcactctag tcatttttct 180
gaatttagtt gttctgacct agaaagcatg aaaacttctt gtagtcatgg ttccagtgat 240
tatcacaccc gctttgctac tgttaacatt cttcctgagg tagaaaatga ccgtctggaa 300
aattccccac atcagtgtag catttctgtg gttacccaaa ctgcttcctg ttcagaagtt 360
tcacagttga atcatattgc tgaagaacat ggtaacaatg gaataaaacc taatgttgat 420
ttatattttg gcgatgcact aaaagaaaca aataacaacc actcacatca gacaatggaa 480
ttaaaagttg caattcagac tgaaatttag gcccataaat gctgcagaat aattaccact 540
gtacaaccgt gtttggagct ggttgaacta catgtgacta cttaagtttc aggttaccan 600
caaaagccgg gtttcattat cataatgcag atacattttc tgtgttcagc aaggcattgt 660
gtgtcatgtg gatcttaagt taccaaacta tgaagtgaag gcttttaaaa gtgcattatt 720
tttaaggnta ataaattttg aagagcaaag caangttttg tgtggtttgg cacaannaca 780
attgccttga agcacatact ttagnataga aaattgggcc ttaattttan a 831

<210> 4181
<211> 675
<212> DNA
<213> Homo sapiens

<400> 4181

agggcgatgg caggttcgcc gggtgtgagg cttcacagcg gtccggtgac caagtcgagg 60
atttttctgg tggtctagtc tcagagatta catctgtagt cagcacaatg attcccttcc 120
aagcccagtg gtgcccagtt gcctccaggt cccagacctt tatgtggaca agaaaagctt 180
acagaggaaa tggtaattct ccacttgcac actgaggtgt ccagttgcag cccatggaga 240
tccagttcaa ttatgaatct caggaacacc accttctgtc agatggtgag aacaagacca 300
agattggnaa gccagcttca gaggagggaa ttacagcaaa aattgaacca ttgacaggaa 360
gagtctagca gtctcagaat gttctccagg attctgaagg caaagaattc tgtgaatttg 420
gggataaatt aaatgaaaaa gatcagaacg tctttaaana ggagacctca taactgtgac 480
gaatatgggc aaagctttgt ttggagtaca agcctttta ggcatcgaaa aacgcactgt 540
gaagaaacct tatgaatggg ataagtgtgg aaaggccact gggganaaac cttattcctg 600
taattgggng tattaaaagt ttcaagttgg ngcctcanac cttattaaac accaanggag 660
gtccacacct gggga 675

<210> 4182
<211> 647
<212> DNA
<213> Homo sapiens

<400> 4182
ttagtatgtg tgggctattt aaagtataat gactttggtt tggttatatg agtgacacag 60
aatttaagga ggcttcatgc catagttcat agtttgctct aatggcttgg tggtatccct 120
gaacagtcta cttttagaaa ttaacagtaa atacacaatc cagctgtaat cttaccctcc 180
accaggggga gcttcaacat cggttaatac ttttttttt tttgagatgg agtctcgccc 240
tgtcgcccag gctagagtgc aatggctcag tctccgctca ccgcaatctc tgcctcccgg 300
gttcaaacag ttgtgcctca gtcttccaag tagctgggat tacaggcacc cgccaccacg 360
cccagctaat ttttgtattt ttaagtagag acggggtttc atcatgttgg cgaggctggt 420
cttgaactcc tgacttcgtg atccgccccc ccctcaagcc tcccaaagtg ctgggattac 480
aggcgtgagc caccgcgcct ggcccggtta atactttcaa aagcattgaa gtaactattt 540
aagtcctann acataaacac tgtgtggttc acaaaanggn atagagacat tctctcaaga 600
ggttacaatc taattgggca gggaagattc ctacagntca tcaaagg 647

<210> 4183
<211> 612
<212> DNA
<213> Homo sapiens

<400> 4183
agtaactctt gagctggctc agggagcgca cttccttctc agccagcgcg tcgccccctg 60
catccgtggc ctccactgga gctgggcagg accctaccca gtgaatctgg agaaaacaaa 120
cttgggagac agacgaaagc ttagggcaca ttggaggaca gcgcagctgt ggctcccatt 180
tttggagatg cagtcgaatt tgagctcaca gggaggtgtg gttgcctcct ggggatggaa 240
aggcttcctt tctccacctc tgtaactggt gcttctgaga agtaaatggt atttggatcc 300
tgacctcaga cgcgaatttg ggtcttctgt gcttaggagc agaaagagcc caggaggggc 360
ctgttccttt acttcttggg ggaaacgcaa tgcgtggcct gacttctcat gacgggaaag 420
gctactccac cttctctgta ctcctggagg ggagtcttgt tcacatgttt accaagcggc 480
caggacaagg aagagaaaag gtattgacat taagaggatg gtttgctgaa ggctgtgaaa 540
cttgaacgct attagtcagt gggaacctgc ctggcttang ggaatggctg cagcanaatc 600
nanacgtttc cn 612

0356203-020200

0002705459.Q

<210> 4184
<211> 739
<212> DNA
<213> Homo sapiens

<400> 4184
aagtggcacc aagcacttcc ggtacggaaa actcgctgct gccccaacct ggcttgacag 60
gcttggtctc tgcaagtggc tctcagcccc ttcttctttc ctgcctcacc ttccaattcg 120
tttgccgccg ccgtcccgca gctgctgttt ccggagttgc cccttcccca tgttccgggg 180
caggagtccg caaagcgaag atccgcccgc cggttcccca tcatgtccga actgactaaa 240
gagctgatgg agctggtgtg gggcaccaag agcagccccg gtctctcgga caccattttc 300
tgccgctgga cgcaagggtt tgtgtttagt gaatcagagg gatctgcatt agaacagttt 360
gaaggtggcc cctgtgctgt tattgcacct gttcaggcat ttcttttgaa gaagctcctg 420
ttttcttcgg agaagtcttc ttggcgggat tgttcagagg aagagcagaa ggaactcctt 480
tgtcatacct tgtgtgatat tttagaaagt gcttgttgtg accactctgg atcatactgc 540
ttggtttcaa ggttaagagg aaagacaact gaggaaactg ctagtatttc tgggagtcct 600
gcanaagtct aanttgccaa gtggaacatt cttctgcctt ggntgtccaa gagcttggct 660
ttgagcgatt tcaatgcatt aaattcaaaa aagatngttc aanaagttta acaannattt 720
aaaaaggatc tgtcctggg 739

<210> 4185
<211> 617
<212> DNA
<213> Homo sapiens

<400> 4185
taaaactaac tccaatacag cgtgaagcca caaatggaat gggaagctca aaccctgaac 60
cctgctctgc aatttctctt atttgctctt ctgacacagt agggaaaagg aacctacttt 120
tcaaacttgg ctaagacatc agctacgacg gttcgacttt caatggcttt gtcgacgtgg 180
ccgttgtatt caaacaaagc aaacatgttc ctgctgtcct ccatggccag gcctcggatc 240
agcttctcca ccacctggaa gacacaccag ggggacttca gttccacagg ctgcggcccc 300
aacacgtgtt cccagaacgt gccatcacct gatcccagag ggagctgctg gcacaagggc 360
gtctccagcc tcctaaaaat gttacccgtg tggtcatccc agaatttcaa aagtactatt 420
ttccctttgn tctcttgaga ttaggtttat ctctttcctg ctgaaaataa ctcanggtat 480
tttgcccatc ggtagaggca gatgctgggc tgatttcttg caaacctata ttaacaggaa 540
aagcgggtga aaagcttcan gtcctgtctt ttggntgata aatttangaa ctccaaggaa 600
caacaagnga ctccang 617

<210> 4186
<211> 771
<212> DNA
<213> Homo sapiens

<400> 4186
gaaaatgcaa actgaaacct gggaaacagt gcagtccaag tcaaggtcct tgttgtacag 60
cacagtgtgc attcaagtca aagtctgaga agtgtcggga tgattcagac tgtgcaaggg 120
aaggaatatg taatggcttc acagctctct gcccagcatc tgaccctaaa ccaaacttca 180

cagactgtaa taggcataca caagtgtgca ttaatggggt aagcatttaa ctatatgttt 240
taaaatttaa ttttagaaaa cttgtttttc agaagaatta ttgatgctta aagctacata 300
gttaaagtaa ttaatcttgg tctctgttta agtaatattc cctcacaaaa ccatgaatat 360
attatgtggc attcaattag ctactaattt gtctttcatc tttccatgta catgtggttg 420
atattctcta gagaaacata gttgtacaac tcggcatgtg atttgtctat aatatttaag 480
ttttataaaa taatatttca gtagcctaaa taaaagaact ctttggtcat cttctctgaa 540
tatcaaacct tcaaagcttt tgtggctgaa tatcactttg ctctacagga aaaaaattta 600
atttttcttt ctttatagaa gagccgtaat aaccaacatt aaaatcgatt ctcaactaan 660
ctcttgctct gcttttaaat tcaatttttt aaagttggcc attgcnttaa aagatttact 720
atccnttccc tgggntttac cgggttttca aaaatttttt ttcaaaangg n 771

<210> 4187
<211> 708
<212> DNA
<213> Homo sapiens

<400> 4187
atactatatg cttcaagaac aagtcagtga atatttgggt gtgacctcct ttaaaaggaa 60
atatccagat ttagagcgac gagatttgtc tcacaaggag aaactctacc tgagagagct 120
aaatgtcatt actgaaactc agtgcactct aggcttaaca gcattgcgca gtgatgaagt 180
gattgattta atgataaaag aatatccagc caaacatgct gagtattctg ttattctaca 240
agaaaaagaa cgtcaacgaa ttacagacca ttataaagag tattcccaaa tgcaacaaca 300
gaatactcag aaagttgaag ccagtaaagt gcctgagtat attaagaaag ctgccaaaaa 360
agcagcagaa tttaatagca acttaaaccg ggaacgcatg gaagaaagaa gagcttattt 420
tgacttgcag acacatgtta tccaggtacc tcaagggaag tacaaagttt tgccaacaga 480
gcgaacaaag gtcagttctt acccagtggc tctcatcccc ggacagttcc aggaatatta 540
taagaggtac tcaccagatg agctgcggta tctgccatta aacacagncc tgtatgagcc 600
cctttggatc ctgagctccc tgctctagac agtgatgggg attcagatga tggcgaaaga 660
tggnccaagg tgattgagaa accgggaaaa ttaanggaac nttcgggc 708

<210> 4188
<211> 774
<212> DNA
<213> Homo sapiens

<400> 4188
cagttcagct tttactatat atttctattt atggttatct tcgtatcttt agaagttttg 60
ggtttttttt ttatagtttt gtgaaagaaa ggatgggaat aagatttgtg tttattttgc 120
ataaacctat ctcgtgtgga agatgtgtaa tgatttcaaa taaaagacat cacagcaatg 180
gtacttagat tttgagttaa taaatggtgt ttagtttgag atacacatct gttatgattt 240
tcagtaatat taatgatggt gatagcaaca tttatgtaac cacaagttaa tattattcaa 300
agctccattc tgatttggaa agaacagcag attttgcatc caaggactga ctcttaagtc 360
ttacttttgc cacttagtag ccgagtgacc cataaaatga gaatggtaat acacgcttct 420
actcagtgta tataaatgat gaagaataaa tatgcttatt ggagatcatt ttaatctatg 480
aagcactgta agacataagc tgttatttat caaaaaatat aattctaatg ttgccccagt 540
gttgctccaa ataacaaaac ttttaaagtc ataaaaacaa gtaaaaattt tgggtaaaaa 600
cgtaactttt tattaaataa gcattgcatt acagttgagc aaaagataat gttgaaattc 660
anaattgggg tgtagaaacg atactggagt atttgtgtca agcattgtca aagggaggaa 720

0050245800

ttgcagatgc cgattggaan actggatgca nggaggacca nnatantaaa tggg 774

<210> 4189
<211> 609
<212> DNA
<213> Homo sapiens

<400> 4189
gtgtggccac tctccctggg gtccaaagtc ccttcccgag ggccggcctg tggagctacg 60
ggggtgctgg gccagggtct gtgggcctca gtcccctctg aacctcactg tgccccagat 120
cgtcaacacc tgcagtggcc cagacatcgc acgctccgtc tcctgcccac tgctctcccg 180
agatgccgtg gacttcctgc gcggccacct ggtccctaag gagatgtcgc tgtgggagtc 240
actgggagag agctggatgc ggccccgttc cgagtggccg cgggagccac aggtgccccc 300
ctacgtgccc aagttccaca gcggctggga gcctcctgtg gatgtgctgc aggaggcccc 360
ctgggaggtg gaggggctgg cgtctgcccc catcgaggag gtgagtccag tgagccgaca 420
gtccataaga aactcccaga agcacagccc cacttcagag cccacccccc cgggggatgc 480
cctaccacca gtcagctccc cacatactca caggggctac cagccaacac caaccatggg 540
caagtacgtc aagattctgt atgacttcac anncccgnaa tgccaacgag ctatcngtng 600
ctcaaggat 609

<210> 4190
<211> 684
<212> DNA
<213> Homo sapiens

<400> 4190
acaaatattt acacaacatg tacctttgg aaggtatacc tgatctttaa agcaggtaaa 60
catgttctaa aaattgacac attaatttga aataatatag gaaattgaag cttagatttt 120
atgataaact taaaagaata ggtacaactt ttctgcttta tttaaatttt attttctggt 180
ttatttaaat ttagtcaaat tctgtttgtg gcatttaact tcatacttgg aaaaatatac 240
agtctcccac tgttgaggaa ctcttctgga gagtatattt ttatgtgata ataagtagag 300
atgatgaaga aatgattttt gtatgccaaa ggatacaaaa atgttttat ttaagcgaga 360
attaatcaaa tctgttttaa gaaaattaat tacttgattt tgaaaactgt aagatatact 420
aatgaagttc ttatggaaaa taacctattt tggagtaata tcccaagctg gcagaggctc 480
agtgaaacta aatattctta agtgccattg acactattta ttattggtct gtttttaaag 540
caacatgaca atatagagga agagcaatta agattcccat acactttgac cctgttattc 600
catccttaag aaattatttc aaagaaatag ntcaatagag atgaaaagcn tantggnaca 660
ttgtccanca aagcaaaaca tggg 684

<210> 4191
<211> 700
<212> DNA
<213> Homo sapiens

<400> 4191
tttgttatgt gcaagagttc taaagccatt ttataatact gcagtatccc ccccccccca 60
ccttttttt tttgagacgg actgtctgtt gcccaggctg gagtacagtg gcgcaatctt 120
ggctcactgc aacctccacc tccctggttc aagcaattcc cctgcctcag cctcccatgt 180

0356350.00700

agctgggatt acgggcgcac accaccacac ctggctaatt tgtattctta gtagagacgg 240
ggtttcacca tgttgaccag actggtctcg aactcctgac ctcaggcaat ctgcccgcct 300
cagcctccca aagtgctgga attacaggtg tgagccaccg tgcccggcca agtatctctt 360
ttctacagcc ttattaaact aactacaaac atttattttc caatttagtt ttactttcag 420
tgcatatcaa agttgttgta ctcttcagac caacaaatta acttgagggc aaattacata 480
gctttccatg tacccttttt tcctcaggtg ctaatcaaag gctctgaaaa tggntactgc 540
tttagtgatg tctgctttan tcttaaaatg cttatttctt ttgctanatg taaagatttg 600
gtgttaacaa aagtgggttt aatatgtaaa tatgaatgaa tgcctttagt ttaccctgtt 660
tgtcnantan taatctgttt taattaacct tcaaagnggn 700

<210> 4192
<211> 677
<212> DNA
<213> Homo sapiens

<400> 4192
ctccgctcgg ggtcctcgct cggcctctgc tggcctccgc gactccgcgg tgcccgcccc 60
cgttgagttc aaaaggacgc gcggagcggc gccggccctt caccagcagc ccgtccgact 120
ggaaagatct gcctcttctc caagaaactc aaccactagt gacaatgacc agcctcctga 180
ctactccttc tccaagagaa gaactgatga ccaccccaat tttacagccc actgaggccc 240
tgtccccaga agatggagcc agcacagcac tcattgcagt tgttatcacc gttgtcttcc 300
tcaccctgct ctcggtcgtg atcttgatct tcttttacct gtacaagaac aaaggcagct 360
acgtcaccta tgaacctaca gaaggtgagc ccagtgccat cgtccagatg gagagtgact 420
tggccaaggg caacgagaaa gaggaatatt tcatctaatg actcccaggc cccaaggagc 480
ttattcctgg ctccatcgct aacacgttga ctgcttatta tgggaaagtt ttctctgaag 540
ccaagggaga ancattgatt gatgtgggca aaatccaaag ctccagccaa ggtcgcagtc 600
ccaaatgccg acattcactg actccaaggg gaccaangac atgggagaaa gctgtttann 660
gatnanctttt aaaccaa 677

<210> 4193
<211> 618
<212> DNA
<213> Homo sapiens

<400> 4193
ctaaacagtg ggagaggagt gcaggaggcc catcagctgt gcctttccca gaagtagcag 60
gatctgagca agtgtctgtt ggttgaagag gcacacatgt caggctggca accagcagca 120
tcaggaaata acctaagacg cggtgtgttt atcattcccc tgctgggagc ctttggcttg 180
gtccgtccgc ataacacggg gttctttggg taggcggcta gaagccgagc ggccgggtcg 240
cagcatcgtc tcctttactg cattgtactc cacagtcgta atgggaggtt cccgcttccc 300
acatcctttc cctcagccgt tacatcttgg agcctggatg cattatgaag gtatttttgt 360
ttcgtggcaa caatttttt aaaatttgt tttggtgctt ctttgacaac gcggcccacg 420
cagctgccct ctgtgcaagc cattacccca ccangcctga cacagcttct ctctctgggc 480
ctgggtatga gggcacagtc caanagtaac actgactttc tctctctttc ccccttccng 540
ttcctttgac natctctctt taggcctacc agtttttggn aacanaaagt ttacgggtca 600
ataantcaag caagttaa 618

<210> 4194

0356356.0750000

<211> 688
<212> DNA
<213> Homo sapiens

<400> 4194
aaaaaaaaaa aaatagctaa cttactgaca gccatgccat ggaccacgca aagctgctgg 60
tgaaaggggg tccctagctt ctcagtgtgt ttgagccagc aggatctgtc ttgacatagg 120
ccctctctgg cctggctcat ggtatggccc cctcccctgg tcgcccccag ccgtcccacg 180
aagggtgtta tgcgaaatgt ttcccatgca ggaattggct gaattctctc aacatccctg 240
tgaggtagat tctcttactg tctccgtttt atgctgaggg tcctgaggct cagaaagggg 300
cagacacaca tttaaggtcc cacattagtg agcagtggag ctgggattga acccaggtct 360
gcctgactcc cccgattgtc tgcttgttgc ccctgagccc tcctgcctct cctgcctcca 420
cttccctggt aacccctgca gctgagcaaa agactggaag cacatcccca gctgtcaagg 480
cttatgagag aaatggctac ctgagccctc agcagcagat gggggcgggc tgaagcctcc 540
tgctccctgg gggtcaggtg ggcagcactg atgctcctgt ccctaagtgt ccatgtgtgt 600
tttccccaag gatcagccan aggaggaacg ggggaaacan gagtcctctc ctaacccatc 660
ttgggaaggc tangcgcatg gcaataaa 688

<210> 4195
<211> 605
<212> DNA
<213> Homo sapiens

<400> 4195
ttttatggat gaatgcatct gaggccaaga caggaaaatg acttattgct ggttgaattg 60
ctgattagtg gctggattgg aggtagaacc cagatcatct gcctcttcat tctactcatg 120
tcctgtcatg gaaattagtc aatccaatta ttattattat agaagtctgt tttcaccaga 180
aagtttgtga actgacaacc gtaaaatctg tggtaaattc acaggcttca tcaatgacac 240
tatgaaatat tgaccctcag cttcccagat tgcaactccc caagtcttgg tctgtttgct 300
gttaagattt gttacaactt cttgcttatt gccttttgtt acacaagcag tgctaaatat 360
gggctggata ttggaaagag ggcaagaaaa tgagaaccca cagttctgtg acgtgacaac 420
actgattggc caagtcactg ttatctgcag gatgtgcttt tcttaaggat gaacatattt 480
tggtccacaa gtttccaaga caagcacatt cctgccaaca tgatccttgg acaaactgtt 540
ctggaatttg aacttgctac tggnagangg ttaagtccaa ggacacacac acacacacac 600
nnana 605

<210> 4196
<211> 771
<212> DNA
<213> Homo sapiens

<400> 4196
gaatcactta atcgtcagcc ttttcaagag agtgacgtca ggcacgtagg acttgtagag 60
gtctaaaccc tcatccagta caagtgttga atagagacca cattctggtt gaagacacta 120
agccatctta tttcagcccg aatctagtaa tcagaagctc actaactctt gatgcctcct 180
gcttgctagt tagataactc caaagattag agagtacatt attttattga gtaatttttt 240
tctttgtaaa tttttctaat tgtactctct ggtggaatat aagcaaatct attttatatt 300
ttttccacta taaatcttta gattgtaatg ttatttcttt gaaatcaggg accatatatc 360

0050503-0707000

tttcatatgc atatcctttc tctgcttaat attaatataa aaaacatctt ttgagcacta 420
ggcactgtgc ctggtgtttg tcataaaaat gaataagata tgattccttt cctcaggaag 480
gatatacaaa aaaaggctat acaaagtata tacaaagaaa tgcatacaag ctgtggtata 540
aattgctgta atggnagcat gtacanaatg ctaaaggaag ctaagagagc atctaatatg 600
gcttaggaaa agaggctgac ctagctatgg agaaattttt tgggtgagtc ttaaaagaga 660
aaattttcct ggcaagaaaa agaggggaaa gaattttggg ngtcagtgna gatnagcaat 720
gtccaaaagg nacaagaggg aaagaaagtt gggaagcaca cattngttaa a 771

<210> 4197
<211> 671
<212> DNA
<213> Homo sapiens

<400> 4197
aaattcaatg caatgtctca caatagctgc gctctccttc ttccaagcac agagattctc 60
tctctacgcc acaaagccac tgccatggga tggggacggg tggcatcagc aactcaagac 120
tgtcttccct accctcttca ttgcctcttt caacagtatg aagttaaaat cagctctgaa 180
gatgacaatg cattcaaatt caccagatca cccccagctc tgaagatgac aatgcattca 240
aattcaccag atcaccccca gctctgaaga tgacaatgca ttcaaattca ccagatcacc 300
cccagctctg aagatgacaa tgcattcaaa ttcaccagat caccccccagc tctgaagatg 360
acaatgcatt caaattcacc agatnacccc cagctctgaa gatgacaatg cattcanatt 420
caccagatca tctantgaag tttcacttct gnttcttanc acctccctga ctcttctgtt 480
ccctanagtg gaaggagggt ctgggaaagg acctttgcct gaaactaana agtcaacatg 540
gntacccctc aatancccac ctgggaaggg agctgccnat gagccggaag cagntgggga 600
ggagatgaaa ctggggctat cggctttgca ngctgggagc cccctcctgt anctgcctta 660
tcttcnggta t 671

<210> 4198
<211> 389
<212> DNA
<213> Homo sapiens

<400> 4198
aaactttgca aagttccgcg tcagagcctg gggaggcaaa gtgctccccc ttctccccgg 60
cgttcccccct ccctctgccc ccgcctccct gtcctcgcac agccgggagc acccgtgata 120
ggacgagccc cgggcgtgca ttgtgtatat gcaaaccgga gctgggctcc ccacggctgc 180
ccgacccggg cctgggctgt ggctgtgact ggcgctgccg tgggcgccgc agccctcgcg 240
ggagccggac gcggtaatgc cccagcggcg cagcgggcgg ctgcgtccct gagccgctat 300
ataagcgcgg cagggaacat ccggaggggc tgaagatgaa ggtgcccgcg catgggcccc 360
cgctgattgc cagtccntct nganccccga 389

<210> 4199
<211> 814
<212> DNA
<213> Homo sapiens

<400> 4199
gatgccatgt gacaagggca gaacttgcca agattatgcg taccagagcg aaggaaattg 60

0060203-0004200

aagtgaaatt gcttcttttt gctattcaaa gaacaactaa ctttgagggg tttcttgcaa 120
aacgcttctc cggctgcacc ctgaccgatg ggaccctgaa aaagcttgag tctccacccc 180
catctaccaa tcccttcctg gaagatgagc caacaccaga gatggaggaa ctggcaacgg 240
agaaaggaga tttagatcaa ccaaagaagc ctaaagcccc agacaatcca tttcatggca 300
ttgtttccaa gtgttttgag cctcatctct acgtgtatat cgaatcccaa gacaagaacc 360
tcggagagct gatagatcgg tttgtggctg atttcaaagc ccaggggcca cctaagccca 420
acactgatga agggggtgcc gtgctcccca gctgcgccga cctctttgtc tactacaaga 480
agtgcatggt gcaatgctct cagctcagta ctggggagcc catgatcgcc ctgaccacca 540
ttttccagaa gtacctccga gaatacgcct ggaaaatcct ctctgggcaa cctgcccaaa 600
accacaacca gcantggagg actgactatc agcagcctcc tcaaggaaaa ggagggctca 660
naagtagcca agttcactct gggaggagct ctgcctcatc tggttacaat cctgagcacg 720
ggaaaagtta ctgtctgggc aacaacccaa cagctannaa ggaaaaanct caaaggnaaa 780
aaagtgggat tgttaagtcc ggatttgaac cnaa 814

<210> 4200
<211> 688
<212> DNA
<213> Homo sapiens

<400> 4200
ccttagatag gtaactgttg ccaggaaaat gccctgtgtg gattggcctg gactaagcag 60
gatcctcctc taaagagaga gatgagatga atgcctgacc caagtctggg atcttgggtg 120
ggaagcgtgt ggatagtagg tcagaggtca gcagtgtctg tggtgtaggg tgtaatccca 180
tctccacaga gctgcataca agtgtgttta agtgtgtgca agtgattaac tttgattagt 240
agtttcaact ctttacaatg aacatattta tctttttaa aaaataaagc cattttaaaa 300
gatcttgcca aaaaácaatc attccttaag tcaccactta ggatagacct agaatatttg 360
tcctttctca agagcaccan agagttttct ggtaatccac gcaataaaca gttataaaag 420
gtaattgttg agatcagggg aagatggcag atangaggca gtgctaatgt gtagctccca 480
catggatgga caaaacacca tgtggagact cacactgtga ccctgttgtg ctccaagaac 540
tatcatagga acgtactggg aaaaccaata gaattcacgg atcctttgaa aagaagacgc 600
acancactgt aaattctgtg gaacagggag aanaactggt ccttgggggg gaaggcatcc 660
ttccaattcc taactggatn aannaaag 688

<210> 4201
<211> 770
<212> DNA
<213> Homo sapiens

<400> 4201
ttttttcatt taagaaatta ttgtgacttg taagttactt atcccataaa ggtttgttac 60
ttccctcact tcacctccat aagaacctgt gtttccataa gtaagattac gtacctgatt 120
tcctgtctga gaactatggt aacagatgtt aatagttgca gggtctcacc acttcattag 180
ataagtgttg tctacctagt ctaggaggca cagaattctc attctgttat ccagttcatt 240
ccagcaatca tagttaatac agtacttggt gacacgccct acccccttct cttccaagtt 300
tcccactcac ttgaggagga aaaatggcaa aagaaagctg tctagggttt taccattgaa 360
gggtggaaga acagagacaa agaggagctc tttttctgtg agctgggttg cacaggaaga 420
atgtcacagg gaaccaatna gcacagaaaa aggaagtgct ggtgcatatt tttgagttaa 480
natatttccc tattttatca tgattactaa gtgagtagta tagacagnag tatataacta 540

US 2005/0208503 A1

atggttgaaa atacatatat tcatttcttt ataaaaaaca aanaacctta ccggtagtaa 600
tataatttcc cccttgggtg gnttttcaga cacctggcag caagaagaaa tactgactga 660
ctaggcatta ttttccataa aatcccctct caanaagtng gaaaagantt cccncttgct 720
ggnggagaaa aagcttttac ccacccaatg gagttattgg ctggtccaac 770

<210> 4202
<211> 726
<212> DNA
<213> Homo sapiens

<400> 4202
aaacaaccta ccctccttcc ccattttctg tggtccaact ancctcggcg atcccaggct 60
tggcggggca ccgcctggnc tctcccgttc ctttaggctg ccgccgctgc ctgccgccat 120
ggcanagttg ggcctaaatg agcaccatca aaatgaagtt attaattata tgcgttttgc 180
tcgttcaaag agaggcttga gactcaaaac tgtagattcc tgcttccaag acctcaagga 240
gagcaggctg gtggaggaca ccttcaccat agatgaagtc tctgaagtcc tcaatggatt 300
acaagctgtg gttcatagtg aggtggaatc tgagctcatc aacactgcct ataccaatgt 360
gttacttctg cgacagctgt ttgcacaagc tgagaagtgg tatcttaagc tacagacaga 420
catctctgaa cttgcaaacc ggtaataaaa tttgaacttg caactgtgac aataatggcc 480
caagcataat cttaaaagtt agtgaacatc tttggctgca tattttcttg gggctagtgt 540
gtgaggaaat ttgggtaggg taacagcaaa gcattgagtc actgagtgat ctcttgggta 600
ccactaagca ccctttttaaa agttctcctg tttcnactgg tccnaggtat tacaaaggcc 660
aatcgagatt tatgaaattt gcttttcang ggttancatt aaattatttc ctacaagnat 720
ttttgg 726

<210> 4203
<211> 728
<212> DNA
<213> Homo sapiens

<400> 4203
aaagtgaagc cgccctgaag gaacgaattg agctcagaaa agtcaaagcc tctgtggaca 60
tgtttgatca gcttttgcaa gcaggaacca ctgtgtctct tgaaacaaca aatagtctct 120
tggatttatt gtgttactat ggtgaccagg agccctcaac tgattaccat tttcaacaaa 180
ctggacagtc agaagcattg gnagaggaaa atgatgagac atctaggagg aaagctggtc 240
atcagtttgg agttacatgg cgagcaaaaa acaacgctga gagaatcttt tctctaatgc 300
cagagaaaaa tgaacattcc tattgcacaa tgatccgagg aatggtgaag caccgagctt 360
atgagcaggc attaaacttg nacactgagt tactaaacaa cagactccat gctgatgtat 420
acacatttaa tgcattgatt gaagcaacag tatgtgcgat aaatgagaaa tttgaggaaa 480
aatggagtaa aatactggga gctgctaaag acacatgggt tgcacaagaa ngtgaaacca 540
aatcttcaag acttttaata ccattctgna atgtctccga agatttcang tgtttgcaag 600
atcgccangc ttacaagggt ttacgtgaaa tgaaaagcca ttgggnatag naacctcgct 660
tgcaacatat caccatatta attcncctgg tttggtcaan cctgggggaa ncccttttaa 720
aggaggtt 728

<210> 4204
<211> 873
<212> DNA

0050-0050-0050-0050-0050

0090/040360 - 2006-09-28

<213> Homo sapiens

<400> 4204
ataatccaaa attctttggc aatcttcagt ctgatgattc caaaaaaaat gactcaaaaa 60
taaaagttac tgtgttggaa atgtctgaat atttgaacaa atatgaaagc atgtcctcaa 120
ataaagactc aaaaaggcct aagacatgtg agcaaaatac tcaacttaat agcatagaga 180
attatctcaa taaagataat gaaggtttca aatgtaaaaa gtcagaccaa ttaaaaaatg 240
aacaagataa gcaagaagat ccaactaatg aaaaatccca aaactattct cagagaagaa 300
gtataaaaga ctgtttgtct acatgtgagc aaccaaaaaa tacagaggta ttgaggacta 360
cactgaaaca ttcaaatgtg tggcgaaaac ataattttca ttccttggat ggaacttcaa 420
ccagagcctt tcatcctcaa actgggattg cctcttcttt caagccctgt tcctcaaaga 480
aaaacacaat caggttgctt tgatctggat tcttcattac tacatctgaa aagcttctca 540
tctagaagtc ctccgaccat gtttaaacat tgaagatgac ccagatattc atgaaaaacc 600
atttttgagt tctagtgctc cacctataac aagtcttagt ctcctaggga aattttgagg 660
aatctgtcnt gaactaacgt ttccgatcct ctcgggcaat tgttgatggg ntttactgcc 720
naggtaaggg gcaagtggtg gctttctggc ccaanacaat ttgacctctt ccaagttnga 780
aagtgtcaat tccaacaagt gttttcaana ttgacaaagg ntccctctcc ctaaaaaggg 840
ggtggggant aactttaaaa ngtccccttg ggg 873

<210> 4205
<211> 577
<212> DNA
<213> Homo sapiens

<400> 4205
atctagcgcc cccgtcagga cgtgcgaaaa gcgacggcgc agcacggtgc ggcgcagctc 60
ctgctcgcct ttcccttcgc tgggcgagag gtgtctatgg ggcacccgct gccgccgccg 120
ctaccgccac cgccaccgcc accgccgccg agtgctgtct ctatggcgag gaggaggagg 180
aggagcgcga gctcagcgat acaagtacat aaataaagga taaaatattt tatgaaacaa 240
atcttcaatc aagtataaca ttttgatgct tggcatctag actcccttgt gccctcacta 300
tgccagcggc aactgtagat catagccaaa gaatttgtga agtttgggct tgcaacttgg 360
atgaagagat gaagaaaatt cgncaagtta tccgaaaata taattacgtt gctatggnca 420
ccgagtttcc aagtgtggnt gcaagaccca ttggngaatt caggagcaat gctggctatc 480
aataccaact atttgcgggg gtaaatgtag acttgttnaa ggataattta agctagggac 540
tgacatttna tgnaatgagn caaagggggn aaaccct 577

<210> 4206
<211> 505
<212> DNA
<213> Homo sapiens

<400> 4206
gactctcgct gcggcgcttc tggctccaga ccgccctccg gatcggaccc tgcgaatggt 60
tttggctata tcttcatgta ggacctactc cctatcccgt cggccgcggt gaatcccacc 120
tgcggtgctt taacttgtgt aacagagatg ctgcctctgg gagaggcggg gagggacggg 180
ccaactggag cgggcggcgg gagggtggag ggcggggcgc ggcttggggc ctgggttcct 240
ttgcccctg cccaccaggg aggggtggga gacgagagag ggtgaacttt cccctgcgag 300
attctggtga aaggggaaat atgcttcgag tcagtaaagc tgcgcaagtg cacagtcaag 360

gagagagtct tgggaaaacc aaggatagtt cccggagatg acttttggac tgcggnaacg 420
tttgtcaaag gaaagangct tcaatttaat gtgagatcat tggaanttga actattcaag 480
cggcgagcan agccccttc tcanc 505

<210> 4207
<211> 713
<212> DNA
<213> Homo sapiens

<400> 4207
tggcaagaca tttttggggt tccaatgttg ccaaagtatg gaacaaaatc tgtaagaagt 60
acattgcagc caatgccaaa tgggacacct gttaatttat taggaacttc caagaatagt 120
aatgtcaaaa gttacatcaa aaataatggc tctgattgtc catcatctca ttcatttaat 180
tggaggaaag caaataaata tcagctttgt gcacaaggtg tcgaagagcc taacaatact 240
caaaattcac atgataanat aattgatcct gaaaaacgtg ttcctactca aggaatgttt 300
gataaaaatg ggataaaggg aggtttgaaa agtgtttctt tattcacatc aaagctagca 360
aagccatcca ctatgtttgt gtcatctaca gaggagttaa accaaaagtc tttttctgga 420
ccatctaatt tgggtaaant caccaaaggc acattantag gaaggacttc atattcttcg 480
atcaatactc caaaatcaca gttgaatgga ttttatggaa accgntcagc tggtaacatg 540
caaaaggcct aaagcgaact cctgtgccac caaaagcagt tctggagaaa agcttaactc 600
aatccccaag acagtagtaa ntctattaat tatgaanaaa tgggtaaggg gcacaaaggt 660
tttcacattc cattcaggag ttcaatcctt ccaccttcaa nctagnganc agg 713

<210> 4208
<211> 552
<212> DNA
<213> Homo sapiens

<400> 4208
agtttggcca actaacaaat caagaatctg aggggcatgt tctatttccc aggaatgatt 60
gacactttgg tgctggggtt ttgtgggggc gggggtagt ttttgtttag cttttgtgga 120
gattgtgtgt gtgagaggag atttgatttt tttttcttct tttcctttgt gagctgatgg 180
ctgaagtgta acagtacatc ttcaggtaaa gagagggatt tctcaatcta ctttctgtta 240
tgtcagacta taagagaaac cctttcagct gctttctaga tgtacctaaa ttcagtcaga 300
cattttggat taagaaacct aaagtcctga tacattacat actccaagga aatatatcag 360
ggacagacaa ttggctgaaa cactggnact tcaatgtgac acatttttat agaacatttc 420
taccaggggg tactgacctt gatttctcct acaaggacca cactgccttt gngtttaatg 480
gaatgcaatt tgtgtacctt ctaancanat anctgcagtt cctcattttt anaaaacttt 540
gatatcatgc ca 552

<210> 4209
<211> 654
<212> DNA
<213> Homo sapiens

<400> 4209
catgagcctt ttaaaagacc cttcaaagcc acctacttta tagacagctc ctcttaactg 60
aagactctct gtgccatgcc ccggtgcttt gcattttctt gtcccagact ctgattccat 120

0502040.0702000

ttcacaggat ggggaaacaa ggcaccgaag tgggaccaca gctcaaatcc tgtgtgactc 180
cgggaaatcc tgagctctta accactctgc ttctctaccc tggagggagt agggctgtca 240
ggccacccaa gcctcagagg cagacctggg tctgacctgc ctcagctgct gcatgtgcca 300
ccgctgcctc tgtctggagg ctgcagggct gtgtgtggag tgctcttgca gggcatccac 360
ctacacattc cattttgcta caagcattct aactggcagc aagacatttt gaggcccacc 420
agaaaacgtt aggaaagccg ttacctccgc cattccttcc tggcagcctg cgcagtccag 480
agcagccaca gtcccatagc anggtttctt ccttaggctg tagcttccta ggacaaaggg 540
atggatttgt caacaaaagg gttgtcctgn gaaacaaatc cagattcang ttcacccanc 600
aacaancctg aaatgcttgc aagggcangg gacaattcgg ggggaaacgt ctgg 654

<210> 4210
<211> 822
<212> DNA
<213> Homo sapiens

<400> 4210
agcagtttac ggaagtgtaa cgttgaggcc cttcttgtgt atctggagaa aatagaggtt 60
ctgactcctc aggagcaaaa aacataacct gaagagggag gaagtggatt tggggttcac 120
catttcttgg ggcacacttg attgaaaact gagacttctg aagagaaggc cagaagatac 180
aaagacagac catcccagtt gaatgctgtc ttccaagaac agaagaaaat gatccaggcc 240
caggaatcca taacactgga ggatgtggct gtggacttca cttgggagga gtggcaactc 300
ctgggcgctg ctcagaagga cctgtaccgg gacgtgatgt tggagaacta cagcaacctg 360
gtggcagtgg ggtatcaagc cagcaaaccg gatgcactct tcaagttgga acaaggagaa 420
caaccgtgga caattgaaga tggaatccac agtggagcct gttcagacat atggaaagtt 480
gatcatgtgc tggagcgctt gcagagtgaa agcctggtga acagaaggaa accatgtcat 540
gaacatgatg catttgaaaa tattgttcaa tgcagcaaaa gtcagtttcc gttaaggcaa 600
aatcatgata tatttgactt acgtggaaaa agtttgaaat ccaatttaac tttagttaac 660
cagagcaaaa gggctatgaa ataaaagaac tccgttgaag tttactggga atggggactc 720
ctttccntca agctaaccat gaacgacttc atactgcaan ttaaattccc ctgcaagtca 780
aaaactcatc aagaccnaag tcccaaattt naacagnccc aa 822

<210> 4211
<211> 795
<212> DNA
<213> Homo sapiens

<400> 4211
tacttcatgt ttcatacaga taattcacat tcaaaattac attttctctt tgaactagat 60
ggtattcctt attcacttac attacaaatc taagaccatg tgataagcat gactggagag 120
gtttaatttt tataaacaaa aatagctata aagtacaaag ctgctgctgc atgcaacctt 180
attgcaatca gtatatcatt cctgtggcaa tttctgtcac cttatattgt gaataaaatt 240
tttctataga aattaaatga tttaaaaact cacctatatg aaacatttaa tgcttttcag 300
cctgctttct ggctgatttt gttatttgat gtgctaattt gggcaactta atttacattc 360
tggcagtcgg tgtagataac taaaagccca gttaagtatt ttataatttc aggctactga 420
ggccatgctt gggatgttgt ttgaaagaaa gaaaaaatac acttgacata tttcacattt 480
ctgtaccttc atctttactt ccaagtaaac ccgtggatga tttgatgagg gataaatgaa 540
cctatttctt ttacacacat accaaggaca tgcttgtggc taaagtgagt tgataatgtt 600
gtgcaaangg atagttgtca ccaactcatt tctttaaggt ccaaaatgaa ataaaaattt 660

0356450.00200

tgtatactgt taantctgta aacagatgca tgttcaaaaa gatctaagaa tggtcctgta 720
atcttaatcc aatataattt tagatatttt aantttttcc ccccctgggg ggaacacant 780
ttagnatnag nggta 795

<210> 4212
<211> 785
<212> DNA
<213> Homo sapiens

<400> 4212
gttacctaaa ggtaaggctt gttccttttg caaagggcca caagatactg tccctctgag 60
aaacttatga gggggaaatt tgcaaatcca cagagagctg ccctcagccg agcagaggca 120
gtggttgggg aggccgccac actcttcctg actcacctca aggtacctgg caggttgtat 180
ctaccagcaa gtgcctgcct gcagggccac ctctggatga gtggggaggc caggtttgcc 240
cctcaacctg tctagctttt tcacagggtg gatgttttac acctctggta ttcttccagt 300
ctgaactcaa tcccatcccc caaccaatta ggcaggttgt aaatgactgc tgggtgcttg 360
atgaaccaat ctgcctgagt taggaactct tcctaaccca cataaagtat ttgaccctac 420
ctgaccattt actgcatgac ccccatgctt agcctctctg gaccagtttc tggtcagtca 480
tacctcaccg gcgcaatacg aagattcaat gaatgaaaac gtaagtagtt tgtgcccttt 540
ctatgtggga tgactgaaag gagcttacca agccatgatg actttggnac atgactatan 600
tttgtttgan tcttatatca atcctgtgag acaaggcaag gtctcacact aatcaacacc 660
aatttacaga ttagaaaaac tgagactgag antggttaag ggactttgcc aagtctgtca 720
attcttgact gacanaactg gaaccaagtc tccaaaatcc caattcagta atccngnccc 780
cntta 785

<210> 4213
<211> 747
<212> DNA
<213> Homo sapiens

<400> 4213
gagaaattcc aaaggtggcc agcatggtgg ctcatgcctg taattccagt actttgaggc 60
cgaggtggga ggaatgcttg agcccccagt ctgggcaata tagtgagacc ccatctctgc 120
aaaaaaagaa gttccagagg cccagacttg ctactggtgc ccaggggggct gtggggcagc 180
ttgggcattg agccctcatg ctgtgggatc tgatgctgtc tctaggtaga tagtgttgga 240
attgaattgg aggacaccca actggtgtcc gctgcagaac tgattgcttg cctggtggtg 300
gggagaaatc cttacatatt ttttggagtc acagaagtct tctgtgttga ttgttgtagt 360
gtgaaagcag aggaaaaaca atggtttggg ttttttcaaa acaactttca tgacacatac 420
gagaatgtaa attccagaag ggccaaggcc atgtctgttt tacctactct ttttccccca 480
gcttctaagt acataggagg catttgatat ataccaaaca aacaagcaag tgactgacta 540
gttgatgtcc tgagaatctt cttgctgctg gaagggtcct cctgccctca agcatttctc 600
tctgggaagc tcttagacta ctctctcagt catgcccacc ttttcggtca tangtcanaa 660
gccaatgacc tggccctgaa gctggctcgn caatacacgg gacaacaang acgtgntggg 720
attagattat ccgtaatcgc cgggcaa 747

<210> 4214
<211> 761
<212> DNA

0050305-0070000

WO 2005/003310 PCT/US2004/020850

<213> Homo sapiens

<400> 4214
ataagacctc agatcagaca gaggtaagtg tattgtttct cactttgatt agggcttttt 60
gttactgttt gacagtgcag cgtaagtatg cacagatgaa gatggaacta agccgagtaa 120
gaagacatac aaaagcctct tctgaaggaa aagacagtgt agtcctgcaa aacattttga 180
ggtacattgt tttgtctcag ctattttgta gcagactcgt gcccccatta gtgtgcctct 240
ttggaaatta tcgcccacat ttgtaatata gtcgccattg aaaagttaat tatccttttt 300
ttagggattt tgatgtcatt tctttttttt ttttaataaa aaggttgaac tgttttttt 360
ttttcttttt ggtattaagt ccatcttgtg ttggtacatt ggcagagaca tatgctttaa 420
aaacttaaat atttcggagg cacatgttgg actactttgt tttaattaaa ctgctagtat 480
ttctttgtca aggatgtttc nagttttttg ctttattgcc ttgcattcna atgcagtttg 540
ttctgtaact cgaagagcca gtagcattgg attgatggga agtgtanggt ttaagaatta 600
ttgcaagctg actaccatac ctcacacaag cgttggtgtt gtgagcgggc catgaaaagc 660
caaattaaaa atcaanggat tcaagtcaaa cctaagcaag gtnctcaagg caagtactcc 720
tttctccnac ccanatccag gnttgaatgc caattgcccg g 761

<210> 4215
<211> 839
<212> DNA
<213> Homo sapiens

<400> 4215
tttcagattg tctgctcaga gttcatctca aagcctggca aggattggag aggtcaataa 60
gagtcagcgc ctttaaaaag aaatctactc actcttctgt gtgcataagg ccgagcagag 120
gttcttcgtc tcaagaggaa ctgacttctg ttgagcactc aacacgccac agagaccagc 180
catcttgcaa cctcacctca cagcatggag agaggagacc aacctaagag aaccaggaat 240
gaaaacattt tcaactgctt atacaaaaac cctgaggcaa cttttaagct gatttgcttt 300
ccctggatgg gaggtggctc cactcatttt gccaaatggg gccaagatac tcatgatttg 360
ctggaagtgc actccttaag gcttcctgga agagaaagca gagttgaaga acctcttgaa 420
aatgacatct cccagttagt tgatgaagtt gtttgtgctc tgcagccaag tcatccagga 480
taaaccattt gcatttttg gncacagtat gggatcctac attgctttta ggactgcact 540
aggtctaaaa gaaancaatc aaccagaacc attgcattta tttttgtcaa ngtgcaactc 600
ctgtacattc aaaggcctgg natcgcattc caaagatgat gaattgtcag aaagaacaaa 660
tangtcatta ccttatggga tttggggggn acccccaagc attttgctga agccaaaggg 720
gaattttgtg aaacaaatgt agnccccatc ataaggggca agatttggaa caattgntaa 780
naaagttgca cctctaacgt tacaaaccta ngggggttc cttcccnggg accttgaca 839

<210> 4216
<211> 801
<212> DNA
<213> Homo sapiens

<400> 4216
ttatttctca cagttctgga tgctgggaag tccaagttca aggcagattc aatgtctggt 60
gagggcccac ttcctagttc ttagacagct gtcttcctgc agtgtcctca cgtggtagaa 120
gaggaaggca gctctccggg gtcccttta taagatcact aagccggttc atgagaggtc 180
tgctctcatg acctaatcac ctcccaaagg ccccacctcc caataccatc acattagggg 240

ttaggattta acatgaattt tggggacata taaacattaa gtctgtagta gcagcagctg 300
actaacgagg gagataggga gattctgaca aacttctact cttgattgtg atcctaattc 360
aaggaatatc aagtcccagc ccctgcaacc caggctgctg cttaatttc atgtcagtat 420
catcaaaatc caatgttctg cttaaactca agatggaaag tccagtccaa ggtacactgt 480
tcatcttttt cttcacattt tgcacatcct tcaaggggat ctttaacctc tttaaccctt 540
tgtactgcac ctcaaataat gtgcttttta gctcaataca ctgaaaccat atggtnacac 600
aaattcacat ataantgggg gttaagnccc aaactcctat acaagcttta ngccctggcc 660
tttcaattag ccatgttata atataactcc atgttccaat gcaantggga tttttggncc 720
ccggtaatag caattaaggg tanagggtta ccccaatcaa ccttaacaac ctcaaanact 780
accctgtggg gaagnccctt a 801

<210> 4217
<211> 860
<212> DNA
<213> Homo sapiens

<400> 4217
gggatcaggc tcgtgaacat attcggcaaa acctagaaag tttcataaga caggactttc 60
caggaactaa attgagcctg tttggctcct ccaaaaatgg atttgggttc aaacagagtg 120
accttgacgt ctgtatgaca attaatgggc ttgaaactgc tgagggattg gactgtgtca 180
gaactattga agaattagca agagtcctca gaaaacattc aggcctgaga aacatcttac 240
ctattacaac agcaaaggtg ccaattgtga agttcttcca tttgagaagt ggtctggaag 300
tagatatcag tttgtataac acattggccc ttcataacac aaggctttta tctgcttatt 360
ccgccattga tcccagagtg aagtatttgt gctataccat gaaagtattt acaaagatat 420
acaaaggtga aaagaaacct gaaatatttg ttgatggctg gaatatttat ttttttgatc 480
aaatagatga actgcctacc tattggtcag aatgtggaaa aaatacagaa tctgttgggc 540
agttatggtt gggccttctt cgtttctaca cagaggaatt tgattttaaa gaacatgtta 600
ttagcatcag gagaaaaagt ctgcttacaa cttttaagaa acagtggacc tcaanataca 660
ttgttantga agatcctttg atttgaatca aaatcctgga gctggattat caaggaaaat 720
gacaaatttt ataatgaagg cttttatcaa atgggtagaa gagtatttgg gaattcccng 780
tcaaagggat ttccaaangg ncctaacccc cccaaaaaat tgggatacct tttttggatc 840
caaaatgggg ttaaccggaa 860

<210> 4218
<211> 656
<212> DNA
<213> Homo sapiens

<400> 4218
aatgaagcat cggaatggtg cgctcacgtc gccttctcct gaaatacctc cgagtctgca 60
agtgagaaaa cgcgctgatc ctgttgcaaa ctgtgaatat tctgatgatg ccagtacagt 120
ttgatttatt aaatgtgggt cctcaagctt ctcagtgtca tctcttttct gccagagtgt 180
gctactgtga acagggccag gcccaggaat cgtgtccacc atatggctgg ttttcagcat 240
ccgtctttct gtcagctttt gttttatcan agataagatg tttttgtatt agcatttaat 300
gttgtcaatc aaaattatgg gaagagctag aaactgatgg ggtttttaat cangtcccca 360
tcttggtcaa ggttangcag ctggagagga aggtataatt gagcaaaacg tgtccagagg 420
acccatggct gcaccccatc angtcagggc ccaggaggac tgcctggcat gggtgtgctt 480
ggcattgtgc ccacagcact gctgtccgtg gtacagactg gcagttggna gggggcttaa 540

0550250.00200

gccggctgag aagtttgggc ttctgggttg aaatccacgg ncccgggttg aagccttgtg 600
tgctgaagtg ncaaaagctg ggagttttcc aaccttggna aatctgnang aattaa 656

<210> 4219
<211> 776
<212> DNA
<213> Homo sapiens

<400> 4219
gttgcgcctg cgcagtgcat caccgcaggc gggcctcgcg ggtccgggag cgcggcggag 60
acgatgcctg agatcagagt cacgcccttg ggggccggcc aggacgtggg ccgaagctgc 120
atcctggtct ccattgcggg caagaatgtc atgctggact gtggaatgca catgggcttc 180
aatgacgacg tgagtccctt gggcaggagg cccagaggct gggagagccg gccatccaca 240
gctggaccct gggcctcaga gccgggacag tggggtggtg ggcagcagtg gttgtgcttg 300
gatggctgca ccctgtgggg agcagggatg ggtgggcctg gccgaggtga gcccctgcat 360
ggtggggtcc ccctgtgctg gcgctgagcc ccagccccgg ggtcctgtag gctggactcc 420
gtgagaccct gggctcagct tccagctcac atctgtcagt gaggttgggg gtaacctcgg 480
cccctccgga tgctgtgagc agccaggggt cctggtgcca cctgcgggat gggagtgccc 540
ancctgagtc tgcacataga acccccctte ctgggggccc ctccctgggg catgggtggc 600
cccanatgct gcctggagaa cactgtgcaa cctgaaaccc cacatccttc ctagcgacgc 660
ttccctgact tctcctacat cacccagaac ggncgcctaa caagacttcc ttggactgtt 720
tgattattna ncaactttca acctggacca actgcggggg caatncccta ctttan 776

<210> 4220
<211> 829
<212> DNA
<213> Homo sapiens

<400> 4220
atgcgtgcag caaagaatgg aggagtcgga acccgaacgg aagcgggctc gcaccgacga 60
ggtgcctgcc ggaggaagcc gctccgaggc ggaagatgag gacgacgagg actacgtgcc 120
ctatgtgccg ttacggcagc gccggcagct actgctccag aagctgctgc agcgaagacg 180
caagggagct gcggaggaag agcaggagga cagcggtagt gaaccccggg gagatgagga 240
cgacatcccg ctaggccctc agtccaacgt cagcctcctg gatcagcacc agcaccttaa 300
agagaaggct gaagcgcgca aagagtctgc caaggagaag cagctgaagg aagaagagaa 360
gatcctggag agtgttgccg agggccgagc attgatgtca gtgaaggaga tggctaaggg 420
cattacgtat gatgacccca tcaaaaccag ctggactcca ccccgttatg ttctgagcat 480
gtctgaagag cgacatgagc gcgtgcggga gaaataccac atcctggtgg agggagacgg 540
tatcccacca cccatcaaga gcttcaagga aatgaagttt cctgcagcca tccctgaaaa 600
gcctgaaaga agaaaaggca ttcaccaacc aacacccant cagattcaag ggcatcccca 660
acattctatc tggccgtnga catgataggc atcgcttttc acggggntca aggcaaagac 720
actgggtggt ttcaagtttg cccgtcatca atgttctgcc tgggaacaag anaaanaggt 780
ttacccttt caaaaacgcc aanggggggcc cttntggggc tcaacnatc 829

<210> 4221
<211> 605
<212> DNA
<213> Homo sapiens

US 2003/0224385 A1 Dec. 4, 2003

<400> 4221
acataatgtt ataaataaga aaactgaggc tcaaaaagtt ttacacttgt ccaaaggtat 60
ccagcaggct gcagacctgg actttgaatc caagtttttc tcattcaaaa tatgtttttt 120
ctaatgcaat atgaggcatg aaggcaatgg tatccttttg agaggtgtga tggtaagttt 180
tatgtcagct tggctaggct gtgatgtcta attgcttaac caaacactgg tctaaatgtt 240
tctatgaaag tatctgtgga tatgattaac actcacaatc agctgagcac agtgggctca 300
tacctgtaat cccagcattt tgagaggccg aggcaggaag gtcacttgaa ccaaagagtt 360
caaggccagc ccagggaaca tggtgaacca ctgtctcaac aaaaataaaa ataaaaatta 420
gccaggcatg gtgtcatata cctataatcc cagctacttg ggaggctgaa gtancaggat 480
tgcttgagcc caggaggtca aggctgctgt gagtaatgac catcacacca ctgcattcca 540
cttgggatga aaaaccaaaa cattgtcacc aaaannacan aaatgtataa atanatanga 600
taaat 605

<210> 4222
<211> 745
<212> DNA
<213> Homo sapiens

<400> 4222
gatgccactc caagctggac gggctcgtgg agtctgcatt cgagggattc cctagtccgt 60
ccagtcatca cgggctgctg cccgcctgcc cgtgccgtcc aaggcacctg gccttgggcc 120
ggtatcaggt agccgcgcct gggtcacacc tgccctccac gttcatctct ccacctacag 180
atcataggga ccgtttcctc attttattgt catgcaaatg ttgtacataa atacatggct 240
ataaacaggc agctcagagt aaccaggagg ctcttttctc agtgacagat cacaccctct 300
tagagtagta atttttgaat aattgttgca aaatatgaaa acctttagca aaactccagc 360
accactgaag tcatcaggaa gtgtttggga gaatacgtgt ctgtgctgga tgctgttgaa 420
gcaggtcagg ccgttggggt cccttcgttc ttagggcttc tccaccaagc ttctaaatgg 480
ggaatgccaa ctttgtgcca ggcacacact acctgctgag acactgtgga tgaacaaggc 540
gttgacccag ggctcactct gtagaggaag aagaccagag aatggntacc accaagacag 600
tgataagtgc tgcaacaagg ttcaanagct gcacaagaag tccccaaagg tagtggaanc 660
catcaatccg ggggcttaag gaaagaagct tttaaanggg aagattaaag ccancaaggt 720
gacnccaaaa aactggggta attcn 745

<210> 4223
<211> 849
<212> DNA
<213> Homo sapiens

<400> 4223
gagaaaaaaa aaagaaaaaa aaccatatgt gtattagggt gactgagtgg tgacttcatt 60
tataataata cagagaatag ctataagctc attgacagta aaaacaacaa accaggattc 120
tactgtttga aaagaagttt cgttttaatt ttggaattta gaatgtgtat ttgcaaagtc 180
accaattttc atctaaaagg ttatattcta gttgtgtcac caaaccatca aaaaacctta 240
aaaaagaagt aacttgcttt gtaggtttgt attgttgatc taaacctgat acatgcttca 300
tttaatcagg aataatcctt ttttttctgc tggacatgta taaatttcac tggattgtat 360
aaatttttat ctattgcctt aaacatttac atgattctca atatgtttta gctgtacagt 420
tttggtgttc atcttagagg attcttcagc agaagtgata tttctttact gttttgtgag 480

0956340-090200

gtaatactga ttttgaaaat atatataagc taaaaacagt atttcgttga tatcagtagt 540
cattgggtta actataaagt caagtgccag caaagaactt taaaactgta aagctgtgta 600
tagaactgtt ttgtgtagca tggaaataat ctgtcagctt tttaaagtca ctaaatgttc 660
ctggattatc aacttgaagg naatttttgg aattacaaag ttgacaagtt gcctgggtgt 720
antgggctca tgccctgtaa ncccaagcaa ccccgggggct taaggtgggg aaggattgct 780
tcaagcccaa ggagttttgn gaacaanccc ttggggcaac aatanncaaa aacccccaac 840
ccctacnaa 849

<210> 4224
<211> 774
<212> DNA
<213> Homo sapiens

<400> 4224
ttagaacagc atctgaaaca aattcacgag gaagcactga gcaaattcca gaaaattgaa 60
ccaagcaccg tggtgccagc tcagacaccc tgggacaagc ctagggaatt ccagataaca 120
tgtggcccgg attcatttgc tacagatccc tctaaacaaa caaccgtcag cgttagcttc 180
ctcttaccgg acatcaccga cacatttgaa gccttcacat taagtcttct gtcttcactc 240
ttgacttctg ggcccaattc tccctttttac aaagccttga ttgaatctgg ccttggcaca 300
gacttttctc ctgatgttgg atataatggc tacacgaggg aggcctactt tagtgtcggc 360
ctccaaggga ttgtggagaa agacattgag accgtcagaa gcctcataga cagaacgatt 420
gatgaagtag ttgagaaagg atttgaagat gatcgaattg aggctttact tcataaaatt 480
gaaatacaga tgaaacatca agtctaccaa gctttgggct gatgctgaca tcatacatag 540
cttcttgctg gaaccatgat ggggaccctg tggagctctt gaagttggga aatcagttag 600
ctaaattcag acagtgcctg caggaaaatc caaaaatttt gcaagaaaaa agtaaaacag 660
tattttaagg aataaccagc ataagctgac tttatcgatg anggcaaatg acaagtnnca 720
cgaggaagca ngcacaaggt ggaagccacg aagctcaagc aanaagggcc aagg 774

<210> 4225
<211> 721
<212> DNA
<213> Homo sapiens

<400> 4225
atttttagta gagatgaggg ttcaccatgt tggtcaggct ggtctcgagc tcctgacctc 60
gtgatcccct cacctcggcc ttccaaagcg ctgggattac aggcgtgagc taccgcatac 120
ggccgatctc aagtaatttt ttttttttt tttaagagac ggagtctcgc tgtgtcgccc 180
aggctggagt gcggtggcgc gatcttggct cactgcaagc tccgcctccc gggttcacgc 240
cattctcctg cctcagcttc ctgagtagcc cacgctgggc taatttttgt atttttagta 300
gagatggggt ttcaccgtgt tagccaggat ggtctcgatc tcctgacctg gtgatctgcc 360
cgcctcggcc tcccaaagtg ctgggattta ctggtgtgag ccattgcgcc tggccacctt 420
tccccagctt tcttaagtca ctgcgcanag gtgagaggaa aaaggaaaag tgatacccaa 480
aataaaaggg cataagtata ctcatatgat tattgtatcg caggtggcat tgcctttang 540
ttcttgttta atttttaaa actgagataa cttgttaatc ataatatagt acagcttgta 600
cttgtgacct gaatttactt agggtgctga acngtaatta acctganggg ggccaatgtc 660
atccaatcan taatgggttg gnaagagaga acaagnccta agctccggaa atgtggacca 720
a 721

0050050.000300

<210> 4226
<211> 695
<212> DNA
<213> Homo sapiens

<400> 4226
gtaagtcccc ccgcctcgca tgatggctgc ggtgccgccg ggcctggagc cgtggaaccg 60
tgtgagaatc cctaaggcgg ggaaccgcag cgcagtgaca gtgcagaacc ccggcgcggc 120
ccttgacctt tgcattgcag ctgtaattaa agaatgccat ctcgtcatac tgtcgctgaa 180
gagccaaacc ttagatgcag aaacagatgt gttatgtgca gtcctttaca gcaatcacaa 240
cagaatgggc cgccacaaac cccatttggc cctcaaacag gttgagcaat gtttaaagcg 300
tttgaaaaac atgaatttgg agggctcaat tcaagacctg tttgagttgt tttcttccaa 360
tgaaaatcag cccttaacta ccaaagtatg tgttgtcccc agtcagccag tggtggagtt 420
ggtgttgatg aaggttttgg gagcctgcaa gttgttgctc cgcttgttgg actgctgctg 480
caaaactttt cttttgactg tgaaacatct angtttgcaa gagttcatta ttttaaacct 540
tgtgatggtt gggctggtga gcaagttatg ggttctctaa aaaggtgtct taaaaagggt 600
gattttgtta natgagcctt tgtttggatt gcttcaagan gtcnctagga ttcaaccaaa 660
tgncttactt caaagaattt acctttncct tctga 695

<210> 4227
<211> 710
<212> DNA
<213> Homo sapiens

<400> 4227
attgagaaag agttcaagaa tgactacaaa aaactgtcaa tgcagtgcaa agactttgtt 60
gttggactcc ttgatctgtg cagaaacact gaagaagtcg aggccattct gaatggggat 120
gttgaaacgc tccagagtgg tgatcacggt cgcccaaatc tcagccgttt aaaacttgcc 180
attaaatatg aagtaaaaaa atttgtagct catccaaact gccaacagca acttctctcc 240
atttggtatg agctttctgg tttacgacag cagacaatgg cggtcaagtt ccttgtggtc 300
cttgctgttg ccattggact gcccttcctg gctctcattt actggtttgc tccatgcagc 360
aagatgggga agataatgcg tggaccattc atgaagtttg tagcacacgc agcctccttc 420
accatttttc tgggactgct agtcatgaat gcagctgaca gatttgaagg cacaaaactc 480
cttcctaatg aaaccagtac agataatgca aaacagctgt tcaggatgaa aacatcctgc 540
ttctcaagga tggagatgct cattatatcc tgggtaataa gcatgatatg ggctgaatgt 600
aaagaaatct ggactcaagg ccccaangaa tatttgtttg agttgtggna catgcttgat 660
tttggnatgt tagcaaattt tcgcancatc aattcaatgc naagattcaa 710

<210> 4228
<211> 828
<212> DNA
<213> Homo sapiens

<400> 4228
gaaaaacaag ctcagcgatg gcgggctcca gaaggcagcg gtctaggcga ggacgcccgg 60
ctggaccagg agaccgccca gtggctgcgc tgggacaaga attccttaac tttggaggca 120
gtgaaacgac taatagcaga aggtaataaa gaagaactac gaaaatgttt tggggcccga 180
atggagtttg ggacagctgg cctccgagct gctatgggac ctggaatttc tcgtatgaat 240

0050450.0702000

gacttgacca tcatccagac tacacaggga ttttgcagat acctggaaaa acaattcagt 300
gacttaaagc agaaaggcat cgtgatcagt tttgacgccc gagctcatcc atccagtggg 360
ggtagcagca gaaggtttgc ccgacttgct gcaaccacat ttatcagtca ggggattcct 420
gtgtacctct tttctgatat aacgccaacc ccctttgtgc ccttcacagt atcacatttg 480
aaactttgtg ctggaatcat ggtaactgca tctcacaatc caaagcagga taatggntat 540
aaggtctatt gggataatgg agctcagatc atttctcctc acgataaagg gatttctcaa 600
gctattgaag aaaatctana accgtggnct caagcttggg acgattcctt aattgatagc 660
agtccaattc tccacaatcc gagtgcttcc aatcaataaa tggcctactt tgaagacctt 720
aaaaaagttc cggtttccac aagggagcgt tnaacanggg agacaaaang gggaaatttt 780
tgttgcaaaa cctcctgtcc aaaggggggt ggggtccaaa anctttgn 828

<210> 4229
<211> 656
<212> DNA
<213> Homo sapiens

<400> 4229
cttttaaagg catcacctaa ttaggtcagg cccactcaac agttgattaa ccttaattat 60
atttgcaaaa tccctttgcc atttaagatg acacaataat tggaatgata tcccatcata 120
ttcacaggtc ctacctatac tcaaaaggtg gtaggttata cagggtggat atagtgttga 180
aagaaggaat gaatgaaatg aatgaattct gatagctgga agcacagcaa ctagcttttt 240
ttgtagcatg agtgagagaa ggtattgagt tccttattga agaatgcagt tgcaacagtt 300
tatcactagt gagctgcttc ttggtaacta taagacataa gcagacaaga aacagcaaga 360
aaggaaggaa ggagaaaaga gaacgagaag gaaatcatta ttttggaccg atttccggtg 420
gtggtttcaa gaagttctcc ccaccctcca gactgctgtc atttacaatt gctagagaac 480
aagagctggg agcctctcct tggttctgct cctgtggcat agccatgggg gatgcagaag 540
ggcantggtg cccactaaag ggaatccccg tcagctttgg ntttaagttt ccagagattg 600
agcctctgnc ttangctgag agaaatactt antgtgagtc cttaattgct cccnta 656

<210> 4230
<211> 377
<212> DNA
<213> Homo sapiens

<400> 4230
aattattatg tggaatctct taagtgagca actaagaaaa agccttatag aaagactaca 60
ctggatttat aagtgtgttt atgtttctct aagaatggga gcttctgtta acttaggggt 120
ggagttgttc tgaggaaacc agtagattgg atgactgact ggagaatcca gaataacaaa 180
tccattatcc agacatgttt acttttatat taagaagttt gttgattagg tcttaatttt 240
caaatgcaaa caccaagctt tgaaaatatt gcatatacaa tgtattggnc accaatttaa 300
taatatttaa tttgaagtta attactgtta atccttctan aaaagttttt tttctttaaa 360
taaaagtaca tanatat 377

<210> 4231
<211> 801
<212> DNA
<213> Homo sapiens

0356045-020202

0050203450

<400> 4231
gtgcgcctgc gcgcggcgcc gaggggacgg ggtccgactc agaaatggcg gcctccatgt 60
tctacggcag gctagtggcc gtggccaccc ttcggaacca ccggcctcgg acggcccagc 120
gggctgctgc tcaggttctg ggaagttctg gattgtttaa tgaccatgga ctccaagtac 180
agcagcaaca gcaaaggaat ctctcactac atgaatacat gagtatggaa ttattgcaag 240
aagctggtgt ctccgttccc aaaggatatg tggcaaagtc accagatgaa gcttatgcaa 300
ttgccaaaaa attaggttca aaagatgtcg tgataaaggc acaggtttta gctggtggta 360
gaggaaaagg aacatttgaa agtggcctca aaggaggagt gaagatagtt ttctctccag 420
aagaagcaaa agctgtttct tcacaaatga ttgggaaaaa attgtttacc aagcaaacgg 480
gagaaaaggg cagaatatgc aatcaagtat tggtctgtga gcgaaaatat cccaagagag 540
aatactactt tgcaataaca atgggaaagg tcatttcaag gtcctgtatt aatangaagt 600
tcacatgggg gtgtcaacat tgaagatgtt gctgctgaaa actcctgaag cagttaattn 660
aaggaaccta attgatattt gaaagaaagg catccaaaaa gggaacaaag ctcctccanc 720
cttgcacaag aagattggga atttccaacc ctaataattg tgggaatcaa caannaagna 780
aaacaatggg ncaaagcttt t 801

<210> 4232
<211> 675
<212> DNA
<213> Homo sapiens

<400> 4232
ggattatttt ttccccttg gaataacttt tgtgaattat tataatgcag tttccctagt 60
aatatagtac ttttcatttg aaccacatct tgactgatct gtattgtaat atatgtcagc 120
aggtaaggtt gcctgctgga tcattttgag gacagaggca tgagggagca catctcttgt 180
gaagttgcag ccagatttgt aaccaaccct gaaattcatc agcttaattc atttatcagc 240
ttgattcatt catcattcat tgcttatatc caaagcaaag acggtaagaa aatgaattca 300
tcctgaaata taaagaaaag ggtctgaagg aacaaacacg attctcttat attttggggc 360
tcatgagcct tgatagacag tttcctctcg tcttcatttc caccctcat cctcagtagt 420
ctcctctccc ccacgcccca ncccaacttc ccccccaagc ttgagttaaa gacagaatag 480
ctaaagacag tgctgccttt acaatgcagt aattgccatc tttggggccg aaagacaagc 540
tctgtgttgt gcttttcttg accaaccctt atcctgggct ctggagcttg tgtttccctg 600
ctggcgactg taccttgggt aattggtgct acctcccctg tttgctcant angaccctgg 660
tccnggnngg caatt 675

<210> 4233
<211> 594
<212> DNA
<213> Homo sapiens

<400> 4233
aacagtctgg gagcaaagag tttactcgcc actgggtant gggccatgga caccccagtc 60
tccaccagaa gttcgggatt gcaaaatggg actctggcag caaatttcaa actgtatgcc 120
agacctggcc ctttgcagtg atataaaatt tttcttgagg tgtctggaaa gatggctgaa 180
taggaacagc tctgctctgc agctcccagc gagatcaacg cagaaggaga taatttctgc 240
atttccaact aaagtaccca gctcatctca ttgggactgg ttagacagtg ggtgcagccc 300
acagaaggca agcagaagca gggtggggtg tcgcctcacc cgggaagcgc aaggggtcag 360
ggaactccct cccctagcca agggaagctg tgagggactg tgccgtgagg aacggggcat 420

tccggcacag atactatgct ttccccacgg tctttgcaac ccacagacca aggagattcc 480
cttgggtgcc tgcaccacca agggccctgg gtttcaagca aaaanctggg cagccatttg 540
ggcaaacact ganctagcag cagggagttt ttttcatacc ctaagtancc ccta 594

<210> 4234
<211> 617
<212> DNA
<213> Homo sapiens

<400> 4234
atgataaaga tgcagtacct ttctcttaaa aaaaaatgct atggaaagct gtgagaattg 60
aagagacaaa ttggctgtgt cagtgtgggg ttatgtcatg atttctagaa gccctgaagt 120
tgctcttttg agcagctttg catgacacgc tctggtaaaa ggtgtgcatc tttaaattat 180
ttcatggata ctttgaaaaa tattgtatca cttcaaatac agcaataagt ttatatgttc 240
tcaagatttc atttgttttt aagaatttta agttcgtgga ttaatatcac tacttgaata 300
ctgacagttg ttgattagac accgaaaggt tactgattgt tgaatgtatc tgtgttagag 360
ctgtgcactg gcacgcttgc atcangggct ggggccacac ggccgccaca cagattcccc 420
cgtgatgcct ggagctgctt ccanagccgg gtgtctccaa gaggcacctg taggacttcc 480
catttaagaa atctcttgag tgggtttgta ngttaccttc tccaaggntt atttaggaca 540
nagatattgc tgggaaggtc atgggtcaaa ttccctcaca acccaactcg tctgcgggtg 600
caancccant ccaaggn 617

<210> 4235
<211> 613
<212> DNA
<213> Homo sapiens

<400> 4235
aaaagcaaaa tctgagcagg cttccgaggt ttcctatgca ggagtgattg gggcagatgt 60
gagagggcac ggcctcatct gtgaggggcg gccagtgacg tcacggctgg ctgtcatctg 120
tggaacgtct tcttgtcaca tggggatcag caaagacccg atttttgtac caggcgtctg 180
ggggccttat ttctcagcca tggtacctgg gttctggctg aatgaaggtg gtcagagcgt 240
tactggaaaa ttgatagacc acatggtaca aggccatgct gcttttccag aactacaagt 300
aaaggccaca gccagatgcc agagtatata tgcatatttg aacagtcacc tggatctgat 360
taagaaggct cagcctgtgg gtttccttac tgttgattta catgtttggc cagatttcca 420
tggcaaccgg tctcccttag cagatctgac actaaagggc atggtcaccg gattgaaact 480
gtctcaggac cttgatgatc ttgccattct ctacctggcc acagttcaag ccattgcttt 540
ggggactcgc ttcantatag aagccatgga ngcancaagg gcactcaatc agtactcntt 600
tcctangtgg agg 613

<210> 4236
<211> 892
<212> DNA
<213> Homo sapiens

<400> 4236
aaataggtga cttaaaagaa ggcattccat catagatggc aaaaaaccaa aaatctgttg 60
gaccagtaac tcttcttttt ctttgacttg cttagtaggt taaaaagtga taatgaattc 120

0501505.0420003

aagtttttgt tattgttgtt caaaacatca tttttaagac ccgaggctct agtgctgcat 180
ttcctacctg ttaataaagg aatatctgga acataaatat ttgtgcagtg agtgggcatt 240
tctctagaag tgtttcaaca gatacagtac agactcctag aagtagagat gctacagcag 300
tgggtttgcg tatttaacat cttggttgag attgtgaaac tttctccgat aactttctac 360
ccatttataa ctttagtaat atacaatgtg actttttta gtatccttgc tagtattggg 420
cattgtcatt gttttaatct ttgccaatct gatagttata agtgatactc atttaaattt 480
aaatcacaat atttcttttt taattgaaga aaaaatcagc attaggtgag gtttaccaag 540
cattggtggt gattactggg tattggtggc tcagacgtag gatgatggac tgttggcatg 600
atattgcctt gattgcctaa tctgtaactc ctaataaata ctggaaaatt agcttgcctg 660
aaacattggn aagaactttt taaaaattac ctttaatttc ctacttgggc cttgactggc 720
atcctggggc ccaagccagt tncatatgca tatnatatga atgacaaatg gaaaatgggt 780
aagacagcat gtancctggt cccctaaaaa agggtactcc tangggcaaa agaccttgnt 840
tttggaaaaa ttttggaatt acnaaatttt tagncctaaa taacaacaaa aa 892

<210> 4237
<211> 712
<212> DNA
<213> Homo sapiens

<400> 4237
atattatgaa atacccggcc caataaacaa gacaacagag cgacatctag ctatcaactg 60
tgttcatgat agagttgttt gctggtggcc actggtcaac gatgatgctt ggccttgggc 120
ccccatttct tctgagaagg acagagccaa tctactcctc ctgggttatg ctcaaggaag 180
actagaggtt ctgagttctg tccgcacaga atgggaccca ctggatgttc gctttggcac 240
caaacagcct tatcaggtgt tcacagtgga gcactccgta agtgtagaca aagagcccat 300
ggctgacagc tgcatctatg aatgcattcg gaataaaatc cagtgtgtgt cagtcaccag 360
aataccacta aagtcaaagg ccatcagctg ctgcaggaat gttactgaag acaaactgat 420
tctgggctgt gaagattctt cgctaattct ttatgaaact caccgtagag tgactctctt 480
agcacagact gaacttttgc cttcantaat aagctgccac ccaagtggtg ccattctgct 540
agttggcaac aaccaaaggg gagttgcaaa nttttgntat ggctctatcc cctattaaca 600
tccaactgtt ggctgaaaga ccgcttaccc angggaggaa tcttgcaaat tcaattaaan 660
nttattttgg ntccctccaa gcaagttcct tgttcaaaat gcaaatgggg gn 712

<210> 4238
<211> 816
<212> DNA
<213> Homo sapiens

<400> 4238
agagcgaact tgcggctcgt ccgagtacat gtgagcggta atcgcccctg cagctggtta 60
tcctgacatt atgcactccg aagcagaaga atccaaggaa gtggccacag atgtctttaa 120
ttccaaaaac ctggccgttc aggcacaaaa gaagatcttg ggtaaaatgg tgtccaaatc 180
catcgccacc accttaatag acgacacaag tagtgaggtg ctggatgagc tctacagagt 240
gaccagggag tacacccaaa acaagaagga ggcagagaag atcatcaaga acctcatcaa 300
gacagtcatc aagctggcca ttctttatag gaataatcag tttaatcaag atgagctagc 360
attgatggag aaatttaaga agaaagttca tcagcttgct atgaccgtgg tcagtttcca 420
tcaggtggat tataccttg accggaatgt gttatccagg ctgttaaatg aatgcagaga 480
gatgctgcac caaatcattc agcgccacct cactgccaag tcacatggac gggttaataa 540

0052045.0002

tgtgtttgat catttttcag attgtgaatt tttggctgcc ttgtataatc cttttgggaa 600
ttttaaaccc cacttacaaa aactaagtga tggtatcaac aaaattgttt ggatgaagag 660
aacatattag cacatgagtt aagantggtg accngatcat ggatttaatt tgaagatggn 720
gcactgctgg attttatgaa gggaaaaaag gaagaatttt cctaaagnat tacacaatat 780
ttcaanaaan ggcttttacc caanttcaat ttgtca 816

<210> 4239
<211> 677
<212> DNA
<213> Homo sapiens

<400> 4239
ttattatatg caaataatat ttcccgcca tcgttatgga aaattctata ttttgtcaac 60
gttcattttc ttctcaaaag ccttttgtta ttatttccaa atgaatatta tgtgtgtctc 120
agacaaccac agaaagtttt gtttttgtca cattctactg ctactgtgtc aatggcagca 180
ttttgatata ggtggaggga tgctcacatc aaccccataa tttgtgtcag cttctcctga 240
agttatcaga agcatacaat ttaagtaaaa acagtatctt cgctatccaa atgatgttcc 300
aaggtaaatc tcctcagatc ccttccagta catgtatgct ccaaggcctg ctctatgtag 360
aacttttgga gccatcaacg tactgcttga ggttgctttg aacaaaaggt atttgacata 420
agctctataa gatcagggac tctttttan tttattcatt gttctttatc ttctagagca 480
ataatttgca aaatgactat ttattgaata aactaggacg gangtgaaaa ggaaagaaca 540
agctcatcct tccaagggga agagagcagt atcccaaatc caaattgaag aaaatanaca 600
tatatctatt caccangaag agatanaagg gaagacaggg cagaatttct gtgggtctta 660
caaactcngc acntcta 677

<210> 4240
<211> 561
<212> DNA
<213> Homo sapiens

<400> 4240
agtcagggag gcgaactgct gagcactggc cgcggacgct ccgttgcagt ctcgcccagg 60
ggccggtacc tgcgctcgcg ccgccgggtt gaaaggatga agccgcagct ggagcagcca 120
ccctatgatt ggctgtggcg cttgtgaacc caaagtaaag atggcgggcg ggcaggcagc 180
cgccgcactg cccacttgga agatggcggc gcgccgcagc ctcagcgctc gcggccgggg 240
gatcctgcag gcggctgcgg ggcggctgct gccgctgctc ctgctgagct gctgctgcgg 300
tgcgggcggc tgcgcagcgg tgggcgagaa tgaggagacg gtgatcatcg ggctgcgact 360
ggaggacacg aacgacgtgt cgttcatgga agggggggcg ctgcnggtga gcgaacggac 420
ccgggtcaag ctgcggggtg tacggggcaa naacatcaat naacgaagac gttggtcccn 480
gcatcgcctt taaccgaagc acgaagccgg cgggcgccaa caagcccggg gggganccgc 540
ggggcctggg ggggncccca n 561

<210> 4241
<211> 707
<212> DNA
<213> Homo sapiens

<400> 4241

0952345.0720

aattaangat ggctgcgccc atgtaacatc actagcgacc ggtgacctct ttttcccct 60
tgcctggctc ctgtggtggc aggctgggca cgaggaccat gctgggccgg agcctccgag 120
aagtttctgc ggcactgaaa caaggccaaa ttacaccaac agagctctgt caaaaatgtc 180
tctctcttat caagaagacc aagtttctaa atgcctacat tactgtgtca gaagaggtgg 240
ccttaaaaca agctgaagaa tcagaaaaga gatataagaa tggacagtca cttggggatt 300
tagatggaat tcctattgca gtaaaagaca atttcagcac ttctggcatt gagacaacat 360
gtgcatcaaa tatgctgaaa ggttatatac caccttataa tgctacaagt agttcaagaa 420
gttgttggat cagggagctc tactaatggg aaaaacaaat ttaagatgag tttgctatgg 480
gatctgggag cacaagatgg tgtatttgga ccaagttaaa aacccctgga gttattcaaa 540
acaatataga gaaaagagga agcaagaatc cccacagnga gaatgaaaga ttcagactgg 600
ctggataact gggagggaag ctcaaggtgg gaantgcaac tggctggtat ccnggggttc 660
aaaatgctaa cccgggcttt tagggattaa ggttncaggg nggggnt 707

<210> 4242
<211> 670
<212> DNA
<213> Homo sapiens

<400> 4242
atgaggcgga caggccccga ggaggaggcc tgcggcgtgt ggctggacgc ggcggcgctg 60
aagaggcgga aagtgcagac acatttaatc aaaccaggca ccaaaatgct aacactcctt 120
cctggagaaa gaaaggctaa tatttatttt actcaaagaa gagctccatc tacaggcatt 180
caccagagaa gcattgcttc cttcttcacc ttgcagccag gaaagacaaa tggcagtgac 240
cagaagagtg tttcatctca tacagaaagt cagatcaaca aagagtccaa gaaaaatgcg 300
acccagctan accatttgat cccaggctta gcacacgatt gcatggcatc ccctttancc 360
acttcaacca ctgcggacat ccangaagct ggactctctc ctcagtccct ccagacttct 420
gggcaccaca gaatgnaaan cccattttca actgaagcta tctttgctcc aagcctgata 480
ctccagactg tgctggngat agtcataccc cactgggntt tttccttcac cgagggactt 540
ggaaagntct tgtttgctag accgtaaagg gaacnaaaaa agggggattc tgccaaggaa 600
aatggggaat ggnttcatga gtctaaggaa gganntatca gagtatggng gaaacacacc 660
aaactacctg 670

<210> 4243
<211> 729
<212> DNA
<213> Homo sapiens

<400> 4243
cttttcgcgg ccgggcccca gcatggctgc ccccacggct gagggcctgg cagctgctgc 60
gccctcgctt tcttgacatt ccctggcttc tgtgctctct tccccaggcc accccagcag 120
acatgtttgc caaggccttt cgggtcaagt ccgacacggc catcaagggg tcggacagga 180
gaaagcttcg agctgatgtg acaactgctt tccccaccct tggaactgat caagtctctg 240
agttagtacc tggaaaggag gagctcaaca ttgtgaagtt gtatgctcac aaaggggatg 300
cagtgactgt gtacgtgagt ggtggtaacc ccatcctctt tgaactggag aaaaatctgt 360
atccaacagt gtacacgctg tggtcctatc ctgatcttct gccaaccttt acaacatggc 420
ctctggtgct cgagaaactg gtaggggggag cagatttgat gctgcctgga ctggtgatgc 480
cccctgctgg tctgcctcag gtacagaagg gcgacctctg tgccatttct ttggtgggga 540
acagagcccc tgtagccatt ggagttgcag ccatgtccac agctgagatg ctcacgtcag 600

0050504350

gcctgaaagg gaaaggggct tctctgtgct ccacacttan caaggaccac ttgtggcggt 660
ctggaaacaa gtcctctcca ccttccattg ctccactggg ncctgngatt cagcanatnt 720
caagtgaaa 729

<210> 4244
<211> 778
<212> DNA
<213> Homo sapiens

<400> 4244
aaaaaaaaaa aatttccaca ngatgctggt cctcagtgga ttaggtcaga agctcatgtt 60
ctgatagttc ttcattattt cacaaaggtg gacaacctga aagagaaaag gctgcttgat 120
gtcagcagaa tctaaacccc tacattaaag ctttgcctcc cattctgtgg ttgtggtggt 180
ggtaagaagg agatattggt accaagaaaa atttccaaaa ctattgagag agagagagag 240
aaagtattga aattttgttc tgccttgcag gatccattta tcattcattg gtaaaggata 300
tattccttgt tcttaccaag tgtacattta actcttgctg acatgttcag tgtattttat 360
tacttttaat gctgtcttaa aatgaacatt ctttaaagtt ggacaggaag gtggcatttc 420
ttatttatta acatttttaa ctttaaacat attgtgactc atctagacct tttaataaga 480
cgatcaactt cacacttagg gaaaaaatta aaatgtgatg gccacttcta ataattcagg 540
tagttataag ggatctggaa gaaatccagt ctttatgaat atactattag ttgggcatta 600
aaaaatcagt atatatttta acttttgtg acatgctaac acattttcag aataattatt 660
gcatagtaga atttattact ccaagaanag aanngacctt acntcaattc aaatgaaggt 720
taagtaattt acatttcctg gggtaaaaaa ccgggntcta taaaattaaa gttagaag 778

<210> 4245
<211> 789
<212> DNA
<213> Homo sapiens

<400> 4245
gagttttaaa gtagaagtac ttgctagtaa tgcagataga gtcagttctc tcaccagtat 60
ggatttaaat tgtcctttcc atctcagttt actctttttt ttaaaaaaaa caaaccaata 120
tgctacctga aactagaaac acatttttaa ttctgcagct ctcctaacag attatttgc 180
tttagtacag agctgggctg caggctgagt tgggagttgg taaaggattg aggacagcaa 240
tgtaggtcgc ctcttcctac aggaaaaaat tgaggaacgt tgtgtattac tggttaaaag 300
attgattagg attatttcaa gggatggttg agttgtcgtt ttacttattt cacccaatat 360
tttgtgtctc tacttaagca gtgttgtttt aaatgttact ggataattgt aacataatca 420
aattaaattt tatatttaac tgatacccaa gcatttgatg aaaacatgtt gcaggaatgg 480
gagagtattc catagctttt gttttattgt gatttgatta aatgtgacaa ctaataagtt 540
aaagacagga cttcactgtt ttagcctgat ttcctgtaga aagtgtggct aagtttaatt 600
ggaaagaaat gtcttcttac tagaactgga ttttgggggg actttatcca actcttactt 660
ggggacacta actggttggc tataaagggt caaaaaaggg agccaacaag ttgcctaatt 720
tgggnaatgt ttgaaaataa tcaacngggc taatttttaa gaggtatnga agccaaacct 780
tttancnaa 789

<210> 4246
<211> 662
<212> DNA

0082703456.0

0950203.0070800

<213> Homo sapiens

<400> 4246
aaattcgatg agcgcgtcgg gctccaaggc aggcgctgtc agcccgggag ggctgtctgg 60
gatttctaga gggtcccaga acgggttctt cccaggccga tcccgcctgc ttcctgcccc 120
gtctctccac ccgcctcccg ccctctgtaa gggaccccga gggcggcgcc ggaaacacgg 180
agaaggccca gaacggcgcg ggacccgaga ggcctacgtt ggcaaacgca gcccgctgcc 240
cctttgctcg cttcccccgg gcctggagtg gctcctgtcg cttctggcgc tccgatttcg 300
agaaatgact ttcagctgtg caaggcgaga atgctacttt agataatgag aaaaaatctc 360
tcgaatggct cccaaaatga ggtccttgtt taagaagcca caggaagccg ccagccgaac 420
gctgatacca aagangaggc caagaagcgg actgtggctt gntgacctgt ttggtattgc 480
caaattttca gcttttatta aagctgaaac accttggnct gtttaaaacg ttcgacaagg 540
actttttat gaacgttaac ggcacannat acgggttttt tggaaaaaaa aaaaggcang 600
anttcaaccc gttcggcccc tttgtgaagg tccattcatg aaaccctcga ngttaaaagg 660
cc 662

<210> 4247
<211> 760
<212> DNA
<213> Homo sapiens

<400> 4247
ctgtcctggt agggcacctg cacctgcgaa tcttgcacct tgcaaacaat cagttacaga 60
cctttcctgc aagcaaacta aataaattgg agcaattgga ggaactgaac ctaagtggca 120
acaagcttaa aaccattccc acaaccatag caaactgtaa aaggctgcac acccttgttg 180
cacactccaa caacatcagc attttcccag aaatactgca gttgcctcag atccagtttg 240
tagacctaag ttgcaacgac ttgacagaaa tcctgattcc agaggctttg cctgctacat 300
tacaagacct tgacctgact ggaaatacaa atctggttct ggaacacaag acactggaca 360
tatttagcca tatcacaacc ctgaaaattg atcagaaacc tttgccaacc acagattcta 420
cagttacgtc aaccttctgg agccatggac tggctgagat ggcagggcag agaaataagc 480
tgtgtgtctc agcacttgct atggatagct ttgcaagagg gggtggganc tgtgtatggc 540
atgtttgatg gagaccgaaa tgaggagctc ccgcgcctgc tgcaatgtac gatggcagat 600
gtgcttttag aagaggtaca gcaagtcaac taatgacaca gnttttcaaa gggtaaacac 660
cttctttggg aatcccacaa gggnaatttt nggaatggct ggggccaaaa aatttggggc 720
gccccccggt ccccccgggg ncnaaaatcc cggccccggn 760

<210> 4248
<211> 630
<212> DNA
<213> Homo sapiens

<400> 4248
catttcttta taatcgttat gcaggaaaat tgcctaagaa ttatgaccca aaagttaccc 60
cagatccaga aagatggctg ccaatgcgag aacgttctta ctaccgggga agaaagaagg 120
gtaaaaagaa ggatcagatt ggaaaaggga cccagggagc aactgcagga gcttcatctg 180
aactggatgc cagtaaaact gtgagcagcc cacccacctc cccaagacct ggcagtgctg 240
caacagtatc tgcctctaca agtaacatca tacccccaag acaccagaaa cctgcagggg 300
ctccagcaac anaaaagaaa cagcaacaga aaaagaagaa aggtggaaaa ggtggctggt 360

gatgagaata ttcttgttgc aggctgtttt taaactagtg tcagtgacac taggaatata 420
ataaaggtaa cacagcanga agcacagnac tactccctct tcatctccat attttcataa 480
gttcttgtgt ttcaaattag ggaaacatct tcctcaaagt ctgcctagtg agatatggcc 540
tactggttgc ctcatagctt tgtacaagat tacgaggact gaaaataatt gggcatttac 600
ccatcttggg atcngttgng nnnctttanc 630

<210> 4249
<211> 788
<212> DNA
<213> Homo sapiens

<400> 4249
ttactccaat gaacttcttc cccactcatt ggaaaaacag aaatgatatg acatgagaaa 60
gacagcaaaa tataatatta gcgtggcaaa gagccaggaa aattaaaaga catataaagg 120
gaagagatgg cgaaaagacc ctctagaaat atctaaaaat tcagatgtgt ggacacagaa 180
atgaccttag ccaagacttg ttgttcacgc caccctcaag ccctgagcta tctaagggca 240
ggctgagaag cacgtgttga agaataccaa tgtttataag gtggcagttc aaaaactctc 300
ccatccaaaa ttggacaaag gaacaaaaaa atctgccatg tgacaaattt aaagtttcca 360
aattccaggg ttctttgatc tctgacacaa ccagattatc aaaattaaac ctctactact 420
taacaatgat aaagggtatt tcattctcat aagtgtagct agtagtatat cttttccatc 480
atggcttttt ctctgtttat cttttctctc tttctttatt tccctgtagc tttcaagcag 540
aaattctttt cattttgttt tggctctgta attaaacact caaagtgtat cagtagctaa 600
aacattactt caatacccac atttattctg gctagaaaat cattccattt tataccatgg 660
agcatccaag ttatttaatt aagaaaattt cccttaagat ttataccana tatgggnaaa 720
ggngtaaang ccaatgtnag gggcaaaaca aaatgtctgc tgcggttgtt gatttcaatt 780
tgcataat 788

<210> 4250
<211> 617
<212> DNA
<213> Homo sapiens

<400> 4250
gtttagcgac cggacccgaa acggggaagt tgtcttgtgt ggagaggtta gtagagcagc 60
gcgcgcgtca ccagagtcgt ttctcttcgg agtcttaggt gatcgagggt gtgcccaggg 120
ggcggacttg tttgcgcctc ccgttccctc ccaatttcca aacgtgtcac cccggcgccg 180
acggccctgt gcaggggaag cagatggagt tcaagctgga ggctcatcgc atcgtcagca 240
tctctctggg caagatctac aactcgcggg tccagcgcgg cggcatcaag ctgcataaga 300
acctcctggt ctcgctggtg ctgcgcagcg cccgccaagt ctacctgagc gacccgtgcc 360
ccggcctcta cctggccggt cccgctggga ccccggcgcc gccaccgcag cagcagcccg 420
gggagccggc ggncgggcca cccgccggct ggggagagcc gcccccgccn gncgctcatg 480
cctcttggnc ggagaccgag ccgcagccgg agcgctcctc cgtctcagac gcgccgcggg 540
taggggacga ggtgccggtg gncacggtga ctggagtcgg ggacgttttt caaggcggan 600
aggcggncgc nacngaa 617

<210> 4251
<211> 621
<212> DNA

0 9 5 2 0 4 5 0 3 9 0 0 0

<213> Homo sapiens

<400> 4251
cggcaatgtc cgccacctgg tgcagcccag agggtcaagg aatgggccag ggccctggca 60
gggaggtcgg aggaaattcc gccgccagcg gccccgcctc tcccataagg aacccatgcc 120
tttctgaagc aggactgaag gggcccccaa gtgcccaccc cctgcggtta tgtctcctcc 180
atagattggt ctgcttctct ggaggcctca cgtccattca gctctcacct cgcacctgct 240
gtagccacca gtgggcccag ctcttctcac ctgcctgctt cccccagtgg cgtgctcctg 300
gctgtagttt ggatgattcc cgttctctca caagaatccg tccagtccat cttcctggcc 360
cctccctgga ctgactttgg agacctagcc ccagaaagcc tcccttcttc tccaggtccc 420
ctccgcccta gtccctgcct gtctcatcta acgccccana ccttcatttg ggccttcctt 480
cctcatgtct gccctgagcg cggggtggaa atgctccctt ctgtgggctc cancagatcc 540
cttgttttcc tgtcagttgg acncctcacc tggnctccag ggaagantgc aganaaaagc 600
aaggagagac tctagttaag a 621

<210> 4252
<211> 843
<212> DNA
<213> Homo sapiens

<400> 4252
taacaaatac tgtgactgaa atgcatgcac cttgttgaag agaaaacatt ttattaatct 60
ccactataat gtctgtgaaa tgtgcagtat tccatcctta gagagtttat ctggttcatc 120
agcatctgca tgtatcctct gaataatgaa gcaacatttc agcaattctg ttaaccacac 180
cattagagac atttttagaa gtgctgcaac atggtgggaa cctagtactt taataatttc 240
ctatgatatt tattagagca taaaatgtac atcacgatag tacagtatgt agtcctttaa 300
gaccagaagg tatgttaact gcaccatcat taagcagtct atcctatttt cttatttatt 360
tgttagaatt gaatcctttc tcaatatctg taccattcct atgatggtag ccattcttct 420
ctttataaaa tatttcctct ttgaaaagcg tcctaaaaca ttaatttcaa atcccctctt 480
ggatgcaaag tgtccctaag accatccatt caacagtatt tatgtgagcc aacttactag 540
agccgctaca actaatcatg atagacagtc cagaatctcc ctggacttta tactgggcca 600
gcctcattgt ccctaagatt tctcttttta tgtctcatgg attacttctc tttttaattg 660
ccccaggcac attccaaatg agaacctggt aaaagtcaca ttggaccccc ttcagtatgt 720
cttcggctaa tgtgttagcc ttcaataagg gtgataaccc cttttcaacc taanctagtc 780
cataanggag ggaaaaaatt cagattttgg agttccnaan cctaatttcc cccaaanggg 840
gaa 843

<210> 4253
<211> 915
<212> DNA
<213> Homo sapiens

<400> 4253
aatgagaagg aaccggaaaa acaattctgg taatataaga aaacaagctt ctttaacacg 60
cagaaaagat cacactagct caccagcaat ggatccaaac aaagaataca tctctgaatt 120
gccagaaaaa gaattaagaa agtcaattat taagctactc aagaaggcac cagagaaagg 180
taaatatcaa cttaaagaaa tgttttgttt tttgtttttt tgagatggag tctcgctcta 240
ttgcccaggc tggagtgcag tggcgcgatc tgggctcact gcaagctcgg cctcctaggt 300

0352345.0720000

tcatgccatt ctcttgcctc agcctcccga gtagctggga ctacaggtgc ccaccaccac 360
acctggctaa ttttttgtat tttttagtag agacagggtt tcaccctgtt agccaggatg 420
gtctctatcc cctgacctcg tgatccactg gcctcgacct cccaaagtgc tgggattaca 480
ggcatgagcc accacgtttg gcctaaagaa atgttttaaa tgatacagtg tatgaatgaa 540
aaaatctcca gaagaataga tggcataaat ttaaaacaat cacaacttct ggaaatgaaa 600
gacacattta gagaaatgca aaatacacgg gaaaaactca acaataaaat ggaacaagta 660
gagagaactt cagaacttga agacaaggct tttgaattaa cccaatcaaa cagagattaa 720
gaaaaaataa ttttaaaata taaacaaacc ctccaagaag ttggggattg tgttaaatga 780
acaaacttaa ggataaatgg ggttcttgag gagggaagag aaagctaaac cgtttgggaa 840
agcatattgg gagggaaata attnganggg aaacttcccc tggnccntgc ctanagattc 900
agacatccaa ttcca 915

<210> 4254
<211> 836
<212> DNA
<213> Homo sapiens

<400> 4254
ttgaggggag gtgcagcttt catctgacca tgcaggcgtg ctttgcagtg ggtagagcag 60
tgctttcctc ctcccagctg cacactggaa tcacctggag agtccagaaa cttcccgcct 120
cagtgaaaga acatcagtgt atcagcacag caaatattcc aaatgccagg ctggattccc 180
tccaattacc aggacctcca ggcttctcct cctttcaaga actttctgac cctggatcca 240
gtctaaatgt tggttataaa ctcacctgac atccacaggg cccttccaaa atactgtcaa 300
ggctgactgc tggtgcctgg aacctgcaca ccctcctggg actctgcatc tctgctgggg 360
ctggtttctc ctctgagcca ccttaaggaa tcccaccctg acccggtcag agctcaccat 420
gcctccctct cctacttgct cagcattttg tgtctatcta gactgaagcc tttgctttct 480
ctctgtgatt gtggtgaaag ttcaatttgc tttcctatct ctagaatgtc agcacgaagg 540
cagaggcatg gtctcctgag ttccataacc ccaaagccta actccctgcc tgccacactg 600
aggggcttag tanacattga cttactaaat tgaatagttg agtaataatg ctccttgaaa 660
ataatttgga gttagatctt gagccttgtg tgggcaagag gatgggtgag gacacatcat 720
taaaactaaa ggtaactgan catgccaant ggttggggtg agaaaattgc atggnggaat 780
ccaagacaca gaggcagcaa aaacccaagt gctgggaant caagagtgan aaaagt 836

<210> 4255
<211> 539
<212> DNA
<213> Homo sapiens

<400> 4255
taaacaaatg agcatggctg tgtttcagta antaaaattt acaaaaacag gtggtctgtt 60
ggatttgacc tgcaagccat aatttgctgg cccctagttt agcagttaaa gatttacata 120
cataatttga attaatatta attataccaa gttggnaaca ttgaaggaca catacagtgt 180
tttagggaat cttaaacttt atttttattc tctaaagttt tagtttgtgt tttctgttct 240
caagtcttgn ggaatgctca cagattatct ttctgctcat ctctganggg tttancactt 300
ttgagcatta cacatgaact gtcagaaagg acctgagtgc cttagtgtga attaatagct 360
gtctccatgt ctaagaagtt accatcattg ggtttttttcc tccaggctaa actcccatct 420
tccagcaagc tttgagtgtc tctgtaaagt gagcaaaaac atatcagtat acatnnctat 480
ttactaccna gtccttggat ctttagatgg cgcnttctca gctattgcct aanggctga 539

0962459-072800

0050750.0050750

<210> 4256
<211> 833
<212> DNA
<213> Homo sapiens

<400> 4256
gcgccaggga tttgaaccgc gctgacgaag tttggtgatc catcttccga gtatcgccgg 60
gatttcgaat cgcgatgatc atcccctctc tagaggagct ggactccctc aagtacagtg 120
acctgcagaa cttagccaag agtctgggtc tccgggccaa cctgagggca accaagttgt 180
taaaagcctt gaaaggctac attaaacatg aggcaagaaa aggaaatgag aatcaggatg 240
aaagtcaaac ttctgcatcc tcttgtgatg agactgagat acagatcagc aaccaggaag 300
aagctgagag acagccactt ggccatgtca ccaaaacaag gagaaggtgc aagactgtcc 360
gtgtggaccc tgactcacag cagaatcatt cagagataaa aataagtaat cccactgaat 420
tccagaatca tgaaaagcag gaaagccagg atctcagagc tactgcaaaa gttccttctc 480
caccagacga gcaccaagaa gctgagaatg ctgtttcctc aggtaacaga gattcgaagg 540
taccttcaga aggaaagaaa tctctctaca cagatgagtc atccaaacct ggaaaaaata 600
aaagaactgc aatcactact ccaaacttta agaagcttca tgaagctcat tttaaggaaa 660
tggagtccat tgatcaatat attgagagaa aaaagaaaca ttttgaagaa cacaattcca 720
tgaatgaact gaagcaaccc atcaataagg gaaggggtca ggactccaag tacctccaaa 780
gaagggaaga ctctctgtng gctttctaat cccaatnaag ccaaanggan gnc 833

<210> 4257
<211> 789
<212> DNA
<213> Homo sapiens

<400> 4257
aggaaaacac tgaatttgtt tggatgttct aagaaatggt gctaagaaaa tggtgtcttt 60
aatagctaaa aatttaatgc ctttatatca tcaagatgct atcagtgtac tccagtgccc 120
ttgaataata ggggtacctt ttcattcaag tttttatcat aattacctat tcttacacaa 180
gcttagtttt taaaatgtgg acattttaaa ggcctctgga ttttgctcat ccagtgaagt 240
ccttgtagga caataaacgt atatatgtac atatatacac aaacatgtat atgtgcacac 300
acatgtatat gtataaatat tttaaatggt gttttagaag cactttgtct acctaagctt 360
tgacaacttg aacaatgcta aggtactgag atgtttaaaa aacaagttta ctttcatttt 420
agaatgcaaa gttgattttt ttaaggaaac aaagaaagct tttaaaatat ttttgctttt 480
agccatgcat ctgctgatga gcaattgtgt ccatttttaa cacagccagt taaatccacc 540
atggggctta ctggattcaa gggaatacgt tagtccacaa aacatgtttt ctggtgctca 600
tctcacatgc tatactggaa aacagtttta tacaaaattg tatgacaagt tcaatgctca 660
aaaaatggtn cagttttaaa gaattttcta ttaaccngca gggtaataat tagctncatg 720
ctgcaagact ccaacaaaag cctaagttca actggaaagc ccaaatgccn aattttaang 780
ggntttaat 789

<210> 4258
<211> 737
<212> DNA
<213> Homo sapiens

0030704950

<400> 4258
caaatgttta taaaatgact accgtatgct aggcagagta tggngcatag caactatgaa 60
atctgtttca gtaggcttgg tccagaaccc tcagtatttg gaaagttgca tattgtcatc 120
atttactccc attttgatta tattaagaaa gtatgtgagg gcatgagcct ctcaggaggg 180
gacctcagtg tttccggatc cctcctgccc tctgtgggac ctagatgctg gctagctgag 240
caccgtcaat gtgtcctcgc agaagacgaa gcgcatttcc tttcttctct tttttgcggt 300
tccagtgtga tgacatggct tggtcaccat gcttcgtgtt tgctaaaaag aaaccaggga 360
tatgagtttc tgaattctca acctggtgcc tttgccagag aacaaagtca ggttaatcag 420
acgtcttccc ctctccagcc caactcattc gctggctgac ctctcntggn cccatggttc 480
taagaaccat ctccacgata atgattccca antgaatatc ctancccaga cctctccctc 540
ccactccaga cttctgcttg gattccgttg ggctgtctca taagcatctt atgcctgcta 600
catctaagtc nancaacaag attccaacct ccaagnctgc tcaagccctt gcctcctgcn 660
tttggggaaa cgggacatcg ctttttttccc ctgangttgt gtgttgccaa aaaagtcgtt 720
gaaantcaan cctttgn 737

<210> 4259
<211> 734
<212> DNA
<213> Homo sapiens

<400> 4259
aaataaatac atctgggatg actgaccaag aacaaagaat gtaggcatca actgaacacc 60
aactgtatac ctgggactgg atctgagggt aggattgcca gattgagcac aaacaaacaa 120
acgaaacaca agaaacaaca gaagggtgcc tgttaaatat gaatttctgg taagcaataa 180
gtaattttta ttgtgttcct gtgcaatgat aggacgcacg tatcctgaaa acctgtctgt 240
agttcacctg aaattcacat ttaactaggc gttctgattt tatgtggccg ccctatctgc 300
tgggaacata ggctgatgcc cctgggggtt ctgcgtttcc ttggccaggt tcctgtaggg 360
ctgaggtcat gggggagccg tggccaggga tggtgtcctt gccaggggag gtgacgggca 420
gagctgcagg ccctacaact tggggttggg caaggatgag tcgctctatg gtggtgcctc 480
tgataatagc tgttatttta gcttctgaaa aatgtgctgc cctcaagagc ttctgaggct 540
aagcctactt gggtgaaaat agctttccaa ggagccacat tgtggggacn ttnagggaac 600
agccccacac tttggggnca cttggctgtc tccaactcat cctcacttnc caaggctgga 660
caaaggngat taaaaagaaa atgccaaagg gggttgggca aggcaagaac cctgtttggc 720
ntttgnaagg ngct 734

<210> 4260
<211> 776
<212> DNA
<213> Homo sapiens

<400> 4260
tatactttta tttcctgttt attcttaggt agattggaag ggggaaacag tctgttctcc 60
ctaattaaat tttttctaat aacgattagt agaatatgga cattctatat gacagtgaca 120
ttaaaagagg ctctttggaa gtatatacat tattaacata atgtgtacaa gtccttttga 180
aatgacaact ttaatgggtt tcagctcttt tatctagagc ttgagataat tcaagctgag 240
tttttcaggg catatcacaa cggcaaagtg ttcagcagtg ggatatcaat gcttatttac 300
attttcctac tgctatttat ataaaatgtt attccattca gaggatgcct tttatcccca 360
cattaaagca cagatcatta agcaataaaa accaaattgt ctgtcattca aattataact 420

gcagttattt ttgcatggta agagtgaggt gctaattttg tgtgagatga actttgtaaa 480
ctactttggg aaatgttctt tggaagtaag gttttttctc ctttagtctt atgcttccac 540
ttttgtctca agattcacaa tccattaana catggggaaa aaagaaaagg taaaattgag 600
agacttttgt tagaggagct atttggatga accaacattt cagattttcc aaaatgtaag 660
ttaggaagct ccaatggccc ctgcattaac aaaatacact gttacnacct aatcccaaga 720
gtgtcattac agtgagaatc cncanttaaa ngcattccag tggaaattat aanaat 776

<210> 4261
<211> 783
<212> DNA
<213> Homo sapiens

<400> 4261
ggttatgaag aataacatag aatatcatac atttgagatt tttgtacttg cttaaaggaa 60
accaacagga agacttttt tttttccaaa attgacttac actgaaaagt ttatctttgc 120
ctccataccc cctaaaaatc aaatgatgta tatttttcca tgaaatgcct tttggtgtgg 180
tttatgtgca tgactgattc ttagaaagcc aataagatag gggtggagcc aagatggccg 240
aataggaaca gctccagtct aaagctccca gcgtgagcga cgcagaagac gaaagatttc 300
tgcatttcca gctgaggtac cgggttcatc tcactgcgga ttgtcagaca gtgggtgcag 360
tgcaccaagt gtgagccgaa gcagggcgag gcatcacctc acccaggaag cgcaaggggt 420
cagggaattc cctttcctag ccaaggaaag gggtgacaga tggcacctgg aaagtcaggt 480
cactcccaac ctaatactgt gcttttccaa cggtcttagc aaacggcaca ccaggagatt 540
gtatcctgca cctggcttgg agggtcctat gcccatggag cctagctcat tgctagcaca 600
gcagtctgag atcaaactgc aaggcagcaa gaggctgggg gaagggcgcc cgccattgcc 660
caangcttga gttaggtaaa caaagtggcc gggaaactcn aactgggtgg agtccaccgc 720
aagctcaagg aggggctgcc nggcctccgg tnnaactcca acctctgcng ggcaagggca 780
ata 783

<210> 4262
<211> 761
<212> DNA
<213> Homo sapiens

<400> 4262
gtacctgtag ctgcggcgct gaggtcggaa cgtctgcgtg tgtgcgggct ggttttgtgg 60
cggctgctgc tagagctgga gcatttgccg ggttggtggc tcctgcacat ttttacagtt 120
ctccagtcct tctctttcgt cagtataaaa gattaaactc tacagaagaa tgcaatcaag 180
tgatggcttt tcctttagaa tttgaatatg gaggctacag gaacagatga agttgacaag 240
ctaaaaacca aatttatatc tgcttggaac aacatgaaat atagttgggt gttgaaaaca 300
aagacgtatt ttagtagaaa ttctcctgta ttattgcttg gaaaatgtta ccattttaaa 360
tatgaagacg aagataaaac gttacctgca gagtcgggat gtacaataga ggatcacgta 420
attgcaggaa atgtagaaga atttcgtaaa gatttcattt ctagaatatg gctgacctac 480
agggaagaat tccctcaaat agaaggctca gctttgacaa cagactgtgg gtggggctgc 540
acattgagaa ctggccagat gctcttgggc tcaaggactc atactacact ttcttggnag 600
agcntgggac ctggccctga tgccttggna taatgaaaat tcaaactctg aatcaaggga 660
cttcccanac tggtcaaaaa attttaacng caacaatttn gaagncatcc actttcaagg 720
gggaaaagaa gaaattccaa aaacccccaa acaaantttc c 761

0956305.00200

<210> 4263
<211> 662
<212> DNA
<213> Homo sapiens

<400> 4263
aagtctcaat gtttaaggaa aaaagattta gaaatagtgg tttttaaaag tttgatggaa 60
aaacacatga gttcctgctg gtgcatttta catgctttct aggtccttct gagttttagg 120
atcctgaggg atttggttgg tattgttttt gggttttctt cttgaaactc agtattaaaa 180
cactgaaaag tancagattt ttttctacct agagttttct gtttatccat catgagccca 240
aataaagtca caattgtatg ttacctgctt tacaaagaag ccatttatgt ttaattgact 300
gttcattttg ctttcttgtc tgctgggatg acaaccgtga aattcagtct ggtagttttt 360
atgagttgga catgaaccta ttagaaatga tttaaagtat aaaatcattt ctcacagggc 420
tttcaaaaca tanacctgtg atcagaaacc tggaatctag aaatttattc angacttgca 480
agaatttgta gcatatctac attattggag atctattgaa agggcaagaa aaagatgatt 540
gcccgttagt atcaacagtt atggtacagn caactatgag agaaaccttt tagatttggc 600
agctgtatca ttaataangt gtcattgggc caattcnaan attacagtaa tcnaaaaatg 660
gg 662

<210> 4264
<211> 735
<212> DNA
<213> Homo sapiens

<400> 4264
tctgaatcaa gccagggagg acttcaacca ggacatcggc tggtgtgtct ccctcatcac 60
cgactacagg gtccggttag gctgcgggtc ttttgctggc tctttcctgg aatattacgc 120
ggctgatata agctatcctg tccgaaaatc catccagcag gacgtcttag ggaccaggct 180
tcctcaactg agcaagggga gccccgagga gcccgtggtg gggtgccccc tggggcagag 240
gcagccctgc cggaaaatgc tccccgaccg ctcgcgggcc gcccgggacc gggccaacca 300
gaagctggtg gagtacattg tgaaggccaa gggcgcggag agccacctgc gggccatcct 360
aaagagcagg aagccatctc gctggctgca gaccttcctg agctccagcc agtacgtgac 420
ctgtgtggag acctacctgg aggatgangg gcagctggac ctggtggtga agtacctgca 480
nggcgtctac cangaggtgg gggccaaggt gctccagcgc accaacggcg accggatccg 540
gttcattctg gacgtgcttc tgcccgaggc catcatctgt gcgatctctg cggtggacca 600
ggtggactac aaagacggct ganggagaag tacatcaagg ggccttcgct gagctaccgg 660
ggaaaaagaa atatttgaca aaccaagctc cctttaaaaa ncgggaaccn gggngnccgt 720
tccggtgaag gganc 735

<210> 4265
<211> 728
<212> DNA
<213> Homo sapiens

<400> 4265
gagatcggtt gctggaaaac tctccgtctt tgctaatgga gtcgtgactt caattcaggt 60
cagtggaatg gggcagtgct cactggctat gacggtaggt tcagcagttt gaaaatgaga 120
cctgcttcaa tcttcaactg ctggaaaatt caattatata ttattggatc gatatgtttg 180

0050050.00700

ctacactata acccagaaca ttatgaaaac cagaaattat aattttatat ttaatatttt 240
ctaacggatg actctagggg aattgttaga ggaattgtca tgaccattgt ccagtttttt 300
tcctagattg gaacagagaa gtattaagaa gaaaactgaa attatctgta atgccacatc 360
acagggataa cctctgttaa tattttggta tatttttagc tctagatttc taaggatatt 420
tttctatacg tagattaaaa agatatacat atctatcttt ttaaagttaa aaagggatta 480
tattgtatag agggttttat atcttgcttt ttctctgtga tgctgggagc atttccttgt 540
aatgaaaagt tttcctaaaa ccacattcta ttgagtgaaa acataagcca aggatggcgc 600
atacttgcgc atgagagtcn aggccatctg tgacgatatg antggctcgt ttctttgcac 660
cttcttgttt acgtcagggc tattgaaaaa aggattgtnt taanggtaaa acgccggcna 720
aangggaa 728

<210> 4266
<211> 714
<212> DNA
<213> Homo sapiens

<400> 4266
tataatgaag ccaagaaaac gctgacagag ctgaagactt acagtgagaa actggacaaa 60
gagcaagcag ccctcgagaa gatagaatcc aaagctgatc caagtatcct acagaacctg 120
agagcacttg tagccatgaa tgaaaatctg aaaagtcaag aacaggaatt taaagcacat 180
tgtcgagagg agatgacacg actacagcaa gaaattgaaa acctgaaagc tgagagagca 240
ccacgtggag atgaaaagac cctctccagt ggagagccgc ctggtacctt gacctctgca 300
atgactcatg acgaagacct agacagacgg tataatatgg agaaagagaa actttacaag 360
atacgtttac tacaggctcg aagaaatcga gaaatagcaa ttttgcaccg caagattgat 420
gaagtcccta gccgtgccga gctaatacag tatcagaaga gatttattga accctaccgc 480
cagatttcag cagtgcacaa agaaaccaag cagttcttca ctttatataa taccctggat 540
gataaaaagg ttatttggaa aaagagatta gtctgctgaa ctcaattcat gagaacttct 600
cacaggccat gggctcccct gctgcccggg accagttttt acgtcagatg ggaacagatt 660
gtgggaaggg gattaagcan agnnnaatgg aagatgggaa angaaaaagc aagg 714

<210> 4267
<211> 736
<212> DNA
<213> Homo sapiens

<400> 4267
gtagttgcga gcgagagtga gtggggccgg gacccgcaga gccgagccga cccttctctc 60
ccgggctgcg gcagggcagg gcggggagct ccgcgcacca acagagccgg ttctcagggc 120
gctttgctcc ttgtttttc cccggttctg ttttctcccc ttctccggaa ggcttgtcaa 180
ggggtaggag aaagagacgc aaacacaaaa gtggaaaaca gttaatgacc agccacggcg 240
tccctgctgt gagctctggc cgctgccttc cagggctccc gagccacacg ctgggggtgc 300
tggctgaggg aacatggctt gttggcccca gctgaggttg ctgctgtgga agaacctcac 360
tttcagaaga agacaaacat gtcagctgct gctggaagtg gcctggcctc tatttatctt 420
cctgatcctg atctctgttc ggctgagcta cccaccctat gaacaacatg aatgccattt 480
tccaaataaa gccatgccct ctgcaggaac acttccttgg gttcagggga ttatctgtaa 540
tgccaacaac ccctgtttcc gttacccgac tcctggggag gctcccggag ttgttggaaa 600
ctttaacaaa tccattgttg gctcgcctgt tctcaaatgc tcggagggct tcttttata 660
caagccaaga aaagacacca ngcatgnaag ggacaatgcg gcaaaagttt ctgangaaac 720

0502702-050250

atttncaagc aanatt 736

<210> 4268
<211> 766
<212> DNA
<213> Homo sapiens

<400> 4268
ggaattttta ggtggtcaca ttgtaaggca tgcccaggct catcagaaaa aaggcagttt 60
tgcatgtgta atatgtggta ggaaatttag aaacagagga cttatgcaga agcatttgaa 120
gaatcatgtt aagaagatac agaggcagca aattgctgca gctcaacagg atgatcagga 180
agtcactgct ttggaagaaa taaattgttc tagttcttcc atttcatttg aaaatgggaa 240
ttctgatagt aaggatttgg aagtggagac acttactgct tctagtgaag gaaacaaaga 300
agtcatccct gagcatgtgg ctgaattcat tgaaattccc ataagtgtac cagaagatgt 360
tattgaaaat gttattgaaa atggcagtcc taataattct ttaaataatg ttttcaagcc 420
tttaactgaa tgtggggatg attatgagga ggaagaggat gaanaaggtg attatganga 480
agatgantat gacctgaatc aagaaacttc agtaattcat aaaatcaatg gaactgtgtg 540
ccatccanaa gacatatatg ccacagatca agaangaaac tttaagtgtc ctgctcntgg 600
ttgtgtccgg atatttaaaa gaattgggtt tccaaaataa acatgcaatg acccgtacat 660
ccaaccgatt taaatgtggc gacaaacagt atgaactggg caaaggaaat gcaaattttg 720
gcaanggaat ttgngatccc acattntcan nacttatggc atacta 766

<210> 4269
<211> 729
<212> DNA
<213> Homo sapiens

<400> 4269
aagtttcttt gaagctagag atcttcgcca gcacatgaac aaacatcttg gtgtgaagcc 60
attccagtgc caattttgtg ataagtgcta tagttggaag aaagattggt attcccatgt 120
gaagtctcat tctgtcactg agccttatag gtgtaatata tgtggcaaag aattttatga 180
aaaagctttg ttcagaaggc atgtaaagaa agctacccat gggaagaaag gaagagcaaa 240
gcaaaacctg gaacgggtgt gtgaaaaatg tggaagaaaa ttcactcagc taagagagta 300
taggagacac atgaacaacc atgaaggagt taagccattt gagtgcttaa catgtggagt 360
agcttgggct gatgcccgat ctctaaaacg ccatgtcaga acacatactg gtgaacggcc 420
ctatgtctgt cctgtatgta gcgaagccta catagatgct cgaacactcc gtaaacatat 480
gactaaattc cacagagact atgtgccttg caaaattatg ctgggnaaaa agacancctt 540
cagtttcaaa ancaaaggga ctcaagtggg cacatgctgt taacatctta acancaaggc 600
atgcaggaac aagganaagc aagtgggcct caaggaactt gangactggt gggaagtgac 660
aaggagaaaa ctattgggaa agcctccggg aaanctggtt ngcangctaa ctggaaagag 720
gtttnccaa 729

<210> 4270
<211> 741
<212> DNA
<213> Homo sapiens

<400> 4270

Docket No. 50570-2000

taggtggcag tcgcaaccca tactattcgg acagatggca cagaaaccgc tgcgcctctt 60
ggcttgtgga gatgttgaag gaaagtttga tattttattc aatagagttc aagcaattca 120
gaagaaaagt ggaaactttg atctgctgtt gtgtgtagga aatttctttg gctccaccca 180
agatgctgaa tgggaggagt ataagactgg catcaagaaa gctcctattc agacatatgt 240
gcttggtgct aataaccagg aaacagtaaa atatttccag gatgctgatg gatgtgaatt 300
agctgaaaac attacttatc tgggtcgtaa aggtatcttc actggaagct cggggctgca 360
gattgtgtac ctcagtggga cagaatcctt aaatgagcca gtaccaggtt atagttttag 420
tcccaaggat gtgtcttctc tgagaatgat gctgtgtaca acctcccagt ttaagggtgt 480
tgatatcttg ctcacatccc catggcccaa gtgtgtgggg aactttggga attcttctgg 540
gagaagtgga taccaaaaaa tgtggntctg ctttggnttc agtcttgcc acgggcttga 600
aaccaagata ccattttgct gctttgggaa agacctatta agangaggct tccaatatcc 660
gaaaccatat cattcctaca ggaaaatgga nagcaatgnc anccgggttt aaanctcctg 720
gaaaaggttg ggaaatccca g 741

<210> 4271
<211> 723
<212> DNA
<213> Homo sapiens

<400> 4271
gcacaaagat agactactgt gcctcatcta atcacggatg tcaagcacga gtgtgttaac 60
acagatgatt cctattcctg ccactgcctg aaaggcttta ccctgaatcc agataagaaa 120
cctgcagaag gatcaactac tgtgcactga acaaaccggg ctgtgagcat gagtgcgtca 180
acatggagga gagctactac tgccgctgcc accgtggcta cactctggac cccaatggca 240
aaacctgcag ccgagtggac cactgtgcac agcaggacca tggctgtgag cagctgtgtc 300
tgaacacgga ggattccttc gtctgccagt gctcagaagg cttcctcatc aacgaggacc 360
tcatgacctg ctcccgggtg gattactgcc tgctgagtga ccatggttgt gaatactcct 420
gtgtcaacat ggacagatcc tttgcctgtc agtgtcctga gggacacgtg ctccgcagcg 480
atgggaagac gtgtgcaaaa ttggactctt gtgctctggg ggaccacggt tgtgaacatt 540
cgtgtgtaag cagtgaaaga ttcgtttgtg tgccagtgct tttgaaggtt atatactccg 600
tgaagatggg aaaacctgca gaaggaaaga tgtctgccaa agntattaga ccatggggtg 660
tgaacacatt ttgtgtgnac agtgatgact catacacgtt ncaagtgntt tggangggat 720
tcc 723

<210> 4272
<211> 749
<212> DNA
<213> Homo sapiens

<400> 4272
ttttgactta taaacaatgc tgcaatgaaa taattgacat atttccttgt gtacatgtga 60
gcatttcttg agatatgtat ctagaacttg aatcactggc caacaggata ttcttaatct 120
tcagtttcac cagatacttc caaattgatc tccataacat gcataccaaa ttatattcct 180
accagccatt tataggagtt cacatttttt ccataccctc ccaatcctgc cttggcagat 240
atgtttttc caatgaataa caatgaaatt ttgttttggg atttgacaaa atgattctag 300
attcatctgg aagaaaagca agtataagta agaaatttaa aagggacctg aaaaactaag 360
caatggatat atttaaaaat tggtaccagt agggataacc aaatatttgt taactgtagc 420
aagaaacaat gcatgttttt ctcactggtt ccaccttcta tctctcagtc aagccctgcc 480

0005-0350-0000

caggtgtggt aagtcctcat agtctctcac tgtaggggtc ctctcacata gtaagaccac 540
tctcttggag ttgaatattg gaaaagaang cttggncggg ggcaatggct catgcctgtg 600
gtcccagcac tttggggaag ctgagtcgan cgggattgcn tgagggcagc agttcgagan 660
cagcctggac taacatgggn gatgaaagta caaaattaac tgggggggtgg tngggcaagg 720
cctgcaatcc cagntacccg ggaaggntg 749

<210> 4273
<211> 688
<212> DNA
<213> Homo sapiens

<400> 4273
ttaatttaaa actggattga tgatcattat ggtatgatat gatattaaat gtatgcattg 60
ttttgatgct atatttagta gacaggtggt agaccctgtc cttaaggagc tgttgtcctg 120
aaaataagta gggcacatat aaatgtccaa agagacctaa accatttttg ctgtttcctg 180
aggatacatg tcttttgccc ataactcttc tttacttttg tcctgtttgt cttaaaggta 240
gagaataagg tagacattgc cagggaagcc ctggcaccct tataccattt ctttttcagc 300
tttttctctc aagtttcttt cttaggaagg agttggatga gtcatcctgg gatgagggta 360
aagaaggtta tcattcttat agtgacttta agtgatggtg ggcttccctt caagggagtg 420
tatagttttc tgtggctcta cagcaagaca tctttactga gtaataggca acctggatag 480
attgcaatcc actacttaaa agtacaccac ctgtctttct cccagctctc tgtaaaaata 540
aaagaacaag ccaaacaaat caaaatttcc atagatttgg gcactggtga atttgacaag 600
ctcctccact tttaagttcc taaagatggg ataaaattgg ggaanaaatn cagattggcc 660
ttccccaaan ggaangtaat angtttcc 688

<210> 4274
<211> 816
<212> DNA
<213> Homo sapiens

<400> 4274
tttttcttag gatggctggc tgtggtgaaa ttgatcattc aataaacatg cttcctacaa 60
acaggaaagc gaacgagtcc tgttctaata ctgcaccttc tttaaccgtc cctgaatgtg 120
ccatttgtct gcaaacatgt gttcatccag tcagtctgcc ctgtaagcac gttttctgct 180
atctatgtgt aaaaggagct tcatggcttg gaaggcggtg tgctctttgt cgacaagaaa 240
ttcccgagga tttccttgac aagccaacct tgttgtcacc agaagaactc aaggcagcaa 300
gtagaggaaa tggtgaatat gcatggtatt atgaaggaag aaatgggtgg tggcagtacg 360
atgagcgcac tagtagagag ctggaagatg ctttttccaa aggtaaaaag aacactgaaa 420
tgttaattgc tggctttctg tatgtcgctg atcttgaaaa catggttcaa tataggagaa 480
atgaacatgg acgtcgcagg aagattaagc gagatataat agatatacca aagaagggag 540
tanctggact taagctagac tgtgatgcta ataccgtaaa cctagcaaga gagagctctg 600
ctgacggagc ggacagtgta tcagcacaga gtggagcttc tgttcanccc ctagtgtctt 660
ctgtaaggcc cctaacatca gtagatggtc agttaacaaa gccctgcaac aacatcccct 720
gatgcaagca cttctctgga agactccttt gcncatttac aactcantgg nggacaacac 780
agctgaaaag ggtcataagg gagaaagggg aagnan 816

<210> 4275
<211> 732

0062-5565-0202

<212> DNA
<213> Homo sapiens

<400> 4275
aatacaagta tgtagacccc atctgcacct tcgtcttctc catcctggtc ctggggacaa 60
ccttgaccat cctgagagat gtgatcctgg tgttgatgga agggaccccc aagggcgttg 120
acttcacagc tgttcgtgat ctgctgctgt cggtggaggg ggtagaagcc ctgcacagcc 180
tgcatatctg ggcactgacg gtggcccagc ctgttctgtc tgtccacatc gccattgctc 240
agaatacaga cgcccaggct gtgctgaaga cagccagcag ccgcctccaa gggaagttcc 300
acttccacac cgtgaccatc cagatcgagg actactcgga ggacatgaag gactgtcagg 360
catgccaggg cccctcagac tgactgctca gccaggcacc aactggggca tgaacaggac 420
ctgcaggtgg ctggactgag tgtcccccag gcccagccag gactttgcct accccagctg 480
tgttataaac caggtccccc tcctgacctc tgccccactc caggaatgga gctcttccca 540
agcctcccat ctgactacag ccagggtggg gactcagcgg gtataaagct agtgtgaccc 600
tgctcttcca gctcctgggc cagctctgga agggctgtat ttgggcctaa tcctcaacaa 660
ctgttctacc actcgcaggg gcaaangtgg tnaagccacg gnacntcaan gggggaaggc 720
tgggccccaa cg 732

<210> 4276
<211> 558
<212> DNA
<213> Homo sapiens

<400> 4276
ttccgctgct ccaggtccca ggctcagcca gagcaaaggc tgtggaaggg ggtgttccaa 60
gcaccatcag tgtttcccca ccatcaccca gacccaagtg cagggactga ccttcccggt 120
ttgccaagta ctgtcccagt tttagcactg aaagtcccac atctcaggaa acccttcagt 180
cctgcgtaag caaggacaac tggtgacccc agatcgaagc tgtgcaatta ggaaggggac 240
tcctctcagc ccctggccag tgcttagctg ctttggagat gagactcgtc tcctgaatct 300
gagaantaca gtcatttgct gcaggaatca actcgtcccc tagatatcgg ttcccttatt 360
cancaactgt ggcctgctat aggagtcaat ttcttgttac ctttggtcag gggaataaga 420
cttacttttg agtttttcat ggttttccca gtcctccccg cccgccncaa caagcttccc 480
ctctctaant gcaacaggaa ncctcctctt aaagggaang ttccctggnc tctatctcac 540
tgctcttttc ccagagga 558

<210> 4277
<211> 753
<212> DNA
<213> Homo sapiens

<400> 4277
gagtaaaacc gccgcccggg agaagactga aggagcagtt gccgccgttg gcggcggccc 60
gagcagtttt cgctgctgct acggctgttg ccatgaggcg aggctaggga ggacctcact 120
tccccggggt gtaataatgt taactgagtt atattgggag ctagtttcaa gatgaaatac 180
taattctaag ccagtctatc catatgggga tggggaagcc ttggcattgt ccttttctg 240
ataacctttg gacccttttgt aatattttat ttgacatttt atatcctctg ctttgtgggt 300
gggggtttag tggttactct cctgcttgga aaaacaaact cagagaagta cctagaacag 360
tgtgaacact catttcttcc tccaacatca cctggggttc ctaagtgctt agaagaaatg 420

0962946.0720800

aaacgggaag ccaggactat taagattgat agaagattga cgggtgccaa tataattgat 480
gaatctctcc agcaagttat ccagttttcc ttgagggatt atgtccagta ttggtattat 540
acactaagcg atgatgaatc ttttcttctt gaaattaggc agactcttca aaacgcactc 600
attcagtttg ctactangtc aaaagaaata gactgggcaa ccttatttta ctacacgcat 660
tgtagattga ctttggcaca cacttacgag tattcaanaa nggtcaaaca gaaaataacn 720
aggaaangat gatcaaagtg aaaaggtaca nca 753

<210> 4278
<211> 776
<212> DNA
<213> Homo sapiens

<400> 4278
agcagtcagc cggccggaga cagagacttc acgactccca gtctcctcct cgccgcggcc 60
gccgcctcct ccttctctcc tcctcctctt cctcctcctc cctcgctccc acagccatgt 120
ctgcttagac cagagcagcc ccacagccaa ctagggcagc tgccgccgcc acaacagcaa 180
ggacagccgc tgccgccgcc cgtgagcgat gacaggagtg tttgacagaa gggtccccan 240
catccgatcc ggcgacttcc aagctccgtt ccagacgtcc gcagctatgc accatccgtc 300
tcaggaatcg ccaactttgc ccgagtcttc agctaccgat tctgactact acagccctac 360
gggggagcc ccgcacggct actgctctcc tacctcggct tcctatggca aagctctcaa 420
cccctaccag tatcagtatc acggcgtgaa cggctccgcc gggagctacc cagccaaagc 480
ttatgccgac tatagctacg ctagctccta ccaccagtac ggcggcgcct acaaccgcgt 540
cncaagcgcc accaaccagc caganaaaga agtgaccgag ccccaggtga gaatggtgaa 600
tggcaaacca aagaaagttc gtaaacccaa ggactattta ttccagcttt cagctgggcg 660
cattacagag aaggttcaca agactcagta cctcgccttg ccgggacgcg ncgagctggc 720
cgnctcgctg ggattgacac antacaggtg aaaaatccgg gtttcagaat aanang 776

<210> 4279
<211> 812
<212> DNA
<213> Homo sapiens

<400> 4279
tctctactaa aaatacaaaa aaattagctg ggcgtggtgg cacgcgcctg tagtcccagc 60
tacttgggag gctgaggcag gagaatagct tgaacccagg aagcggaggt tgcagtgagc 120
cgaggtcatg ccactgcact ccagcatggg caatagagcg agactctgtc cccccggaaa 180
aaaagaacaa gggctaaatt caaatcaaat tttccctgta ccctaagaaa aataattagg 240
ccgggagatg tttgactaag tgagtaggca ttgttctgtg acggtctgag ccccagacct 300
ttcctctgga tgaatgctgt cccaggtaat gaaatgactt cacttattaa tatataggta 360
cacagagttc aggtagatgt ggaatgaatg gggactcgcc ccgtctgccc ttgaatgtat 420
ttagtggttt atgtgaaatg tacctttcaa agttgtctgt atgtttcata ctctgggggt 480
gggaatataa atcattgcag ccttttttgta gggcactttg gcagtactca tcaaaatatg 540
cgatgtgcag atgcttagcc agcaactccg cttctatgaa tctagccaac agaaatactt 600
gtagaagtgt gcagctataa atgtccacaa gaggctcaga gcctcattgt ttttaatagt 660
gaacagttgg naaccaaata gatgtctgtc agtagggatg tggcagaatt gtggcatgtt 720
ttatatgggt ataaaaaagt attggangga acataaaccc aactggttgg naagaagtta 780
acctctggga tncaggnata aggtangggg tt 812

0950450 : 0702080

<210> 4280
<211> 750
<212> DNA
<213> Homo sapiens

<400> 4280
aaaacaacta cgtgctgcgg tgtggttggt ggtgagatga cgaccttagt gctggataat 60
ggagcttaca acgccaaaat cggttacagc catgaaaatg tgtcggttat tcctaattgt 120
cagttccggt caaaaacagc acgtcttaaa acttttactg ccaaccagat agatgaaata 180
aaagaccctt ctggactctt ttacatcctc ccttttcaaa agggctactt ggtgaattgg 240
gatgttcaga gacaagtttg ggattacctt tttggaaaag aaatgtatca ggttgatttt 300
ttagatacta atattattat cactgaacca tactttaact tcacttcaat tcaagaatca 360
atgaatgaaa ttctatttga agaataccag tttcaagcag tattaagagt aaatgctggg 420
gctctcagtg cacataggta tttccgagat aatccttccc gaattatgct gtatcattgt 480
tgatagtgga tattccttta cacatatagt tccttantgt anaagtaaaa agaaaaaaga 540
agcaattatt cggataaatg tgggaggaaa actcttaacc aatcatctaa aggagatcat 600
atcttacagg cagctacatg ttatggatga aacacatgtg attaatcaag tgaaagaaga 660
tgtatgccan ggtgtcccaa ggatttttat agagacatgg atattgcana gttgnaaagg 720
agaangaaaa ttcaagtaat natagaacta 750

<210> 4281
<211> 823
<212> DNA
<213> Homo sapiens

<400> 4281
aacaacttta gtacttggct ttgtgtgaaa gaaaacagaa ttccctatgt aatacccaac 60
acaccatact catgcaataa atattggtga atacaggtgc tgtactagag atgacaaaag 120
tacaattaag agtcctattt ttcactggat ctactagttg aataaggatg ccatatacta 180
aagcatagaa aagttaaata tccattccct ataaaatcta agaaatacta tgcagtaata 240
tgtcataaat tgccaaataa taatttactg taatacagaa aaagatctgc acctatgtat 300
gaaaagattc tcagaaaact aagaataaag ggaaattcta acttgataca tcctgtgcac 360
ctcaagtcta tagcaaaagt tacatttcat tgagaaattt tgagcacaat ttaagtaaga 420
ggagaagata agaaagaaga aataaagttc actattcgta tatgatatag tcatttgtat 480
aaaatccaaa acagcaaact actagaactg agaaaattca gcaagggttg tctaatataa 540
gattaattta taaaaagcag ttgtttttc tataccgaga gatcagcaat ctttttaaa 600
tgttttcagc tttgtgggcc atatggtctc tgtcataact ataactgctg atgtagtatg 660
aaagcagctt agacatcatg tcaagacatg ggcaatgcct gtgttccaat aaaagctttc 720
tttgtagtaa atngcaagcc ntgggatttt gggcctgtga gnccataaaa tttctaaacc 780
cccngccaat ttatcaaggg gggaaacccc aacttttgna aaa 823

<210> 4282
<211> 521
<212> DNA
<213> Homo sapiens

<400> 4282
tttaattgat gctaaccata gtgatgggag atcnttgctt atacaggaga acataattta 60

0082270-050403.0

ttatcttatt ttaaaataaa cattacacta aaaccccaca tcatttcaag aaatgtgggc 120
aatagtagtt attttattat tatacgtaac ttttaaaaat aacaagatag acaaaatgtt 180
tgagctacat gcacatgaaa agtgaaattt acaaaaagct taagaaatgg atccaaaagt 240
atatttaagc acttcctctg aaaccctcat aactaacana atatgaaaaa acaataaatg 300
tggtttataa accagaaagc ctaaaaaatc tcttctaatg ctatttttat taaaaatgtt 360
tactcattaa tattttaatt ggaactttgc atcatctcag gtagaacgtg agtctcctgt 420
cactatattt anacaagaat gtcctaaaag nttgtcnatt ttctgaaaaa tagcctctgc 480
tttcccaatg gttgctgctt gcttactnng aaatatgcaa a 521

<210> 4283
<211> 698
<212> DNA
<213> Homo sapiens

<400> 4283
ctcggggact ggcatcacgg gagagtggcc aggcgccccc cacccgcagg gcatgcccac 60
ctggacagga ctgaaggctg ctgccacctc tgcagcgcct gccattctca caccccaccc 120
tctgcccagt tttgctgcgt cgcgtgaagg atcctgcgct ggcgccccca cctggtgatg 180
ccgagtccct gggggtggtt tgctgtgact gcatgcggcg cgcagcgggt atatgtgcag 240
gggaggagga gctatgtgcg caggggagga ggagagatgt gcccagggga ggggcctgca 300
actctggtca ctagaggttt ggggcatagg gtttgggaag gccaggaagc gtaaaggggc 360
ttctggggggt cccgaagtag cacgggaggg tggggcaggg ctggtcacgc ctcctgtgct 420
cgggcagaac aacttcgagg agccagtggc actgcaggag atggacacaa gcaacggggt 480
cctattgccc ttttacgatc ccgactccag catcgtctac ctgtgtggca agggcgacag 540
cagcattcgg tactttgaga ttaccgacga gccgcctttc gtgcactacc tgaacacgtt 600
cagcagcaaa gagccgcaac ggggcatggg gtttcatgcc caaaanggga ctgggattgt 660
caagcaaagt gttnagatnn ccccggtttc tacaanct 698

<210> 4284
<211> 780
<212> DNA
<213> Homo sapiens

<400> 4284
atcatatgat atctaagtcc acattaagat gttccccaaa atatttgttt ttgaaccagg 60
attcagtcaa ggctcgtgca tttcatttag ttatatttct ttagtctctt aatgtaaaac 120
tttccaccta ttatttttcc cctgtgtcat tgactttcta aagagaccag gcctgttcta 180
ccaggatttt taaaagggtg acattgccag agggaagtta atgtttctct gaaggtatat 240
gtgcgtttgt atatgtaagt cgatgtggta gctaatactg ttcttaaaca tttataaaaa 300
taagttttgg cattaagtac tagagcatat attgtgtaaa tgtttccgcc agccaatgtg 360
gctgatatct gttttaaagg tctcatttaa aatttagtgt ttttagtata agttactttt 420
tggggacata aatatgcata tgatttgttt aaaaatttgg attgtaaata aaggtttatc 480
tacctatgtg attcagttaa atttttaagt gttaagtggt gtgaattttg tgacactggg 540
agaaagtttg catatcaggt atgaccttag aaagtaacaa atagatttgg tgcattacat 600
cangcatgtg gaangataga tttgtccttc tgttcatgaa gaggtcattt acaaatttat 660
naggagctaa actgactaag tacttgggaa atctgtactt gtaagctaat cacatttacc 720
caaanccgga tttagnaata tanaagggct tttagggaat tgtttggaan ttttaaaaan 780

09629465.072800

<210> 4285
<211> 741
<212> DNA
<213> Homo sapiens

<400> 4285
agattcactt tgtgtttatg catgcatgca cgcgtgcaca caattctatc agcagctgta 60
aactacccac atattttctt aatctcattt tttcagtttt tcttcatctt taaaagaggt 120
tacatttcat tcctggtcaa ctcttaaaaa gaattatgta atgttgggcc ttcatattaa 180
agagagagac tggttataag atcctttaca gtccattcat tttattctga tgtctaacca 240
gatagacact agcaagcaaa acttccctct taatcctgga ccaaatgcat aattttactg 300
tcactttcaa aaatctgtta tgactgaatc aaaatccttt taaagaaagg aaaaagctcc 360
ttttgtgtca aatagttgaa caacatgaaa acagtatgag ccggttaaag atagattgaa 420
tttttacttt acacatatga aaaacagtaa gttttgactg ctgtgtatgt tattcatgtt 480
aatatgtgct cagttattca ctattgttaa tccacatata atcagttgct atccctggtt 540
agacacacta tggaacttga aatgcacaat atttacattg ttagaggctt ctatccaaat 600
atctgcattc ctttaaaatg tgaactattt gctggtgatt aaccaaaagg gaagattang 660
tcatcagtgg gacattttag ntttaangga aacaaattat taagaaatgg aatagaaaag 720
ggngtccttt cctttggggn a 741

<210> 4286
<211> 786
<212> DNA
<213> Homo sapiens

<400> 4286
ttcaaagaaa gatgtcacca caaaattaaa agctatgcag gaatttggaa ccatgtgtac 60
agagagagac acagaaactg tgaaaggagt tcttccatat tggccaagaa ttttttgcaa 120
aatttcactt gatcatgacc gtcgcgtccg agaagccaca caacaagctt ttgaaaaact 180
tatccttaaa gtaaagaaac agttggctcc ctacttaaaa agtttaatgg gagattggct 240
aatggctcag tgtgatactt acacaccagc tgcgtttgca gcaaaagatg catttgaagc 300
ggcttttcct ccaagcaagc aacctgaagc catagcattt tgtaaggatg aaattacaag 360
tgtgctgcag gatcatctta taaaagaaac acctgataca ctcagtgacc cgcaaactgt 420
tccagaggaa gaaagagaag ctaaattcta ccgggttgta acttgttcct tattggcatt 480
aaagagatta ctttgccttt tacctgataa tgagcttgat tctctggagg agaaatttaa 540
gtctctttta tcacagaata agttttggaa gtatggaaaa cacaagtgta cctcaagatt 600
cgctcagctt attttgagtt agtctctgca ttgtgccaac gcantccaca gttgatgaaa 660
gaggaagcat ccaaagtgag cccatcagtt ctacntagca attgatgaca gtgacccaat 720
ttgtctgccc aagctctccg gggaanctgt ncncnataca cttacaacta attggaggga 780
ctggtt 786

<210> 4287
<211> 726
<212> DNA
<213> Homo sapiens

<400> 4287
agaagctttt tcatttattc gtccaagcag catcttgtac tagtcctgac tggaaattta 60

09525465.030200

tcagtggtgt ggttcctcgt gcaacaaata tgaacgtctg aaggcaaacc aggtagctac 120
tggcattcgg tacaatgaaa ggaaaggaag gtctgaacta attgtcgtgg aagaaggaag 180
tgaaccctca gaacttataa aggtcttagg ggaaaagcca gagcttccag atggaggtga 240
tgatgatgac attatagcag acataagtaa caggaaaatg gctaaactat acatggtttc 300
agatgcaagt ggctccatga gagtgactgt ggtggcagaa gaaaacccct tctcaatggc 360
aatgctgctg tctgaagaat gctttatttt ggaccacggg gctgccaaac aaattttcgt 420
atggaaaggt aaagatgcta atccccaaga gaggaaggct gcaatgaaga cagctgaaga 480
atttctacag caaatgaatt attccaagaa tacccaaatt caagttcttc cagaaggagg 540
tgaaacacca atcttcaaac agtttttaa ggactggaga gataaagatc agagtgatgg 600
cttcgggaaa gtttatgtca cagagaaagt ggctcaaatn aaacaaattc cctttgatgc 660
ctcaaaatta cacaagttcc ccgcagatgg caacccangc acaatntggn gggangatgg 720
ttctgg 726

<210> 4288
<211> 707
<212> DNA
<213> Homo sapiens

<400> 4288
aaacaagaga agcgagatgg ttccaagcac aaatgatcct tatgtggctt ttagaaggcg 60
tactgaaaaa atgcagactc gaaaaaatcg caaaaatgat gaagcctctt acgaaaaaat 120
gcttaagctg cgacgagatc taagtcgagc tgttactatt ctagagatga taaaaagaag 180
agaaaaaagt aaaagagagc tattgcactt aacactggaa attatggaaa agaggtataa 240
tttgggcgac tacaatggag agatcatgtc tgaggttatg gcacagagac agccaatgaa 300
acctacttat gccatcccca tcatccctat tactaatagc agtcaattta aacaccagga 360
agcaatggat gtgaaggagt tcaaagttaa taagcaagat aaagccgatc ttatccgacc 420
gaaacggaaa tatgaaaaga agcccaaagt cttaccatcg tctgccgctg ctactcccca 480
acagacgagt cctgctgcac tgccagtctt caatgctaaa gatctgaatc agtatgactt 540
tcccagctca gacgaagaac tctctcccag gttttgtctg gctcttcgga agctgangga 600
agacaatgat cctgatggtc cttttgcctt ccgtanggaa agcaggctgt cagtactaag 660
gcncctcact tagancaaaa ctgggaactg ggccttggnc aatnccc 707

<210> 4289
<211> 909
<212> DNA
<213> Homo sapiens

<400> 4289
agtggccgga acccttgaga ccagaggctt accatgctgc tccctaggag ggccgggaac 60
tgctgacgtg accactggac agttattcgt gtctcttaca attaccaaac agaatggaca 120
agcttaataa aataaccgtc cccgccagtc agaagttgag gcagcttcaa aagatggtcc 180
atgatattaa aaacaatgaa ggtggaataa tgaataaaat caaaaagcta aaagtcaaag 240
cacctccaag tgttcctcga agggactacg cttcagagag ccccgctgac gaagaggagc 300
agtggtccga tgactttgac agcgactatg aaaatccaga tgagcactcg gactcagaga 360
tgtacgtgat gcccgccgag gagaacgctg atgacagcta cgagccgcct ccagtagagc 420
aggaaaccag gccggttcac ccagccctgc ccttcgccag aggcgagtat atagacaatc 480
gatcaagcca gaggcattcc ccacccttca gcaagacact tcccagtaag cccagctggc 540
cttcagagaa agcanggctc acctccaccc tgccggccct gactgctttg cagaaacctc 600

09/02/2005 15:09 FAX 619 235 0176

aagtcccacc caaacccaaa ggcctccttg aggatgaggc tgattatgtg gtccccgtgg 660
aaagataatg atgaaaacta tattcatccc acagaaagca gttcaactcc aacctgaaaa 720
agctcccaag ggtgaataga tnaaccaang ccaaatttcc tcaaangccc gnctctcctc 780
caaggaacaa gcttaaggtc caaaacagtg ggggcctggg gaaaccaagt cacctccaac 840
aaagctncaa caatnccccg ttgccaaagg ggcccgggga aaaaaaccaa cgancancca 900
ctggangac 909

<210> 4290
<211> 729
<212> DNA
<213> Homo sapiens

<400> 4290
gtagaaaacc aagagtgaga aggagttact gtgccggctg cagaagctgc acctccagca 60
ccagaacgtc acatgtgaga aggaaaagct gctggaacgg cagcagcagc tgcaggagga 120
gctgcagtgc catgaggcag agctgcagca cctcagggat acggtggcct ccttcaaaga 180
gagcaatgag aaggacacag agacgcacgc tcagcttcag gagatgaagc agctgtacca 240
ggtcagcaag gacgagctgg agcggcagaa gcacatgtat gaccagctgg agcaggacct 300
cctgctctgc cagctggagc tgaaagagct caaggcctcc caccccattc cggaggacaa 360
aggaaagtgt gctaataagt gtgacacact gctgtccaga ctgacagaat tgcaggaaaa 420
gtacaaggcc agccagaagg agatggggca gctgcagatg gagcagtgtg agctcctgga 480
ggatcagagg aggatgcang aggagcaagg ccagctgcag gaagagctgc acaggctcac 540
actgccactg ccaaagagtg gnctcttact caagagtcag gagctactca ccaagttaga 600
agacctgtgt gaagctgcan ctgctctacc aaggcatgca aggagggaac agaagaagct 660
tgattcaaga acccaanact ggtgtattta aaangaacaa ttttnnagat tccaacgaaa 720
naagctggc 729

<210> 4291
<211> 836
<212> DNA
<213> Homo sapiens

<400> 4291
aaccaattgc accacgaccg gatggaagag cccagctgac acaaccaaga cgagtctcag 60
tgtctaggga agcttggggt tctgctcctt ttacttcagg cgaacctgaa ctcagttaat 120
gcaattttga agcatgccct gaatagattc agtcattatc aagtcaaact aaaaacggtg 180
aaaggttgcg actattacca aataggaaaa acctgaagac ataagaacta cacatgagga 240
atatgtcatt tagcactttc acttttgat ctccacagaa gacaatgaga agtcatacca 300
taacaatgac gacaacttca gtcagcagct ggccttactc ctcccacaga atgcgcttta 360
taaccaatca tagcgaccaa ccgccacaaa acttctcagc aacaccaaat gttactacct 420
gtcccatgga tgaaaaattg ctatctactg tgttaaccac atcctactct gttattttca 480
tcgtgggact ggttgggaac ataatcgccc tctatgtatt tctgggtatt caccgtaaaa 540
gaaattccat tcaaatttat ctacttaacg tagccattgc agacctccta ctcatcttct 600
gcctcccttt ccgaataatg tatcatatta accaaaacaa gtggacacta ggtgtgattc 660
tgtgcaaggg tgtgggaaca ctgttttata tgaacatgta nattagcatt aatttgcctg 720
gattcatcag tttggattgc tatataaaaa ttatccggtc tatacaagca accgganggc 780
aataacaanc aagcaaaagt atttaggtcc ggttgtaaan ntangggatg ccttgc 836

0500450-0720800

0052769.0950

<210> 4292
<211> 897
<212> DNA
<213> Homo sapiens

<400> 4292
aaatacaggt tgacaagtgc taagagagaa gtcagaggct gtgggaacag agaggaggag 60
tatctaacca gcctggagta tcnggaagac ttcctgaagg aggagaaaac acctgggcta 120
aatcttaaag gaagaccaga agctacccag ggaaagaagt gaaggaaggc attataaaca 180
gagaggccag gagattccag cctcagcatt cccagagaag gcccaggatc tccctgagag 240
gcccagttgg tgtttgtgga atcatcgctc ctctggtgat cacgcagttt gcctcacttt 300
ctccatggag ctctttgcta aaggacattc tcctccagct gtgaaggaaa agcccaacaa 360
aaggcagggt actttgttct aactgaggat gtctactgac acagccaagc tgtaaagcag 420
accacggacg gcagtgcagc ggggagaaca actctacatc tggttggagg tggagtaatg 480
tccagtctgg gcacagagag atggcaggtg tgcagctgca ctcagcatgg gatagagcac 540
cacctgccag gccaagaaca gaaagaaggg cgacggagac tggcagagaa acagcaatta 600
ctgctcagtg agaagtaaac agcgtctgct tccaaaggct ttacggncca gaaaagccca 660
caggaaatag ctcctgcttc ccancctgga gggtcctcat gcactanccc tccctggctg 720
caatttttga tgggttttcg catatttaca ggaatttgtg caaccatcan catgatcaag 780
tccttagaaa gangtttaat caacccctga accccagaaa aactccggtt attcaattaa 840
naagtcaatc ccctttcccc ttttcaaccc ctnctncaaa caattnaggg aaaccnc 897

<210> 4293
<211> 739
<212> DNA
<213> Homo sapiens

<400> 4293
acaagaacac ccaagactac aagcagttca ttgtttttac agatagactt cagccaacca 60
ctgaagcagc agagatggaa tttttaaata gacacaaact agagacagtt cctttggtaa 120
ggcacaaagg tgaggcttct cagccccata gtggggctgc atgcatacag agaaggtctc 180
cacctcggga cagcttcttg aatccggtgg atatcaactg tcactgtgtg tcagaatcac 240
cttggggctt ttaaaaaata atgatgcttg ggcacccact cccagagctc aagtttacct 300
gatctaaggc atgtgcctgg gcattggtgt ttctttagag cgcctccgtc ccaggtgaag 360
ctaatggata gccagcccta ctttacgaat gaaccacagc tcaaaatctt gtataaacaa 420
tttctctctc caacacctta tgtactcagt tccactggat gtcttgcgct ttatatgctt 480
gaaactgagt tcttgatttg ggacccttcc ctacctggcc cttgctcagg gttccccatc 540
ttggtgagct gcactaccca agcattctgt agtgaccaag aatcccaaag aactcccctt 600
caatctcaat tctctgccat cttctcccct gcccgcccat atacaattcg ttctcggtgg 660
ctgaggctat tactttccaa ctgggancta ngatnatgtc caacggggtc cgtcaaacnt 720
ccccctggnc tttctggaa 739

<210> 4294
<211> 519
<212> DNA
<213> Homo sapiens

<400> 4294

gttttccggc gcggcccagc gagctcggca acctcggcgc agcgagcgcg ggcggccagc 60
cagggccagg gggcggtggc ggccaaggtc cgaccgggtg ccagctgttc ccagcccccg 120
cctcgggccc gccgccggcg ccgccatggg caagaagcac aagaagcaca aggccgagtg 180
gcgctcgtcc tacgaggatt atgccgacaa gcccctggag aagcctctaa agctagtcct 240
gaaggtcgga ggaagtgaag tgactgaact ctcaggatcc ggccacgact ccagttacta 300
tgatgacagg tcagaccatg agcgagagag gcacaaagaa aagaaaaaga agaagaagaa 360
gaagtccgag aaggagaagc atctggacga tgaggaaaga aggaagcgaa aggaagagaa 420
gaagcggaag cnaagagagg gaacactgtg acacggaggg agaggctgac gactttgatc 480
ctggggaana angtggangt gganccgccc ccagatcgg 519

<210> 4295
<211> 783
<212> DNA
<213> Homo sapiens

<400> 4295
gtgatcctgg tgttgatgga agggaccccc aagggcgttg acttcacagc tgttcgtgat 60
ctgctgctgt cggtggaggg ggtagaagcc ctgcacagcc tgcatatctg ggcactgacg 120
gtggcccagc ctgttctgtc tgtccacatc gccattgctc agaatacaga cgcccaggct 180
gtgctgaaga cagccagcag ccgcctccaa gggaagttcc acttccacac cgtgaccatc 240
cagatcgagg actactcgga ggacatgaag gactgtcagg catgccaggg cccctcagac 300
tgactgctca gccaggcacc aactggggca tgaacaggac ctgcaggtgg ctggactgag 360
tgtcccccag gcccagccag gactttgcct accccagctg tgttataaac caggtccccc 420
tcctgacctc tgccccactc caggaatgga gctcttccca gcctcccatc tgactacagc 480
cagggtgggg actcagcggg tataaagcta gtgtgaccct gctcttccag ctcctgggcc 540
agctctggaa gggctgtatt tggggcctaa tcctcagcaa ctgttctgcc actcncangg 600
gcaaaggtgg tgagccacgg gacgtccaag gggaggctgg gncccagcgn gcccatactg 660
cctgcctcat gccccattct caaccctggc tgggcctttt gcctttaatg aaatctggag 720
ccccctccaa tctgccctaa tangcaatta ggcaaccggg ggggttnnan ggaacccntc 780
caa 783

<210> 4296
<211> 702
<212> DNA
<213> Homo sapiens

<400> 4296
agagagctgt ttactaggca cgactgcgaa ggcaaggggg caccagctca ggactgcatc 60
tgcctgccat ttcccttcca ctcctccttt ctggagtctg acattagaaa gccagcgaga 120
aggaagattc aaacaaccaa ccctgatttc ctgcttctcc ttttcatgag tgttcctgtg 180
gtctctgcac ctcctttctg tcccccggca gagggcagta gagatggccg gcccaaggcc 240
tcggtggcgc gaccagctgc tgttcatgag catcatagtc ctcgtgattg tggtcatctg 300
cctgatgtta tacgctcttc tctgggaggc tggcaacctc actgacctgc ccaacctgag 360
aatcggcttc tataacttct gcctgtggaa tgaggacacc agcaccctac agtgtcacca 420
gttccctgag ctggaagccc tgggggtgcc tcgggttggc ctgggcctgg ccaggcttgg 480
cgtgtacggg tccctggtcc tcaccctctt tgccccccag cctctcctcc tagcccagtg 540
caacagtgat gagagagcgt ggcggctggc antgggcttc ctggctgtgt cctctgtgct 600
gctggcangc ggnctgggcc tcttcctcnc ctatgtgtgg aaatgggtca ngctctccct 660

09/29/2005 09:59:59

ccccgggggc ctggggtttc tagctctggg cancgcccaa gg 702

<210> 4297
<211> 629
<212> DNA
<213> Homo sapiens

<400> 4297
aatgcatgcc gggcactgag ccagcatctg ccaagaaact gggaccacca cagaccagct 60
cttgaggcaa agcttgaaca ccatcagtca agagtggttc cgcgtctcca gccggaagtc 120
gtctagcccc gccgtggtgg cctcctacct ccacgaggtc cagcctcact ccccacactt 180
cctgaaactg cttgtcaact tggccgatca caacgggaac acggcccttc actacagcgt 240
gtcccactcc aacttctcca tcgtgaagct gctgctggag acaggcgtct gcaatgtgga 300
ccatcagaac aaagctggct acactgccgt aatgatcact cccttggctt ccgcagagac 360
caatgaagac atggctgttg tctggaagct cttaagagaa ggaaatgtga acattcaagc 420
tactcaggga ggccagactg cgctgatgct gggagtcagc cacgacaggg aggacatggt 480
tcaagcgctg cttagctgcc aggcagatgt caatctgcag gaccacgatg gatcctcggn 540
cctcatgctg gcctgtcacc atggnaacgt gganctggtg cggctgctcc tggnacaccc 600
agcctgcgac agcaacctga ctaacaang 629

<210> 4298
<211> 805
<212> DNA
<213> Homo sapiens

<400> 4298
tttgttttga gcaataaact aatacaaaat gatggccatt catgtgcagc tctttgtcac 60
catgggccgg atgagttgtg ctcctcctgg ctcaccattt ccccctgctc ccccacagcc 120
ggttctgcac ttatcaccga gtcgcccctg gaagcagatt cccattgagt tttccccacc 180
aaggggacca tgcacatggt agaaacatta gattctgcat tgacagtagc ctttccttgg 240
cccgggcctg tggtgggaag acgggcaaca agtatacccc accagggcct gagtgactag 300
aggaagaggg cgaggccttg ttggcactag atttgggtat tttctgcatg tcataacata 360
tcctaactgc tatttcagaa gaggcagctt gtaggtgatt gtacaagtga gaattaaaga 420
gagaacagat atttaaacag gtgctgtatt agtaacagcc agtgcccttt cagcccttgc 480
atctattaaa aggagattca ggattttatt gggcacaggc ccttcttant aggaagaaag 540
ggtgcttagc tttggacctg accgggtgtg tgtaaaacca tggactgagt cacagcagac 600
actccatggg ggtaaatgtg atgggtgctt acacactgta ccttttcctt tcanactgat 660
gcctgcantt caagggctgg gantttgttt aanggaattg acctccaacc caactgcccc 720
aatgttccaa ctgggggctg gccccaangc tgcaatggtc aancctgaag gggcctgggc 780
aaaggaaang ggggccnaan aaaat 805

<210> 4299
<211> 719
<212> DNA
<213> Homo sapiens

<400> 4299
tcagtggcca tcgcctgccg gcagctgcaa cagcagagca aggccagcaa gatcctcatt 60

09625469.0202000

gtagactggg acgtgcacca tggcaacggc acccagcaaa ccttctacca agaccccagt 120
gtgctctaca tctccctgca tcgccatgac gacggcaact tcttcccggg gagtggggct 180
gtggatgagg taggggctgg cagcggtgag ggcttcaatg tcaatgtggc ctgggctgga 240
ggtctggacc cccccatggg ggatcctgag tacctggcta ctttcaggat agtcgtgatg 300
cccatcgccc gagagttctc tccagaccta gtcctggtgt ctgctggatt tgatgctgct 360
gagggtcacc cggccccact gggtggctac catgtttctg ccaaatgttt tggatacatg 420
acgcagcaac tgatgaacct ggcaagaggc gcagtggtgc tggccttgga gggtggccat 480
gacctcacag ccatctgtga cgcctctgag gcctgtgtgg ctgctcttct gggtaacagg 540
gtggatcccc tttcaaaaga aggctggaaa cagaaaccca anctcaatgg catccgctct 600
ctgggaggcc gtgatccggg tgcacagtaa atactggggc tgcatgcaan cgcctggcct 660
cctggtccaa gactcctggg gtggcctnaa agtgccnaag ggggcttgac aaaannaat 719

<210> 4300
<211> 757
<212> DNA
<213> Homo sapiens

<400> 4300
aaagcaaagg cgtcaggaat ggttcttcct caggtatttt ttctaaatgt gagatcaagg 60
aattaccacc aaaaaaggag agtaatacag gagaaatatt ccagacagta atgttggaaa 120
gacatgaaag ccacgacata caagattttt gcttcagaga aacccagaaa aatgtacatg 180
actctcagtg tctgtggaaa catgattgaa gacattataa gcgagtgcgt gtgacctata 240
aggaaagtct cattggtaga agagacatgc atggtagaaa ggatgatgca caaaagcagc 300
ctgttaaaaa tcagcttgga ttaaacccgc agtcacatct accagaactg cagctatttc 360
aagctgaagg gaaaatatat aaatatgatc acatggaaaa atctgtcaac agtagttcct 420
tagtttcccc accccaacgt atttcttcta ctgtcaaaac ccacatttct catacatatg 480
aatgtaattt tgtggattca ttattcacac aaaaagagaa agcaaatatt gggacagaac 540
actacaaatg taatgagcgt ggcaaggcct ttcatcaagg cttacatttt actatacatc 600
aaataatcca tactaaagag acgcaattta aatgtgatat atgtggcaag atcttcaata 660
aaaaatcaaa ccttgcaagt catcaaagaa ttcatacngg agangaagcc atttaaatgt 720
aatgaatgtg gcaanggnct tccatatatg ncacacc 757

<210> 4301
<211> 861
<212> DNA
<213> Homo sapiens

<400> 4301
tggttatggg ctttgtttct ggagctcaga cagtccttag tttgaatccc aaatctgtcc 60
ttacctccga taagcctcac taaagctcac taaacctctg tccccttatc tgccaattgg 120
agataatcat gatatttaat cctatggagt gctgtgagga ttaactaaaa caatgcattt 180
gaagttcttg gcactatgtc tggcatggag gtatatgact atgatttgta aattgcaatg 240
cttctgagat ggcagtagag ggagcagagt caatgggaac tggacttcag aaaattagca 300
agattgatat taaacccttt tacaagacaa tgttcctgtt ctgatggagc tagagcaacc 360
tgcacacaga tgagtcgatg agattcacac caggccatct tatcccaata atccttgctg 420
tcccactcat gtggtactag cagatgcaac cagggaactc aacgcatctt tctgcgtgta 480
catattgtct gtccaacctc caactccagc tcaccccagt ttcctcagaa cacttaagag 540
gggagaggag aagtatggtg atatcacaaa actgaaacta gcaaatgttt atattctttg 600

0562563.0020000

tacaaaaatt gggagaaggt ggagctggtt tacctccctt acagcggcaa gagtgatatc 660
ctctctcttc ctctctctgt ttcccacaaa agcagctcca ctgggcanag tgggaaaagc 720
acaatcaagn accgattttg aatccaccct ggtcctccaa tttacaaact gtgaaacctg 780
gcctatccca anccaagact ccccttcaac ctccaatttc cggcnnctgg tanagcaaag 840
ggtggcaagg gnaaacctgg g 861

<210> 4302
<211> 725
<212> DNA
<213> Homo sapiens

<400> 4302
ttatcaatgc tttttaatgt gtttttaccc ttgcctcact gtgtgtgtgt cactttctat 60
aatataaaga aatactataa tatttctaga gtctggaact gtcaccatga tgaatggccc 120
tttcaatgca tagttacaga aattcctgaa gattccccag gacttcaatt tcattggttt 180
ttatttgcag tttttagttg ctgtaattgt tgctgtttcc agtctaaagg acctcctttg 240
gtaaaggtga acaagacctc tcccctatgc tacccagcca gattttgtgt gtgtaatggg 300
ctggcccaag agtgttcttt tacttagaac tccttttgat tttgctttc tctgccccta 360
gaaattttag ggacaaagac attttggaaa ttgtcagtta cttttagaaa gaaaacactg 420
cagaaatatt taacagatta cttcttgata aaatttaaat gggattatat gaatttataa 480
tgccaattga aaatattata tacacaaaat ttgctatttt cacttaaagt aagcattttt 540
aaaggattta ttttagaata caatctatgc aatcctcgaa ctcagtgtgc ttttccctga 600
caggatatat aaaaaggtag attaggtcaa ccctccttta agcttactct cccctcacct 660
tttcntttca ctggananaa acggnacttt cctgtgattc aaaccaacan gaggactttc 720
tggga 725

<210> 4303
<211> 652
<212> DNA
<213> Homo sapiens

<400> 4303
aatatagtta tcttcttaaa aaccattata acaattcaga gagagttctt tacaaagcca 60
tgaatatgaa ctatggggaa tcatggttct tttaaagcaa ttttcaaaat aagtaccaat 120
taaagcttta ggttccaaga agattctggg actcaggaag aaaaagtgcc atcaggtgac 180
cagctgttgc atttcttgct tattctgttt tgtttttgca catcataatg gatttttctt 240
agtgccctaa ttgtgaaggg tttctctagc tttggttatg tgtaatgttc acgtgacctt 300
tttttgtcaa tcgtttttgg aatttttctt tctttctgtg ctttattact aataagtcca 360
atgagtgagt agtagctaga tgactagtat gtagttttat attttggtaa aattatttgc 420
cctttcagaa atgcctcatc taaagataca tgataatttt ggagttggag ggggccttag 480
aggctctcca gctctgcttc ttgcccattg ccaaatactg aaatggaagc ccgtcttacc 540
tggggtcact aactggttgg ttaactgagc taagaatang ctgtgggtcn cctcacttgt 600
gggccantgc tccttccggc tatacaaaat gtccaatcnc anaattttcc tc 652

<210> 4304
<211> 807
<212> DNA
<213> Homo sapiens

09629465.070200

<400> 4304
aaatgaattt actaaatgtt gtcagagtat tttttgttta gataaccacc aagaacagaa 60
caaacctaaa agatacttgg gaaaatatct aatcagtcaa cattctaagg actgttaaat 120
gtgaaatagc atagttattt tttgtctttt gttactagtg tgaacaaaga acggcgccta 180
acatataatg ggcatttagt aactctgtta gatgaaagac tctccaattt cagattttct 240
tttagcatct tattagtcac tacttaattc tgatgattta gctctaaatt tattttgatc 300
tcagtttttt tatttttatt tttggagaca ggatcttgct ctgttgccca ggctggagta 360
cagttgtagg attacagttc actccagcct caatctccta ggctcaagca atcctcccat 420
ctcagcttcc caaatagcta cgactacagg tgcatgcctc catgccctgc taatttctgt 480
atttttgta gagatggggt tttactatgt tccctangct aatcttgaac tcctgagctc 540
aagcaatcca cccgcctcgg gctcccaaag ggctgggatt acaggcgtga gctatcatgc 600
ctggcctaat gtatttttta aaagttgaat ctaaaaagaa tttaaaacaa atataaatca 660
gctcagtaag gatggatant tttggacatt taaaactatt attttagggc ccgggagtgg 720
gtggctcaac acctggttaa tccccagcaa tttttgggga aancccnagg gcaanggggg 780
gattaatcct gnangggcca agggaaa 807

<210> 4305
<211> 765
<212> DNA
<213> Homo sapiens

<400> 4305
gagcgcctgc cccatgcgcc gccgcctctc cgcacgatgt tcccctcgcg gaggaaagcg 60
gcgcagctgc cctgggagga cggcaggtcc gggttgctct ccggcggcct ccctcggaag 120
tgttccgtct tccacctgtt cgtggcctgc ctctcgctgg gcttcttctc cctactctgg 180
ctgcagctca gctgctctgg ggacgtggcc cgggcagtca ggggacaagg gcaggagacc 240
tcgggccctc cccgcgcctg ccccccagag ccgccccctg agcactggga agaagacgca 300
tcctggggcc cccaccgcct ggcagtgctg gtgcccttcc gcgaacgctt cgaggagctc 360
ctggtcttcg tgccccacat gcgccgcttc ctgagcagga agaagatccg gcaccacatc 420
tacgtgctca accaggtgga ccacttcagg ttcaaccggg cagcgctcat caacgtgggc 480
ttcctggaga gcagcaacag cacggactac attgccatgc acgacgttga cctgctccct 540
ctcaacgagg agctggacta tggctttcct gaagctgggc ccttccacgt ggnctccccg 600
gagctccanc ctctctacca ctacaagacc tatgtcggcg gatctgctgc tctccaagca 660
acataacggn tgtgcaatgg gatgtccaac gcttctgggg ntggggccgc caaggacnac 720
ganttctacc ggcgcattaa nggaagctgg gctcaagctt ttccg 765

<210> 4306
<211> 824
<212> DNA
<213> Homo sapiens

<400> 4306
aacacaccaa gatgagactg gtcctaattt ttcctctgcg aatatggttt tctgattaac 60
tactagttat gtctatgcca aaaaaagaaa catgctcaga ccacggtttt tgcctccaga 120
tgaccgaact gtacgtgaag gtgagagaaa agctgccaag ctgcatttta gtcagttggg 180
caacagtgaa aattttcttt tagaggtgga aaaaagctct agggagaaga caatgaaaaa 240
ctgtgtaaca ggtgagagct ctgcatcaaa agtcagtgct aatgttgaca gcaggattga 300

0956456.0072800

aatggaaaga gtcttgctct gtcgcccaga ctggagtgct gtggcgcgat ctcggctcac 360
tgcaacctct acctcctggg ttcaagcagt tctcctgcct cagcctagcg agcagctggg 420
attacagact caaacaaagg acttttttatt cccttcccca accgggaaat aaaggattcc 480
ctaagtactt ctgcaactca gggcaatggt acacgtgatc agaaattaga caccttccca 540
ctggggacac agagttcaga cactactcgc ctcgtcagtc cacagtccga tncccagaga 600
agatgactag agaagggtac caagtatctt ttttggacaa taaagtcttc agggtcttct 660
ccaaaaaagg gaattgatac caaaacctga tacttttcaa cttacccatg gatgcctcat 720
tgagtaaatg cctggatgtg ggtgattcta nccagatcat ccctancaag ttaccttcan 780
atgttggcct gggaaaatta tgacagttgt tattcccaaa ntnc 824

<210> 4307
<211> 815
<212> DNA
<213> Homo sapiens

<400> 4307
acagttgttg caaagtgctc agcactaagg gagccagcgc acagcacagc caggaaggcg 60
agcgatccca gccagcccag ccagcccagc cagcccggag gtaaggaaac ggtgctcggg 120
cagcagctct gctcggaaag aaggcacggc ttctgctctt aagccaagtg gtcttttcaa 180
aggccttctt taaaatcgct cagatgggtg cttttgagtc tgcgggtctg gtttctgaaa 240
acccaggctg cacgcagctg cattgcaaag tgcttttgct aattcggagg gcttcacctt 300
tctcttcaga aagcaaaggg cagttttctt aagtcacttg cagaaggaaa tttccatgtg 360
tatttaggaa tctggtgttt atttgctgtg tggctattta agctccagta agcaggggaa 420
ctttgcaaga acacagacta tccattctgc ctgaccaatt tggcatgggg attagcttgg 480
cacccactgt ttacctgttt tgcttctagt atatcagttt ggaaacagat aaaattggca 540
gtaaatacgt aattccaaga atgatgaaca ctttattaag aggatcctta aatggagcag 600
aaaactgctg agaatctttg tgaagtccaa gatgtatttg aattcagtac tttgggggat 660
ttaccaaagt ctgtaagtcc gggaagctat aaacgtgaat gttaaacaca gcccgggtcn 720
tcctcttccc cttgaangga acgccttgcc aaatnctaaa tttgngtaat tgggtccncc 780
cttaaaaagg gggtttaaag ttccaaactt tcaaa 815

<210> 4308
<211> 791
<212> DNA
<213> Homo sapiens

<400> 4308
ttgaaaacat atattactct cgaggcttcc tgtctcaaga aatagaccag aaggccaaat 60
tcttctcttt caatacatca gtttgcctcc aagaatatac taaaaaaagg aaaattaatt 120
gctaaataca tttaaatagc ctagcctcat tatttactca tgatttcttg ccaaatgtca 180
tggcggtaaa gaggctgtcc acatctctaa aaaccctctg taaattccac ataatgcatc 240
tttcccaaag gaactatcaa agaatttggt atgaagcgca actctcccag gggcttaaac 300
tgagcaaatc aaatatatac tggtatatgt gtaaccatat acaaaaacct gttctagctg 360
tatgatctag tctttacaaa accaaataaa acttgttttc tgtaaattta aagagcttta 420
caaagttcca taatgtaacc atatcaaaat tcattttgtt agagcaggta tagaaaagag 480
tacataagag tttaccaatc atcatcacat tgtattccac taaataaata cataagcctt 540
atttgcagtg tctgtagtga ttttaaaaat gtagaaaaat actatttgtt ctaaatactt 600
ttaagcaata actataatag tatattgatg ctgcagtttt atcttcatat ttcctggttt 660

0088270 6456350

gaaaaagcat tttaatggtt ggacacagta tttttgggna caaaaaaaaa angactcact 720
aaaatgtgtc ctactaaagg ttaacctttg gnaatgctgg nggttctgtg attctccaan 780
aaacttaatt g 791

<210> 4309
<211> 753
<212> DNA
<213> Homo sapiens

<400> 4309
ttttttcccc cttgcctggc tcctgtggtg gcaggctggg cacgaggacc atgctgggcc 60
ggagcctccg agaagtttct gcggcactga aacaaggcca aattacacca acagagctct 120
gtcaaaaatg tctctctctt atcaagaaga ccaagtttct aaatgcctac attactgtgt 180
cagaagaggt ggccttaaaa caagctgaag aatcagaaaa gagatataag aatggacagt 240
cacttgggga tttagatgga attcctattg cagtaaaaga caatttcagc acttctggca 300
ttgagacaac atgtgcatca aatatgctga aaggttatat accaccttat aatgctacag 360
tagttcagaa gttgttggat cagggagctc tactaatggg aaaaacaaat ttagatgagt 420
ttgctatggg atctgggagc acagatggtg tatttggacc agttaaaaac ccctggagtt 480
attcaaaaca atatagagaa aagaggaagc agaatcccca cagcgagaat gaagattcag 540
actggctgat aactggagga agctcaagtg gggagtgcaa ctgctgtatc ggngttcaca 600
tgctacgcgg gttttaggat cagatacaag gaggatcnac caagaaatcc tgctggccca 660
ctgtggggct tgttgggttc aaaccaaagc tatgggntta antttccccg tcaatgggcc 720
ncaatccccc tgggggaatt ccnatggntt gtg 753

<210> 4310
<211> 661
<212> DNA
<213> Homo sapiens

<400> 4310
gtctatcatg gcaagctcgg actggtcata cggccttgag aagggtagtc tcgggatgcc 60
gtccgaagtc ggcgacagcg gccggggcgc aggcgcccgt gcggaatggc agatatttag 120
cttcctgtgg tatactgatg agcagaactc ttccactaca tacctcaatt ttgcctaagg 180
agatatgtgc acgaactttc ttcaaaatca ctgcaccatt aataaacaaa aggaaagaat 240
attcagagag aagaatttta ggatattcaa tgcaggaaat gtatgatgta gtatcgggag 300
tggaggatta caagcatttt gttccttggt gcaaaaaatc agatgttata tcaaagagat 360
ctggatattg taaaacaaga ttagaaattg gatttccacc tgtgttggag cgatatacat 420
cagtagtaac cttggtgaaa cctcatttag taaaggcatc ttgtactgat gggagacttt 480
tcaatcattt ggagactatt tggcgtttta gcccaagtct tcctgggcta cccaagaact 540
tgtaccttgg gatttttcaa tttcttttgn atttcgatca cttctacatt cccagcttgc 600
cacactcttt tttgatnaag ttgtgaaaca aatgggnact gcctttgaaa naaaancatg 660
t 661

<210> 4311
<211> 756
<212> DNA
<213> Homo sapiens

09820.5252.00

<400> 4311
atactaaaat tggaacgata cagagaagat tagcatggcc cctgcgcaag gatgacacgc 60
aaattcgtga agcgttccat atttttgatc catccggatt ggaaacacag ccttttctac 120
tagactcttg cctgtcagag gagctgttga atgtttattt gaaatgggct ttgaagaggg 180
agaaacacat ctcatctttc ctaaaaaagc ttcagtggag cagctgcaaa aaattcgtga 240
cctgattgcc atagagagaa gtagcagact ggatggctca aataagagcc acaaagtaaa 300
gtcatctcag caacctgcag ccagtaccca gcttcctaca acaccatctt caaatcccag 360
tgggttaaac cagcacacaa ggaaccgtca agggcagtca tcagatccac catctgcttc 420
aacggttgct gctgactcag ccattctaga agttcttcag tccaacattc agcatgtgct 480
ggtctatgaa aatcctgctc ttcaggagaa agcgttggct tgtantccgg tccaagaact 540
aaaaaggaaa tcacaagaaa agttatcgag agctagaaaa ttggataaag atataatanc 600
cctgaagaaa cttttggaaa caaagatgtg gacggtgtgg cgagtgggcc aattgtttta 660
cactgggctg ccganctgta gggtttgaag ctccgctatg tttgggatta cgcangacca 720
tgtctnggac agaagtcnat tctccttctc agcaan 756

<210> 4312
<211> 878
<212> DNA
<213> Homo sapiens

<400> 4312
atctcaagtt gcacagctaa aaaattcaag tgaagagaaa gaagctatga attccatttg 60
ccaagacagc actttctgca gatggcaaag ggagcaaagg cagtgaggag gatgtggtgt 120
caaagaatca aggcgatagt gccagaaagc agcctggctc atccacctcc agttcttctc 180
acctagcgaa gccttccagc agcagactgt gtgacaccag ttctgcaagg caggaaagta 240
ccagcaaagc agaccttaac tgttctaaga acaaagacct atatcaagaa caggtagaag 300
taatgttaga tgtgacagat acaagtatgg atacttattt ggaaagagaa tgggggaata 360
aaccaagtga ctgtgtaccc tacaaagatg aagaacttta tgatcttcca gctccttgta 420
ctcctttgtc ccttagttgc cttcagctca gtactccaga aaatagagag agctctgtgg 480
tccaagcagg aggttccaaa aagcactcaa accatctcag aaaattggtg tttgatgatt 540
tttgtgattc ttcaaatgtt tctaataaag attcttcaga agatgatata agtagaagtg 600
aaaatgaaaa gaaatcagaa tgtttttctt ccccaaagac aggattttgg ggactgttgt 660
tccacaaagc tatgcccaaa aacttagatt ttgaaaagtt cagaggggaa cacgatagca 720
aattctgttg gagaaatatc ctcaaaantt gaggtgagga aaatcaaggc ttaaggttta 780
tccaaaaagg gtgaattcca atccgctcct ttgaaatgga ccgggcaaga catccaagtn 840
gaagcatcca tggnngcngn ttaccttgac aaaatccc 878

<210> 4313
<211> 633
<212> DNA
<213> Homo sapiens

<400> 4313
gaaatctttt gatgcacatc ccaggaagga gagccaagtg cgacagcttg cgtgggtggg 60
ggatggcgtg tgggtctcca ttcgcttgga ttctacgctc cgtctctatc atgcacacac 120
ttatcaacat ctacaggatg tggacattga gccttatgta agcaaaatgt taggtactgg 180
aaaactgggc ttctcttttg tgagaattac agctcttatg gtgtcttgta atcgtttgtg 240
ggtggggaca ggaaatggtg tcattatctc catcccattg acagaaaccg taatcctcca 300

09523469.070200

ccagggacgt ttactggggc tgagggcaaa taaaacctca ggtgtaccag gaaatcgtcc 360
tggaagtgta atccgtgtat atggtgatga aaacagtgat aaagtgactc cagggacatt 420
tataccctat tgttcaatgg cacatgcaca gctttgcttc catgggcacc gggatgctgt 480
gaaattcttt gtggcaagtc ccaaggtcaa agtcatcagc ccacaaagta gcagtagtgg 540
cacggatctg acgggtgaca aaagcaaggc catctgcaca aggagcctgg gtaatcannc 600
gcccttngaa gtctangctt gtcatcaagt ggn 633

<210> 4314
<211> 762
<212> DNA
<213> Homo sapiens

<400> 4314
cttattcatg caggctctgc attaagctgc taatgtatgt aaaaagatta ctggacgtct 60
tacaagtgca atagcaaaac aggaagatgt ctctgttcag ctagaagcct tggatattat 120
ggctgatatg ttgagcaggc aaggaggact tcttgttaat ttccatcctt caattctgac 180
ctgtctactt ccccagttga ccagccctag acttgcagtg aggaaaagaa ccattatcgc 240
tcttggccat ctggttatga gctgtggaaa tatagttttt gtagatctta ttgaacatct 300
gttgtcagag ttgtccaaaa atgattctat gtcaacaaca agaacctaca tacaatgtat 360
tgctgctatt agtaggcaag cgggtcatag aataggtgaa taccttgaga agataattcc 420
tttggtgggt aaaattttgc aatgtagatg atgatgaatt aaaagagtac tgtattcaag 480
cctttgaatc atttgtaagn aagatgtcct aaaggaagta tatcctcatg tttctaccat 540
tataaatatt tgtcttaaat atcttaccta tgatccaaat tataattacg atgatgaang 600
atgaaggatg aaaatgcaat ggatgctgat gggtggtgat gatngatgat caaggggagt 660
gatgatgaat acagtganga tgatgacatg aatttggaan gtganacgtg canctggcga 720
aagtggcttg ggatgcctgg taanttaagc aacaagggca at 762

<210> 4315
<211> 830
<212> DNA
<213> Homo sapiens

<400> 4315
gcgccctcgc cgcggacacc gggagctgcg gccgctcccc gctgtccccc agagatggca 60
gatcctgagg tagttgtgtg tagctgcagc tctcatgaag aggaaaatcg ctgcaatttt 120
aaccagcaaa catctccatc tgaggagctt ctattagaag accagatgag gcgaaaactc 180
aaatttttt tcatgaatcc ctgtgagaag ttctgggctc gaggtagaaa accatggaaa 240
cttgccatac aaattctaaa aattgcaatg gtgactatcc agtacttgca gctatacaat 300
gtctccgttg ggaatcatgc ttatgagaac aaaggtacca agcaatctgc tatggcaatc 360
tgtcagcact tctacaagcg aggaaacatc taccctggaa atgatacctt tgacatcgat 420
ccagaaattg aaactgagtg tttctttgtg gagccagatg aacctttca cattgggaca 480
ccagcagaaa ataaactgaa cttaacactg gacttccaca gactcctaac agtggagctt 540
cagtttaaac tgaaagccat taatctgcag acagttcgtc atcaagaact ccctgactgt 600
tatgacttta ctctgactat aacatttgac aacaagggcc atagtggaag aattaaaata 660
agtttagata atgacatttc catcagagga atgtaaagac tggcatgtat ccgggatcaa 720
ttcagaagaa cactccatta catgangatc tttgntgcct ttggcattct gacttgcttg 780
ggttcaataa nccccctgcat tanatntggg attaaggact caacttcaca 830

09652694 - 07-12-2010

<210> 4316
<211> 774
<212> DNA
<213> Homo sapiens

<400> 4316
cattaatgtt gggcagggaa acaggagctg tcagactgag agggccaggg atgttcattg 60
tggagattaa atgttctgag taagtgagtt tgtagacatt ttcttgtaag aaaatgttcc 120
atgctttact ctgttttgga cattttcttt tgaaaaattt tgagatagaa accttaatat 180
catttcatat atttacagca catagttaat ttgagtagag tcaaattaat cttactttag 240
aatttgatta ctaagtatta gcatggataa taatgcttct tttgcttaaa tgtaaaaatt 300
aggccgtttt actaggtgta ctttgtctta atcatattcc tatttttta tacagctgtg 360
caaccatatt gcttctggga aaaaatgtca atatgtggga aactgttcct ttgctcatag 420
tcctgaggaa agagaagttt ggacttacat gaaggagaat gggatacaag atatggagca 480
attttacgaa ctatggctca agagtcaaaa aaatgaaaaa agtgaagaca tagccagtca 540
gtcaaacaag gaaaatggaa aacaanttca catgccaaca gattatgctg aagttacagt 600
gggactttca ctgctggatg tgtgggaaaa ctgcaacagt gagaagcagt ggcagggcca 660
catctcctcc gagaagcaca aagagaaggg tttccacacc ganggacgac cantacctgc 720
tgncaagcac ngccttccca acaaggctat ttcaggtatt ggtgacnagg tata 774

<210> 4317
<211> 680
<212> DNA
<213> Homo sapiens

<400> 4317
aatacttgct ggtctgatcc atgcacaagg cggggctgct aggcctctgt gcccgggctt 60
ggaattcggt gcggatggcc agctccggga tgacccgccg ggacccgctc gcaaataagg 120
tggccctggc aacggcctcc accgacggga tcggcttcgc catcgcccgg cgtttggccc 180
aggacggggc ccatgtggtc gtcagcagcc ggaagcagca gaatgtggac caggcggtgg 240
ccacgctgca gggggagggg ctgagcgtga cgggcaccgt gtgccatgtg gggaaggcgg 300
aggaccggga gcggctggtg gccacggctg tgaagcttca tggaggtatc gatatcctag 360
tctccaatgc tgctgtcaac cctttctttg gaagcataat ggatgtcact gaggaggtgt 420
gggacaagac tctggacatt aatgtgaang ccccagccct gatgacaaag gcagtggtgc 480
cagaaatgga gaaacgaaga ggcggctcag tggtgatcgt gtcttccata agaagccttc 540
agtccatctc ctggcttcag tccttacaat gtcagtaaaa cagccttgct gggctgacca 600
anaccctggc catanagctg gccccaagga acattanggt gaaactgcct aacacctgga 660
cntatcaaag actancttca 680

<210> 4318
<211> 758
<212> DNA
<213> Homo sapiens

<400> 4318
agagtatgct gaagttattg ctgtcaggtg cgtttgccat atactcaggg acctgggtcc 60
cttccttctt agtctccatc ttctccagga gccagaaaaa aaggagagag agagcatcag 120
gtggcactgt ttatgggcct ttcatggaag tgacacctgg ggttacttct gcttatgttc 180

EP 2 395 093 A2

ctttggacag aattcagttg aatggtcata ctagaggcat tgtgccaggc tttgcagcat 240
aaaaagaagt tagagacagg gactttggat ccaagtcctc cctgactcaa aacccagaga 300
ggcagaggat gcttgccacc tttgactagt cctatctcct ccaaagggtc cttttgattt 360
attagcaaga agccatcttc tgaccacaaa gacaagattt caaagttctc acccagttcc 420
tagctaaaga tgtccaaaga gacttctaag ccaatgattt tcaacaagga aattgaagtt 480
gtatgctttg aagagagggg cttgattggg tggcatctta tgcttaantg tgcatggnag 540
agccatccta catgcagcat gtgatgggcc cccagggact gaggacttgt gtatgactgg 600
gagtctacgc aacttggctt catatcagtt cttgccatct cgggatccaa atgctctcca 660
aggcatgaag tcatttcctc caaagagant ttgangatgc cccaagaaga atctttaagg 720
ctaanggtca ctaattcctt aaagcctaaa gggcaacc 758

<210> 4319
<211> 701
<212> DNA
<213> Homo sapiens

<400> 4319
gatccttgtc ctttctctca aactccctga agaagctcgt ccccttcag ctccctgggt 60
cgaagagtga gcacaaagaa cccaaagata aaaagataaa catactgatt cctttgtctg 120
ggcgtttcga catgtttgtg agatttatgg gaaactttga gaagacgtgt cttatcccca 180
atcagaacgt caagctcgtg gttctgcttt tcaattctga ctccaaccct gacaaggcca 240
aacaagttga actgatgaga gattaccgca ttaagtaccc taaagccgac atgcagattt 300
tgcctgtgtc tggagagttt tcaagagccc tggccctgga agtaggatcc tcccagttta 360
acaatgaatc tttgctcttc ttctgcgacg tcgacctcgt gtttactaca gaattccttc 420
agcgatgtcg agcaaataca gttctgggcc aacanatata ttttccantc atcttcagnc 480
aagtatgacc caaagattgt ttatagtggg aaagttccca gtgacaacca ttttgccttt 540
actcagaaaa ctgggcttct ggagaaacta tgggtttggg atcacgtgta tttataaagg 600
gagatcttgt ccgaantggg tggctttgat gtttcaatcc anggntgggg ggctggaggg 660
atgtggggcc ttttcaacaa gggttgtcaa ggcaagtttg a 701

<210> 4320
<211> 793
<212> DNA
<213> Homo sapiens

<400> 4320
gtaccaatgc ataatcatct atggggtcgc ctgggactac aagtacctga ctctgaaagt 60
caaagcttcc tacaggaaaa taaacactca catcctaaag gttccagaaa cagatgaggt 120
agagctcacc tgccaggcta caggttatcc tctggcagaa gtatcctggc caaacgtcag 180
cgttcctgcc aacaccagcc actccaggac ccctgaaggc ctctaccagg tcaccagtgt 240
tctgcgccta aagccacccc ctggcagaaa cttcagctgt gtgttctgga atactcacgc 300
gagggaactt actttggcca gcattgacct tcaaagtcag atggaaccca ggacccatcc 360
aacttggctg cttcacattt tcatcccctc ctgcatcatt gctttcattt tcatagccac 420
agtgatagcc ctaagaaaac aactctgtca aaagctgtat tcttcaaaag acacaacaaa 480
aagacctgtc accacaacaa agagggaagt gaacagtgct atctgaacct gtggtcttgg 540
gagccagggt gacctgatat gacatctaaa gaagcttctg gactctgaac aagaattcgg 600
tggcctgcaa agcttgccat ttgcactttt caaatgcctt tggntgaccc agcacttaaa 660
tctgaaacct gcaacaagga ctagccaaca cctggccatg aaacttgccc cttcactgat 720

05052456.027800

ctggntcact ctggggncta agggntttaa gcaagcacta ntgnacttta cagaattacc 780
cactgggttc tgg 793

<210> 4321
<211> 747
<212> DNA
<213> Homo sapiens

<400> 4321
atgatgccaa cagcgtgatt gcttagaagt tcctacacaa aaaaaggatc atttgaaagc 60
acctggaatg gtttattagc ttcacaggat tttattcttc ttggcttcta tttggaggga 120
aaataacata aattcaaaag gattccaatc tgaagcccaa atcgtttgcc tacataacaa 180
aaatatctca tcttttcctg cacattatta ttcttttatg ggttaaaaag aaaaatacct 240
tttagtgttt tagaactctc tcatggtaaa aagtgcaaga atttaaaatg ttgctttcat 300
attcctataa ttctccaaaa gtattaaatt cgtatatgtt tgagtgattt tctaaaaact 360
gctcaacctg aaatcaattg cattgaccat ttggcttcgc acaataggga gaaaataatt 420
ggttcattga ttatatagag agaaagacta agaaaagcta ttaattgcta ccaattttat 480
gataagcttt aaggtttatg aaagtatgtt tttttattta atgagtaatg tccatttgaa 540
gttgaaagaa aacatgaaat cctaattgta gttcatttta tgttcaaatg aaaccattgg 600
ttttggtttt gntttgaaac agagtctcac tctgttgccc aaaggtggag agaagtggna 660
cgcttttgtc ctcactggna aacctccaac tccccgaggt tcaaagtgga ntccncgngg 720
cctcaaacct ccccaaaatt tataagg 747

<210> 4322
<211> 194
<212> DNA
<213> Homo sapiens

<400> 4322
atcatggcgt caatgcagaa acgactacag aaagaactgt tggctttgca aaatgaccca 60
cctcctggaa tgaccttaaa tgagaagagt gttcaaaatt caattacaca gtggattgta 120
gacatggaaa ggtgatcagg taccttatat gaaggggaaa aatttcaact tccaattaaa 180
tttannantc cata 194

<210> 4323
<211> 883
<212> DNA
<213> Homo sapiens

<400> 4323
gtgcggacca gtttaagaag gatatcctgc tgggggctct cttccctata gcatccagac 60
agctgaaaaa cagaattggc tgcattccta ttttcacaaa tggtcagctg agacttctgg 120
ccgcagcaat gccatgccac atattaagac atatatgagg ccttctccag acttcagtaa 180
aattgcttgg ttccttgtca caagcgcaaa tctgtccaag gctgcctggg gagcattgga 240
gaagaatggc acccagctga tgatccgctc ctacgagctc ggggtccttt tcctcccttc 300
agcatttggt ctagacagtt tcaaagtgaa acagaagttc ttcgctggca gccaggagcc 360
aatggccacc tttcctgtgc catatgattt gcctccagaa ctgtatggaa gtaaagatcg 420
gccatggata tggaacattc cttatgtcaa agcaccggat acgcatggga acatgtgggt 480

0952680.0272800

gccctcctga gaatcttgag gcactgtgaa atttaagtgt aagacattga gccacaaaca 540
tggaatctct tctttgtact ggatgtccac ttcccttaaa gtcttatttg cacccttaca 600
aaatctttcc aaaggtcact cttatgaatg gatgttggtt atacttttaa tggacattaa 660
cattcctaat aaagtattaa gttcctaatt cacttttata tgttttggaa agaaaattag 720
tgaacttctc tatgttaaaa aatacgtact gcttgagtaa cccctgtctg aaaatgcctg 780
gggaccagaa agtgtttcan cttttgggat ttttttgaaa tttttgggaa natttttgcat 840
agcaataatg agataccttg ggaatgggac ccaaatccaa aca 883

<210> 4324
<211> 792
<212> DNA
<213> Homo sapiens

<400> 4324
gagatgaagg tgaagatgct gagccggaat ccggacaatt atgtccgcga aaccaagttg 60
gacttacaga gagttccaag aaactatgat cctgctttac atccttttga ggtcccacga 120
gaatatgtaa gagctttaaa tgctaccaaa ctggaacgag tatttgcaaa accattcctt 180
gcttcgctgg atggtcaccg tgatggagtc aattgcttgg caaagcatcc agagaagctg 240
gctactgtcc tttctggggc gtgtgatgga gaggttagaa tttggaatct aactcagcgg 300
aattgtatcc gtacaataca agcacatgaa ggctttgtac gaggaatatg tactcgcttt 360
tgtgggactt ctttttcac tgttggtgat gacaaaactg tgaagcagtg gaaaatggat 420
gggccaggct atggagacga ggaagagcca ttacatacaa tattaggaaa gacagtgtat 480
actgggattg atcatcactg gaaagaagct gtttttgcca catgtggaca gcaagtagac 540
atttgggatg aacaaagaac taatcctata tgttcaatga cctggggatt tgacagtata 600
agtagtgtta aatttaaccc aattgagaca tttctcttgg gaagttgtgc atctgacagg 660
aatatagtac tgtacgatat gaggcaagct acccttgaa aaaagggtat cttagatatg 720
agaacaaata caatctgttg gnaccctaag ggaagctttc antttacan cangcaaatg 780
gaagnattat aa 792

<210> 4325
<211> 787
<212> DNA
<213> Homo sapiens

<400> 4325
aacaaatatg aatattgtta catcacctct gactctctga ctagtaagaa actatgcatt 60
tccataccca atgaaacctc aattcctaca gcaattctac ttttattgcc tcccaagaac 120
tatttcttca tggtcaatat cactctttaa aagctagcaa aatatgactt tcttctgagg 180
tttgggcaat ctggatcaat atttatgtat ctaaccactt gaaaggctgt ctccttttt 240
ggccttttaa attaaaactt ccataaaatg aagcaaaata tgaaaacagc tagttgattt 300
atcaataatg tgaaaccctc cttctgaatt tttttggtaa aaattaccac actgaaacca 360
aaacttaacc ttggcttgga ctctcagata gattgctttt gtattctttg actacaaagt 420
attctcaaaa agaagaaatt atttctgatg gtagatcaaa ctctagccaa gaaggtctag 480
ataaactaga ggactgtata attatctaaa gtaattcagg gggactttta gaaaaattct 540
ttaatttttg ttcctgtgta aaaattatta ttaatggatg gcagcccaaa ttactattct 600
tcttttaaaa tttgtttcaa gtgtgtcacc aggcactcat aaaattcatt tatttggtat 660
ataactcaat gacctgaaat aataggtgct caatgctttt tcatttgatt ccttaaaaaa 720
caatttttat tccggtncaa aaaaaaaatt ccccccnggcn aaaaatccca aaatggattt 780

0960230 - 0960230

acctggg 787

<210> 4326
<211> 843
<212> DNA
<213> Homo sapiens

<400> 4326
acaccctcgg attgacgtgc gcacgcgcac cggttacctt caggagcgcc gaagaaggaa 60
agaagaacac agagcccgag gcaaagctta agtgcttacg cttttgtcgg gaggtacaga 120
cccagctctg cgagagccag gggaaaagga agagaggcag ggaaggaaag gcagcaagta 180
caaggtgatg aatgactgca ctggccattg cttcatgaag agccacgaaa aaacagagcc 240
ggtttctcag caggtagctg gctgctcagt cacaaaggac ctctttggac aggctttatg 300
gaaatactgt gcctaggaca gtcgctcaaa ggcaggaggg agagaaaatg catccgcaag 360
ctcactttgt cttctttctt ctgctggtca aaatttgctg gctcgggcag ttaacgccct 420
cacacatccg agttgtgtca cctggcccct ttggtagcca ctggggaagc cagatctagg 480
catgtggcct gatggctcct gcggtggaac cacatgctca cactcagtca gtcaccactg 540
ggatgccctg ggcagggcaa gctgagtgac tgggagatag ctgagcctaa gatatctaag 600
caagcacctg tgatgtatgc actgcagtgt ccaaatgtga aaaancaaga aagggagata 660
gaagcatatt tttttctgga gagaaggagg aaaccaccag gaagaataca aacagganaa 720
aaagacatgc tcatcatgcc ctgcaaactc ctatgaactg ggaactacag cagctgttct 780
gccaagggac aaggttcttc tcnaaagntc aagctccctg gaggganaaa gnnctgantt 840
tgg 843

<210> 4327
<211> 784
<212> DNA
<213> Homo sapiens

<400> 4327
ttacattacg caagagagca agttgttcca agtagttgcc tggcaggaga atttgaaagg 60
gtgccccaaa ggacaatctc taaaggggta agggagatac ctaccttgtc tggtagggga 120
gatgtttcgt tttcatgctt taccagaaaa tccacttccc tgctgacctt agtttcaaag 180
cttattctta attagagaca agaaacctgt ttcaacttga agacaccgta tgaggtgaat 240
ggacagccag ccaccacaat gaaagaaatc aaaccaggaa taacctatgc tgaacccacg 300
cctcaatcgt ccccaagtgt ttcctgacac gcatctttgc ttacagtgca tcacaactga 360
agaatggggt tcaacttgac gcttgcaaaa ttaccaaata acgagctgca cggccaagag 420
agtcacaatt caggcaacag gagcgacggg ccaggaaaga acaccaccct tcacaatgaa 480
tttgacacaa ttgtcttgcc ggtgctttat ctcattatat ttgtggcaag catcttgctg 540
aatggtttag caagtgtgga tcttcttcca cattaggaat aaaaccaagc ttcanattct 600
atctcaaaaa cataggtggg ttgcagacct cataatgacg ctgacatttt ccattttcga 660
ataagtccaa tgatgcaagg atttggacct tggnacttca agtttattct ccgcagatac 720
acntcagttt ttggttttat ggaaacatgt agacttccaa ccgtgttcct tggggnctga 780
nnaa 784

<210> 4328
<211> 823
<212> DNA

0502456.0002

<213> Homo sapiens

<400> 4328
atcatggcca caagaatttg ctctgtcgag ggtcgtggtg ccagctaggt gaggtttggg 60
gctctgtcac tattggtcag tgtctgttac atacttgggc cccagcagtg ccctggcact 120
gcacccccaa ctccatgggc acatttgtcc tgttctcttc atctcagttt cctctcctgt 180
aaaatgggtg cattgactgt gcagtggttc ctccaaggtc ccctgatccc cagatgcggc 240
ccagggctct gccaaccagt ctcaatgttt caaggtggcc accatgaact ttctgcatgt 300
cgaagtaaaa cacttcatgc ctttctgcac agaggttagc cctccacagg ctctgggttc 360
aaatcctgga ttccgttgat gccctgggca cgtccttaaa gcccaccaag cctcagtttc 420
tccactgtaa accaccgtcc tgggggggcat ggtgaggatg aagtgggctt gtgcctggga 480
cgttcctact cagccagtgc cctgcctgaa acactaggat cgaactgtcc attcagccag 540
gcaccttcga actcctccca ggcataatct ctgtctggaa actccttgtg ttgaataaga 600
tgggaaaatc catccatgag aactgaagcc acaaacagcg cttgcangac aagaaggaga 660
naangtcttt ngggaaggag atgggcacat cgtttctaag tccccacctc acacctgatc 720
ttggcctgtc ctggaacatg cantgtgacc caagggaaag gcatggggtc tcccaaangg 780
cccgntnaaa ccgggggaag cctttcccna ttcccaagtt taa 823

<210> 4329
<211> 336
<212> DNA
<213> Homo sapiens

<400> 4329
tgcaaagatg agataaaggc gcgggaaaga agggtctgaa ttaggggttg agctctgaaa 60
tcggacgatt ctgtgtttcc tgccgcatgg agggcgtgtg tggttcgcag gctgtggggg 120
gtttcttgca gcgggggctg ctgcctaaac agactccgcg ggccccatga tggcaaaccc 180
cctcgccccg ttcatgactt aatgcctcct agaagaaaag gctaaaaaca agacacacag 240
aacaagaaat tgcactctct caaaacgaca gtcnccctga aacggacgct ggaagaggtt 300
tccaggcccg tggngacggt gaggggggtg aangtc 336

<210> 4330
<211> 774
<212> DNA
<213> Homo sapiens

<400> 4330
tctacagaac aaactgcaca gcttgggtac tgagctcttc attgtcaggc aacttcttca 60
aatagtgaag cagaaaacca atcaaaattc agtggacact acattgaaat ttactttgag 120
tgcactttgg aacctcacag atgaatctcc aaccacttgt agacacttta ttgaaaacca 180
agggttagaa ctcttcatga gggttctaga gtctttccca actgagtcat ccattcagca 240
gaaagttcta ggacttttgt gtggatctgc tgatgatgaa ttcttcagct tttgtctgac 300
tgaaaacatc tttacttaac ctttgttttt gaaagatact tttaccagaa caatatagct 360
gaagtacaag aattacattc tgaattaatg tggaaagatt ttatagacca catcagtagt 420
ctcctacaca gtgtggaagt ggaagtcagt tactttgcag ctggaattat tgcccattta 480
atatccagag gtgaacaagc ttggacattg agtcgtagcc agaggaattc tctgctggat 540
gatttgcatt cagctatttt gaaatgggcc aactccaaga ntgtgagatg gtancataca 600
gggcctttaa tccatttttc ccattacttg gctgtttcac aanaacaagg agttcagcta 660

0962945.0002

tggggcaagt ttgtgccatn caacaatgtc tgcaagcaag gaatccctca agggtattgc 720
agcatgcnga tttgaagaag gggggatttg cancaatttg tncaacatca aang 774

<210> 4331
<211> 666
<212> DNA
<213> Homo sapiens

<400> 4331
ttctgcaaac cgagagcccc gaatccacag agctccaaag tagactccgc cagctgagcc 60
tgctctggga agcagcacag ggcgcagtgg acagctggag agggggctta cgacagtcgc 120
tcatgcagtg ccaggacttc caccagttga gtcaaaatct gctgctgtgg ttagcgagtg 180
ccaagaaccg gaggcagaag gctcatgtca ccgatccaaa ggcagacccc cgggctctcc 240
tagagtgtcg gagggaacta atgcaactgg aaaaggagct ggtagaacgt caacctcaag 300
tggacatgtt acaggagatt tcaaacagcc ttctcattaa gggacatgga gaagactgta 360
ttgaagctga agaaaaggtg catgttattg agaagaaact caaacagtta cgggagcaag 420
tgtcccaaga tttaatggcc ttgcagggaa cccagaaccc agcctcaacc ctgcccagct 480
tcgacgaggt anactcgggg gaccagcctc ctgcaacatc cgtgccagct ccccgagcaa 540
agttcaagag cagtgagaac tacagaaggc gaggaggaga cagagagcaa ggtccccggc 600
agcanacggg caaaagggct ccttcctctc aagggtggnc cgggnagccc taacccctgn 660
agntgc 666

<210> 4332
<211> 837
<212> DNA
<213> Homo sapiens

<400> 4332
agaaaaatgt acatgactcc cagtgtctgt ggaaacatga ttgaagacat tataagcgag 60
tgcgtgtgac ctataaggaa agtctcattg gtagaagaga catgcatggt agaaaggatg 120
atgcacaaaa gcagcctgtt aaaaatcagc ttggattaaa cccgcagtca catctaccag 180
aactgcagct atttcaagct gaagggaaaa tatataaata tgatcacatg gaaaaatctg 240
tcaacagtag ttccttagtt tccccacccc aacgtatttc ttctactgtc aaaacccaca 300
tttctcatat atatgaatgt aattttgtgg attcattatt cacacaaaaa gagaaagcaa 360
atattgggac agaacactac aaatgtaatg agcgtggcaa ggcctttcat caaggcttac 420
attttactat acatcaaata atccatacta aagagacgca atttaaatgt gatatatgtg 480
gcaagatctt caataaaaaa tcaaaccttg caagtcatca aagaattcat actggagaga 540
agccatataa atgtaatgaa tgtggcaagg tcttccataa tatgtcacac cttgcacagc 600
atcgcangat tcatactggg agagaaacca tataaatgta atgaatgtgg caaggtcttt 660
aatcaaattt cacaccttgc acaacatcaa aggattcata ccggagagaa accttataaa 720
tgtatgaatg tggaaaggtc ctccatcaaa tttcacaacc ttgcacaaca tcngacaant 780
catactnggn gaaaaaacct tacgaatgta caaatgtggc aaggngttca atcccaa 837

<210> 4333
<211> 714
<212> DNA
<213> Homo sapiens

0356203 "0 2002

<400> 4333
aagttggagg taggggcctg tggaaacatg aagagggtaa acagctgtgt gaagagtgat 60
gagcatgtcc tggaggagct ggaaacagaa ggggagaggc agctgaaaag cctccttcag 120
catcaacttg atacttctgt ctccattgag gaatgtatgt ctaagaaaga gagctttgct 180
cctggtacta tgtacaagcc ctttgggaag gaagcagctg ggactatgac tttgtcccaa 240
ttccagacac tgcatgagaa ggaccaggaa actgcttctc tcagggaatt agggcttaat 300
gaaacagaaa tcttgatctg gaagagccat gtttctggtg aaaagaagac aaaactgagg 360
gcaactcctg aagcaataca gaaccgtctt caagatattg aagaaaggat ctcggagcgt 420
cagcgcattc tttgcctgcc acagagattt gcaaagagca aacagctgac ccggcgagaa 480
atggaaatag aaaagtcttt atttcaggga gctgatcgtc actccttcct taaggctctt 540
tattaccaag atgaacccca aaagaagaac aaaggtgatc ccatgaacaa cctggaaagt 600
ttttaccaag agatgataat gaaaaaacgt cctgaagagn ttcaacttat gaaaaggtga 660
acccttttgc ttccaatcac tgggcncaag ctncatcaat nggtgatant ggca 714

<210> 4334
<211> 794
<212> DNA
<213> Homo sapiens

<400> 4334
acacaacctt ggacattaga gcctgtccgt ctgatctaga gaaggaatgt tgctggggaa 60
ggaaaactca gggcgaggtg agagaggaca gaacctctaa ccaggaagag gctgtccccg 120
ccaagctccg gagaggcgcg gaagcatgac cctcaggtgg taacagaaaa caatccagat 180
ggggtgcagg tgctgtaaaa taatacaaag ctatctcttt gatccagtcc aagtgccctc 240
tcctggctat gtcaatgaag tcaacagctg caagctagat gaagacgaca ctgataaatt 300
aaaaggcaaa tggagcagtg aagtcttggt gcagaaaaat gaccctcaga ggcagggctc 360
aaagaagact gagagcagca gcaggacagc tgatccatgg gagccctgct ggcctcacca 420
agggccgctc ccacaggggg acgctggagg ggaacaccat gcctgcggtg tcaacggcat 480
cggnnctgct gccactccac agcccactgg gaantccagc cccacccang atgacaaggg 540
ctcctgggnc antactgcaa atactgttcc cccaactcaa cccttcctgg aaggaggggg 600
gcaccaagga aaacaaggac tgtgtgctgc tggnctcaaa agggacccaa agtcatgaga 660
aattggggga ctccaaangc tccttctgag gcaaaaagtt ttgccttgga agtacaagac 720
catgtctcca aattccaanc cccagnttac ctttancant tggggcccaa cttggggaaa 780
acntttgatc ataa 794

<210> 4335
<211> 743
<212> DNA
<213> Homo sapiens

<400> 4335
agtctgtgag ctgggagcct gttggcaggt ccctcttttt attttcgctg agagctttct 60
tttactaaat gccaccatcc ttacctttca aggtgtctgc gtgcctaatt tttcctggtt 120
gttagacaag aacccggatt ttagttgaac tctggagcaa aaatcctgca tcatttgtag 180
gtaatgtttg ttttctttgg ttgcttttat gaccttctct ttattcctag tatttgggca 240
tttcacaaaa acatttataa atctgaatta aaaaacaaac tgaccttgcc aaggacccta 300
ctgatccctt ttcatataat tctatctgct aggtcttgtg ctgccttcta agttagttca 360
tcagttctat acttcagtat ttaattctat attcagccat gttatcaaat gtttatttca 420

0057350 - 0057350

accttgagt ttctcatttg taatagtatt ttttcatttt tatgttttta aaagagttct 480
tttcatattt tactattttt gtttagtaac tttcagtact tgttgcgtag attttatttc 540
atctttaagt ttttgagatg tttgcataac acatttaaag acaattacat attgntggta 600
tgatttccaa ttccttgggn caagaattct cccatttgtt gcatcccctg aagagtttcc 660
caaaggnggg ttaatccttg aataatgggt aaacttgcct gncctcaant tttttaaggn 720
tttaaanacc tttaacaagt tgg 743

<210> 4336
<211> 792
<212> DNA
<213> Homo sapiens

<400> 4336
ctgaaaacct tgtgcagcga gatggtgact tcctagttcg tgactctctg tccagccctg 60
ggaactttgt cctgacctgt cagtggaaga acctcgctca gcacttcaaa atcaaccgga 120
cagttctgcg actcagcgag gcctacagcc gcgtgcagta ccagttcgag atggagagct 180
tcgactccat ccccggcctg gtgcgctgct acgtgggcaa ccgccggccc atctcccagc 240
agagtggcgc catcatcttc cagcccatca acaggacggt gcctctgcgg tgcctggagg 300
agcattatgg cacctcccca ggccaggccc gggagggcag cctcaccaag ggaaggccgg 360
atgtggccaa gaggctgagc ctcaccatgg gtggcgtcca ggcccgagag cagaatttgc 420
ccaggggaaa cctcctcaga aacaaagaaa agagtggtag ccaagcccgc ctgcctggat 480
cacatgcagg acagaagagc cttgtccctc aaagccacca gtcagagagc tacctgccga 540
ttggctgcaa gctgccacct cagtcctcgg gtgtggacac aagcccctgc ccaaactcac 600
ctgtgttcag ggacgggaag cgaagcctgc cctggagccc gggagtgggt tcgggagggt 660
ctcctcaaga cgccaggggc tgggggaagg cgctganggg gatnaagaca agtcaaactg 720
gtgcccctaa agncccccgg cctaaagccc ntgcaaaggg tggcccgttt ccccaaaggg 780
ttccctccgn ct 792

<210> 4337
<211> 748
<212> DNA
<213> Homo sapiens

<400> 4337
aataacaatc taagtttttt ttcccccaag tactaaaatt gtattgtctt tcagacaata 60
taatttttat ttaaaattgg agcatactat cttcatgctt tctaagctaa atcttcattt 120
agatttcact cctcagtaga tcccagagaa gaagctatat aggatccaga ttcaaattta 180
acagtgtctt ctacttttt agttatgttt tctatcaact cctgctgcct tttcaaatac 240
ggatattttt caggagactc ttctacttgt ccactgactg tatttttcc tttttgatcc 300
gtagccctgg ttaaatggct gacatccttc cgtggatgat tcttggaggt ggtctcagag 360
ttccaaagtg attgtctgtc ttcttcttgt cttgatccta atgcagacat tcacctctat 420
tatttattta tttttttag acagagtctc gctctgtcac caggctggag tgcagtggca 480
caatcttggc ttactgtacc ctccacctcc tgggttcaag cgattctcct gcctcagnct 540
ctcgagtagc tgggactaca ggtgtgtgcc accatgccca gctaattttt gtatttttgg 600
gagagatggg ggtttaccat gtttgccaag gatgggcctc gatttcccgg acccttgggg 660
atctgcccaa ccttggggcc tccccaaaaa gtgnctggga atttacaagg gcaatnaggg 720
ccaaccggtt ggccctnggg ncnaacct 748

09529369.030303

<210> 4338
<211> 575
<212> DNA
<213> Homo sapiens

<400> 4338
atcaaggccc tgggctggag gaagacatcc cagatccaga ggagctcgac tgggggtcca 60
agtactatgc gtcgctgcag gagctccagg ggcagcacaa ctttgatgaa gatgaaatgg 120
atgatcctgg agattcagat ggggtcaacc tcatttctat ggttggggag atccaagacc 180
agggtgaggc tgaagtcaaa ggcactgtgt ccccaaaaaa agcagttgcc accctgaaga 240
tctacaacag gtccctggag gaagaattta accactttga agactggctg aatgtgtttc 300
ctctgtaccg agggcaaggg ggccaggatg gaggtggaga agaggaagga tctggacacc 360
ttgtgggcaa gttcaagggc tccttcctca tttaccctga atcagaggca gtgttgttct 420
ctgagcccca gatctctcgg gggatcccac anaaccggcc catcaagctc ctggtcagan 480
tgtatgttgt aaaggctacc aacctggctc ctgcagaccc caatggcaaa gcanaccctt 540
acntggtggt nagcgctggc cgggagcngg caagg 575

<210> 4339
<211> 797
<212> DNA
<213> Homo sapiens

<400> 4339
agaggcgcgg cgtgactgag ctacggttct ggctgcgtcc tagaggcatc cggggcagta 60
aaaccgctgc gatcgcggag gcggcggcca ggccgagagg caggccgggc aggggtgtcg 120
gacgcagggc gctgggccgg gtttcggctt cggccacagc ttttttttctc aaggtgcaat 180
gaaagccttc cacactttct gtgttgtcct tctggtgttt gggagtgtct ctgaagccaa 240
gtttgatgat tttgaggatg aggaggacat agtagagtat gatgataatg acttcgctga 300
atttgaggat gtcatggaag actctgttac tgaatctcct caacgggtca taatcactga 360
agatgatgaa gatgagacca ctgtggagtt ggaagggcag gatgaaaacc aagaaggaga 420
ttttgaagat gcagataccc aggagggaga tactgagagt gaaccatatg atgatgaaga 480
atttgaaggt tatgaagaca aaccagatac ttcttctagc aaaaataaag acccaataac 540
gattgttgat gttcctgcac acctccagaa cagctgggag agttattatc tagaaatttt 600
gatggtgact ggtctgcttg cntanatcat gaattacatc attgggaana ataaaaaaca 660
gtcgccttgc acaaggcctg gtttaacact caaaagggga gcttttggag agcaactttt 720
acttttantg ggggaatnnt ggaactaaca aagaaagcca caaggcacaa ggaaaanttt 780
taaccaagga gaatggn 797

<210> 4340
<211> 642
<212> DNA
<213> Homo sapiens

<400> 4340
tatataaaaa ttattacttt aaaaatagct gcataatatt ttatagtaac tacgtgccat 60
gatttatcta aacattccac tactgatgga ttaacagatt gtttccaatt ttttggaaac 120
aatgacaaat aatgctgcag taagaattct tggacatatg ctcttgaata ctttctgtgg 180
catagatttg ttttggcttg ctggctgaaa ttgtaagagc atttcaaatt taatagatat 240

0050203.0050203

tgcgaatttt ccttccaaaa atgtatagca gtttacatta acaataccag aaaggggtca 300
tcattctcct gaatacccaa cagtactgaa tatattgctc tttagaaatt tttgccaggc 360
tgatgcatga aaaattctat cttgttttag tttgcatttc tctgactact gctgagatta 420
aacatgtttt agatgtttat gaatcctttg gatttcttct tccatgaatt gtctaattat 480
gcatgtggct gtgtatgtgt gtatatgtgt atgcatctgt atgtttgtgt gtgtatgaga 540
tcaagtgatt ttccnaatgg gtaggtgtcn tttggaaaat ctagtgtaaa ggtgcattag 600
ttaaaaccag gcctanctgt ataaatacca gaaaanttnc aa 642

<210> 4341
<211> 740
<212> DNA
<213> Homo sapiens

<400> 4341
tactgtataa ggttctatac ctggtagctt ccaggtggta gttggtacca gaatgggcgc 60
aaacttagtc tcttctccat tctgacttca aacctgggtc actacaattt cttggatcac 120
gaaaactgca ttcttcctta aatggtgtca ctaagttgtc tttctgtttc tttctgccat 180
ggtcattgtc agcagtgacc ccaggccaaa gaacagtttt tcattcattc tcaatacctc 240
gatgagacca tgtgctactc tgtgtttcca caactctagt gtgattttga agttgtatgt 300
ttttctgttc ctgtctagtg agacagtctc taatcttact ggatctcatc attaggtaat 360
tcaatgacaa gtttaattgg ggaaaagaga gaaggatcta gtcccccgaa tttgttttgg 420
gtcctgtccc agttgtcttc tggntaagta ggtttttgtg cttaagaata tgttgacttc 480
aggcatttaa caagggacaa aacatctatt tttaagtgac ttaaggaagt ggtaggaaca 540
gaatctaagt gtagccagat gaaaggtgac ttantttgtt tagacaggca anaactgtgg 600
nctaccatga tctgttcatc aaattatcca aaacacagtc cttttcaggc ttcctttcct 660
ttccttcttc ctccttttcc ccaaactctt tggnaaagtg gcccatggtn actggnaang 720
acttacccan cttgggcaaa 740

<210> 4342
<211> 779
<212> DNA
<213> Homo sapiens

<400> 4342
tgtgtatggc caagcctgga catgaactca gtgatcatct gggtcaaaca gctcactgtg 60
caacaggaaa gttgaggacc agggtcacac aaaattaaac tgtattcaca gatgatcccc 120
tctaaatggt ctgagagatc atttggtcca gcacttccca ttcctggctg cacctggaat 180
aaccagcttt taaaacatcc ttctgcccag gctgcacccc aaggattctg atgttgtggg 240
tctggggttg gcctgggaac gggtgtttcc caaagccttc tcaggtaatg ttgaaggacc 300
actagtgaaa ataattactg atgtagtctg acatcctctt gttctgcaga ggcccaaagg 360
gtaaacgatg ttccctgctt actgagctgg gtagtagcta agcatttggg gaagttccgg 420
tgccccaagc tctgaaggac cctcttccat gctgacttcc tctgttcact ccaaacccct 480
gggtgccaca ggtcctgaca tttcattttt tccagtgcca ttcctgtgtg gaaccatggt 540
ggtccccatc tttacaggag gcanctgatg tcaaatgaat ctctcggagt tttgganaga 600
gaacctcttt tgaacaagaa ggattataag aaagggaanc tcanctctaa ggcattcacc 660
attcactttg ccctgggcta atccnttaaa aaagatgtgt gttcctaata cttcaaaanc 720
cctcaacttt agattcctcc gaaaccaaca atggntgcan gtgtcccaat naggggaag 779

WO 2004/050704 PCT/US2003/038

<210> 4343
<211> 830
<212> DNA
<213> Homo sapiens

<400> 4343
atcttggacc aagcccgagg aagatactga gggagcacag gagcagtcac cgctgccact 60
gctactgccg ctactgctgc cggcgcgtct gcacctctcg gcctgccagt gtacctgccg 120
gcgcctcggt cgaccgcccc cgccccctct cccgctgcgt ccgcactcct gttcctggtc 180
ctgacgcccc cctcccgccc ggaaagctgc ccagccacca gcaacccccc agtgccacca 240
tggcaactgc accatacaac tactcttaca tctttaaata tattattatt ggggacatgg 300
gagtaggaaa atcttgcttg cttcatcaat ttacagaaaa aaaatttatg gctgattgtc 360
ctcacacaat tggtgttgaa tttggtacaa gaataatcga agttagtggc caaaaaataa 420
aactgcagat ttgggatacg gcaggacagg agcgatttag ggctgttaca cggagctact 480
acagaggagc tgcgggagct cttatggtct atgatatcac tagaagaagt acatataacc 540
acttaagcaa ctggttgaca gatgcaagga atctcaccaa tccaaatact gtaataattc 600
tcataggaaa taaagcagat ttggaggcac agagagatgt tacatatgaa gaagcaaaca 660
gtttgctgaa gaaaattggc ttattgttcc tcnaaagcga gttgcaaaaa cggggagaga 720
atgtanaaga ttgcttccct tgaggctgcc aagaaaaatc atcagnacat tcaaggatgg 780
aagcttggnt ntgaatgctg ctgaatccgg ggtaaanaac aaaccttcan 830

<210> 4344
<211> 837
<212> DNA
<213> Homo sapiens

<400> 4344
attattttcc aaggaatttt ttcttaattt ttaagattta acaagtttaa ctacaattaa 60
taaagtactc ccggcacaag gactctgaaa cattgtttgg gtcttggaaa agtttgaaac 120
ctccaattca ttaggacttt gagtaactat tttgtaccta agaatgagaa ttgatggaga 180
gagtggtact aagcacataa ttttatgaaa tatgatgaaa acatgagagt tttgttatga 240
cgcacataac aataaagaac ctgtttcttt ttagcaggct cctaaaaagt acttccctta 300
taattattaa ataaaaacac tcacttattc agtactcagc tagcttttaa gatctgaata 360
acagaagtac acagtgagag aggtacttac atggtttcct tggatactgg atgatgccat 420
tcaggtctat gtttttatct gaaaatggtg ccctgtggag aaacgaggct tggtgagtgg 480
ctgtttatac atagtaagta aataggaact ttgtttattt tacaaagcat tttttatttt 540
gacccagctt tccttttctc atcacaccca actcctgtaa acagcaataa tatggtagaa 600
caggtactct gtacaactct ttttaactcc acttaagaaa tcataattat taaggcagaa 660
gctcagaatg ctttggctaa ggatgttacc tccttgggct gctttatana tcctgacttt 720
ttaattangt cagacatatt aaaggaatat tgcctggcct ccccnanttt ccccaaaaag 780
ggaatattgg ctcaaaacca actaantaan gaaatttagg cctaaaanca ttcacat 837

<210> 4345
<211> 788
<212> DNA
<213> Homo sapiens

<400> 4345

0562469.02800

ataagagtcc tctcgttggt cccggaggtg gggttgcgct cacaaggggc gaccgtcgcc 60
acggtggcgg ccactgcatc gcgtcccacc tccgcggccc tgggcgccgt ggtgtcgacg 120
ggccccgagc ctatgacggg ccagggccag tcggcgtccg ggtcgtcggc gtggagcacg 180
gtattccgcc acgtccggta tgagaacctg atagcgggcg tgagcggcgg cgtcttatcc 240
aaccttgcgc tgcatccgct cgacctcgtg aagatccgct tcgccgtgag tgatggattg 300
gaactgagac cgaaatataa tggaatttta cattgcttga ctaccatttg gaaacttgat 360
ggactacggg gactttatca aggagtaacc ccaaatatat ggggtgcagg tttatcctgg 420
ggactctact ttttctttta caatgccatc aagtcatata aaacagnagg aanagctgaa 480
cgtttagagg caacagaata ccttgtctca nctgctgaag ctggagccat gaccctctgc 540
attacaaacc cattatgggt aacaaaaact cgccttatgt tacagtatga tgctgttgtt 600
aactccccac accgacaata taaaangaat gtttnntaca cttgtgaana atatataagt 660
ataacggtgt gcgtggatta taaaagggat ttgttcctgg gctgtttgga anaatcgcat 720
ggtgcccttc aagnttaatg gcatatgaaa ttgccggaag ttttaaagtt tnaaccagca 780
ntntcaat 788

<210> 4346
<211> 845
<212> DNA
<213> Homo sapiens

<400> 4346
gctaaaatga atgactcttc ctgctcactt aaacctgtgc tcaaaatgac atatttgtca 60
ggcaccctct tcatttacct taaagaagga gagtttaatg tccatcttgg ttctgcccta 120
tgaatcatct tgtcaagaac aggtgttctt atgcagaaac aatgaaaacc ttatactgaa 180
gtgtgaaccc tggatttctt agtttcttct gagtcctaga agaagggttg gaatagaata 240
atacatttac aggatttagg ttggttttct ttctgtccag tctcatctga atttcgtctg 300
tctcttgtgg tccagaagtt ccacagagca acgcagctgc atgtggtgac aggtagagca 360
gttaaagctg ccaataggaa ctcgtccata ttccacacac ctggtatagt gttatgccct 420
ccatgggcac ttacctgcaa taagcagaag ccactgccac attcccgtgt attgggaaaa 480
tggactactg tgtgcgaaca ggcccttac cctaatggca gggaagatgg attatctttg 540
ggncagtgga gctgccaatc taagacatac acattcaact gaatacaatt aaaagcagtt 600
ctttaaatgc aaatataatt actcatcttt ataatacaat agtattaact gcccatatgc 660
tcatagtatg atgagccctg tatagcacaa ggtcaacagg tcctctcctt gtccttanaa 720
tctaaagcag atgacactga catggacaaa acaagtgcac atgcatagtt gcggnagttt 780
tagaggaaat ctagaangct aggtancaac actatgcata aatnttgggg gnccaatggc 840
aatta 845

<210> 4347
<211> 853
<212> DNA
<213> Homo sapiens

<400> 4347
aatggataag gactaaagta aaataattga cagaatctag taaagaattc aagtaggcag 60
ttagatatat taatctggag gtcaagggag agatgaaata aataattttg gaagtctttg 120
gtgcacagtt ggtttttaaa gccttgagag tggataagct gacaccaaag gactgagtac 180
aaagggtaaa aagaaagggt ccaaggacta agccctgaga cctaccagca tttagggggt 240
aagcagatga gaagggagca ccacaaggga ctaagaagga gctgctgccg atctccagtg 300

0050250-0050850

caacatggag gcaagagcct cattagattt aggtccagag aaaattagaa taaagaaatt 360
gcaataggga gtgagtgata acttcacaca tatctagcta acccacagct accttgatgg 420
gagctctatt ggtgggaaga ggcaggaaga gcctgattaa gtgggttcaa gaaaacctaa 480
gaggaaatga gttggatact accagtatgg aaggtctttg aacaggtttt gccctacaag 540
ggggaagaaa aacgaggtag cagttggaga gaatacaaga tgaagacagt ttttagaagg 600
cagtgatgtt acagaatatt tgtgtaagac aagccaatag agaggagaag atgacgatgc 660
aagagaatcc attgcaggag caatgttcnt gagtcagtga tangggatgg nacataatgg 720
acaagttgga gtggtgtgat cataaatcac tttgatgtaa agaccatctc atcaagaact 780
ccaacagctt tcccccactg gctccntttc ataacaccaa aggnccancc tttggggtcc 840
naacaaangc cta 853

<210> 4348
<211> 694
<212> DNA
<213> Homo sapiens

<400> 4348
aagacaacgt cactaagcag tttctgggag ctacttgcca aggctgagtg tgagctgagc 60
ctgccccacc accaagatga tcctgagctt gctgttcagc cttgggggcc ccctgggctg 120
ggggctgctg ggggcatggg cccaggcttc cagtactagc ctctctgatc tgcagagctc 180
caggacacct ggggtctgga aggcagaggc tgaggacacc agcaaggacc ccgttggacg 240
taactggtgc ccctacccaa tgtccaagct ggtcacctta ctagctcttt gcaaaacaga 300
gaaattcctc atccactcgc agcagccgtg tccgcaggga gctccagact gccagaaagt 360
caaagtcatg taccgcatgg cccacaagcc agtgtaccag gtcaagcaga aggtgctgac 420
ctctttggcc tggaggtgct gccctggcta cacgggcccc aactgcgaac accacgattc 480
catggcaatc cctgagcctg cagattctgg tgacagccaa caagaacctc aaggatggac 540
caatcagctt caaaccctgg gccacctttg ctgcagtgat naaattgaag ggttgaaggg 600
tgcaaacaan ggnaacaagc aagggaaaca atcctggctg gggaagaatt ctccaaagaa 660
attgaatggt ttncaanccg ggggttnggc aaag 694

<210> 4349
<211> 787
<212> DNA
<213> Homo sapiens

<400> 4349
tttattaaat agggtatcct ttcccattgc ttgtttttgt caggtttgtc aaagatcaga 60
tgcttttaga tgtgtggtgt catttctgag ggctctgttc tgttccattg gtctatagat 120
ctgatttgtt accagcccca tgctgttttg gttactgtag ccttgtagaa taatttgaag 180
tcaggtactg tgatgcctct agctttgctg tttttgctta ggattgtctt ggctatgtgg 240
gctctttttt ggttccatat gaaatttaaa gtagtttttc taattctgtg aagaaagtaa 300
tggtaacttg atggggacag caatgagtct ataaattact ttgggtggta tagcagtcag 360
gcacagaaat gtccttgtgt taggcaatac cattcaggac atagccatgg gaagagtcct 420
catcactaag aacaccaaaa gcaatggcta caaaaaccaa aatttacaaa tgggatctaa 480
ctaaacttaa gagtatctgc agcgcaaaag aaactattat cagagtgaac aggcaaccca 540
cagaatggga gaacattgtt gcaatctatc catctgacaa agggctaata tgcagaatct 600
acaaagaaca aatttacaag aaaaaaaaac catcaaaaag tgagcaaagg gtatgaacag 660
acacttacca aagaaagaca tttatacagc caacgaacat gtgaagcaaa gcacatcatc 720

0502303.0020

actggtcant agagaaatgg naatcaaaan cacaatgaga tacaaatctc aagnccactt 780
tagaaan 787

<210> 4350
<211> 632
<212> DNA
<213> Homo sapiens

<400> 4350
atagcacagc tgccagtaga cccccggtca ccctgaggct ggtggtccct gctagtcagt 60
gtggctctct cattggaaaa ggtggatgca agatcaagga aatacgagag gctggagtgc 120
agtggcgcag tcatggctca ctgcagcaaa acatcgacct tcccagcctc aggcgatcct 180
ctcatctcag cctcccaagg agccgggact gcaggctccc accaccacac ccaaattttt 240
gtatttttt gtaaaaatgg tgttttgcca tgtggcccag gctggtttcg aactcctgag 300
ctcaagcaat ccacccacct caggctccca gtgttattac tacaggcttg agccagcaca 360
cttgcttgcc tgcagcgtca tttttcttga ccagacttat aaacaacaag gagaaaaata 420
ggaagatgta ttgggaaata gatgtaattc tacatctttt ttttttttt gagacagggt 480
ctcactcaag ctgaagtgca aggcataatc gtgatcatgg gttactgcaa cctcgacttc 540
tgggctcang ttaccctcct aactcaaagc ctcctgaggt acctgggaac aannggngcg 600
ctccanaaat gccccgggga aattttccct cc 632

<210> 4351
<211> 760
<212> DNA
<213> Homo sapiens

<400> 4351
acaagtcttt agggatccaa actttccctc atcttcctgt cttcttctga gccctccaca 60
aaattccaac ctctgtccac tatgcagttc aaaatcgctt ccacattttc agatatcttt 120
atagcagtgc cccactcctc agtatcaact tcctgtatta gttcattctc acgctgctat 180
acagagacac ttgagactgg gtaatttata aagaaaagac attttattgg cttatggttc 240
tgcaggctgt acaggaagca taagtagctt ctgcttctgg gtaggcctca ggaaactttc 300
aatcatgtca gaaagtgaag cagaagtagg ccatgtgtta catgcatggc tggagcagga 360
ggaagagagg tagaagggag gtgctacaca cttttaaaca accagatctc atgataactc 420
actatcatga gaacagcacc aaaggggaaa ttcacctcca tgatccaatc acctccaatc 480
aggccccacc tccaacactg gggattacaa tttgacatga aatttgggtg atgacacaga 540
tccaaatatt tccattctgt tgactgcaat ctacctaatt ccattaggtt taatgggata 600
actcaagatt caagaacaat ataattactc catttanctt tagaatgggc taagacaaac 660
taatcttgta agccggattg gntttcaana cttcaatttt ttcaaggcac ctattgggnc 720
aacactggnt tcaagggatt tagcaanatt aatttggcaa 760

<210> 4352
<211> 867
<212> DNA
<213> Homo sapiens

<400> 4352
tatctaaata ttttttttctt tgaaagcaga ggctgtgcat ttcatctagg cacatagcag 60

0050250-0050250

aagctcacta aatttttact aatagagctg attcatattt tagctagtaa aacggttatg 120
tcaaggcagt agcatttcat catgacatac caaaatactg acttatattc ttactgggat 180
gtgttcttcc atgggtgtga ctatagcggt atctctaggc agaggcaaaa tatttttcaa 240
gaaacagtct acgttcctga gtaagtactc tgttgatacc ctagaatttc atgccacgca 300
agatggcagg gatccctgta acaggaaaat gtggaaagtg ccaccagttg tccatatcaa 360
ttctaaggtg actgaattct tcacaatagt tgagttgaaa taatatcatg tcctattggg 420
cctagcagaa ggaattgggt aaaaatatgt tcctccagga attgccctgc tgaactgact 480
ttgtttggta tttaccttgt gtaaactaga aaatagctgc caaaaaattt tgaatttgga 540
tatatttgat gatgagcttt tccttctctt actagttaga caacaggatc cattgcttcn 600
tgaaatattt ctcaggttgt gataataaaa ccatttgaac tanttggaga acagcacata 660
taccctgttt gcaacagcaa ggnagtatca ctttattcac atttataaag tgtataaata 720
agttgaaaag aantgtgtan gtgtttgtgg gaagttgaaa ggagtcagtt ttcctttcct 780
gagggatnan ggtgtggatt tcctaatttt tttaggttta atttttgggg gaattttaaa 840
acctttattt ggnnggtatt tgangat 867

<210> 4353
<211> 636
<212> DNA
<213> Homo sapiens

<400> 4353
tatggatgaa tactgttggg ccctaccata atcgtcaaga aacatataag tacttttcac 60
ttccattctg tgtggggtca aaaaaaagta tcagtcatta ccatgaaact ctgggagaag 120
cacttcaagg ggttgaattg gaatttagtg gtctggatat taaatttaaa gatgatgtga 180
tgccagccac ttactgtgaa attgatttag ataaagaaaa gagagatgca tttgtatatg 240
ccataaaaaa tcattactgg taccagatgt acatagatga tttaccaata tggggtattg 300
ttggtgaggc tgatgaaaat ggagaagatt actatctttg gacctataaa aaacttgaaa 360
taggttttaa tggaaatcga attgttgatg ttaatctaac tagtgaagga aaggtgaaac 420
tggttccaaa tactaaaatc cagatgtcat attcagtaaa atggaaaaag tcagatgtga 480
aatttgaaga tcgatttgac aaatatcttg atccgtcctt ttttcaacat cggattcatt 540
ggtttcaatt tcaactcctt catgatggtg atcttcttgg ngggcttagt ttcaatgatt 600
ttaatgagaa cattangaaa gnttatgcnc ggnaca 636

<210> 4354
<211> 762
<212> DNA
<213> Homo sapiens

<400> 4354
tttatgctac caggatttct aaagcacacc aagaggaaat agcaggtgct ttcctagtga 60
cactggatcc acttatcagt cagctgctca catttcagcc tttcatgcag gtggttttgg 120
acagtaaatt agacctgcca tgtgaactgc agtttccaca atgtcttctt ctggttgttg 180
tcatggataa gctgccatct cagcctaagg aagtgcaaac cctgtggtgc acagacagcc 240
aggtctcaga aacgacaacc aggatatctc tactcaaagc cgttttctac agttttgagc 300
agtgttctgg tgaactctct ctacctgttc atttacaggg attaaagagt aaggggaaag 360
ctgaggtggc tgtcaccttg tatcagcatg tttgtgttca tctgtgtaca tttattactt 420
cctttcatcc ctcactgttt gctgaactgg atgctgctct gctgaatgct gtacttagtg 480
ctaatatgat cacctctttg ttagctatgg atgcatggtg cttccttgct cgatatggga 540

0052916.0075800

ctgctgaact gtgtgcacac catgtcacca tagtggctca tctgataaag tcatgccctg 600
gagaatgtta tcaactcatc aacctatcaa tactgttgaa agcgtctctt ttttcttcat 660
gggcaccanc ccatcannct gggaggttta tccaagaaaa ttttccccaa aaaggaaagn 720
cangaaaatc ctgccctcct ggtgggcaaa caataatttc cc 762

<210> 4355
<211> 770
<212> DNA
<213> Homo sapiens

<400> 4355
atttattttg atgtcggcgg ggtgtgcaag atgacccttt cctcacgccg tctccgatat 60
tggtgttcac caaaacatct ttatccagta gtgcaaaatg tcatgctaac cttgtcttag 120
tttcacgtct ttaattctga aacttgaaac aaaaacaatg catcagtggg ccatggagac 180
ttcttcttct gtgtatggga tactgtgtct tttattcttc tattctggta tgtcctccct 240
gatttctagt catttttgaa ttatttatag acagtaaaca ttgcccaata tattatgaaa 300
atgtgtttcc actttattgt tgcctctgaa aacattttga acagaagctt ttataagcaa 360
ggcttgaatt tttcttttt atgttgtctt aggtttgtgt gagtttccac ctttgtgtaa 420
cacatttttc cttttaacag aaccatttta tcactgtctc tcttccttct tgggaaaaag 480
aaaaccatct ttttcttttc atttgcatta cttacaacta tgaattgatt tatagagtgc 540
taaaatattt gtaaaatcga gcagattctt ctgtgtgcct ttttctcctg gtgatttatt 600
taaatgggnt ttctaanggg ttttcccgtc aagtattgat ttgttttggg tggantacga 660
ttttaaggtg cgcctaattg gctccccggt ttcctgaaac tatancaaca atttttgggg 720
gcaatcccct ccttantccc cactggaaat gaaggaaccc cttgngnaan 770

<210> 4356
<211> 767
<212> DNA
<213> Homo sapiens

<400> 4356
tatgagtaat acttgtaaac cttaggagag gaatgttgat gtatttaact tgtaaacttt 60
gttttcagct tcttttgtgt taggtaggta catgtatgct tgggtgtagg ataaatagca 120
atgctataat aatactgtat atattgttat atgaagattg cattttattt caagatttcc 180
tttggagata acttttaaaa cattgagatt tcaaaccaca agatcactaa ttacttgcat 240
aacacttagc ataatttttct cctaaacgat atcatggtct ttctatagtt aacactcaag 300
gtgattttct ttattgttct ctttgccttc tttattttga atttgaggca cttagtatat 360
ttttttataa gttatagcca catatcagta cttaccagca tgataagcag ttctttacta 420
taaaattaaa gtttgtaaac cattaagtgt aatttttggt cagaccacaa gtcctgttgc 480
ttttttattt aagttgcttt aaaaattttt tctaaacata cagaataaca accgttaaga 540
tctcattttt ctctccaact actctctcat ttgtttctta aactcccttt tttttcagcc 600
tgtttttttgg aaccctgtta gagaagaaca gacatatatt gtccctgaaa ggtacattta 660
attataatcc tcangtaatt acattatgta attacactca atcacctaat tagcactgct 720
taacacatgt taactttgct tttggtncgt tttganacan ggnctgc 767

<210> 4357
<211> 691
<212> DNA

0095245.0072000

<213> Homo sapiens

<400> 4357
gtaatcaagg aagttaagat attcatcatc cacagaagtc tcattgtgcc actttatgtt 60
cttttatcag gaaactgctg aattattttc caaagtatat gtaccatttt ctgtttctgc 120
agctgtatat gacaattcca gttgctctgt gtgtcatcac aaacacttag catcagcatt 180
tattttatat tttgagtcat tctgaagggt gtgtgttgtg cacatcatta tgtttttcat 240
gtttgttacc tgaatgacta ataatattaa gcttcttttt atgtgtttat ttgccatctg 300
tatatcttct ttgctgaatt gtcatttcaa acattttgct attaaaaatc aggtttcttt 360
tttctttttt ctgtttcttt taaacatttc ctgaaaattt tcagtgtaac atctatgaaa 420
tcaaaggatg aagaagatcg tgcccaggta atacccactc tctttgtctt ctaaagaaat 480
gttgctttcc tgatttcctc ccttctcaat ttagatgtga aaatctaaca atacacataa 540
tgtacaacat atacaattct ctttgtgggg gtggtgttca gtgggactct cctcccaact 600
gacacctgaa ccctaagaca ttttaaaatg acagtattca ttancaagtg taatgtanag 660
gattttcctc agnancangt ttccccttg g 691

<210> 4358
<211> 726
<212> DNA
<213> Homo sapiens

<400> 4358
ttgcttatca atttagagct cttctatgga aagagggtga aaatctgttt tgtgcctctt 60
ttttttgtat gtaaatgtgc aattatactg gattttctct tgtaaaaaac actacaattc 120
ttttactgaa gctcctaaac tgccatttgc ctgactccag caattaattc tgcggtgact 180
cattgggctt ccagtacttc tgttgattgg atatggtccc aaaagaaaga gcaaaatgga 240
aaatgcgatc catgtcacca aatataattg ctacaagtaa catgaaatac agctcaccaa 300
aacactaaac tttgctcttg agcaattata tagttcgatg tccttttaaa aaataagaaa 360
agctaggttt tatcatacta aaattttatt ttgtatatga tgtttggttt tttaaactta 420
ctaacataag gatttccttt aatattccaa atacagttct tgaaacagta tccaacatga 480
aatcttatct ccttgctttt agacttaagt gctatttact atctaaagac ttttctatgg 540
taagccaggg tacatcctat atactacaga taccttangt ttcaagtatt tttaagcagc 600
ttcttcaatg tgccacattt tgttttcata anctgtaaca agagctccgg ctgaaattaa 660
aaaaaaaatt atggattaat agggatttgt ttcaccattt caagaaatcc agnntnagna 720
aaacaa 726

<210> 4359
<211> 821
<212> DNA
<213> Homo sapiens

<400> 4359
tctcttgctt ttgggaaagt taccacaggg tctgcaagaa acctgttgta taactgtaga 60
cactctctaa tggttctcaa aggaggaaat gtagccttca gtctcctcat ttgtcctttg 120
aggaagtcca catttgttca cagttgcaac ctttggtttt acagtgggaa atggtggtgg 180
atgatatgga catatgtagc ccagtggcat tgtacttctg ctgacagctg cacacattac 240
agctgtctcc aaacccacag tgatgcttag ggaaagaccc tgctcaggac ccagcaggtc 300
agcaccccag agcagactga taggtccgtg ggacccatgt tagagcagaa aatttgggct 360

0962946 0972806

cagcacattt tactgttagt agagagccag gaaacgtttt ctgggttggg gattttgtgg 420
gatttttaa ttttttagt aggttttgtt taacctctgt gcagtttgta tgaatgaatt 480
gctatacatt tataaggagc cagggtctgg agggttgcta tcactttgtc cagcccaaat 540
accttcctgg gcaactccta ccatttgttt gcaggttgcc tctactanct gatggcagta 600
tgctggaaag aggttgtact ataaagagag ttctttcctt ccactccaag agttgntggt 660
gtagctttgc cattgaaccc gatcaatttt ttaaactcct taaaggaagc ancaagctat 720
ttttttgaaa attaaagaaa attctcaggc caaggctcaa tggncatgcc tataattgta 780
atgcctttgg angctnanct gggagatcct tnagacagcc a 821

<210> 4360
<211> 801
<212> DNA
<213> Homo sapiens

<400> 4360
agaaaaaaga taatatacta attcttaatt ttagtaagta gacagttgta gtgtatggat 60
gttttgttaa atctttgttg atacagaata tataatttcc tttttctgtt tgtgtgagaa 120
gtaaagattg aacaaaaata tgtgagtgct aaactgtctt taaaaagtag ataactatat 180
caaaaagagt aaggaccagt gggcaccatg cagaacaagc aaatagaagc tcagcctttg 240
agtagcagct ttggtagtat acaaaaatga actgaaaata ggaactcagc agtgttttaa 300
gatgacagat taaacaaaca tcccaccaga aagaggtaat cacttagact aatttcctca 360
tcccctagga taaaatctta agtcagtgac ttgaaaacta ttttgaccca atccattgag 420
aaatgcattt ttacattgca gcccagcaca cacatatgta taactgaagc aagagttgta 480
cttaacaata cttacttatc cgtgtgttat gcatcttgat atttcttatt ctcttttacc 540
ccttcctctg tgtgtctgtg tgtattcttt ttccccccca cccacccgat accgttcang 600
aaacactacg ttgatttcat tacctgctaa tgtgttgcaa ccccttttgag atgatcctac 660
tagttatgat gagatgcttc caataaaagt tacaccagtt gaaaatgcca atatttcana 720
agggcangat gatgacttag atngtactaa tattacaaca cnttaggaaa gtcattcatt 780
ttantttagg aaggcactat t 801

<210> 4361
<211> 787
<212> DNA
<213> Homo sapiens

<400> 4361
caatgttgat gctgatgcta ttgatgatgt ttgctgtcca ctgtacctgg gtcacaagca 60
atgcctactc tagtccaagt gtagtcctgg cctcatacaa tcatgatggc accaggaata 120
tcttagatga ttttagagaa gcttactttt ggctaaggca aaatacagat gaacatgcac 180
gagtaatgtc ttggtgggat tatggctatc agatagctgg aatggctaat agaactacgt 240
tggtggataa taacacctgg aataacagcc acatagcact ggtgggaaaa gctatgtctt 300
ctaatgaaac agcagcctat aaaatcatga ggactctaga tgtagattat gttttggtta 360
tttttggagg ggttattggc tattctggtg atgatatcaa caaatttctc tggatggtta 420
ggatagctga aggagaacat cccaaagaca ttcgggaaag tgactatttt accccacagg 480
gagaattccg tgtagacaaa gcaagatccc ctactttgtt gaattgcctt atgtataaaa 540
tgtcatacta cagatttggn gaaatgcagc tggattttcg tacaccccca agttttgacc 600
gaacacntaa tgctgagatt gggaatnang ncattaaatt caaacatttg ggagaagctt 660
tacatcagaa cactgggctt gttagatata taaagttaaa gcacctgata acaaggagac 720

0562456.0572800

attanatnac aaaactccga gtcancaaca ttttcccaaa acaaaagnta tttgtcaaaa 780
gaanact 787

<210> 4362
<211> 729
<212> DNA
<213> Homo sapiens

<400> 4362
ttttcctcaa catggctgcg cccttgtcag tggaggtgga gttcggaggt ggtgcggagc 60
tcctgtttga cggtattaag aaacatcgag tcactttgcc tggacaggag gaaccctggg 120
acatccggaa cctgctcatc tggatcaaga agaatttgct aaaagagcgg ccagagttgt 180
tcatccaggg agacagcgtg cggccaggaa ttctggtgct gattaacgat gccgactggg 240
agctactggg tgagctggac taccagcttc aggaccagga cagcgtcctc ttcatctcca 300
ctctgcacgg cggctgaggg cccttctctg ggcctgggca cccttagagg ggagaacgaa 360
gcaatcagac atccccttgg gccctgcttc caggtctccc tgtcccccct gcctgccttc 420
ttccctgctc tgtcccctaa gctccctcca ggcagggaaa agaggccagg tgctaaaaat 480
gagcctttct caagcacgtg agcagcggaa ggcagacagg cgccagagcc cagcactccc 540
ttttccagca nctgtggtgg gggagggttc ccctccaagt ttgtcaagag ttgaaggagg 600
ctctggtggc caggtgacct ggctgccttc cactccttgt acctcaagtc taaacatgga 660
ntggccgctg nncaanggcg ctccaacccc aagaagccaa gcgtcttcat ggggaaagga 720
ttnaaatgg 729

<210> 4363
<211> 775
<212> DNA
<213> Homo sapiens

<400> 4363
gatcgggggc gcgaggcctc acggagctcg tagtttcccg gacgggccgc tcccggcctc 60
gcggcctcgc ctccccacac tacaactccc acggggcagc gggcgcggct ccccgtaccc 120
accagctggc cgggcagggc agccacttcg cggtcgggcc cgccggctgc gggcacccgc 180
gcgacgggcg ggaagatggc ggacgtggtc gtgggtaaag acaagggcgg ggagcagcgg 240
ctcatctcgc tgcctctatc ccgcatccgg gtcatcatga agagctcccc cgaggtgtcc 300
agcatcaacc aggaggcgtt ggtgctcacg gccaaggcca cggagctctt tgttcaatgc 360
ctagccacct attcctacag acacggcagt ggaaaggaaa agaaagtact gacttacagt 420
gatttagcaa acactgcaca gcaatcagaa acttttcagt ttcttgcaga tatattacca 480
aagaagattt tagctagtaa atacctgaaa atgcttaaag aggaaaagag ggaagaanat 540
gaggagaatg acaatgataa tgaaagtgac catgatgaag ctgactccta aaccaaaagt 600
gctttaaaaa ccagcctgnc naggacagcc tggacccact ccactgtctc taagtaaaca 660
cagcactgcc cgcttttagc gtcttcactt cttcacagag ttcagtgcgt ggaatctttc 720
gaggtatttt tcaaggccga nnttgagnac ctcatgtacn tacgccacna gatag 775

<210> 4364
<211> 807
<212> DNA
<213> Homo sapiens

0020070250

<400> 4364
attatccagc atggctttat ctaagggagg gcctacaaag cacagtggaa gagggtgggc 60
attagagtca gacttgggtt tgattgacag aactagatac ttagttattt tcacactggg 120
caattgccta aacctgttaa gcttcatttt ttttttcatc tgtaaattgg agaatatggt 180
gtttacttca tatggctatt gtaagcaata aaaaaaaaag gtattttaaa cacctagcat 240
agcaggtgtt agtgctaaat tatatattac tttctcctga taaagtaacc ttttaaaaag 300
taaagagctt atttatatag agctagtttc cagtctcttg ttttagagac ttaaaaaaca 360
gtactggact gctgttgttg tttcactgtg gcaaagaata gaagaatgaa ttttatttca 420
tcatatattt gatggttccc aaatcattcc ttgcttctta tagccagcag aaacctacag 480
ttggattttg gtgagtctaa gtttgtagta agtgagattg tttttagtga gctgtcagcg 540
ggggttgatg aaaggcagaa gaccatggtc gtttttaatg aggttgtgtg aaaatccaat 600
gaagtggtca gtgaaaattc tacctcgaga taaactgtgc aaactgggct ctaacagtag 660
attattttcc tctaattata agtttgctan agcttccttt taatttttgn ttccgttttt 720
gtttgaaaac caagaaagtc cctttggcng tttcccttaa naancctccg aaaaatccaa 780
tggcaatttt tgtgaaaaaa ggggggn 807

<210> 4365
<211> 778
<212> DNA
<213> Homo sapiens

<400> 4365
atcactgatg ggtattttgc ttggttccaa gtctttgcta ttgtgaccag tgccacaata 60
aacatatgtg tgcatgtgtc tttatagtag aatgacttac aatcctttgg gaatataccc 120
agtaatggga ttgctgggtc aaatggtatt tctggttcta gatccttgag gaattgccac 180
actgtcttcc acaatggttg aactaattta cactcccacc aacagtgtaa aagcgttcct 240
atttctccac atcccctcca gcatctgttg tttcctgact ttttaatgat caccattcta 300
actggcatga gatggtattt ccttgtggtt ttgatttgca tttctgttat gaccagtgat 360
gatgagcatt ttttcatatg tccgttggct gtataaatgt cttcttttga gaagtgtctg 420
ttcatttcat tcacccactt ttgatggcat tgtttgtttt tttcttgtaa atttgtttaa 480
gttctttgta gattctggat attagccctt tgtcagatgg atacattgca aaaatttttct 540
cccattctgt aggttgcctg ttcactctga tgatagtttc ttttgctgtg canaaagctc 600
tttagnttaa ttaagatccc attcgncaat tttgggcttt tgttgccatt gcttttggng 660
ttttattcat ggagtccttt gcccatgccc naggtcctga aaggtattgc cccaggtttt 720
tcctccnaag ggngttttan gaatttttag ggtcttaaag gctcccgggt ntttaaac 778

<210> 4366
<211> 823
<212> DNA
<213> Homo sapiens

<400> 4366
catttttgt ttgttcattt atttttacag gttcgaatgc aagcactgaa atgtttctca 60
gttttagctt ttgaaaaccc ccaggtatcg atgaccctgg taaatggtag gctggagctt 120
tcagtggcac ctacatgatt taattgatga acttttaga tttaaagaat ttccttaatc 180
attgttgttt gttttatttc tagttttggt tgatggagaa ttgttaccac agatttttgt 240
gaagatgtta cagagggata agcctattga gatgcagctc acatcagcaa aatgtttaac 300
ttacatgtgt agagctggag caattcggac agatgataac tgtattgtat taaagacatt 360

05254903-070200

accttgtttg gttcgaatgt gcagtaagga gagattacta gaggagagag ttgaaggagc 420
tgagacactt gcctatctga ttgaaccaga tgttgagcta cagagaatcg ctagcataac 480
tgatcacctc attgccatgc ttgctgatta tttcaagtat cccagctcag tgagtgccat 540
cactgatatt aaaaggcttg atcatgattt aaaacatgct cacgaactcc gccaggctgc 600
attcaagctc tatgcctctc ttggagcaaa tgatgaagac atccggaaga agatcattga 660
gactgaaaat atgatggacc gaattgtgac tggcttgtcc gagtcnaaag tcaaggtgcg 720
gttagctgcc gtcaagaatg tttgcacang tttaacccag atctggngca gcaacttcga 780
accagttttc aaggatnaan gccggtttgg naaaccttta atg 823

<210> 4367
<211> 689
<212> DNA
<213> Homo sapiens

<400> 4367
ctggacaacc aaaacttaca taggcttttt atcattttac tgggcctatg taactgagtt 60
ttagccagtg gaatgtccaa gtgacatttg ccacttctag gtctggcaca ttaacacttg 120
atgtattaca tttcagaccc tcttatcatt ctgcagtgtg tttggcgatc tgttgtttaa 180
gatctatatg cactggttac tgttgcttgc cttccattcc tacccttact aatcagattc 240
ctattatagc tacttctgtc cttgattcat tttgtatatt agatgtgtgt gtgttcatgt 300
gcatgcatgc accctcacat gtaggtgtat atgggagtgg tggtaaagac aggatatttc 360
ttcagttcat gggattttat ttcaggagaa ttcaaacatt cacgtattgg agaagatgac 420
acatttcttg aatgtctttg gctttgagct gaatgcacta actagaaggg actccagatt 480
gtcctccttc gggggaggta agtatattct tcatatacag gtaagagtga aatgatagaa 540
gaatgttcct cctctccttt tcttcctgga caacaagatc aaatatttct caagatcttt 600
tacagctgaa ttgggggcac atggacaggt atnatcttaa aatatnanaa antaatttaa 660
aanttacatg ctaaaatttt ataaaaaat 689

<210> 4368
<211> 738
<212> DNA
<213> Homo sapiens

<400> 4368
attttgactg gcaaaatgtg gcaagatttc agggatgcag gtggatcctt aactgaggtc 60
aaggtggaag aggaagaaag ggatccgcag agtcctgaat ttgaaattga ggaggaggaa 120
gaaatgttgt catccgtcat accagattcc aggagagaaa atgaacttcc cgatttcccc 180
cacattgatg agtttttac ccttaactca acaccatcta gatctgcata tgatgagcct 240
catttgctcg taaatattga gaaacagaaa ctagagttgg aaaaacgacg actggatatc 300
gaggccgaaa ggctgcaggt agaaaaggaa cgcctacaaa tcgagaaaga gaggctgcgg 360
catttagaca tggaacatga gcggcttcag ctagagaagg agcggctgca gattgaaaga 420
gaaaagttga ggttacagat agtcaattca gagaaaccgt ccttgggaaa tgaacttggn 480
caaggagaaa aatccatgct tcaaccacag gacatagaaa cagagaagtt aaaacttgag 540
cgagaacgct tgcaactgga aaaggataag ctgcaagttt ttgaagtttg aatctgagaa 600
nctgcanatt gaaaagggaa cgcttacagg tanagaaaag acagacttcn aattcagaaa 660
gaaaggcact tgcaagtgan ttttccaggc ttccatttag caaaatgttt ggaaaaacnc 720
tanatttttc cccaanat 738

0952450.0072000

<210> 4369
<211> 728
<212> DNA
<213> Homo sapiens

<400> 4369
gggttaatga cattaatgat gaggttctca cttaggctag tgatacagag cgagatggac 60
tagccccaga aaagacatca ccagatagag ataagaaaaa agagcagtca gaagtatctg 120
tttctcctag agcttcaaaa catcattatt caagatcacg atcaaggtca agagaaagaa 180
aacgaaagtc agataatgaa ggaagaaaac acaggagccg gagcagaagc aaagaggtaa 240
ttaacacttt gtagtgaata ggtactttaa aatacttata aagtgtctgg tagaaagatt 300
tgtatgaata taagacgttg tcaagggaag aagacatgaa tccaaagata agtcctctaa 360
gaaacataag tctgaggaac ataatgacaa agaacattct tctgataaag gaagagagcg 420
actaaattca tctgaaaatg gtgaggacag gcacaaacgc aaggaaagaa agtcatcaag 480
aggcagaagt cactcaagat ctaggtctcg tgaaagacgc catcgtagta gaagcaggga 540
gcggaagaag tctcgatcca ggagtaggga gcggnagaaa tcgagatcca gaagcagaga 600
gaggaagaaa tcgaagattc agaagcaggg aaagaaaacg gcgggtnaag tctcgttccc 660
gctcaagatc angacacagg caatangant agaancagga gtaggacaag gagttaggag 720
tcgagata 728

<210> 4370
<211> 680
<212> DNA
<213> Homo sapiens

<400> 4370
attcgaatcg gcggcggctt ctagtttgcg gttcaggttt ggccgctgcc ggccagcgtc 60
ctctggccat ggacaccccg gaaaatgtcc ttcagatgct tgaagcccac atgcagagct 120
acaagggcaa tgaccctctt ggtgaatggg aaagatacat acagtgggta caagagaatt 180
ttcctgagaa taaagaatac ttgataactt tactagaaca tttaatgaag gaatttttag 240
ataagaagaa ataccacaat gacccaagat tcatcagtta ttgtttaaaa tttgctgagt 300
acaacagtga cctccatcaa ttttttgagt ttctgtacaa ccatgggatt gggaccctgt 360
catcccctct gtacattgcc tgggcggggc atctggaagc ccaaggagag ctgcagcatg 420
ccagtgctgt ccttcagaga ggaattcaan accaggctga acccagagag ttcctgcaac 480
aacaatacag gttatttcaa gacacgcctc actgaaaccc atttgccagc tcaagctaga 540
aacctcaagn acctctgcat aatgttcaag ttttaaatca aatgataaca tcaaggatca 600
tatccangaa cntaacatgg nctgcatttc taaagaanca gggttcaaga ggctttctgg 660
angtgatatc tcagcttggg 680

<210> 4371
<211> 781
<212> DNA
<213> Homo sapiens

<400> 4371
atacttacct ggcaggggag ataccatgat cacgaaggtg gttttcccag ggcgaggctt 60
atccattgca ctccggatgt gctgacccct gcgatttccc caaatgtggg aaactcgact 120
gcataatttg tggtagtggg ggactgcgtt cgcgctttcc cctgccgaga gatctgagcc 180

US 2005/0260609 A1

cgacagcccc ctgtccagct gcggccacag ccagcctcct tgcctccatt tcccgaattg 240
cccaggaccc cagctctgtg tccccaggag gcactggggg ccagaagctg gcccagctcc 300
cagaacttgc ttctgccgag atgagtctcc atgtcatcta cctgcaccag cttcaccagc 360
agcagcagca gcaggagccg tggggtgagg ctgcagcctc catcctgtcc aggccctgct 420
ccagcccctc acagccaccc tcgcctgatg aggagaagcc atcctggtca agtgacggct 480
ccagtcctgc ctctagcccc agacaacagt ggggaaccca gaaggcccgg aatctgttcc 540
ccgganggtt tcaggtgacc acagacaccc agaaggagcc tgaccgggct cttgcactga 600
ctgagacgac tcctcaaggc cccactcctg gcanctgant gctgcaactg ccttctcgat 660
cacgancctg anaactgcac gggggaacaa gcccaaactg gcttgggaaa ccaatgtttt 720
caaaagtgca agggncaaag ttggcgtcct ctgggggaaa attttnnana aangggacca 780
a 781

<210> 4372
<211> 818
<212> DNA
<213> Homo sapiens

<400> 4372
gtgcagacct tgaatcgaaa cccaggctcc tgcaggcact ggcacagcta cagcgagggc 60
ctcggccatc caagggtctc ccaggtgacc ttccctccac cccaggaagc tatgacagag 120
gccgggaagc tgcccctacc gctaccccca cggctggact ggtttgtgca cacccagatg 180
ggccagctgg cccaagacgg ggtccccgag tggttccatg gtgcaatctc aagagaggat 240
gctgagaact tgctggagtc acagccactg ggatcctttc tcatcagggt cagtcacagc 300
catgtgggct acacactctc ctacaaagcc caaagcagct gctgccattt catggtgaag 360
ctcttggatg atgggacttt catgatcccc ggggagaagg tggcccacac ctcgctggac 420
gccctggtca ccttccacca gcagaagcca attgagccgc gcagggagct gctgacacag 480
ccctgcaggc agaaggatcc cgcaaacgtg gattacgagg atctcttcct ctactccaac 540
gcagtggccg aggaanctgc ctgcccggtg tctgcccctg aggaggcctc cccaaagcca 600
gtcctgtgtc accaatcaaa ggaaaggaag ccgttcagca gagatgaaca gaatanccac 660
caaggaagcc acttcctcct gccccccaaa aatcccctct tggagaagac ccgccagaaa 720
actctggagg agcctcaaaa atgctccccg aaaaganggc aanaggggtc ccgggnaaca 780
agcntaaaaa ggccaacctc ngccaactgg tgaaactt 818

<210> 4373
<211> 742
<212> DNA
<213> Homo sapiens

<400> 4373
acgcgcccag ggcagcgcgc cacgctgcca cacatgggcc ggcggactgc tctgaagagg 60
tggccgaggt gaagccaaag ccagagacag aagctaaggc agaggaagcc agtggggaga 120
aggtgtcagg ctccgcggcc aagcctaggc cctatgcgtg tccgctatgc cccaaggcct 180
acaagacggc acccgagctg cgcagccacg ggcgcagcca cacgggggag aagcctttc 240
cgtgccccga gtgcggccgc cgcttcatgc agcccgtgtg cctgcgcgtg cgcctggcct 300
cgcacgctgg cgaactgccc ttccgctgtg cgcactgccc gaaggcctat ggcgcgctct 360
ccaagctcaa gatccaccag cgtggccaca caggcgagcg gccttacgcc tgcgccgact 420
gcggcaagag ctttgctgac ccttcagtgt tccgcaagca ccggcgtact cacgctggcc 480
tgcggcccta cagctgtgag cgttgcggta aagcctatgc ggagctcaag gacctccgca 540

0960346.02700

accatgagcg gtcncacacc ggcgaacgcc ccttcctctg ctccgagttg cgggaagagc 600
ttctcncgct catcctcgct cacgtgccaa cagcgcatcc aacgcggnac aaaaagccct 660
aacgctgccc ggnctggcgg caagggcttt acgcaagctc agttcctaac cagagccant 720
agcgcangta antccggggg ga 742

<210> 4374
<211> 664
<212> DNA
<213> Homo sapiens

<400> 4374
tttttaaatc aagagtgtat ttaaagttat tttttcattt gtatataatt ttaaaccatg 60
ttttcttaca gtttgtcatc atcctgctct tggtttttgt cacagaagtt gttgtagtgg 120
ttttgggata tgtttacaga gcaaaggtat gttgtctact gtaattcaca taatgcctta 180
aaaggtggtt taagtgtttc aagtaaaata gaacacattc attttatcag agtaaacatt 240
ttcttttgcc ttacttgttt aatctgtatt tcaaatatct aaagttaatt ggcaaatatt 300
tacatgtcaa gactccttac ctcatttaat atagcanagt gttatatatg tattgttctt 360
gattataggt atttatagct gcaaatgaat aattagctga gaagtttgtt caagatttcc 420
tcagcacaca gattgcctat atgaggggag gcataatttt ctgatttccg ctttanaaag 480
aaccaaactc agaantgcgt tttccaatgt ccccttaaaa aatgctttgn gcctaaacat 540
aaaaaaaggg ggtgtgagtt gtgattccac cttcaacccc ggtcctgagg aacaanggg 600
cctgccaact taaacaacaa gggagctggg ggccagnant ccnttcttgg ccttcatcct 660
ttna 664

<210> 4375
<211> 699
<212> DNA
<213> Homo sapiens

<400> 4375
gttgccatgg atcctgggga cgactggctg gtggaatcct tgcgcttgta ccaggatttc 60
tatgcattcg acctgtcagg agccactcga gtccttgaat ggattgatga caaaggagtc 120
tttgttgctg gctatgaaag cctgaaaaag aatgaaattc ttcatctgaa attacctctc 180
agactttctg taaaggaaaa caagggctta ttcccagaaa gagatttcaa agtgcgccat 240
ggaggatttt cagacaggtc tatctttgat ctaaagcatg tgccacatac cagattgctg 300
gttaccagtg gccttccang ttgttatctg caggtgtggc aggttgcaga ggacagtgat 360
gtcattaaag ctgtcagcac cattgctgtg catgagaaag aggagagtct ctggcctaag 420
gtggccgtct tctccacatt ggcacccgga gtcctccatg gggccaagct ccgaagtctg 480
caagtcgttg atctggagtc ccggaagacc acgtncacct canatgtcag tgacagtgag 540
gagctgagta ncctgcangt cctaaatgca agacaccttt gccttctgct gtgcttcggg 600
ccggctgggg cttgtttgac accccggcaa naagtggggc accgttggag aatcgcaanc 660
cctgggccct gggtcctggn ggaaaanaaa atgggggtn 699

<210> 4376
<211> 729
<212> DNA
<213> Homo sapiens

0095445 0072000

<400> 4376
tgcatttcta acagcaatga atgagagttc ctgttgctcc acatccccac cagcatttgg 60
tggtgtagtg ttttgaattt tggctattct aataggtgtg tagtgctacc gcattgtttt 120
aatttgctgt ccctaatggt atatgatgtt ggtcatcttt tcctatgcat atttgctatc 180
tgtatatatt ttttggtaag gtgtctgtta agatttttc ccttttaaa ataggatttt 240
tttttattgt tgaatttaaa gagttctttg tatattttgg atacatgtcc tctatcagat 300
atatgttatg cagtattttt tcccagtgtg tggcttgtct tttcattctc ttaacaatgt 360
cttttgcaga gcagaagttt ttaattttaa tgatgtccag cttatcagtt ttttctttca 420
tgagtcatgc ctttggtgtt gtatctaaaa actcaatgct aagaccatgg tcacttagat 480
tttcntgtat gttatcttct agaagtttta tgttttgcat tttacattta tgtctgtgat 540
ccattttgag gtaatttttg taaaagatgt gaggtccatg tctagatttt tatattttat 600
tttaantttg ttttgcacgt caatgtacag ttgttccaag tacnatttgt tgaaaagacc 660
gtcctttcc ccattgggat cgcctttgct tcnttgttna aaagattaag ttggaataan 720
anttggtgg 729

<210> 4377
<211> 793
<212> DNA
<213> Homo sapiens

<400> 4377
ttatatgttg atttttcttt ctctctgatt tcccagtttc agattgaatg tctgtcttgc 60
aggcagttat ttcaaaatcc atagtctttt gcctttctca ctggcaaaat ttgaagcaat 120
ctctctcttc aatgtatgat ttcaaaacta aaattttaaa agagaagaat aaatatctta 180
tccaagactt cattgcatat ctagagcaag agtggcaaac tttttctgta aaggactata 240
tagaaaatat tttccacaag gtctatgttg caacttctca actttgccat tctgctaatg 300
caatcttagt aaataaaaga atgaacataa ctgttttcct atataacttc ccttacaaaa 360
acagccagta ggccaccttt gcaggtcata ttttgctgac ccctggtctg gatgtttttt 420
aatgctagct ctccatggtg tcatctttcg ttttcattca tttttcaaag gtgagaattt 480
acagtcatta catttcccac tgtatcagaa gtagctgtat tttctacaga tgtagccctg 540
ggaatggcac agtggaacaa tatttaacta actcagcaag acttcttgca aatgaaaaga 600
aaactcaaaa ggtgccatta aaaagcaata ccattttcag gcaacattat tgcaacaacc 660
tttgtgagag aggacactag cttttcaagg atatttgnaa aatnatataa ctaacatgct 720
attttaacct taaacaagct gtgttcctgt aaaagtgttt tgggnttaga angggaattt 780
ttacccttca nac 793

<210> 4378
<211> 809
<212> DNA
<213> Homo sapiens

<400> 4378
ctgaaacgga ccccaacaac acccaaatga tattaggggc aatgttaaat attgttcaag 60
attcagcact tttggaagcc attggttgcc agatggagat gggtggtgga gaaaataacc 120
tgaagagtca tagtcgcacc aatagtggta ttagttcagc aagtggtgga agcacggagc 180
ccacgactcc cgatagtgag agacctgctc aagctctctt aagagattat gctcttaata 240
cagattcagc tgctgggctc ctgattcgca gcattcatct cgtcacccaa agactcaact 300
cccagtggcg ccaagacatg agcatatcac tggcagctct agagctcctc tctggccttg 360

09602469 - 07-12-00

caaaggtaaa agtgatggtt gactcaggag accggaagcg agccatcagt tctgtgtgca 420
cctacattgt ttatcagtgt agtcggccag ctcctttaca ctccagggat ctgcactcca 480
tgatagtggc agcttttcag tgtctctgtg tctggctgac agagcaccct gatatgcttg 540
atgaaaagga ctgccttaag gaagtactgg agattgtgga actgggtatc tcaggaagta 600
agtccaagaa caatgagcaa gaggtcaagt acaaaggaga taaggagcca aaccctgcat 660
ctatganggt aaaggatgct gctgaagcca ccctaacatg cattatgcag ttgctcgggg 720
catttccttc acccantggg cctgcctctc ccttgtantc ctggtgaatg agaccacttt 780
gntnaatacn ccagggtggc aaaccataa 809

<210> 4379
<211> 762
<212> DNA
<213> Homo sapiens

<400> 4379
gaaaatgagg gttatattaa aaagctcctg ngagcttttt catgtgtgtg aagatttgga 60
aaatattgaa ggactgcacc acttgtatga aattatcaaa ggcatctttc tcttgaatcg 120
aactgccctt tttgaagtta tgttctctga agaatgtata atggacgtca ttggatgttt 180
agaatatgat cctgctttat cacaaccacg aaaacacagg gaatttctaa caaaaacagc 240
caagtttaaa gaagtgattc ccatatcaga tcctgagctg aaacaaaaaa ttcatcagac 300
atacagagtt cagtatatac aagatatggt tctaccaact ccttcggtct ttgaagaaaa 360
catgttatca acacttcact cttttatctt tttcaataag gtagagattg ttggcatgtt 420
gcaggaagat gaaaaatttc tgacagattt gtttgcacaa ctaacagatg aagcaacaga 480
tgaggaaaaa agacaggaat tggntaactt tttaaaagaa ttttgtgcgt tttcccaaac 540
gctacagcct caaaacagag atgctttttt caagactttg tcaaacatgg gcatattacc 600
agctttagaa gtcatccttg ggcatggatg atacacangt gcgaagtgct gctaccgata 660
tattctcaaa cctgggtgaa tataatccat ccatggnacg agagtttgca tgcangaggc 720
acnacagaat gatgatgtaa gtnaggaagt ttacagagca an 762

<210> 4380
<211> 853
<212> DNA
<213> Homo sapiens

<400> 4380
ctgagggcag ctggggctac ttctgccctt ggctatgcca ggctttgcat ctcgggctat 60
ggctcactgc agagtttcgt gggggaaggg caggggaagc caggtggggg ccagctgaat 120
ttcagtgtgg aagaaacttt ttacggtctc atctcggccc agtcggtcag gtgggtggca 180
ctcggccttt ctgaggcttc tctctctaaa ccatccctga gcagcaattc agaagacaag 240
ctagaaagcc ctttgatggc atcacagtgt ccctttaacc cctgagcacg ccccagtcct 300
ctgtagctgc ccactcagca cagccgttcc tggaggctga gcggcacggg ccctcggggc 360
agctgcccgg tgcctgccac ccacacatct ctccaccggt cctctccttt ctcctcacct 420
cacttgtctg ccaggccctg cgtgtgggcc cagccatccc aggcaggaca ggcagggctc 480
tccagctgcc tcacagactc accgtcagcc atgcgggaga agaaccgcag cacccaggca 540
aggtctttct ggctctttcc ccaaggccan caggtcttag aaatcgtcaa gacttgccag 600
attctctgag taggaaacgg naccctgggg tctccccact cggnctcctg gcctatctct 660
ccctgagcct tgtggaggct caatgaagga aaagtcttgc tggggatctt ggnagtgtcc 720
ctctcancta ccacaacaag atttcttctg gtacgggtca cttcaagcca acctaaaaan 780

0052-0052-0052-0052

cctgcgttna aagggacttc ttggttggan aaggtgccct ccctgggggg ctggcngggg 840
gnttgcctct ggc 853

<210> 4381
<211> 736
<212> DNA
<213> Homo sapiens

<400> 4381
actaaaaaaa gaaggatatc atcgtccctg taggcaaaga agcattcact ctgcccagga 60
aggcagactt cctagggtac gtgcttgttt tttagcttgc ccttgagtct gaaaggacag 120
ttatctcttt tggaatttac ttagagcagt aacttaataa gcatatccta gggactgaat 180
ccttcaaact cctcatgtaa aaatagggct ggactactgt ttttttgcct atggaaaaag 240
taattgcccg gactcacctt caaagcctac tcatttgttg aaattccagc aagggcatga 300
agtaaagatg ataggccttt gaacctgcca ggttagctgg gtttgagagg gtacctggga 360
gtttagagac ccatcttgcc tttttctttt tcttttggaa gtctctactg aaatgggatg 420
aaacctggcc tcatttccag ctcctctttc aaaattagag ccagccccag gcctggcagt 480
gtcttggttg gggcaagcca gggactgact atcggagagt tgagatctga atcccagctc 540
tgcccctgaa cagctgtgtg gctctgggca agtaattgcc tctctgcact tctccaccta 600
tagaggggac ttcctaatgc ctggggcctc agattggtca taaggtgagg aacatcaaca 660
ctggtancgg ttcaagcaat gtgacacang gagnctttc aacgaaaccc tgggccaaag 720
ggngggaggg gnaaaa 736

<210> 4382
<211> 805
<212> DNA
<213> Homo sapiens

<400> 4382
agctttgaaa taatgactat attagtaaca taagaccatg agagcaacta acagaattat 60
aactaaggaa ccctgttaca ggcaatagaa taacgattga cttctatcta aaacatcacc 120
atttatcttt gaatatttat cactggggat gattcttaga gcattcatca gaaccacagc 180
ttaatatcat caaattattc catttccaca ttcttttaaa actgtaacag aaaaaaaaaa 240
aacccttca attcctagag aactcacccg tttgagagat ttcttaggtc ttctctattc 300
attcaccatc attcactatt atgagatttt tgtgaattgt tgcacctgcg ttctccctac 360
ccgttaaata tgcaatatcc tttgtcatcc agctcaatcc ttagaaaaag gtacacaccc 420
ccctcacata cacaaactct gttctgtttc aagatacatc caatggagca ccttaccctc 480
acatgtacaa agagggcaat gggaacttga tagcatatgg tattgtgaga atcactgagg 540
caagagcaag caactccttc tggttggtaa ttggaaaatc ctcctcttac attgggcaga 600
aatcattttt aacgcctact ccatatcttt aagcgagaag ctgttatctc ctctgcaggc 660
tctgtcatac tatnggatgt ggcttcattt ctaaacctag caatcctgac atcctcatca 720
ctcctggnga gagcacagtc attcactcan ggcaaatccg ggcactgncc aaagggcaaa 780
gngactgttc tgaagccgcc ttgan 805

<210> 4383
<211> 574
<212> DNA
<213> Homo sapiens

0956400.0970800

<400> 4383
tgtgagtgaa tcaaattggg tttatgacat tattagatca caaggatgct agagttttct 60
gttggcgttt caccgtaaac tgacatggtt ttagtgccag cccatacaat gttgagatac 120
aatctggcca catacgctaa gagtaaatct caattgtatt gcaaacaaat gtattttgcg 180
cacgcacaca cgtgcacaca cacacacata cgtcctacat cctgactcct ttgaaaaact 240
ttattttgct ttttttttcta tatagccctt tcaatttctc agatctcctc aaatatatat 300
atatatatat atatatatat gagagaaaga gagtccaaat acaaaccttt ccaaagggac 360
atgtatagtt ttgactgcac tcaaatcaga gctcagaaca ctatttcact attacttttg 420
aataactcta tttccaactg aaacactcaa tttcccaggt aaactggtaa ttcccaggag 480
ctttcanagc attttcagna aacctanntg accagttctt ttatatgaag gataantata 540
tcatgtgtat atgttcaaag tatagcagct gtgt 574

<210> 4384
<211> 788
<212> DNA
<213> Homo sapiens

<400> 4384
acagtgtgat ttattctaac ttgacaagag aacaggcccc tggacatcag tcctaaatct 60
gacaccttaa cggattctca gatagacaga gaccttcaca aattatcttt actagctcaa 120
gccagtgtta ttacgttccc atccgattca cctcagaact catcgcagct gcaaaggaaa 180
gtaaaagaag ataaaagatg tttcacagct aaccaaaata atgttggaga tacctcccgt 240
ggacaggtta ttattatttc agattctgat gatgatgatg atgaaagaat cctgagtctt 300
gagaaactca ctaaacagga caaaatatgc cttgagaggg aacatccaga gcagcacgtt 360
tcaacagtta atagtaagga ggaaaagaat ccagtaaagg aagaaaagac agagactctt 420
tttcagtttg aggaatctga ttctcagtgt tttgagtttg aaagttcatc tgaagtgttt 480
tcaagtttgg caagatcatc cagacgataa taattcagtt caagatggtg agaaaaaatg 540
tttggctcct atagccaata ctacaaatgg tcagggttgt acagattatg tatctgaagt 600
tgttaaaaaa ggagcanagg gcattgaaga acacacaaga ccacggagta ttctgttgaa 660
gaatgttgtg aaattgaagt aaaaaaagcc taagagaana acgatntgaa aaaaccaatg 720
ggntgaaaga ttcctgtgan ggccttcaat ctttccngtc aagaaattga gggggccaag 780
tcctggat 788

<210> 4385
<211> 709
<212> DNA
<213> Homo sapiens

<400> 4385
acgcaatgga attctactca gcattaaaaa ggaatgaatc actgatgcag gcagcaacaa 60
ggaagaatcc caaatagcca aggccacagc ctagaaactt ctccttggag gctaagcctg 120
cagcacccag ctgagcacag aggacaatct gaggagctaa gtgaccggct ggacactcca 180
ttcacagaag aaaggccatg tgaagataag atgagaagac agccatctac cagccaggaa 240
gagaggcttc accagacacc aaccctaaag gcaccttgac cttggacttc cagcttccag 300
gactgtgaga acgcaaatgt ctgtggttta ggccatccag tctgtgatac cttgttatgg 360
cagtccaagc cccagtgaag tcagacagtc cggctgggtt ctaatctcta ctctatatta 420
caggagttat acggccttgg gaaagtcact taactgctct gaaccttaac tttcntatct 480

0052345-0052000

gttgaaaggg gcccgcttca cagggctgct gtgaagatgg natgccctat ggcagggacc 540
ctgcatagtg tccagcacag anggcaccac agagggctca acaaccacat ggggccctct 600
gaaaggactt attcattann aagatgncca ctctgcactt tgggaaggcc gaggcgggtg 660
ggcagatcac ctgangncag gagttccaga caagcttggg caacgtggg 709

<210> 4386
<211> 788
<212> DNA
<213> Homo sapiens

<400> 4386
gaaagagatg tctgcaaaca ccgtgctgga cagccagcgt caacaaaagc attatggaat 60
tacctcccca attagtttgg catctcctaa agaaattgat catatttaca cacagaaatt 120
aattgacgcc atgaaaccat ttggagtgtt tgaagatgag gaagaattga accacaggct 180
ggtggttctt ggtaaattga acaatttagt aaaagaatgg atttctgatg tcagcgagag 240
taagaacctc ccaccttctg ttgtggctac tgttggtggt aaaattttca catttggatc 300
ctataggctt ggagtacaca ccaaaggagc tgacattgat gcactttgtg tagctccaag 360
acatgtggaa agatctgatt tttttcagtc ttttttttgaa aaattgaaac atcaagatgg 420
cattagaaac ttaagagctg tagaagatgc ctttgtacct gttataaaat ttgaatttga 480
tggtattgaa attgatctag tctttgcaag actggcaata caaaccatat caagataatt 540
tagatctaag agacgactct cgcctgagaa gccttgatat aaggtgtatt cccagcttaa 600
atggntgtag agttactgat gaaattttgc atttagtgcc aaataaagaa acttttagac 660
tcaccctaag agctgtcaaa ttatgggcaa aacgacgtgg natttaattc caacaatgct 720
aggattcctt ggnggggncc cctgggcaat gctaagttca annaacttgc caattgtatc 780
caaatgca 788

<210> 4387
<211> 850
<212> DNA
<213> Homo sapiens

<400> 4387
aagttcggtg ggctccaggc gtcgcgatgg aggagagcgg gtacgagtcg gtgctctgtg 60
tcaagcctga cgtccacgtc taccgcatcc ctccgcgggc taccaaccgt ggctacaggg 120
ctgcggagtg gcagctggac cagccatcat ggagtggccg gctgaggatc actgcaaagg 180
gacagatggc ctacatcaag ctggaggaca ggacgtcagg ggagctcttt gctcaggccc 240
cggtggatca gtttcctggc acagctgtgg agagtgtgac ggattccagc aggtacttcg 300
tgatccgcat cgaagatgga aatgggcgac gggcgtttat tggaattggc ttcggggacc 360
gaggtgatgc ctttgacttc aatgttgcat tgcaggacca tttcaagtgg gtgaaacagc 420
agtgtgaatt tgcaaaacaa gcccagaacc cagaccaagg ccctaaactg gacctgggct 480
tcaaggaggg ccaagaccat caagctcaac atcgcaaaca tgaagaagaa ggaaggagca 540
gctgggaatc cccgagtccg gcctgccagc acanganggc tgagcctgct tccccctccc 600
ccaaggggggg aaaacctcca ccctgatccc tccccctggg ggagcagttg gcttgttggn 660
ggggatccct cgtccaagcc agcaagttgc tcccaagttc aagattaaac ttccaagcca 720
nggacccaag ccaaggcaac aagggcttgg ggtcccaagt tcctgaacct tgaagcaaan 780
gggtttttttc cctcaatggt ngaacntttc ttggggnaaa aaggggggct tcccccctcca 840
atcnctgggg 850

0088249 05/12/2005

<210> 4388
<211> 863
<212> DNA
<213> Homo sapiens

<400> 4388
gaaattattc acaaatatga accatccaaa gagggtcagg aaaagggctg gctctccata 60
gacgggttca ctaattacct tatgtcacct gactgttata tattcgatcc agaacataag 120
aaggtctgtc aggatatgaa gcaacctctg tctcattact ttataaactc atctcataat 180
acatacttaa tagaggatca gttccgaggt ccctccgaca tcacaggata tattcgagct 240
cttaaaatgg gttgccggag tgttgaatta gatgtatggg atgggccgga caatgaacct 300
gtaatttaca caggccacac catgacctct cagatagttt tccgcagtgt cattgatatt 360
attaacaagt atgcattctt tgcttcagag tatcctctta tcttgtgttt agaaaaccac 420
tgttccatta aacaacagaa ggtaatggtt cagcacatga agaaactttt aggagacaag 480
ctctatacaa catcacccaa tgttgaggaa tcttatctac catccccaga tgtcctgaaa 540
gggaaaatac taattaaagc aaagaagctg tcctcaaatt gctctggggt agaaggagat 600
gttactgacg aagatgaagg agcagaaatg tctcagagga tgggaaaaga gaacatggag 660
caacccaata atgtgcctgt gaagcgattt cagctttgta aagaaactgt ctgaactggg 720
tcagcatctg caaancagtt caagttcaaa gaatttcaag gggtcgtttc aagttcaaga 780
agtaccgggg gaagtccngt ccctttaaat gaantgcttg ccaancaang tacgcccaat 840
ngaaaaatcc aaggggactt tgg 863

<210> 4389
<211> 638
<212> DNA
<213> Homo sapiens

<400> 4389
cgaacatgct atcaaataaa tgtggaacac ctttagcaaa ctatcaacag ctcatgaagg 60
catgaaatgt gaaaatgatg aatatttgag tgctttttct taataagtat aaccttaaac 120
atcagctaat acacctggtg tgcattttca gtcaggatac cttaatcctc atttctagtt 180
gccttgccaa tgattccata atatactgtc tcattactgt ttatttttac tgttgtgtaa 240
aattgtggta taatgagaaa tacatttggt ctttgttcct ggttcctggc atagagctcc 300
taaaacgctt agaatttcat gagtgataag agtttttgg ttttgttttg tttttgctgt 360
tgttgttatt catagcactg ccctttaat tacacctgat tatactactg aagtgactta 420
tggttgctcc cctagacagc ctcagaatgg ggctgttctc taggaagatc aagtaactag 480
aggatggaga ctttgtgccc catttctccc acctcctgga aggggaaggg tgctggagat 540
tagattagac aatgagatta agngaactcc aaatagccca aagagggtgg tgcaccccca 600
actttatagg ggtanaggcc ctganattag gagaaccc 638

<210> 4390
<211> 848
<212> DNA
<213> Homo sapiens

<400> 4390
aatgcacacg agcagacaga gaagcaacat ctttaaggta ctgagggcag gagaagttaa 60
tgtagaatac tatgccagaa aaaataaatt cccaaaagtg gaagtgaaat aaggacattt 120

0050203450 - 0050203450

agagatgtac aaaagctgac cgaattcact accagtcaac ccacactaca agaaacatca 180
aatgagtcct ccaagcagaa ggaatccaat accagatgaa aatccagatc tccacgagga 240
aatgaagaac accagaaatg ggtaactata ctagatcggc cctttcttca ataagagca 300
gttggaataa caaagctgtt cagttgtacc cttggaatcc actgaaatcc tgggtaggga 360
agctccagta ccaccaactg gaaagactgg gaatgcctaa tagctggtac tggccattgt 420
cgtaggcttt gtccactctg acaaactgaa gatggggact cgactcacct tcgccagcca 480
caggaggacc tccagacgag gacaggactc gctgcctttc tttcccgtca gaaagggatc 540
ccttgcggac aggacctaag caccacgcac ctgccccccg ggatgccgaa cgaagtggtc 600
cctaaagctc ctctgcaggc ccaaccgaaa cangcctgaa gctccaagga tgggcgagag 660
gatcctcttt gagcgaaacc agccttctgc ctggctgggc cctggtcaac accctgggaa 720
gangccgatt tggcgggcaa gaacgggagn aaaaggacct aaaggtagaa tcccatgatg 780
tccaagatgt ttaaaacact caaatttta agggtcgaac tgtnanggg ggannataag 840
ggggtctc 848

<210> 4391
<211> 786
<212> DNA
<213> Homo sapiens

<400> 4391
aaaaggcagg cattctcttt ccttttcctt ctctcctgag cgctcctgca gttcctgggg 60
cgtagtaggg gatccacaag cgtttgtgac cagtgaagtt ctttacaagg gtgagatctg 120
cacgggagga cccgagcgag ggtctcggct tgccaggaag ccggggttcc ccgggaagcg 180
tggagttcac ccgcgcactc gaagtgcctt tgcaaaatta tatctgggtg ttggcaccca 240
gccactattc tgccaatgaa gtacatcctg gtcacgggtg gggtcatctc aggcattggt 300
aaagggatca ttgccagcag cattggaacg attctaaaat catgtggact ccgagttact 360
gccataaaaa tcgaccccta tattaacatc gatgctggca ctttttcacc ttatgaacac 420
ggtgaagtct tcgtcttaaa tgatggtgga gaagttgatt tagaccttgg aaattatgaa 480
agatttttgg atattaatct ttataaanga caacaatatc accacgggga agatatatca 540
gcatgtgatc aataaagaga ggcgtggtga ttacctgggg aaaacagtgc aaagttgtcc 600
ctcacattac tgatgctgtc caagagtggg ttatgaatca agccaaggtg ccngtggatg 660
ggaaataaag gaagagcccc aaatatgcgt tattgagctg ggaaggcaca atgggngaca 720
tcgaaaggaa atgcccgttt gtggaaggcg ttttanacaa attccaagnt ttaaggggna 780
aaanag 786

<210> 4392
<211> 694
<212> DNA
<213> Homo sapiens

<400> 4392
acttccgtag aggtggacat ggcgtgcggc tttcgccgcg ctattgcttg ccagctttcc 60
agagtgttga atcttccacc agaaaacttg atcacatcaa tatctgcagt tccaatttcc 120
caaaaagaag aagtagctga ttttcagctt tctgtggatc ctttattgga aaaagacaat 180
gaccattcaa gaccagatat tcaagttcaa gccaagagac tagcagagaa gctaagatgt 240
gatacagtgg tgagtgaaat cagtactggt caaaggactg taaatttcaa aataaacaga 300
gagctcttaa caaagacagt gctacaacaa gtaattgaag atggctcaaa atatggatta 360
aaaagtgaac ttttctctgg acttccccag aagaagattg tggttgaatt cagttcacct 420

09529056.030905

aatgttgcca aaaaatttca tgttggacat ttgcgttcta ccgtcatagg aaattttata 480
gcaaatctca aagaagcttt aggacatcaa gtaataagaa taaattacct tggcgattgg 540
ggcatgcagt ttggtcctcc gggaactggc ttccagctgt ttggctatga ggaaaaactg 600
cagtccaatc ctctaaaagc atctccttgg agtttangta caagttataa angancancg 660
ggntgataaa agtgtagcaa aagcaagcac aagg 694

<210> 4393
<211> 816
<212> DNA
<213> Homo sapiens

<400> 4393
gaaaaaagag agagtatgtt tgtcttctct tcagatgatg aagaagttac accagcaaga 60
gctgtatctc gtcattttga ggatactagt tatggctata aagatttctc tagacatggg 120
atgcatgttc caacatttcg tgtccaggac tattgctggg aagatcatgg ttattctttg 180
gtaaatcgcc tttatccaga tgtgggacag ttgattgatg aaaaatttca cattgcttac 240
aatcttactt ataatacaat ggcaatgcac aaagatgttg atacctcaat gcttagacgg 300
gcaatttgga actatattca ctgcatgttt ggaataagat atgatgatta tgactatggt 360
gaaattaacc agctattgga tcgtagcttt aaagtttata tcaaaactgt tgtttgcact 420
cctgaaaagg ttaccaaaag aatgtatgat agcttctgga ggcagttcaa gcactctgag 480
aaggttcatg ttaatctgct tcttatagaa gctaggatgc aagcagaact cctttatgct 540
ctgagagcca ttacccgcta tatgacctga tgcctttcct tcattaaaga tgattctgga 600
atgatcagca gatatagtct acaaggggga aggtactaag ccccaggacc aatggtagac 660
aaaataattc agaaatccan tgggccatga ttcccttaat ttccggctat ttttcctggg 720
gggaaaacca ctggctnggn acaagcaant gactggtttg ggaagcttca aagttttaan 780
agctgttaan gacagggctg gccaattcaa aaagta 816

<210> 4394
<211> 845
<212> DNA
<213> Homo sapiens

<400> 4394
tgataactct aaaatccctt ttctgggaag gaattctctt ttctcattca tttcagtaag 60
tttttaaaag ttcatgaagg agttatatta ataatgcttt tctcctagat ctgtagcatt 120
agttgttacc ttggagcttg gagggttaga ttctcatcag tcttattgac gctttcagta 180
ttgaaaggat tttttaaagt tgtattcact taggatctca gtgttgagca agattttatc 240
agaattttaa gtgccaaatc agtttttatt tcctttgtga gaagtatctg gcatgacttt 300
tcagatataa gaaataggaa tgtgaaattt ggataatgtt ctacttgcat gattataaaa 360
taatactgct tataaaattt taagtgcttc tatgttcctt gctctgtaga tcatttttc 420
ttttctattt tattactctt ggctattatg ctaatgcaat accttatctt tggtcatatg 480
ccatcacatt aggtgtagtt aatttaaact agaactattt ggcaagaaaa agtaaaaagc 540
tttctgcttg ctttatcact atgaagtaat gcagattcac aattccttga cataagaact 600
gtgttcaagt ttacatttta aaggacgctg tcaaaagggt tgtgtaccaa atatttttt 660
cctacaaaga atgtngatga tctaaaacca aaactcaacg gtgaaaaacc aagtttaatc 720
ccaagggaca tggttagaaa agtttantta caccagggtg aagtggntac ccaatttggg 780
agaaacggat anacctgaaa atttaccaaa gcaaccaagg ngtggcaatt tggcncaagg 840
gggaa 845

0962946.0972000

<210> 4395
<211> 665
<212> DNA
<213> Homo sapiens

<400> 4395
ctttaaatgg tggacattac aaagacagga aaaagaattc ttgtctttgt ttgctctttt 60
aacaatccaa aggtttagga atttacttng ctctaacaac cctctcgatc ctcttgtgac 120
cccgttatac tcagtgttgc tgaaaaagtc cattttaaaa taatggcacc taccacatcc 180
atttttccgt ctttaggcca gaccctctga tggttggtgg attttagtat taaagcttgt 240
gttgaaagtg gaggggtgt tactactgtt gtgtctgaaa caagagttaa ggttatattt 300
tatgaagcag ttttggcttt ttcaacagat gttggccact cacttttatg gatttcacat 360
tgagtagtaa tgagtcataa tcactactta attttcccaa accagaggga atatacattt 420
tattattgga ccctccaggc tgtcaatgaa gagagaaaac ctttctttgg aatcaagttg 480
aaaacctgtt gttaacacct ctctctgggc cttctttgct ctccttagca cgttcattgc 540
taggggctgc cacttccatc ttctctgcct tggaaagcat agagtcgttt ctcaagcctc 600
attctcaacc tttaatgagt tcatttaaat aaatggtgat taannacata tnaanggtat 660
ngcaa 665

<210> 4396
<211> 735
<212> DNA
<213> Homo sapiens

<400> 4396
aggcccctcc tcccggcggc gcggcagagc caggccccag cgctcggccg gccgcgagcc 60
cgccggccgg ggacgagcgt cgcagctcat gctgatcgct gtcctcctcc tccccctcag 120
gcggcgctgg cggcggccct gggacccgcg gaagccggca tgctggagaa gctggagttc 180
gaggacgaag cagtagaaga ctcagaaagt ggtgtttaca tgcgattcat gaggtcacac 240
aagtgttatg acatcgttcc aaccagttca aagcttgttg tctttgatac tacattacaa 300
gttaaaaagg ccttctttgc tttggtagcc aacggtgtcc gagcagcgcc actgtgggag 360
agtaaaaaac aaagttttgt aggaatgcta acaattacag atttcataaa tatactacat 420
agatactata aatcacctat ggtacagatt tatgaattag aggaacataa aattgaaaca 480
tggagggagc tttatttaca agaaacattt aagcctttag tgaatatatc tccagatgca 540
agcctcttcg atgctgtata ctccttgatc aaaaataaaa tccacagatt gcccgttatt 600
gaccctatca gtgggaatgc actttatata cttacccaca angagaatcc tcaagttcct 660
ccaagctttt tangtccgga tatgccaaaa gcctgccttc atgaaagcaa gaacctggat 720
tgancottgg natna 735

<210> 4397
<211> 701
<212> DNA
<213> Homo sapiens

<400> 4397
taaatgatgg cgactggaac gccagagtct caagcgcggt tcggtcagtc cgtgaagggg 60
cttctcacgg agaaggtgac cacctgtggt actgacgtaa tcgcgctcac caagcaggtg 120

09509503-050200

ctgaaaggct cccggagctc cgagctgcta ggtcaggcag ctcgaaacat ggtactccag 180
gaagatgcca tcttgcactc agaagatagt ttaaggaaga tggcaataat aacaacacat 240
cttcaatacc agcaagaagc tattcagaag aatgttgaac agtcatcgga tctacaggac 300
cagtcgaatc atctgttgaa atagaatgac atgtaagagt gctgtaggac tcctttgcct 360
aatgctgagg agtaaatacc ttacacagct gtcctctggg tttggttttc tattttcttc 420
tccaaaagtt aagttagaaa agttctgtgt tagggccggg cgcggtagct cacgcctgta 480
atcgcagcac tttgggaggc cgaggcgggt ggatnacgag gtcaggagtt cgagaccagc 540
ctggccaaga tggtgaaacc ccgtctctac taaaaatata aagaattagc tgggcgttgg 600
tggcgggcgc ctgtaatccc aagctactcc gggaagctga gggaaganga atccccttga 660
aacccaagga nggtgggang gttnccaatt gnaggccaaa g 701

<210> 4398
<211> 720
<212> DNA
<213> Homo sapiens

<400> 4398
aaaaagtaaa ttttcgcaag aaggacttag aaatgctatt ccatggaatg agtgctgatt 60
ttacaagtga gaatttctca gcagcctggt atcttataga gaatcactca aacaccagtt 120
ttgagcagct caaaatggca gtcaccaacc taaagagaca ggctaacaag aagagtgagg 180
gcagcctggc ctatgtgaaa ggcggtctca gtacattctt cgaagcacag gatgccctct 240
cagccatcca tcaaaaacta gaagcagatg gaacggaaaa agtagaagga tccatgacgc 300
agaaactgga gaatgttctg aacagagcaa gtaatactgc agacacattg tttcaagaag 360
tattaggtcg gaaagacaag gcagattcca ctagaaatgc actcaatgtg cttcagcgat 420
ttaagtttct tttcaacctt cctctaaata ttgaaaggaa tattcaaaag ggtgattatg 480
atgtggttat taatgattat gaaaaggcca agtcactttt tgggaaaacg gaggtgcaag 540
ttttcaagaa atattatgct gaagtanaaa caaggattga agctttaaga gaattacttc 600
tggataaatt gcttgagaca cccatcaact tttacatgac caaaaaacgt tacataaggg 660
nacctgtctg accttcatgc gtctggngan cctgcttggg aaatcanttg gggnccaaca 720

<210> 4399
<211> 802
<212> DNA
<213> Homo sapiens

<400> 4399
aagaaatgaa attattcatc aacaataact ttgggcactg caaaagactg agtcaaaggt 60
taaatcagtc acacagatat ccaaggccaa gttgaagatc acaagtatat cccatttaga 120
gatttgcata cttagagatt aagcccatgt tcattaatta tttagttaat tcaaaagcca 180
ttaataaatc catgcccagc ctacgcaaca tagtaagacc cagtctctac aaaaatttta 240
aaaattagcc agccatggtg acacgtacct gtagtcctac acacttggga agctgaagcc 300
agaggattgc ttgagcccag gaggtcgagg ctgcagtgaa ccgtgattgt gtcactgcac 360
tccagcctgg gtgagagagc aagaccttgt ctcaataaat aaacccaagt tacttcgatg 420
actagatact ggaggtctga aggagaagct ttaaaaatac agattgattg cttcagagaa 480
atcctattta taattatgat ctgaacttat tctatgatta gcaaatatat catctgaaaa 540
taaaacagga gttctctccc cagacttttg tttttcagga tggtgagttt tggtctggga 600
ccctcatggn acccattttg gtaaaaggaa aaagatagta naacagggaa taggaagttt 660
ccagagattt gggcatctca nggatccatg aaatgctgag actaanccac taaatccaaa 720

0962960.02800

ttttattggc tanggnaaat ccnaaatccg gtcagtgttc cggacaagat tttaggagtt 780
taggccnaag gatttaggtc ta 802

<210> 4400
<211> 683
<212> DNA
<213> Homo sapiens

<400> 4400
attttccacg ctgtaccggc ggaaattcaa gcactggaag agaggttccg gggctgggct 60
ggcctgactg aaggcggcgg aatggagacg cggaccgagg acgggggcct cacccgccgc 120
cccacgctgg cctcttcttg ggatgttgca ggcggggccc tgacccacag cctcctcctc 180
acccgggccg gtctcggccc cggtgacttc gactgggagg agctgctggc accgcctgct 240
ccaggtcagg atctggtgat tttgaagaga aaccacaacg acaaagatga aaaccccctgc 300
ttcctttacc tgaggtgtgg ccctgatgga ggtgaagaaa tcgcttctat tggcatttta 360
agttcagcaa gaaatatgga agtgtactta ggagaggagt actgtggaac cagtaggggc 420
aagaatgttt gtactgtcct ggatgacagt gaacatgaaa agatcatttt gtataaaaaa 480
aatctaaaat tggagtcctc cacacatgct tgtaaaataa agttgctctc ctttggcgaa 540
aggcaatgtg tgttcatcag taaagttgtg gtacacatga gatcagtttt tgcaaattct 600
tcaacaagct ctcctgctct aggatnaagg atagaccttg acaaggtcca aaccataatn 660
ggnntcaatg gggtcaaagn tac 683

<210> 4401
<211> 687
<212> DNA
<213> Homo sapiens

<400> 4401
acgtccccgc cgggcccgcg cgcctcgtgc ctcgcgcctc gcgcctccag ccacgtcccc 60
gccccggctc cggcgcgccg cggagttggc tgctgggagg tgcgggactg ggtgtggccg 120
gcggctctgg tctcggctgt gagctgcgct ctccacgccg gctccgcgct ccaggggctg 180
ctgagcgccc agcggacacc ggcagcgcgc ggtcgacgcg ggcctgagct ccctccagct 240
gttttcactc attagctcct gaggtaaaca aattgaaaaa atgagcgaac tggaacagtt 300
gaggcaagaa gcagaacaac tgcggaatca gattcaggat gctcggaaag catgtaatga 360
tgcaacgctt gttcagatta catcaaatat ggactccgtg ggtcgaatac aaatgcgaac 420
aagacgtaca ctgaggggcc acctagctaa aatctatgct atgcattggg gatacgattc 480
caggctgcta gtcagtgctt ctcaagatgg aaaattaatt atttgggata gctatacaac 540
aaataagatg catgctattc ctttgaggtc ctcctgggtg atgacctgtg cttatgctcc 600
ctcctggtaa ntatgttgcc tgtggaaggc ttggcaacat ctgctctata tataacttaa 660
aggaccaana gagggaaaat gntnana 687

<210> 4402
<211> 741
<212> DNA
<213> Homo sapiens

<400> 4402
aggaaggagg gtggccctac cccagcgggc tcggctcggg gcctccgcgg cagttcgggg 60

0502N0305.ST25

tccttcaccc gccggctcca gtcctgtgcc gttttccgtc cgcgactctt ccggcccaga 120
gctttcggag tgcggttgct caggggaagc cgtcgccgcc cccgcctcgg ggccgagtga 180
gagtgcccgt cgcgtcgcgc cgcgtcgccc cccgggccgc ctccttgccg ccagtggcgg 240
gctccgttct ccctcgaagc actcccccca gctccatgaa tggaaatcgg ctccgcagga 300
cccgctgggg cccagccccc actcatggtg cccagaagac ctggctatgg caccatgggc 360
aaacccatta aactgctggc taactgtttt caagttgaaa tcccaaagat tgatgtctac 420
ctctatgagg tagatattaa accagacaag tgtcctaaga gagtgaacag ggangtggtt 480
gactcaatgg ttcaacattt taaagtaact atatttggag accgtaagac caatttatga 540
tggaaaaaga agtctttaca ccgccaatcc acttcctgtg gcaactacag gggtanattt 600
tagacgttac tttacctggg gaangtggga aaaggattga cctttcaagg gtgtcaatca 660
aatttgtctc ccgggttaag ttgggaacct actgcaanaa ntactganaa ggacggacct 720
tgcctgancc aattngaatt t 741

<210> 4403
<211> 765
<212> DNA
<213> Homo sapiens

<400> 4403
ctttatggcg tgggagaggc cacagcccgg actccatcga ctcccccggc tcttagacta 60
aaatcatgcc caagttcaaa caacgaagac gaaagctaaa agccaaagcc gaaagattat 120
tcaaaaaaaa agaagcctct cactttcagt ccaagctaat tacacctcct cctccaccac 180
cctcaccaga aagagtcggt atttcttcaa tagatatatc tcaaagcaga agctggctaa 240
catcatcctg gaacttcaat tttcctaaca tcagagatgc aataaaactt tggacaaata 300
gagtatggtc tatatacagc tggtgccaga actgcataac ccagagttta gaagtattga 360
aagacaccat ctttccatct cgtatctgcc accgagaact ttacagtgta aaacaacagt 420
tttgcatttt ggaaagtaaa ttatgcaagc ttcaggaagc actgaagacc atctcagaaa 480
gttcttcctg tccaagctgt ggtcaaacat gtcacatgag tggtaaactt acaaatgtgc 540
ctgcctgcgt tctgatcacc cctggagact ccaaagctgt gcttcctccc acactgccac 600
agccagccaa gcattttcct cctcctcctc canctccaac tctgccacct cctccaccac 660
cactagcacc tgtgttgctc agaaaaccca ntctcgctaa agcaacttca agctggacca 720
ttaanaaaaa gatgggccca tggcaggnta acngtttaan gattc 765

<210> 4404
<211> 617
<212> DNA
<213> Homo sapiens

<400> 4404
tcaccaaagt taccgcacaa tgggtccaca ggttccaccc cactgctgag gaattctcac 60
tccaactctc taatttccga atgcatggat agtgaagctg agaccgtcat gcagctccga 120
aatgagttaa gagacaagga gatgaagctg acggatatcc gcttagaagc tctcagttct 180
gcccaccagc tggaccagct ccgggaggcc atgaacagga tgcagagtga aatagagaag 240
ctgaaagctg agaatgatcg gctgaagtca gagtctcaag gcagtggctg cagccgggct 300
ccttcccaag tgtccatctc tgcctccccg aggcagtcca tgggcctctc ccagcacagc 360
ttgaacctca ctgagtcaac caagcctgga catgttgctg gatgacactg gtgaatgctc 420
ggctcggaag ggaggaggca ggcatgttaa gatagttgtc agctttcagg aggaaatgaa 480
gtggaaggag gattccagac cacacctctt tcttattggc tgcattgggn gttantggca 540

09625459.0702800

agacnaagtg gggatgtgct ccaatggggg tggttanacc ggctgttcaa agnatacatc 600
attcatgtcg aaccaat 617

<210> 4405
<211> 823
<212> DNA
<213> Homo sapiens

<400> 4405
agagcccggg aagcgctcgg gcgaagagga ggagccaagg gtaccgagcg ggtggagtcg 60
ggagccggag agcggtggag gcggatttcc tgggcccggc cctctggcgc taccatggcg 120
tttggcaaga gtcaccggga tccctacgcg acctccgtgg gccacctcat agaaaaggct 180
acatttgctg gagttcagac tgaagattgg ggccagttca tgcacatctg tgacataatt 240
aacactaccc aggatgggcc aaaagatgca gtgaaagctt tgaagaaaag gatttccaaa 300
aactacaatc ataaagaaat ccaacttacc ttgtcactta ttgacatgtg tgtgcagaac 360
tgcggtccaa gcttccagtc tctgattgtg aagaaggaat ttgttaaaga gaatttagtt 420
aagctactga atcccagata caacttgcca ttagacattc agaatagaat cttgaatttc 480
attaagactt ggtcacaggg cttcccagga ggtgtggatg taagcgaagt caaagaagta 540
tacctcgacc tggttaagaa aggcgttcag tttcctccct cagaagcaga ggctgaaaca 600
gcaagacaag agactgccca aatctcatca aatcctccaa catctgtccc tactgcacca 660
actctttctt ctgtattgct ccaaagaact cgactgttac aattgggccc aagaacaaat 720
tgggaaaact gcacantgaa nttggattgg tgaaaatgna atgtgcgnag tgatgtccgc 780
caatattgat ggggaaatac ccctggggcc tgaaaaacca tgn 823

<210> 4406
<211> 784
<212> DNA
<213> Homo sapiens

<400> 4406
gaacattatt caatttgtgc atggagagga agacctgaag gttcagcata gtagctacag 60
acagagggcc cggctgttga aggaccagct ctccctggga aatgctgcac ttcagatcac 120
agatgtgaaa ttgcaggatg caggggtgta ccgctgcatg atcagctatg gtggtgccga 180
ctacaagcga attactgtga aagtcaatgc cccatacaac aaaatcaacc aaagaatttt 240
ggttgtggat ccagtcacct ctgaacatga actgacatgt caggctgagg gctaccccaa 300
ggccgaagtc atctggacaa gcagtgacca tcaagtcctg agtggtaaga ccaccaccac 360
caattccaag agagaggaga agcttttcaa tgtgaccagc acactgagaa tcaacacaac 420
aactaatgag attttctact gcacttttag gagattagat cctgaggaaa accatacagc 480
tgaattggtc atcccagaac tacctctggc acatcctcca aatgaaagga ctcacttggt 540
aattctggga gccatcttat tatgccttgg tgtancactg acattcatct tccgtttaag 600
aaaagggaga atgatggatg tgaaaaaatg tggcatccaa gatacaaact caaagaagca 660
aagtgataca catttggagg agacgtaatc caacattggn acttctgatc ttcaagcaag 720
gattctcaac ctgtnggtta aggggtcaac cngggctgac cntgacnaag agggaaggga 780
atgg 784

<210> 4407
<211> 728
<212> DNA

09/529,653 - 09/529,653

0082705.60250

<213> Homo sapiens

<400> 4407
atctactact tcttccgaga ggacaatcct gacaagaatc ctgaggctcc tctcaatgtg 60
tcccgtgtgg ccagttgtgc agggggggacc agggtgggga aagttcactg tcagtctcca 120
agtggaacac ttttctgaaa gccatgctgg tatgcagtga tgctgccacc aacaagaact 180
tcaacaggct gcaagacgtc ttcctgctcc ctgaccccag cggccagtgg agggacacca 240
gggtctatgg tgttttctcc aaccccctgga actactcagc cgtctgtgtg tattccctcg 300
gtgacattga caaggtcttc cgtacctcct cactcaaggg ctaccactca agccttccca 360
acccgcggcc tggcaagtgc ctcccagacc agcagccgat acccacagag accttccagg 420
tggctgaccg tcacccanag gtggcgcaga gggtggagcc catggggcct ctgaagacgc 480
cattgttcca ctctaaatac cactaccaga aagtggccgt ccaccgcatg caagccaagc 540
cacggggaga cctttcatgt gctttaccta actanagaca ggggcactat ccacaaggtg 600
gtgngaaccg gggggagcag gagcacagct tcgccttcaa catcatggga gatccaagcc 660
cttccgccgc gcgggttgcc aatncagaac catgttcgct gggannectg aagcggnngg 720
aaactgta 728

<210> 4408
<211> 774
<212> DNA
<213> Homo sapiens

<400> 4408
tttaaagcat aacttcctct ctgcatcttg cttcccctct ttctgtccct tctcctctcc 60
caccccaca gttttggctt cactttgctc aggctgtgac aactgtcttt aagggagcta 120
acttttatct gactgtagag ccaagcaaac taatcttgca aaactgttct gccacatagg 180
ttggtctctt cctgtttgga attcatctat atattagcaa cttggaaagc ctttgagctg 240
agctagtgcg caaagctgca ccttagactg tggttcacag tgctgcttaa ttgtcacaac 300
ggtgtcactc accttgtcct cacctaacct gcaagttaga catttaggct gctttcttca 360
tcagtgtaag gtgaaatagc agattggtgt gtaaaaagtg tggcttggag tgtggtggta 420
tgaactgtgg gattatttac tatagggtct cattgcaaat cctttagaac acttgcctct 480
tacacctttt gtctgtctgc tcttaaatat tttctgtcct tccagcatgc tatctctacc 540
taacagaagg ggtcatatct gtctcaacta aaagtcattc catttgggtc attcgtctgg 600
aggctgagac agtggaagag tcaaacttgc cctgaagctt cactcancca gtacctgtct 660
cctctgccca atgtccanca acttacccct gacccaatcc ttttaaggga actttgccaa 720
agagaaganc aanaatactc tttctttcct caacnctccc ctcnctttt ttgg 774

<210> 4409
<211> 830
<212> DNA
<213> Homo sapiens

<400> 4409
atttaaaatt atagagcttt tcatcactac ggagatgctc ttgcctatga taggaacgat 60
ggctacatct gaagctgagc aaatttatct tttctcttcg tctgcatcag ggtgacctct 120
ggaaggtctg aaaattgaac aagatggacg ggtccaggaa agaggaggag gaagacagca 180
cactcaccaa catttctctt gcagatgaca tagaccattc ctcaagaatt ttgtatccaa 240
ggcccaaaag tttgttaccc aagatgatga atgctgacat ggatgcagtt gatgctgaaa 300

atcaagtgga actggaggaa aaaacaagac ttattaatca agtgttggaa ctccaacaca 360
cacttgaaga tctctctgca agagtagatg cagttaagga agaaaatctg aagctaaaat 420
cagaaaacca agttcttgga caatatatag aaaatctcat gtcagcttct agtgtttttc 480
aaacaactga cacaaaaagc aaaagaaagt aagggattga caccttctg ttttatggaa 540
ttgctgctga acatttttc tttaaaactt ggataagatt ccaaaagtta cagtaccttt 600
gtggcttcat tgggatattt atgangataa tgtcagatgt agacaaaatt aacacantaa 660
caggagactt ccataagttt gtgtattatg ttagtctatg aaaacgtgca aatgtattgt 720
agagactttt atgattagaa ntgcatanat ttatgaaact taaagatgaa tggttttaat 780
tgaaatttgt agggnttaac actggccntt taataanagg gtttaagtaa 830

<210> 4410
<211> 808
<212> DNA
<213> Homo sapiens

<400> 4410
aaatacttag tatagtggct gagattatga agtaaatttc actattagca ttattcactc 60
aaagtcacat atgagtctat acttgtggga caaatcaaat tcagattttt gttcagatta 120
gaatgtgcta gaagcactct cagaaaagaa gtctgccagg ggaggactag ggtccaaaga 180
gaatctacat ggttggtagg taggcatgaa aaaaggaagg agagagagag agaatatggt 240
actattcatg aaaataaagc tatttacaac ttagaaaagc aattccattt cctgcaacaa 300
acataactta gggaaaaata aatattattt tcattagcaa acatattaat attttataag 360
ctttgcagtt atccaacacc cataaatata ttccgggaaa ttaagccagt cttttcagtt 420
cacaattgag tgtacctggg agtctccttg ccctttctca gaagacatta aaaagaaaag 480
ctgtaaatca gtcataagaa aaagaacata tataatctgg agtagaattt tgcttccact 540
tggctaattt tcatcagtgc tatgctcctg tggtcccccg gatccaaata tttcctaacc 600
tttacctttt cattttgttg agaagtagta gtaatccaca tgtattttta gctaacaaaa 660
cacgtccatg aattagatta tttccttgaa gccttttcat caaatatttt gtgggccttt 720
ttttttttta aattttagcc aatggntaaa tcaaancttt aaggctttaa aaattgtnnt 780
ccacatagct aaaccaangg ttccacca 808

<210> 4411
<211> 841
<212> DNA
<213> Homo sapiens

<400> 4411
ctcccgttct ccaccgtgcc ggctggccag gtgggctgag ggtgaccgag agaccagaac 60
ctgcttgctg gagcttagtg ctcagagctg gggagggagg ttccgccgct cctctgctgt 120
cagcgccggc agcccctccc ggcttcactt cctcccgcag cccctgctac tgagaagctc 180
cgggatccca gcagccgcca cgccctggcc tcagcctgcg gggctccagt caggccaaca 240
ccgacgcgca gctgggagga agacagggcc cttgacatct ccatctgcac agaggtcctg 300
gctggaccga gcagcctcct cctcctagga tgacctcacc ctccagctct ccagttttca 360
ggttggagac attagatgga ggccaagaag atggctctga ggcggacaga ggaaagctgg 420
attttgggag cgggctgcct cccatggagt cacagttcca agggcnagga ccggaaattc 480
gcccctcaaa taagagtcaa cctcaactac cgaaagggaa caagtgccag tcaaccggat 540
ccaaaccgat ttgaccgaga tnggctcttc aatgcgggtc tcccggggtg tccccganga 600
tntggctgga cttcaagagt anctgagcaa gaccancaag tacctcaccg actcgggaat 660

0562450.0072800

acacangagg ggctccaaaa ggtaagacgt tgcctgaata aaggctgttg ctgaacctta 720
anggacggag tcaatggcct gcaattctgc cactggcntg caaattngac aagggactct 780
gggaaatcct caagcccccc gggtaaaatg cccaattgca caannntnaac taattaaccg 840
a 841

<210> 4412
<211> 852
<212> DNA
<213> Homo sapiens

<400> 4412
ctttacccta catgcctgag aagccagggg ccaagatgga tcttctcctc gacatcagct 60
aagcctggag gactcttccc ctcagagacc atggagaggg acagccacgg gaatgcatct 120
ccagcaagaa caccttcagc tggagcatct ccagcccagg catctccagc tgggacacct 180
ccaggccggg catctccagc ccaggcatct ccagcccagg catctccagc tgggacacct 240
ccgggccggg catctccagc ccaggcatct ccagctggta cacctccagg ccgggcatct 300
ccaggccggg catctccagc ccaggcatct ccagcccagg catctccagc ccgggcatct 360
ccggctctgg catcactttc caggtcctca tccggcaggt catcatccgc caggtcagcc 420
tcggtgacaa cctccccaac cagagtgtac cttgttagag caacaccagt gggggctgta 480
cccatccgat catctcctgc caggtcagca ccaagcaacc agggccacca gggagagccc 540
aggtacgaag cctgcccaag ttcacctggc gggagggcca agaagcagct accgctcatc 600
gggtgcgtgc tcctcctcat tgccctggtg gtttcgctca tcatcctctt ccagttctgg 660
canggccaca cagggatnag gtacaaggga gcaaagggga gagctgtccc aaagcacgct 720
gtttcgctgn tgaacggggt gggtggactg caagctggaa gagttgacnn aacctggggc 780
tgcctttang gttttgactg gggaaaaagt tctccggctt aaaatcctaa tccnggggtc 840
ccncccaatc aa 852

<210> 4413
<211> 799
<212> DNA
<213> Homo sapiens

<400> 4413
gtacagggct ggatgattga agcaccagcg ggaactagtc ggacctccga gctctttaaa 60
ctgtcctcag ctcggctggt tctccacgag ctccgggcag acggcggggg gtgggtcggc 120
gtttaagtca aaggccttgg ggctccgagt cccttcctct ccccgtcctg tgaaggcacg 180
acccagttca gctgtctgta aagtggagcc attagtccct gcctcgtagt gggaaaactg 240
ggaggcggaa cgaggaggcc gccggtccca acccggccca ggagcatctt tctccgcaga 300
ccgtttcctg gcgagatcct gcgcagccga ggctgtgtta gcgccaagga cttccagcag 360
ctgttagcag aggctgctgc cagggctgct gccccgctcc ctcctcctcc ttcccctgga 420
gtcagtggtg ggaagcttcc caggagagtc ctcagcaacc tctggaacac aggacttggc 480
catgactgtc tcctgtccct gtgtgggccc agatggttga gcttgagcag gaggtggagc 540
ggcggcagcg gctggggcag gagtcagcag ctaggaaagc cctcatcgcg aagttcctaa 600
caaccggcac ggcctgaggt ctacgactca ctgcaaggat gcagctctgg gcccccgagt 660
tcctggccgt gactgagtac agcgtgtccc aagacgcaaa acctcaaggg gccttctcca 720
acgggctgga gaaannntatc ggagggaana aacgcaatct accggggtgc cctgttttaa 780
aagnggcccn ttctggcaa 799

Doc No. 0950 PCT/US

<210> 4414
<211> 868
<212> DNA
<213> Homo sapiens

<400> 4414
actccaagaa ccgggtgccc accttggaag aggtgtcaca gacactgagg agcaaaggcc 60
acgtatcaag gtccccagat gaggaggctg tggcacgggc ccctgaagac agctcccctg 120
cccccgaggt gttcatgaac cagctggacc gcatcagcga ggaatgcgag ccatgggacg 180
cccaggacta ccacccactc atcttccagg acgccagcat caccttcgtg aacacggagg 240
ctggcctctc agacgaggag acctccaagt cctcgctaga ggacaacttg gcaggggagg 300
agagccccca gcaggggct gaagccaagg cgcccctgaa catgggcgag ttcccctcct 360
cctccgagtc caccttcacc agcactgagt ctgagctctc tgtgccttac gaacagctga 420
tgaatgagta caacaaggct aacagcccca agggcacatg aggcagggcc ggctccccac 480
cccacctttg atggcctctt ccccccctcac cctagggtgt cccgagatga ccgggacgcc 540
tggcccctgg tgggggggca gcctcggaac tgggagtggg gggccaaggg gccttcctaa 600
ccttccatca tcctcagcta natgtatgcc cgggacaagg gctctgttct ccaactgaac 660
cataccctgg ctttgggggg catctgtcct gagcttgggc ttgggggtat ctcacaattg 720
caaaagacat gctgggctgg cggggacaag tgggcaaagg actgaccctt aaggaagggc 780
cttgccttgc aagggtcttt tgtcctcaac caattttggn gggannтatc aacaacgggt 840
tttcctnaag gtcttggggg gcctcaan 868

<210> 4415
<211> 891
<212> DNA
<213> Homo sapiens

<400> 4415
ttaaatctat atgtgagact gacaaaaacc ttaatgtaat ttacttataa tgccagaagg 60
aaaacactat tttcataccc tacttttttct gtacctaaat tttcttaaaa aaaaatctag 120
tatagcacta cattcttttt taagtgatgc agaccttagt ttctttagcc cctttatttt 180
gaatacaatg ctacatatga atgttgaagc tgatacattg cacagttctg tagacatcac 240
tacaccgatg tagtttctca aattttagca atatgctcta cataaaatca ctacagagat 300
actagtgggg aagacgatta acacacctct tacagtaata ctgcctgtta ttggtatagc 360
agtggtattt gcagactggg atcataagga gcccttaaat acttgttatt gactggggtt 420
atttttatgc tgtagcaaat gtgacaggct ctttttagca aaatttttga aaatttttttt 480
ggtattactc tgaaacaaaa tttaagttgg agtttcaggg atttagggag tagttttcat 540
tctacatgaa ctgaggtaat attatggtaa ctccaatatt tggttaaaaa aactatacaa 600
atcagaataa gtactaaaat actgtagaat tttagcattt ttantttgca ctttgtgtgg 660
atttgaggtg ttcaagaaaa taccaaccat taaaaatgta atcnagttgg gcaaaaggtg 720
tgcgcctaaa aacacnggaa nccgaacaat gcattgattt tgggataacc ttttggaggg 780
gtttttgtca aatagcaatg tgaangaggt tacaattttt cctaaaaaag aattgggggg 840
gccccaaaat gtccanaagt tcctggggaa anaggtaacc ggaaangana a 891

<210> 4416
<211> 849
<212> DNA
<213> Homo sapiens

0505050-050505

0950050.00200

<400> 4416
atagtctaca cagagctccc cttgctgccc agacaagctg aaggaccaca ggaaaagcca 60
tggagacttc agcatcctcc tcccagcctc aggacaacag tcaagtccac agagaaacag 120
aagatgtaga ctatggagag acagatttcc acaagcaaga cgggaaggct ggactctttt 180
cccaagaaca atatgagaga aacaagtctt cttcctcctc cttctcttcc tcctcatcct 240
cctcatcttc ttcatcctcc tcctcctcag gtcctgggca tggggagcct gacgttttga 300
aggatgagct tcaactctat ggagatgctc ctggagaggt ggtaccctct ggggaatcag 360
gactccgaag gagaggctct gacccagcaa gtggagaagt ggaggcctct cagttaagaa 420
gactgaatat aaagaaagat gatgagtttt tccatttcgt cctcctgtgc tttgccatcg 480
gggccttgct ggtgtgttat cactattacg cagactggtt catgtctctt ggggtcggcc 540
tgctcacctt cgcctccctg ggaaaccgtt ggcatctact tcggactagt gtaccgtatc 600
cacaagcgtc ctccaangnt tcatcccccc cttccagaag tttangctga caggggttca 660
aggaagactg actgagggca cttccaggtg ggcaacaana ggcaaggccc aattgtgacc 720
aacaaatggg gaaccctgga gcccaaaaag gggaagaagc aacaattctg angaagaacg 780
cacaanggag aaccaaagcc caaganccaa ntaaancagg aaacaacttt ttcccttcca 840
atggtgggg 849

<210> 4417
<211> 859
<212> DNA
<213> Homo sapiens

<400> 4417
aaaaagacgg aggagatcca gttcgggctg acagtgagag gatgcagccc ggtgtctggg 60
cgggctctta ccggcgaagc ggatcttcac gaggtcgagc ggatgcagcg caaggttgga 120
taagacgccg ccgctcacgc ccgctatcag gttctcatac cggacgtggc ggaataccgt 180
gctccacgcc gacgacccgg acgccgactg gccctggccc gtcataggct cggggcccgt 240
cgacaccacg gcgcccaggg ccgcggaggt gggacgcgat gcagtggccg ccaccgtggc 300
gacggtcgcc ccttgtgagc gcaaccccac ctccgggacc aacgagagga ctcttatgcc 360
caaggcgcgt gagcgaagcc ggagactcta gtactgaggg ggcaagaacg gggcacagcc 420
actacgtcac gccggcggaa agcgcgatgg aggggaggtc ccagcctctc ccgagtctcc 480
gccctgcctc gcccacaaat gctccaagcc cacggacgcg gaagcgactg cacagctaaa 540
gaaccgcccc ttgctaacgt ttgccggcaa aactacggag cggcgcanga ttcagttgag 600
ctaacaagcc gccgctccgc gagtcacgtg actggaagca gtctgggaaa agcggaagtc 660
gcctgtggga agaagtggcn gttgggcggg aactcctanc gggacactcg tggantccgg 720
gccgggaaga gcaacccgan aattaaaggt gaaagaatgc tgaancccgg aaatcccggg 780
acaaatttat gttccgcnga aaaccaaagt ttgggaccnt taaagaagaa gnttccaaag 840
aaaacttang gattctggc 859

<210> 4418
<211> 925
<212> DNA
<213> Homo sapiens

<400> 4418
acttgtggtg cgctgccagg gctccgcagc gttgccggtt gtattcgctg gataccagag 60
ggcggaagtg cagcagggtt cagctccgac ctccgcgccg gtgctttttg cggctgcgcg 120

ggcttcctgg agtcctgcta ccgcgtcccc gcaggacagt gtgtcaggcg ggcagcttgc 180
cccgccgccc caccggagcg cggaatctgg gcgtccccac cagtgcgggg agccggaagg 240
aggagccata gcttggagta ggtttggctt tggttgaaat aagaatttag cctgtatgta 300
ctgctttaac tcctggaaga atgacagatg acaaagatgt gcttcgagat gtgtggtttg 360
gacgaattcc aacttgtttc acgctatatc aggatgagat aactgaaagg gaagcagaac 420
catactattt gcttttgcca agagtaagtt atttgacgtt ggtaactgac aaagtgaaaa 480
agcactttca gaaggttatg agacaagaag acattagtga gatatggttt gaatatgaag 540
gcacaccact gaaatggcat tatccaattg gtttgctatt tgatcttctt gcatcaagtt 600
cagctcttcc ttggaacatc acagtacatt ttaagagttt tccaaaaaaa aagaccttct 660
gcactgtcca tccaaaggat gcaaattgaa agctcaattt taatgtcatg ttatgaaaag 720
aagctgatgc tttaaaacat aaaaagtcca agtaatcaat gaaatgcaag naaaaaagga 780
tcacaaagca aactcctgga atgggaantg caaaaatgnc aagattttga ccaantttt 840
ggggccaaca aatcgggaaa cnccatggga atatccctgc caaaaataaa aaatgggntt 900
tccgttaaaa ncccccttta naaat 925

<210> 4419
<211> 787
<212> DNA
<213> Homo sapiens

<400> 4419
aaagccccac cccggtgcgc gggtatggcg gccagcctgt ggatgggcga cgtgagtgag 60
ggcagccgtc cggggtctga agacaaggaa gcatctcggt ttcgcgagag aggaaggatc 120
tgagtgggag gggacttggg atcccagaaa ggggagacgt gtgacggggg ttctttttgg 180
tgacacagaa gcgggttcca gcatctaagt gaagaggctg agtccgtgag gctaggggtc 240
ctggggcccc acctgggttc gtgggaggga aaggtggtgc tttggggaca tagaatggga 300
gcaatccaag gactgaggcg cgctgttctg ggaccggagg agtggggttt ctaggtccaa 360
ggggaggctc cctaaagcgg ggcaagcttg aaccaaaaga gctggggttt caggccgctc 420
agtggaggcg aacctcgccc ctcgctcccc cagcggcgcg tagccagccc tgggctgaac 480
gggaggggct ctggaacccg gagtgggaag cccggncgcc ggcctgagcc gctgtgctct 540
tgtttttacg cagctggaac cctacatgga tgagaacttc atctccaaga gcctttgcca 600
acatggggga gaccgtaatg agcgtcaaaa ttatccnaaa ccgcctcact gggattccan 660
ctggctactg ctttgtaaat ttgcagattt ggncacaanc tganaagtgt tttgcataaa 720
attaatggga aaacccttca agganccaaa acctttactt aaccttacag ctgcaccaan 780
ctggcaa 787

<210> 4420
<211> 691
<212> DNA
<213> Homo sapiens

<400> 4420
gaaaaacagg agctgattcg agctggcaga gctgggccat ggaaccggta gagacctgga 60
cccccggaaa ggtggcaact tggctgagag gtcttgacga ctccctgcag gactatccct 120
ttgaggactg gcagctgcct ggcaagaacc tgctccagct ctgccccaa agcctcgagg 180
ctctggctgt gcggtctctg ggacaccagg agctcatcct gggcggggtg gaacagctcc 240
aggccctgag ctccaggcta cagacagaga acctgcaaag cctgacagag ggacttctgg 300
gggcaaccca tgacttccag agcatagtcc aaggctgcct gggggactgt gccaagaccc 360

US 2003/0224000 A1

ctattgatgt cctctgtgca gctgtggagc tgttgcatga agctgacgcc ctcctcttct 420
ggctcagcag gtacctcttc tcccacttaa atgatttctc agcatgccan gagatccgag 480
acttgttgga ggagctgagc caggtcttgc atgaggatgg tccagcggct gagaaggagg 540
gcacagtcct gaggatccac gtggctggga tctgccacaa catcctggtc tgctgcccca 600
aggagctgct ggnacaaaaa ggccgtgctc gaacaagtgc aactggacan tccaattggg 660
cctaaaaaat tcaacancaa ccnngcaaat t 691

<210> 4421
<211> 826
<212> DNA
<213> Homo sapiens

<400> 4421
aatgagcgac tcgctttccg tgcggtgcgg cgagtgaggc cccggtcttc ctcctcgtcc 60
tgccgcaggg ccagaacccc tgacggtatt cagctgcgcg taagtctggc cggtgccatc 120
tgtctccgca atgcccccca agaaacaggc tcaggccggg ggcagcaaaa aggcggagca 180
aaaaaagaag gagaagatta tcgaagacaa aactttcggt ttgaagaata agaaaggagc 240
aaagcaacag aagtttatca aggctgtcac acatcaagtt aaatttggtc aacaaaatcc 300
acgtcaggta gcacagagtg aagctgaaaa gaaattgaag aaggatgaca agaagaaaga 360
attgcaggag ctaaatgagc tgttcaaacc tgtagttgct gctcaaaaaa taagtaaagg 420
tgcagatccc aagtctgtag tatgtgcatt cttcaagcaa ggacggtgta ctaaaggaga 480
taagtgtaag ttctcccatg acttgactct ggagagaaaa tgtgaaaagc gaagtgttta 540
cattgatgca agagatgaag aacttgaaaa agatactatg gataattggg atgagaaaaa 600
gctggaagaa gtagtgaaca agaagcacgg tgaggcggaa aagaaaaacc aaaaactcaa 660
atagtgtgca aagcatttcc tggaaagcta ttgaaaacaa caagntatgg gctgggtttt 720
ggggtatgcc ctggaggggg tgatattttg catgtaatcg tcatgcactt cctcctggaa 780
tttgggttga aaaaaagatt acnnggaaaa naanaagaaa gaagna 826

<210> 4422
<211> 646
<212> DNA
<213> Homo sapiens

<400> 4422
tttttgccct gtcttgtaca gtcatattaa gatttgcaat atgaatatcc atatctggaa 60
taggactata ataccataaa tagcttaaaa catagtcttc atgttttcag taaatgttat 120
gacagtgtat tatatattaa ttataaatta atatgtaata caaatcttca caaatctgaa 180
aatgccaaat ttagtgaata ttcagctttt taaattttga aatggagtct cactctgtca 240
cctaggctgg agtgcaatgg cgtgatcttg gctcactgca acctctacct cctgggttca 300
agtgattctc ctgcctcagc ctcccaagta gctgggaata caggcacctg ccaccatgcc 360
tgtgctattt ttttttttt tcatagagat ggggtttcac tgtgttggcc aggctggtct 420
tgaactcctg acctcaggtg atctgcccac ctcagcctcc caaagtgctg ggattacagg 480
tgtgagccac tgcacctggc caatattcag cttttaataa aatttttctt ttaaaggatg 540
attttacttt ccnatcagat tcctaantgc attgaggact tantttgcct taattttagt 600
gtttttcaaa ngttttacca angtacaact tggtctctaa gattca 646

<210> 4423
<211> 781

09/03/2007 09:50:00

<212> DNA
<213> Homo sapiens

<400> 4423
ctattatgaa ccaagtatac agaaatagaa acctgtgtgg agtgttcagc gaaaaacctg 60
aagaacatat cagagctctt ttattacgca cagaaagctg ttcttcatcc tacagggccc 120
ctgtactgcc cagaggagaa ggagatgaaa ccagcttgta taaaagccct tactcgtata 180
tttaaaatat ctgatcaaga taatgatggt actctcaatg atgctgaact caacttcttt 240
cagaggattt gtttcaacac tccattagct cctcaagctc tggaggatgt caagaatgta 300
gtcagaaaac atataagtga tggtgtggct gacagtgggt tgaccctgaa aggttttctc 360
tttttacaca cacttttttat ccagagaggg agacacgaaa ctacttggac tgtgcttcga 420
cgatttggtt atgatgatga cctggatttg acacctgaat atttgttccc cctgctgaaa 480
atacctcctg attgcactac tgaattaaat catcatgcat atttatttct ccaaagcacc 540
tttgacaagc atgatttgga tagagactgt gctttgtcac ctgatgagct taaaggattt 600
atttaaagtt ttcccttaca taccttgggg gccagatgtg aataacacag tttgtaccaa 660
tgaaagaggc tggataacct accaagggat tcctttccca gtggacgctc acnacttatt 720
tagatgtcaa cggtgcctgg gaataattgg ggctanccan ggcnattcaa tantggactg 780
g 781

<210> 4424
<211> 751
<212> DNA
<213> Homo sapiens

<400> 4424
tatcatgcat gtgggaaggt gggtgtggtg agaaaagttt taaggcaaga gtagatggcc 60
atgttcaact ttacaaaatt tcttggaaaa ctggcagtat tttgaactgc atcttctttg 120
gtaccggaac ctgcagaaac agtgtgagaa attaagtcct ggttcactgc gcagtagcaa 180
agatggtcaa ggccatggaa aaagcagaaa tttaccaaga aagctgatac ccatgtatag 240
ttcccactca tctcaaatac atctgctatc tttttaagct aagtcctaga catatcgggg 300
ataacatggg ggttgattag tgaccacagt tatcagaagc agagaaatgt aattccatat 360
tttatttgaa acttattcca tattttaatt ggatattgag tgattgggtt atcaaacacc 420
cacaaacttt aattttgtta aatttatatg gctttgaaat agaagtataa gttgctacca 480
ttttttgata acattgaaag atagtatttt accatcttta atcatcttgg aaaatacaag 540
tcctgtgaac aaccactctt tcacctagca gcatgaggcc aaaagtaaag gctttaaatt 600
ataacatatg ggattcctaa gtagtaagtt tttttcttga aactcagtgg ctctatcnaa 660
ccttactanc tcctcactcn ttctctaaga ctaaactcca aggctcctaa aaatccgccc 720
acaccaancc ttaagaaagc ccctgaaaaa n 751

<210> 4425
<211> 859
<212> DNA
<213> Homo sapiens

<400> 4425
tataacagtg ccactctcag gaattactaa gtgacatttt aaattgatat tttaaactct 60
ttccaactac atagttatgg tttatttcat tctcatcctg ttgggatgag aacttgtttg 120
tgcctttcat aacttgttta aagcagagtt ttaaaattag tttataggat ctgaggtggc 180

09502400.seq.000

tattagttac agtggcaaga ttatttagaa agcaagattt tgatgagaat taaaaacaat 240
agaaaatgta gagtgcttaa acaaaaatgt tatattttga aagagtagat acttaattta 300
taaataacag tctgaaggtt gatgctattt tgggataatt gttttgctaa tggataattc 360
taacaacgca gaatacctag tcaagactgt catcaaaaac attcacaaat gtttcattct 420
atttttagtg actctgttta aagagtttct gaaaggaaag aaatttttta ttttttattat 480
ctttagcagt actgagtgtc atagcagaat attttacaga ctttctatga gattattttt 540
atggtacaaa gtatttacat ttccctcatg tttatcatta tgccaatttt acatggcaag 600
tcatgccact gactctgcta tttagctaag taatttcttt tttcggagac tgtctcactc 660
tgtctcccag gctggactgc agtggtggcg attcccctgc ctcagcctcc cgaagtagcg 720
ggggatttca ggcacgcgct gccangcccc gccaagtttt tcatattttt agtaaangac 780
aggggtttgc cctgttgggc caaggctngg tccttgnaac cncccggacc ctcaaggtgg 840
attccanccc aacctttgg 859

<210> 4426
<211> 876
<212> DNA
<213> Homo sapiens

<400> 4426
gtccgggatg aaaacgggag cttgtaccca ggagtcacag ctattgatat gatgtacaag 60
gagggtctgc atggtgtgga caatgggata ttaatatttg acaaggttcg gatacccagg 120
gagaacctgc tggataagtt tggttccgtg gctccagatg gacagtacca ttcgcctatt 180
aggaacaaga gtgcaagatt caatgccatg ctggcagcac tgacccctc gagattagct 240
gtggctttcc aagctatggg tgccatgaag cttgggttga cgatagccat tcgctatagc 300
cacagccgga ggcagtttgg gcccaaaacc aaggaagagg tgaagatcat tgagcaccaa 360
acacagaccc tgcggctgat gccccacctg gccacagcct tggccctgac cttcgtcagc 420
aggtatgctg gggccctcct ggatgaggat gtcttccagg gaaaggagct ggtcaacagt 480
cgctcgctgc aggctctggt ggcagggctg aaggcctaca gcacctggga gaacatccgc 540
tgcctgcagg actgccgcga gtgcactgga ggcatgggtt acatganggg aaaatcnaat 600
ctccggctta angtgtgaca cagatgtgtt tgccactttt tgaaagggtg acgatgttgt 660
taagcttcag ggttgtgggg ggcggggaaa ctggctgggc ccaaatncac ccaaaaccag 720
ttntgaaang aaaaaaccac tcctttgggc ctggctccaa aaaactgggg cctgaatctg 780
ttgggggga acaaagcctg gagaaaccaa gntttccct gggcaattta accattgggc 840
caacaagttt gatggantct cnnccttttc cnggtt 876

<210> 4427
<211> 850
<212> DNA
<213> Homo sapiens

<400> 4427
aaacatggcg gcattgagcg gagtccgctg gctgacccga gcgctggtct ccgccgggaa 60
ccctggggca tggagaggtc tgagtacctc ggccgcggcg cacgctgcat cgcggagcca 120
ggccgaggac gtgagggtgg agggctcctt tcccgtgacc atgcttccgg gagacggtgt 180
ggggcctgag ctgatgcacg ccgtcaagga ggtgttcaag gctgccgctg tcccagtgga 240
gttccaggag caccacctga gtgaggtgca gaatatggca tctgaggaga agctggagca 300
ggtgctgagt tccatgaagg agaacaaagt ggccatcatt ggaaagattc ataccccgat 360
ggagtataag ggggagctag cctcctatga tatgcggctg aggcgtaagt tggacttatt 420

0356230.00000

tgccaacgta agtccatgtg aagtcacttc ctgggtatat gactcggcac aacaatctag 480
acctggtgat cattcgagag cagacagaag gggagtacag ctctctggaa catgaggtga 540
ggccccagaa actgggggag ggcaagggat gaagatggga gagaggtgga gctccttgtt 600
tcccttccca ggtgtcacct agctgctgct ttcttcttac ccaagagtgc aaaggggtgt 660
gatttgagtg tttgaagatt gtcacacgag ccaagtctca acgggatttg caaaagttcc 720
gcctttgact aatgccaacc aaggaaaggg ggcgggggca aaggtcaact gctngtccaa 780
caaagggcca acatcaatgn aaannttggg ggaatggggt tgttccctgc aattgctgtt 840
aaggaaantt 850

<210> 4428
<211> 863
<212> DNA
<213> Homo sapiens

<400> 4428
tacaacaatg aaaacagaac aatctattta ggagaaacaa aaaacaattg ttcatatttt 60
tttaacaaaa agaaggagtg ggaatatttt ctttaaaatc cctattggcc aggggtgctg 120
gctcatgcct gtaatctcaa cactctgaga gactgaggca ggaagatcgc ttgaggccag 180
gagtttgaga ccagcctggg caacatagca agtcctagtc tctacaaaaa taataataag 240
aagaagaaga agaagaataa atccctttaa actacaataa gcagagacca gttattcatt 300
ggctatattt ttaagattgc cagctttca aatgcagcaa aataaatgaa aaaagaactt 360
tcaacaggga tctagaagtc agttttcccg ttgagtagat cttccagccc aatacattta 420
ttagtctata atgaaaatat ctactttgat ttcttagagg tttcttcaaa taaatatatt 480
gaaacaattt taaaatgacc acatattatt taattttaaa agcacacttt taagaacccc 540
atttcttatg aaaggtttca tatcgagatc atttgttatt gtgagactgt atctggtgga 600
aaggaaagat aggagtattt ttcatatgtc aaatgagtaa gactaaaaca tgggaggaga 660
gatttatgac tttttttta catcatccag ctatgggntt gggacgtggt ttgttttaca 720
atttttcttc cccaggaatc ccctanaccg gtttgatcca aangaaagta atttgggcaa 780
aatccaattg gacctagtat ggntaaatca ccagtttacc tttgtgnagg ggaagtgtca 840
aaattantng gggtccggtt tgn 863

<210> 4429
<211> 842
<212> DNA
<213> Homo sapiens

<400> 4429
ttataataag gaattgcctg tgcatatctg taatgtaata tctcctgaga agatttatgt 60
tcagtggttg ttaactgaaa acttacttaa tagtttagaa gaaaagatga tagctgctta 120
tgaaaactca aaatgggaac ctgttaaatg ggaaaatgat atgcactgtg ctgttaagat 180
ccaagataaa aatcagtggc gaagaggcca gatcatcaga atggttacag acacattggt 240
agaggtcttg ctgtatgatg tgggtgttga actagtagtg aatgttgact gtttaagaaa 300
acttgaagaa aatctaaaga cgatgggaag actctctttg gaatgttctc tggttgacat 360
aagaccagct ggtgggagtg acaagtggac agcaacagct tgtgactgtc tttcattgta 420
cctgactgga gctgtagcaa ctataatctt acaggtggat agtgaggaaa acaacacaac 480
atggccatta cctgtgaaaa ttttctgcag agatgaaaaa ggagagcgtg ttgatgtttc 540
taaatatttg attaaaaagg gtttggcttt gagagaaagg agaattaata acttagataa 600
cagccattca ttatctgaga agtctctgga agtccccctg gaacaggaag attcagtagt 660

0096705-0045950

tactaactgt attaaaacta actttgaccc tgacaagaaa aactgctgac aataatcagt 720
gaacagaaag tggtcctgaa tttcagggag aaaaattcta gaaccaaaga accactagan 780
ggggtataag nccaccaagn cttattccct aacaatgaac cgntattttt gagggcnaac 840
aa 842

<210> 4430
<211> 702
<212> DNA
<213> Homo sapiens

<400> 4430
tatcactctc ttgctttaat actatattta gtattaaatt ttgtctcagg acaaaattca 60
aaccattaag taccatacta gtcccaaccc acttttccaa cattatttcc aattacttgt 120
ccgctcaaac ctccataatg gtctgcacca gccagatttg cctgccctca aaggcattcc 180
acctttgttc aggcctctct ccatacctga aattgccttc ctctaccaaa ttaggaaata 240
tccatccttc aattccaaca tcttttgtga atatttacta ctactaagtt ccagagtaat 300
acctttttta aattattatt tatttatttt tttgagacgg agtttcactc ttgttgccca 360
ggctggaatg caatggcatg atctcggctc accgcgccct ccacctcctg ggttcaagcg 420
attcagtaat acctttttta aaaacttcct gtaatcttta gtgtccactc aaatatattt 480
atacactgtc ctgtggtttc ttttatattg taatttaatg tttacagtgc ttttatttt 540
gggcagtgct cttgttcctc taactacatt gtaagccact caaaggccaa aatactgtgt 600
tacatatttt taacattctc ccagtggttt gcagtttgta gggactcaag taaatatttg 660
tagaataaag ggaatggntt ancaagtnga tattgaagga aa 702

<210> 4431
<211> 841
<212> DNA
<213> Homo sapiens

<400> 4431
aagaaaattc acattgaaga gaaaccatac agaggtaagg tttgtgacaa ggtttttgca 60
tataatacat ctggcaaaac atactagaat tcacactgga gagaaactca ttataagtgt 120
aatgagtgtg gcaagaccgt tggtcaaaat tcacaccttg taattaaaag gtcaaaattc 180
acaccttgta attcatagtg gagagaaacc ttacaagcac aatgaatgtg acatggtttt 240
taatcaacaa tcacaccttg caagtcatca tagacttcat actgcataga aatcctacaa 300
acgtgaacaa tatgacaaag ttttcattca caaatccagc ttcaaataca taggagaatt 360
cacactggag aaaagccata gaaatgtaag gtttgtgaca aggctttcgg gaatgattca 420
cacgtggcac cccatactag aattcacact ggagagaaac cttacaagtg caatgagtgt 480
ggcaaaccct ttagtgggca gtcaccactt attcaccatc aagcaatcca tggtataggg 540
aaacttgact aatgtaatga ttgtcacaaa gttttcagta atgctacaac cattgcacat 600
cattggagaa tccacagtga agagatctta caagtgtnat aaatgtggca aatttttcag 660
acatcgttca tgccttgcat ttcactgggt gaactccatg ctgggagaga aaccntataa 720
atgtcatgat tgaggcaagg tcctcagtca aggcttcatc ctaancaaan acataggagg 780
gattcataca gggagnngaa aacctcacaa ggtggtgaat gaatttgntg ggcaaaaagc 840
g 841

<210> 4432
<211> 833

US20050250105

<212> DNA
<213> Homo sapiens

<400> 4432
aacagcaatg gcggaaggag aagatgtgcc gccgctgcca acgtcgagcg gcgacggctg 60
ggaaaaagat cttgaagaag ctctggaagc aggaggttgt gatcttgaaa cgttgagaaa 120
tataattcaa ggaagaccgc tgcctgctga tctgagggcc aaagtttgga agattgctct 180
gaatgttgca ggaaaaggtg attgtttggc atcatgggat ggtattttag acttgccaga 240
acagaacact attcacaaag attgcctgca gtttattgac cagctttcag tgccagagga 300
gaaggcagca gaattacttt tggatattga atctgtaatt acctttttatt gtaaatcacg 360
taacattaaa tatagcacat cccttagctg gatacatcta ctgaaaccat tggtgcatct 420
tcaactgcca cgcagcgatt tatacaactg cttttatgcc ataatgaata agtacattcc 480
cagggattgt tcccagaaag ggagaccatt tcatcccttc aggttgctca tccaatacca 540
tgagcctgag ctttgttctt atcttgatac aaagaaaatt actccagact cctatgcact 600
caactggctt ggaagtcttt ttgcatgtta ctgttccact gaagtcactc aggcaatatg 660
ggatggatat ctacaacaag cagatccatt ttttatttaa ttcctaatgg ttanttatcc 720
ttgttaaatg caaaaggaag ttattttaac ncaagaagtc aagacagcaa agaagaagtt 780
tatcaaggtt cctgggaaaa tacnccatcc aagtcctgaa atatngnaan ggt 833

<210> 4433
<211> 828
<212> DNA
<213> Homo sapiens

<400> 4433
ttaaccataa taatcggaag gctttataga accctaaaat atccaactat cattcaattt 60
aaaatttatc acacaaaaaa tgagttttat agaatgcttc aaaaaaagcc attaaaataa 120
ccaaaactaa aaccaagagt ttgtaggaaa ataccaatat gcaaacattc caaaaggaga 180
gcctttattt tgccagccaa ggtggtatta tttgctttaa aaaaaaaatc aatgtaacat 240
tggttgtctt ttgagaaagt tccttgctgg gattcttttg ctggaaaatt ctcatgctga 300
gggtaaacaa ctttggtttg ctttttagtg cctgagatct gaaggcagaa ggaagattca 360
aatagaaaga ataatggccc attcaacagc tgactcctac agacattctg actaagatgc 420
ctgttgcaat tcccctgagc aacttaataa ctgtgttttc aaggttaaac tcaagaacca 480
atcagttatc tgtaaatgaa tatccaactt ttctgaaagg aaaaaggtaa catgttaata 540
taaacagcaa atacatacat catttataaa actgcctcaa gatcaattaa caagataaac 600
atacttaaaa aaaattcttg ccttttgttt taaagggcca tagcaaaata ctaacctctg 660
tataatggat caagtaaaga gctgtcaaat aagattaaaa agactcacaa ttattggaat 720
gttaaaacaa aaccctaaaa ntgaangaaa accgttaaat aaangctaat taaggtanta 780
atccctaant tccaattttt taattaaaat cctgagaaac tccaacaa 828

<210> 4434
<211> 232
<212> DNA
<213> Homo sapiens

<400> 4434
agagtcgggt agacggcagc gggagcggtg gcgtctcccc gccttccctc cctcccgggc 60
ctgggcgccc agccggacag gtgagcggca gccaggtgag cgcgcccacc tgcgcctctc 120

0960204365-070300

cgcgcggccc gccctccccg gcgccgggct cctctccgcg cccctgtcgg cgcggaaccc 180
tggcctcgtc cgcggcncan ctccctggag cctcncatca gcgggggcgc cc 232

<210> 4435
<211> 699
<212> DNA
<213> Homo sapiens

<400> 4435
tcaacatgtt gactaagaac ccaccattta ctaagaacat ggagtctccc ttatgcaatg 60
aagccctggt agatcaactt tggaaactta tgaattctgg tacttcacat gactggaggt 120
tacggtgtgg tgctgtggac ttgtacttca cacttttgg cctcagtaga ccttcctgtt 180
tacccttgcc agagcttggg ttggttctta atctaaagga gaaaaaagct gtcttgaatc 240
ctaccataat tccagagtca gtagcaggca accaagaagc tgcaaataat ccaagcagtc 300
acccacagct agttggattt canaaccctt tttccagttc tcaagatgag gaggagattg 360
atatggatac tgttcatgat agccaggcct tcatttccca tcatttaaac atgcttgaaa 420
ggccgtcaac tccagggctc tcgaaatatc ggccagctag ctcccgatct gctttaatac 480
cccaacactc agcaggctgt gacagcacac ccaccacaaa accccagtgg agtttggaac 540
ttgcacggaa gggaacaggt aaagaacaag cacctttggg agatgagtat gcatccagcg 600
ggnangcgct ccactcccaa gtctttacta anggaatcta cagtctccaa acacagtgac 660
cancatcacc accatcacca tgnggcacaa gaaaaagaa 699

<210> 4436
<211> 851
<212> DNA
<213> Homo sapiens

<400> 4436
ttgtatggac tcatggtttt caatatatag atagatttat aagtatctgt aaagtatgta 60
ataaatagct gtaatatgtg tagatatatt ttgctcttta tctgtatata catagataca 120
gatatatttt tttgccatta cttttagtgg caaaaaccag aattactttt gcaccaacct 180
aatatagcta tatctacatc atctctatct ctatttatat agagatagag aaagagtaaa 240
agtaatggca aaacctgcaa ttacttttgc accaacctaa tggatttaga ctctagcttc 300
cctcctgaga gacagtagca gcagtaacac ctagttatgg actgaatgta tcccccaaca 360
attcatatgt tgaagctcta acccccaagg taatagtatt tggaggtgag gactttggga 420
ggtatttagg tttagatgag gtcttaaggt tggagcccac atgatgtgat aagtgccctt 480
acaagaagag gaagagacac cagagcattc tctcaccctc cgtgtgcatg caccaaaaat 540
ggcatgtgaa cacagagaga ggaggcggct gcctacaagc caggagggag tgctctcacc 600
aggaaccgaa gctgtcggca nctttgatac tggaccttcc agcctccaag aactgtgaag 660
aaataaatgt ccaacggctt aaaccancca agtccnatgg gtataatggt tatggcaagc 720
tcaaactaaa gacaacccta ataatggagc acagctatgc ccaatatcct gggnttccag 780
atgccantcc ncactaaaag aacccaaaag ttccttgaag naaatgggct ggatttcang 840
ggcaaaggac a 851

<210> 4437
<211> 714
<212> DNA
<213> Homo sapiens

0052760.0450

<400> 4437
gacatacatt atttttcat tttactttgt gctaccacgg tttccatttg cttatggctg 60
ttggttgtga ggtctagtgc tttcttaaaa tatactactg ctttgcacat tgtgggcctg 120
ggagctccgg gtgccaaata aagattagga ctaacacacc ttcagtgttt gagtgatgtg 180
ggttcccggt gagcacctac atgctgctta cctagtacag gctgtgcagc caagacagcc 240
ctgtgtggcc cagaagacca aacatttcat gtgaaccttt ccccttcagg gtgataaaga 300
tcaggtcgct tgtccccagt ccttgttacc tccatgttat tgattcactt cccagttgcc 360
atattcgagg taagcctcca tagctttatc tttgctttca tgtcaacaat gcatgtctgc 420
atccttggac tggcttcaag ggtttctggc aaaaaatttg cagtctgtta atagacttgg 480
gcacaaatag gacctaacca agtgtgaagg gaataatgna ttcagactga ggcatttggg 540
agagactgtt ggggaagttc atccaagtgc agggccttgt cctgttgggt ggctcanata 600
tattaaatat gacccttatc caaattaaac aatggttacc gcatttgccc ctnaactcca 660
nggtgnatca ttgaagaang ggaaggaatt tgccttgcnt tgggggggcac atta 714

<210> 4438
<211> 838
<212> DNA
<213> Homo sapiens

<400> 4438
tcttgtcaga aactagaact ggccaaggcc aacatgcagc tcctatatga gcgtcttctc 60
agaagaaaac agccacgaac acagaaagac aaccatctag aggaaatgga tgtagaagct 120
cgacttactg aactatgtga agaagttaag aaaatagaga atcctgatga actggcagaa 180
cttataaata tgaatcttgc gcaactttgc tcacttttga tggctttatg gggacagttt 240
ctggaagtta taacgctaca cgaagaacta agaatattat tagcacaaga gcaccatact 300
ttgagggtaa gttaaagaga agtgatttta gagcatttta atgagtatta tttaccttta 360
gaaaattttt atgaaaacaa acctgatttt tacctatata ttgataaatc agaaaagaga 420
catttgtcat attgttattg tttgacttcc aaaattaata atagaataga acaatacagt 480
taagcatatg acctatttca atcacaatcc ctgctgctaa gaaaaaccac ctaaaagtaa 540
gtaaaatagg aaaatatatg atacagaata gaataggaac ctaagaatag gaattaatag 600
ccaagcctca ttagggacag gaatcaggaa ctagagagct gtctcaaact tatatctccc 660
tcntctcctt ttccttccct tcctctacca cctggaccta atataggaat gtggtattan 720
taacttagca aggatgggag gggggcaagt ccacacattt cacatataag gtttactggt 780
gacctagtat ggggnaattt atgcaaggta attccnaagg taantttaat ggnatngc 838

<210> 4439
<211> 737
<212> DNA
<213> Homo sapiens

<400> 4439
gagcgccggc ccgatggcgg cggcggcggc ggcgatggcc gagcaggaga gcgcccggaa 60
cggcggccgc aaccgcggcg gcgtccagcg tgtggagggc aagctgcgcg ccagcgtcga 120
gaagggcgac tactacgagg cgcaccagat gtaccggacc ctgttcttca ggtacatgtc 180
ccagagcaag cacacggagg cccgggagct catgtactcg ggagccctgc tcttcttcag 240
ccatggccag caaaacagtg cagcagactt gtccatgctg gtcctggagt ccctggagaa 300
ggcggaagtg gaggtggctg acgagctgct ggaaaatctg gctaaagtgt tcaagcctga 360

05052503.0702300

tggaccccaa ctctcctgag cgcgtgacct ttgtgtccag agccctgaag tggtccagtg 420
ggggctccgg gaagctgggc cacccccggc tgcaccaact gctggccctc accctgtgga 480
aagaacaaaa ctattgtgag tcgaggtatc attttctgca ctcagcggac ggggaagggc 540
tgtgccaaca tgctggtgga gtattccacg tcccgcggct tccgcancga ggtggacatg 600
ttcgtggccc gggccgtgct acagtttctc tgttttaaaa aacaaaaagt aancgcatcc 660
ggtggtcctc acgacgttac accccanaaa gcaacccgtt caatccnang gaacggggcc 720
tccgtttgtt ggaancc 737

<210> 4440
<211> 824
<212> DNA
<213> Homo sapiens

<400> 4440
aaaaatggcg gctgccactg tggggcttct gccggccggt agtccctggc gctgctgacc 60
cagcatcggc ttttctacgt cttgaacctg gattcgccta ggggttggga agggctgtgg 120
acggcgttgg gggaggcctg acgagattaa taaagaactc ttcagaattc ctggtgtttc 180
atcatatata cgactaagat atcaactctt ctagcttgct gtttctggac caaaaaaaat 240
gacgtctatt atcaaattaa ctacccttc tggggtccaa gaagaatctg ccctttgcta 300
tcttctccaa gttgatgagt ttagattttt attggactgt ggctgggatg agcacttttc 360
tatggatatt attgattccc tgaggaagca tgttcaccag attgatgcag tgctgttgtc 420
tcaccctgat cctctccacc ttggtgccct cccgtatgct gtcggaaagt tgggtctgaa 480
ctgtgctatc tatgcaacca ttcctgttta taaaatggga cagatgttca tgtatgatct 540
ttatcagtct cgacacaata cagaagattt tacactcttt acattagatg atgtggatgc 600
angattgggg tgtttactca ttggnactcc taaataatgt caagttacaa tgtggtggag 660
ttttcctaag tcccagggta gaatgggatg aagtgataaa ttgatgagat gttttgaaag 720
acaaaagaaa taatcccgtt tcaatttccg ccaatctcct cctttaangt caatgggccc 780
tttccggact tgggccccgt gntanccnan cccctaaagt ttgt 824

<210> 4441
<211> 720
<212> DNA
<213> Homo sapiens

<400> 4441
ggcgttgccg ggctctccga gaaggagacg tggcggcggt tgggccggtg atacccgggc 60
gctttatagt cccgccgcct cctcctccac ctcctcctcc tcctcctctc ctcctggagc 120
agaggaggtt gtggcggtgg ctggagaaag cggcggcgga ggatggagga aggaggcggc 180
ggcgtacgga gtctggtccc gggcgggccg gtgttactgg tcctctgcgg cctcctggag 240
gcgtccggcg gcggccgagc ccttcctcaa ctcagcgatg acatcccttt ccgagtcaac 300
tggcccggca ccgagttctc tctgcccaca actggagttt tatataaaga agataattat 360
gtcatcatga caactgcaca taaagaaaaa tataaatgca tacttcccct tgtgacaagt 420
ggggatgagg aagaagaaaa ggattataaa ggccctaatc caagagagct tttggagcca 480
ctatttaaac aaagcagttg ttcctacaga attgagtctt attggactta cgaagtatgt 540
catggaaaac acattcggna gtaccatgaa gagaaagaaa ctggtcaaga aaataaatat 600
tcacgagtac taccttggga atatgttggc caagaaacct tctaattgaa aaagaacgan 660
aannaagang aaaaggaaaa aatcaaaatt gagaattccc aactaaaaaa tatcnaaggt 720

US005955280B1

0020070045850

<210> 4442
<211> 886
<212> DNA
<213> Homo sapiens

<400> 4442
aagtgtcccc tcctacttct tgctgcctca cggttgctgt tgcagaccca ggagtctctg 60
aaggcttccg cggctttggg gccggttgtg agatgccagg cagaggccgc tgcccggact 120
gcggctccac ggagctggtg gaagactcgc actattcgca gagccagctg gtgtgctccg 180
actgcggctg cgtggtcacc gagggggtcc ttaccactac cttcagcgac gagggcaatc 240
tccgagaggt aacatattcc cgaagcacag gggaaaacga acaagttagt cgcagccagc 300
aacgaggtct ccggcgagtg agagaccttt gtcgagttct gcagttgcca ccaacatttg 360
aggataccgc ggttgcctac taccaacagg catatcggca ctctggcatc cgagcggcca 420
ggctgcaaaa gaaggaggtg ttggttgggt gctgcgtctt aatcacctgc cgacagcata 480
actggcccct aacaatgggg gccatctgca cgctgttgta tgcagatttg gatgtgtttt 540
ctagcacttg catgcagata agtgaagctc ctgggactgg atgtgccatc tctgtgcttg 600
gcagaactgg gtgaagacct attgcagcag cttcaaactg ttccaaagct tcaccttctg 660
tggccaacca aaattacgtg gaaagacaaa gagaaagatg ctgtctcgaa acaatgcaaa 720
ttgggttgga actggcaaaa ttgagaacct gggcttgggt gaccggggan ggaatcccct 780
tggcccgtta atcaacggcn tgngaacttt tccctggcct tgggaaattc ccctgcaaac 840
cttgnaaaat nggggtttca aaggttcccc ctttgcccna attttt 886

<210> 4443
<211> 825
<212> DNA
<213> Homo sapiens

<400> 4443
aaggagaatc agttcttgct gtaggtaagg ggaatgctgt gtttataaag caaatgacat 60
ggcaactgga tcttgaagga tgagttagtt ttcaaaaggt acatgggaaa tactcctcag 120
aaaaaagccg tctttgggca gtgtcggggt ctgccatgtg ttgcaccgct gctgaccaca 180
gtggaagagg ctccacgggg catctctgct cgagtctggg gacattttcc taagtggctc 240
aatggctctc tacttcgaat tggacctggg aaattcgagt ttgggaagga taagtacaat 300
cattggtttg atgggatggc gctgcttcac cagttcagaa tggcaaaggg cacagtgaca 360
tacaggagca agtttctaca gagtgataca tataaggcca acagtgctaa aaaccgaatt 420
gtgatctcag aatttggcac actggctctc ccggatccat gcaagaatgt ttttgaacgt 480
ttcatgtcca ggtttgagct gcctggtaaa gctgcagcca tgactgacaa tactaatgtc 540
aactatgtgc ggtacaaggg tgattactac ctctgcactg agaccaactt tatgaataaa 600
gtggacattg aaactctgga aaaaacagna aaggtagant gggagcaaat ttattgctgt 660
gaaatggagc aactgcacat cctcaattat gacccgggat gggacancat acaatatggg 720
gggaactccc tttggggcaa tatgggttcc nccctaanaa gggttaatnc ggggttccct 780
ccnaaaagaa aaggttggac cctttggggg aaaancaaat ccaat 825

<210> 4444
<211> 741
<212> DNA
<213> Homo sapiens

0060 = 0060250

<400> 4444
acaggcgctc ccgcccctgt gccgcggcag ggtgacgtct ccgcagcgca ctagaggtgc 60
cgctacttcc gggtcggccg agcacacctg gcggcgtggc ggacgcctga agtgtgacag 120
tggcgcgcgc ccccgcccca gaacggggac tcgagggact ttgcccaccc ctgcaacagc 180
cctcccgcgc tgtctcccgg gcagggagaa ggctgggctc ccccacctgc ccctggccgt 240
caggtggctg tggagaagcg gaggcgcggg cgctcggcct taacgtcccg ggctctgggg 300
ccatccgtga ctcccacacg cggagcacct gcagtttggg gagggaggga tctgggagcg 360
atcggccaaa gcctggggct gccgaggaaa tggctcttcg gaattaggga tctgagagtg 420
tgagatttga cctttgtagg ctggtggcgg ctgtgcaatc tctagctcca cccactccct 480
ccaaaaactt tgtcctctga cagctctgcg aangttttag ctgagtattt gtgancacgt 540
atttcttttg cagtattttt aaaaaatcct cttgatctga ggcaacttcg ctggnttcct 600
ccccattccc ttgggcaagt tgagagtgtt ggttcctggc cttgacctca naaactcatn 660
aacacaggat tgggcaataa aactaacttt tatccaaaaa ggcaagaact ttncaaaaca 720
aaagtccgta tcngcngtgt c 741

<210> 4445
<211> 878
<212> DNA
<213> Homo sapiens

<400> 4445
attacagggt gtcctcttcc gccgccagaa gccggaagtt gtgtcccgga cgtgtcaacc 60
ggggtctgag tgctcagagt acagctgcaa ccgcgaccaa gggcgggaag aacaagcagc 120
gaactaaagg gaacctgagg ccttcaaaca gtggccgagc tgcagaactc cttgccaaag 180
aacagggaac agtgcctgga tttattggtt ttggaacatc tcagagtgac ctaggctatg 240
ttcctgctat tcaaggagct gaagaaattg acagtcttgt agattctgat ttccgaatgg 300
tgctgcggaa actttcaaag aaagatgtca ccacaaaatt aaaagctatg caggaatttg 360
gaaccatgtg tacagagaga gacacagaaa ctgtgaaagg agttcttcca tattggccaa 420
gaatttttg caaaatttca cttgatcatg accgtcgcgt ccgagaagcc acacaacaag 480
cttttgaaaa acttaccctt aaagtaaaga aacagttggc tccctactta aaaagtttaa 540
tgggatattg gctaatggct cagtgtgata cttacacacc agctgcgttt gcagcaaaag 600
atgcatttga agcggctttt cctccaaagc aagcaacctg aagccatanc attttgttag 660
ggatgaaatt acaagtgtgc tgcangatna tcttataaaa aggaaaacac ctgatacact 720
caagtggacc ccgcaaaact gttccanaag gaaagaaagg agaaagctaa aatttctacc 780
ggggtttgta accttggttc cctaattggg caattaaaag agatttactt ttgccctttt 840
acctnannaa atgaagcctt naattccncc gggaggga 878

<210> 4446
<211> 781
<212> DNA
<213> Homo sapiens

<400> 4446
gcgcaactca ttggcgccaa gatggcgatg gagatgaggc ttccagtggc tcgcaagcct 60
cttagcgaga gactgggccg cgacactaag aaacatctag tggtgccggg ggatacaatc 120
actacggaca caggattcat gcggggccat ggaacgtata tgggagaaga gaagctcatt 180
gcatctgttg ctggctctgt ggagagagta aacaagttga tctgtgtgaa agctttgaaa 240
accagataca ttggtgaagt aggagacatc gtagtgggac gaatcacaga ggttcaacag 300

aagaggtgga aggtggagac caactccagg ctggattcgg tcttgctgct ctcgtccatg 360
aaccttcctg gaggagagct gaggagaaga tctgcagaag atgagcttgc aatgagaggt 420
ttcttacagg aaggggacct tatcagtgct gaggtccagg cagtgttctc tgacggagct 480
gtctctttgc acacgaggag cctgaaatat ggaaaactag gtcagggggt tttggtccaa 540
ggtttccccc tccctgggtg aaacggcaga agacccactt tcatgatttg ccatgtggtg 600
cctcagtgat tctcggtaac aacggcttca tctgggattt acccaanacc tgagcacana 660
gaagaggaac agggggggctt cattgcaaac ctggngcctg tcccctcctt gcctgattca 720
anaagtggat atccccggct tcgggaactg catcantctc gccgggtaac tccanangga 780
t 781

<210> 4447
<211> 633
<212> DNA
<213> Homo sapiens

<400> 4447
ggagtcggcc tgagaggtct ctcgtcgctg caggcgcctc agcccagccg cgtgccttgg 60
cccatggccg cctactctta ccgccccggc cctgggcctg ctgcaggcgc ggcgctgccg 120
gaccagagct tcctgtggaa cgttttccag agggtcgata aagacaggag tggagtgata 180
tcagacaccg agcttcagca agctctctcc aacggcacgt ggactccctt taatccagtg 240
actgtcaggt cgatcatatc catgtttgac cgtgagaaca aggccggcgt gaacttcagc 300
gagttcacgg gtgtgtggaa gtacatcacg gactggcaga acgtcttccg cacgtacgac 360
cgggacaact ccgggatgat cgataagaac gagctgaagc aggccctctc angctaccgg 420
ctctctgacc agttccacga catcctcatt cgaaagtttg acangcaggg acgggggcca 480
gattgccttc gacgacttca tccanggctg catcgtcctg caaaaggttg acggatatat 540
tcagacgtta cgacacggat nangacggct ggattcaagt gtcgtacgaa cantacctgt 600
ccatggtcct cantatcnta tgaacctggg act 633

<210> 4448
<211> 764
<212> DNA
<213> Homo sapiens

<400> 4448
ataattacgt tgctatggac accgagtttc caggtgtggt tgcaagaccc attggagaat 60
tcaggagcaa tgctgactat caataccaac tattgcggtg taatgtagac ttgttaaaga 120
taattcagct aggactgaca tttatgaatg agcaaggaga ataccctcca ggaacttcaa 180
cttggcagtt taattttaaa tttaatttga cgtaagtggg aaataactgt ataacccaga 240
ctttttttt ttttctttaa tcttaggaat tgattttcct caagtatggt gacatgctag 300
gtgaatttgg tgtagttatc ctggaaatat ataaaacgta acatttcaaa agcatggttt 360
tctttttac tatgggacca aaaaaaatac tttgatgtta aagatgttat atttaaaata 420
tgactgcagc tttttttgta tttggaagac tgggtattga aagtacttct gatagaaaaa 480
ataatcctac attagtttta ctttcaaaaa ttttgtgtgc aatttgaaat atanccttt 540
ataatattta tccttcttgt gaagattttt gttgcattca tattccagtt tatgagtaga 600
ttacatgtca aatgcagtaa gacgttttct ggaaccttgg gtacgttttc ctttcaagtc 660
agtattanca ttaggttgcc acttcagccc acaaaaagct ccccttaatt tacatatagg 720
gngaaagtna tagtaancct tgaancctgg gggtttaacc aaaa 764

0050345-0020

0956456-072806

<210> 4449
<211> 722
<212> DNA
<213> Homo sapiens

<400> 4449
ttttttttt ttttttttt ttacggagat taggtcttgt tatgttgccc aggctggtct 60
caaactcctg ggcgcaataa atccttccac atcagccttc caaagtgttg ggattacatg 120
ctgcaccccc agtgtatcag cacttcttaa attaaaataa tcttgccaac taatgtcttg 180
ttttacatcc ttccccttta gtctactact tgccattcta tccttagtag cctcgatgac 240
ggctcccctt ttaccccata cctctctccc ccaaaaaagc ttggacagca accaaattgg 300
cttgtatcag tattgtcaac tggaggccta catgaggact cagcttactg tttttcttct 360
ggttaattgt ggacataatc aagttcattg cttttactcc ccatctgcta ccactcttgt 420
gcagctattt atggtgatgg ctttgttacg tatatacaca tagaccattg ttaatccccc 480
ccttttcctt tggctgccaa acagtattca tttgaacatc atcanaaggt gtgcaaagca 540
ctttgggagg ccgaggcggg tggatcacga ggtccagaga ttgagaccat cctggccaac 600
atggtgaaac cccgtctaca ctgaaaaata caaaaattag ctgggcaatt ggtggctccg 660
tgccctgtgg gtcccgggct acttggggaa gctgaaggga aggnngaata accttgganc 720
ca 722

<210> 4450
<211> 726
<212> DNA
<213> Homo sapiens

<400> 4450
gatgaagcat gagccctgcc cttgcggact ccaaggccaa ggccagttga ggacaggaga 60
gccagcccca gggtccggag tggtggtgaa gactctggaa ccagctcacc cactccaaga 120
acttccctag cctcctcata cctcactctc ctcctctgtg gaatggacat ggagaaggct 180
acttcatcag gtgactggtg gtgaagttag gccgatctat ttaaggtagt tagaacagtg 240
cccagcctat ggtgagctct tgttacctgc ctggtgcagg ctctagaaat tcagaaagga 300
agccaagaag agtaggaaag tcttttgtta ggaggtgggc tttgcagaat ggatctgcag 360
agatggggga aggcgactct gtcctgtagg tgggggaact gcgtgagcaa aggcacagag 420
gccggatgca ctgaacctgt ttgttccccc agaggttctg aggccacagg aagtggctgg 480
cgtgggagtg gctggtccaa ggggagctgc actattaagt gtggaggggg agggggacat 540
gancangacc acagggacct tgaccgccaa gctgggggaa ngaantgtga ataaagcccc 600
aatgccacca aggcatctct gtactgccct cctctccctc cccaatcnaa gccaaggcaa 660
cctngcccct tgttttcctg gggaancccc tgaanggagg gacatccctt tagcgtccan 720
aaaatg 726

<210> 4451
<211> 833
<212> DNA
<213> Homo sapiens

<400> 4451
aaggtctgaa aaataaatca tatttagaac gccattggta gcttaaaaat ggttttaaac 60
ctgaatttga agaaaatgtt gagaccacga tgtaaccaaa aagaaataat tgggttattt 120

ctattccaaa tgtctttggt gactgtgtga ttttaaacca aattggttta tctatctagg 180
catttaaaca agttctcagt gttctaaaga agtacatgta ctgaccctga caatcatgtt 240
cttttaagcc tttagattat tgactatcca ggttgttcca cagagtctct ttttttcccc 300
cttctttctt gaagatctgt gagtaatgga ctaattgcta ttaaatttgg gagctttaca 360
tatgccacaa cagaaaaagt cagaagaagg taagtcttga atcttgtttg gatgaaatgt 420
agatacatgt gatatgtgta tatgtttagg aataggatca gactcagtta tggtggtaat 480
ataggtaaaa gggctttgcc acttcccaca tcaagggcag gattctttgt gtatttatac 540
atagagaatg atttgacttc tgattgaata gaaccttact gccctgcagt ttaagtcata 600
cggtttccta taattaatac tcctgagctc cctgttgaca aagaaagtaa tgtggntccc 660
atgggcaaga tggnctgcaa ggctgaagtt cttgttacga ccaaaaaaaa ttatgaaggg 720
gatgccaatc ctaatggatg ggaganttte ctaaggattc caaaaatggn aacaagtncc 780
taaagccaac cctggaanct tcccaaaggg gaaaagaagt gaccaaanca ata 833

<210> 4452
<211> 798
<212> DNA
<213> Homo sapiens

<400> 4452
tttaaaaaaa atgtgccatt tggcttagaa ttaataattt tttttaaagc aaaaatggaa 60
gcttagtctt caaggactga taacagctgg taatatttac cattgtttgg tgggaatggg 120
gttctcatat taggctagca cgctaaacat tttcaattac gaaaatgtat taggctcgtg 180
tgctacccta atataaaaac cccatatttc ctcagttgaa atagtcagct gactatcctg 240
aaaagcattg accctctttt atattttatc tgactttcag ttcatttttt taatgctagt 300
gggaacttct ccaatcagtg tatttttta gtttcctttt ttggggaaca ggaggagctc 360
agtaattttt atgaaatgct ttgacctcat atccattaac taattatggt cctagtcaga 420
agaagctagc acccttccct ggtgaagttg atacaaatcc attgtatgtt cctgtcctgc 480
aatgatttac attcagttac agtactagtc aaaactatat atatatgaat tctacttagg 540
atccaatttt gatatattta aaaagcaatt gagactcatg atagacttta tgagcaggtt 600
taacttgtgt gggcgaataa aaagccttta atttaaatgg gaaaagtaaa aagtaacttt 660
tttcaaggac ttgatttttt ttttttgggt ttaaaccatt ttgggttcac gtcagntnaa 720
ccggtaacaa aaaggtggga acctttcanc ctttgtnaaa agaancccce ttaaccaaag 780
ttcaattccc ctcaaaat 798

<210> 4453
<211> 719
<212> DNA
<213> Homo sapiens

<400> 4453
acttgagctc agaagatcaa agctgtaggg tgcatgactg tgctctcaat agccactgca 60
ttcaaaccgg ggcaacacag cacaacccag tctcttaaaa gagattcagc atcctggaga 120
agccattgga aagagtagag aaaatgccac ggatgaaata tccctgctgc tcagactcca 180
ctgacccaag tgaagttggc cacagtctaa caaatgggat actgcagcgg ggttctggtt 240
ctgaaacaga tctggtgaat ggtgctcgaa gtgatcggct gttgaccagg tgtggcttct 300
ctgttgatgt tccaaggacc tcatcagcag aggaagaagc attattacta accatctttg 360
gcaggatgac cttttgttgt tgtcgttcaa ccaggtctcc tttattactc tgcaatctct 420
ccctttttgtt ccctttccac ctaaaactcg gatgtctctg ccaccgataa gcacccagtg 480

0952945.0002

gctttcccag attggaaaca gcagaatcat ttttcttcct cttgcttttc actgggacca 540
caccatggnt aactccttaa acttgttcct aactctgaat ctgcataagc aggttctgac 600
aaagatctcg atagcttgga gggacaaagg tgatgtttgn ntcttaaaag atgctcaatc 660
ttccctgact ccaagtcttt aacaagtctc tctaaacttt aangantcct ccaanctgg 719

<210> 4454
<211> 758
<212> DNA
<213> Homo sapiens

<400> 4454
taactttgat gtcccaatgg aaacaaccca cggtgctcca ttggattctg tgggatctga 60
tgtctggagc acagaggagc cgatgccaac taaagagacg ggctgggctt ctttttcaga 120
gttcacgtct tccctgagca caaaagattc tttaaggagt aattctccag tggaaatgga 180
aaccagcact gaacccatgg accctctgac tcccagtgcg gctgccctgg cagtgcagcc 240
agaagcggca ggcagtgtgg ccatggaagc cagctctgac ggagaggagg atgcagaaag 300
tacagacaag gtaactgaga cagtgatgaa tggcggcatg aaggaaacgc tcagcctcac 360
tgtagatgcc aagacagaga ctgcggtctt caaaagtgag gaagggaaac tgtctacctc 420
tcaagatgct gcttgtaaag acgcagagga gtgtcccgag actgcagagg cgaagtgcgc 480
ggcgcccagg cctcccagca gcagtcccga gcagaggact ggccaaccaa gcgcaccagg 540
tgacacttca gtgaatggcc ctgtatgacg ggtgacgtct gctgctgctg actgangact 600
gcagaccgcc accactcagg ggctctggag gggtcaacct ggagcccaac aagctgtcaa 660
ctgctgcact cantcctgca aagggatnaa ggnccancaa acctttaaa ttccaagatt 720
cctaaagaca tttgtacaag gatgaaaatt caagaaan 758

<210> 4455
<211> 720
<212> DNA
<213> Homo sapiens

<400> 4455
ctctactaac aatacaaaaa aaaaaaaaaa tagctgggcg tagaggtaca cgcctgtaat 60
cccagctact caggaggctg aggcaggaga atcacttgaa cccgggaggc ggagggtgca 120
gagccgagat cgcaccactg ctctctagcc tgggcaacaa gagcaaagac tccgtctcgg 180
aaaaaaaaaa tgtggttccg gggcctccca ggggacagcg tgtcataggt tgctcaggcc 240
tccaagcacg gtcggtgggc ctccgactgc agccttggtg cccactccac caaccggcag 300
aagagccggc cctgagtgct gatgggggga tgtgtgtctg atggaggggt ctcctganag 360
gtcagtgatt gcctacgatg gggcttccct cccaagtcat caagttcatg ggaggctgca 420
tcccatgggt ctctttcaac accagccctg actgaagagc tgctctcttc agcagtgtat 480
tgttggagcn agtgctggaa ttgagtcatt gtcactggaa cagctggtca ccgcccaaag 540
acgggggagc ctgggtccca gagaccagtc cccaacatgg gtgctgggtc tggggaaatg 600
gccgtgacaa ggctggggtg ggattccctg acactggggc cctttgtngt gacaatcccc 660
tctggtgctg acgcccgctt ctcaacggtg gggattggct nanggcctct gactcctggg 720

<210> 4456
<211> 712
<212> DNA
<213> Homo sapiens

09253-0052US1

<400> 4456
atcatgaacc tgggaagagc aggtactata aaagagaatt cacgctgtcc gttgaatgaa 60
gaggtaattg tccaagccag gaaaatattt ccttcagtga taaaatatgc cgtagaaatg 120
actatatggg aagaggaaaa agaactgcct cctgaactcc agataaggga gaaaaatgaa 180
agatactatt gtgtcctttt caatgatgaa caccattcat atgaccacgt catatacagc 240
ctacaaagag ctcttgactg tgagctcgca gaggcccagt tgcataccac tgccattgac 300
aaagagggtc gtcgggctgt taaagcggga gcttatgctg cttgccagga agcaaaggaa 360
gatataaaga gtcattcaga aaatgtctct caacatccac ttcatgtaga agtattacac 420
tcagagatta tggctcatca gaaatttgct ttgcgtcttg gttcctggat gaacaaaatt 480
atgagctatt caagtgactt taggcagatc ttttgccaag catgccttag agaagaacct 540
gactcggaga atccctgtct cataagcagg ttaatgcttt gggatgcaaa gctttataaa 600
ggtgccccgt aagatccttc atgaattgat cttcagcagt ttttttangg nngatggnat 660
acaaaaaact ctttgctatg gaattttgtg aaagtattta taacaactgc an 712

<210> 4457
<211> 769
<212> DNA
<213> Homo sapiens

<400> 4457
ttttcctcgt ccctcccttc gcggtgattt tccggtcccg gcgcccggcg agggcgcgcg 60
gctggtgtcc gccccgcccg aaaggtgagc cagccatgag agggtatctt gtggccatat 120
tcctgagtgc tgtcttcctc tattatgtac tgcattgcat attatgggga acgaatgtct 180
attgggtggc acctgtggaa atgaaacgga gaaataagat ccagccttgt ttatcaaagc 240
cagcttttgc ctctctgctg agtcagagct ctgcatatat tttaagaaaa ggcattgagg 300
aactcaatca aaccagtatt cttttcacac aggtttcatc agtttcaccc ttttctgtgt 360
gcggctgatt ttagaaagat tgcttccttg tatggtagcg ataagtttga tttgccctat 420
gggatgagaa catcagcgga atattttcga cttgctcttt caaaactgca gagttgtgat 480
ctctttgatg agtttgacaa aatgaataat ggtcctgttt taggacatga agaagaagtt 540
ggganaagga caaccttccg actttttttat ccaaaatccg ttttttcaga tcctattcac 600
aatgacccta atacgacagt gattcccact gcttttaagc cacatgattt aaaggggget 660
gttggaattg ntgattgggt gacaaaanta aacactaang ggttttggga agaaaaccaa 720
gcccttaaac ctgaatttat aaaaccttaa tcaaatcccn naataatta 769

<210> 4458
<211> 860
<212> DNA
<213> Homo sapiens

<400> 4458
ccatctgaca gccaaggagc cacacctttg cactatgctg ctcagagtaa ctttgctgaa 60
acggttaaag tgtttttaaa acatccttca gtgaaagatg attcagacct ggaaggaaga 120
acatccttta tgtgggcagc tggcaaaggc agtgatgatg tccttagaac tatgctgagc 180
ttaaaatcgg acatagatat taacatggct gacaaatatg gaggtacagc tttgcatgct 240
gctgctcttt ctggccatgt cagcaccgtg aagttattac tggaaaataa tgctcaagta 300
gatgctactg atgttatgaa acatactcca cttttccgag cctgtgagat gtgacacaaa 360
gatgtgattc agacactcat taaaggtgga gcaagggtag atctagttga ccaagatgga 420

0960245 - 0960800

cattctcttc tacattgggc agcactggga ggaaatgctg atgtttgcca gatattaata 480
gaaaataaga tcaatccaaa tgtccaggat tatgcaggaa gaaccccttt gcagtgtgca 540
gcatatggag gctatatcaa ctgcatggca gttctcatgg aaaacaatgc agaccctaac 600
attcaagaca aagagggaag aacagctttg cattggtcct gcaacaatgg ataccttgat 660
gccattaaat tactgctaga ctttgctgct ttccctaatc agatggaaaa caaatgaaag 720
agagatacac acccccttgat taagccttgc cttggtgaac cccatgaaag tgatcaaatt 780
caaggttggg ncacggtgcc ctgtccaatc ccaancaata caaggacaat cnccggcctt 840
caaaaatncc aagctngtct 860

<210> 4459
<211> 763
<212> DNA
<213> Homo sapiens

<400> 4459
aaagaaaaga aggaaaaagg aaactgattt ggtggaagaa cacaatggtc acatctttaa 60
agccacccaa tatagcatcc ctacatactg tgaatactgt tcttctttga tatggataat 120
ggaccgagcc tctgtttgca aattatgcaa gtatgcttgc cataagaagt gctgtctgaa 180
aaccacagcc aagtgctcta aaaagtatga tccagagctg tcatctcgac aatttggggt 240
tgaactgtcc cgtttgacca gtgaagaccg aactgttcct ttagtagtgg aaaagctcat 300
aaactacatt gaaatgcatg gactgtatac agaaggtatt tatcgaaagt ctggttcgac 360
taataaaatc aaggagcttc ggcagggtct agatacagat gctgagagtg taaatctaga 420
tgactataac atacacgtca ttgcaagtgt attcaaacaa tggcttcgag atttgcccaa 480
tcctctcatg acctttgaac tctatgagga atttcttcga gctatgggcc ttcaggagag 540
gaaggagaca atccgtggtg tatactctgt gattgatcaa ctctcccgaa ctcatctcaa 600
tacactggaa cgcctcatct ttcatctaag tcaggattgc tctgcangaa gacactaatc 660
gaatgtctgc taatgctttg ggccattggn gtttgcgccc tgcantcccc gctggcctga 720
caccaacttg ncccactaac aaangtttca agggcatcan tta 763

<210> 4460
<211> 808
<212> DNA
<213> Homo sapiens

<400> 4460
gattccgtgt tcttggccat gttagccata atatcctgtg cagtatgttt ttcctgtgca 60
gaggcaaaaa catattgggc atatgttccc aagcccccag cagtatgacc catactttgg 120
agtgacactc ctcctaagat ttatcatgat taaggagcat gggctccagg acccctaact 180
ccacctgaca tagaacagtt agactctcag aataatgtca ttaattatac cgctccattg 240
gaaggacttc ctttgtgtgt caccacaaag acatcactca gccatagctg tcttacagtt 300
caagctcaca catggttgag tcactatggg aaaatcatgt acttattaag tcttggttat 360
attaatgtaa ccggtgtgct aaccaaccat tcctggccca atcgccttca ttgtgctgac 420
tatacagaat ggattccctt caatagttcc taccccctc catagaccca gtgtcttggc 480
ccactggcta gaaaacaatc tatgttaact ggagacattg tggattgggg acctaaaggc 540
caattagatg gaaaagaaga aaatcagaaa tcgtggcaca aactttgctg gcattggtgg 600
caagctttta atgcttcttc tttatataac actggggatt caatcccagt cggncgccca 660
anattgcttg gcatggagca agctttagcc cgcctcttcc tcagtggcat tatctaaggg 720
aggaaaggga ccaattcaaa aaggatggat aatggaaagg gaagcaattc ccattttang 780

aannggcaaa natcctgggg tttgccna 808

<210> 4461
<211> 762
<212> DNA
<213> Homo sapiens

<400> 4461
tgactacctc ttccaactgg gatttgggga gctgtggagg gtgcaggagg aaggcatgga 60
ctcggagatt ggctgcctca tccgcttcta tgcaggaaaa cctcacagca cgggtagctc 120
tgaacggatt cagctctcag gaatgtataa tgtccgtaaa ggcaagatgc agttgccagt 180
gaaccgatgg acaagacgcc aagtcatcct atgtgggacc tgcctgatag tatcatctgt 240
gaaagacagc ttgaccggaa agatgcatgt tctgccacta attggtggaa aagtagaaga 300
agtgaaaaag caccaacact gtttagcatt tagctcctct ggaccccaaa gccagactta 360
ctacatttgc tttgatactt tcacagaata cttaaggtgg ctgcgacaag tctccaaggt 420
tgcatcccag cgcattagct cagtggacct ctcgtgttgt agcctggaac atctgcctgc 480
caacctcttc tacagccaag acctcactca tctcaattta aaacaaaact tcctaaggca 540
gaaccctagc cttccagctg ccaggggct taatgaactg caaaggttcg ccaagttgaa 600
gagtcctaac cttttccaat aatcatttag gggacttccc tctggcantc tgcagtattc 660
caaccctggn aaaagctgaa cgtgtcctgc aatngccctg cgatcaatcc ccgggaancc 720
gtttggangt tgatgcacaa ctttacanga cattttgtt gg 762

<210> 4462
<211> 676
<212> DNA
<213> Homo sapiens

<400> 4462
gtattcttta atgatattaa atatgccgaa gccaagcaca cagtctttct aaagtgtgtg 60
tatgtttgtg tgaatgtgaa tgatactgat cttatatctg ttaaaagttg ttttaaaaag 120
ctgtggcatc ccattgttca tatttgccaa gtcttctgta aagatgtcta ggacgaaata 180
ttttatgtgc taatgcatgt atttgtaaac cagatttgtt taccactcaa aattaacttg 240
ttttcttcat ccaaaaaagt ttatttcttc cacgtactta aattttctgt gtgggtataa 300
tatagctttc taatttttt ctttcacaaa ggcaggttca aaattctgtt gaaagaaaaa 360
tgctttctga aactgaggta taacaccaga gcttgctgtt taaaggatta tatgatgtac 420
atcagttcta taaatgtgct cagcagttta acatgtgaat cctgttttaa agtgctcaga 480
tttcaactgt gtaagccatt gatataacgc tgtaattaaa aatgtttata tgaaataact 540
taatgtttta aatttattta tgtagatcac atcatttta acgtatgcag tgcaaatatg 600
tgaaaagtct tttggtttan tcccannant tatttanttt aagaaaagta agtttaaaag 660
accttaagga cattca 676

<210> 4463
<211> 714
<212> DNA
<213> Homo sapiens

<400> 4463
atttcggcct gagagcgggc cgaggagatt ggcgacggtg tcgcccgtgt tttcgttggc 60

0502469.0002

gggtgcctgg gctggtggga acagccgccc gaaggaagca ccatgatttc ggccgcgcag 120
ttgttggatg agttaatggg ccgggaccga aacctagccc cggacgagaa gcgcagcaac 180
gtgcggtggg accacgagag cgtttgtaaa tattatctct gtggtttttg tcctgcggaa 240
ttgttcacaa atacacgttc tgatcttggt ccgtgtgaaa aaattcatga tgaaaatcta 300
cgaaaacagt atgagaagag ctctcgtttc atgaaagttg gctatgagag agatttttg 360
cgatacttac agagcttact tgcagaagta gaacgtagga tcagacgagg ccatgctcgt 420
ttggcattat ctcaaaacca gcagtcttct ggggccgctg gcccaacagg caaaaatgaa 480
gaaaaaattc aggttctaac agacaaaatt gatgtacttc tgcaacaaga ttgaagaatt 540
agggtctgaa ggaaaagtag aagaagccca agggatgatg aaattaagtt gagcaattaa 600
aaagaaagag agaagaactg ctaaggtcca caacgtcgac aattgaaaag ctttgctgca 660
caagaanaac aaatggnagt ttgtgaagta atgtgggagc cnttttaann atta 714

<210> 4464
<211> 742
<212> DNA
<213> Homo sapiens

<400> 4464
atatagcaaa tagaagagaa ctaatttgtc tcagatttct taaatgtgaa gccttttctt 60
tcaaaataaa tgtttagatg aggctggttg tagactttca taaagtacct gtgaaactat 120
ttttgttttc agaaagtgat tactattaat ataaaccaag atttacttgt aaaaagcagt 180
gttctcaggg tttatattat ggaacagtag cttcaaatac tttgtcttat gacagtaatt 240
cacttccttt ctttttcaca gagtaagttc ctctcagttt atacagagtg attttactta 300
ttttatttgg tggtagtggt ggaaggtggg agtattataa ataagcctgg aaaaatatat 360
agtgccacat taatagtggt tatctctgga taaaatttat aactctttct cttacttaca 420
gtgaatatat tttgtaataa acaaatcaag cttataagat tacaggtctt cagaataaga 480
ccatagatac attggtaaaa gattaataat ttctctaaac taggctattg agaaaattaa 540
tanacataaa agacaaaagc attcagctct tcgaagtata ttaagctgat tagaaaaatc 600
tgaaataggt ggcgccaaga tggccgaata ggaacaagct ccagtctgca nctcccanca 660
atgaacgatg cagaaagatg gggcgaattc tgcatttcca anctgangga ccaagttcaa 720
cctcaccngg ggggcttggc aa 742

<210> 4465
<211> 797
<212> DNA
<213> Homo sapiens

<400> 4465
attcctgctg tggatcccaa ctttcctaac aaaccacccc ttacatttga cataattagg 60
aagaatgttg aaaataatcg ctaccgtcgg cttgatttat ttcaagagca tatgtttgaa 120
gtattggaac gagcaagaag gatgaatcgg acagattcag aaatatatga agatgcagta 180
gaacttcagc agtttttat taaaattcgt gatgaactct gcaaaaatgg agagattctt 240
ctttcaccgg cactcagcta taccacaaaa catttgcata atgatgtgga gaaagagaga 300
aaggaaaaat tgccaaaaga aatagaggaa gataaactaa aacgagaaga agaaaaaaga 360
gaagctgaaa agagtgaaga ttcctctggt gctgcaggcc tctcaggctt acatcgcaca 420
tacagccagg actgtagctt taaaaacagc atgtaccatg ttggagatta cgtctatgtg 480
gaacctgcag aggccaacct acanccacat atcgtctgta ttgaaagact gtgggaggat 540
tcagctggtg aaaaatggtt gtatggctgt tggttttacc gaccaaatga aacattccac 600

0050350.00000

ctggctacac gaaaatttct agaaaaagaa gtttttaaag agtgactatt acaacaaagn 660
tccagttaag aaaattctag gcaagtgtgt gggcatgttt ggcaaaggaa tacnttaagt 720
tatgcccana anacttccgg agatgaggga ggttttggcc cggngaaatc caccgggaat 780
tccggccaaa aaccaan 797

<210> 4466
<211> 774
<212> DNA
<213> Homo sapiens

<400> 4466
gctctttagc agcttttcag caattacaaa gacaatatat gagtttttgc gtgttttgca 60
tatgcttgtg aaaattatgt agtaaatagg tgccaagtaa ggtatgtaga tagcaagtgc 120
tagtgcaatt tataggtgcc ataatcccta tggactgagt cagaaatggc ctaatagaag 180
gcagaagaga ggccagttcc aagcaggggc atagaacaga acaatctgca agggagttgg 240
gagcatatac cgctgggtta agacagtgag tgagaaaagg ctggaaggca gacagtgctg 300
ggcaaaggag ctggagcttg atcattgctg catacgaaaa tggaggcatt taaactggga 360
ctgagatggg actgagtgat taaattgcta ccagtgttag ttttaagagt tgaaaagctt 420
aatagtaaat tttaataagc ccatgaactt gattatggct acctttattt taaacaagga 480
gaccttaatg gacagaatca agaaacagct acgtgaatgg gatgaaaatc taaaagatga 540
ttctcttcct tcaaatccaa tangtatgaa aagttagttt cctgcctgga gcctgggatg 600
tcctgctata aaaaaatagc tttttcaagg gatgccgatt caatcatatc ctccaaggtt 660
taagaccgga ttaaaacatt ttnantcctg aaaaagcata anttcccttt gagcaagttn 720
gaaaaaaaat gangtaattt taaaaattta aattgccaat aaaaatcccc caaa 774

<210> 4467
<211> 809
<212> DNA
<213> Homo sapiens

<400> 4467
tttagcttgt gctcaagtcc tcttgctgtg ttttcagaag cactcacatg ttctttcttt 60
tcctgagtga aaagcaaagg tcccacggtg tgtgctgtgg tgcaccgcct ggctttgggg 120
gtcccggagg caggctgcct agactcacag cctcgggacc gttgccacgg cctgtcttct 180
cgttcaggcc tgcctctgac agcactcacc atgaggacat tccatccttc acccccctcct 240
ctggcacagg ccaccactgc ggtgctgtgc cttcagatgg gaggtgggcg cggtggccgc 300
ctccttccct ccaggacctg cccgtgtgaa gacccccggg agtgctgagc ttcagggctg 360
cgtggaaaga gtttttactc tctttttcta gcctgtatac caggctttc cccacattgt 420
caggtagagc accagcttcc ctgaccgctg ctgctcgggg agggctgggg ctggccgggg 480
gtcctgtgga ggagtacatg gaggactcca ggtacagcgc angagtcacg gcttttgttt 540
tttgacattg gcccccggtt ctaccaatga canggtgccc tggctggagc tgtcaatcac 600
acacaccctc anctccggag gctgttgggc tcctcaaagc tgggagaana ganggcaaag 660
atttttctgc acacggagtn ttngggaata agaacccggg ccaaacgctg ggccctcaac 720
ggtgnagccc tgcccaatcc ttaacgggca aaggtgggnt gggtcctggg aaagaagntc 780
cccccaaggg gggaaancna tgggtttcc 809

<210> 4468
<211> 840

US 2005/0048500 A1

<212> DNA
<213> Homo sapiens

<400> 4468
ttcaaaatct tctcaggcac actgatacac atacctcaga tttttaattc tccggttgtg 60
ttcaccaggt gcttggtcat gattaagaat tccgtgatgt gtaccccatg tgtttaaatt 120
tgctgctgag ttaactttgt ggcggcctgt ggactagacc tctgcacatg caatgcagaa 180
cggcagggcc agatttgaaa tcctgctatc ttttcggctg ccttgtaaaa ataacatcag 240
gcgatgggga tacgatgcca gaggtcacct gtgataagtt ctgtttatgg ccattttact 300
tctaggaaga caggaagtgt caggatctca gggatctagg aagccaaaat gtttttccac 360
tctgaaataa agtgactgac caggagttcc cggccacgca gccctgtggg aactgccgca 420
cggccacttt tatgaagtgg acacgtgttg gtcccactga aaagaaactc cccacccatg 480
gctccctcac gctgcagcag aggccctgcc acagcacctg tcagcccctg ccagcttgca 540
ggggcgcang cgcagagcgg tttgtgccct tgctggagcc agggaagggc acaaggtccc 600
tcctggagtc atgggaagtg canccgangt tctatattaa aaatacagag gctaagcaca 660
tgtgcttggg gaatgcagct acagtagtgg aatgaaagtg ctgtccgttc cttacccccc 720
cagcttctca actgtcctcc aaacgcatat ccctgggntc ccttttccct aatnaagggg 780
actgaaattg aaattggggg cttngcccca agggttcaan nacctggggc cctttcggaa 840

<210> 4469
<211> 797
<212> DNA
<213> Homo sapiens

<400> 4469
ttgtactaat ttacactcat gagatatttt taatggttac attattttag tatacagatt 60
gtcataggtt agaattaact taaaatttgc atttctaaaa gctatctttt aaaatgtatt 120
gaactggctt gagttggttt gaaatgacca ttcccttctt actaataagc ttatgcagat 180
tcattcacct ttcttttctc ttttctgttt ttctacagag aaagagaatt gggcttatcc 240
cgccagaaaa gcacagaagc cacagtgctt cttgttgaaa gacagaccct cataatgtta 300
cctctagtag aaagatagca tatgcttgtt ttgcttgttt gggttcatca tactctattg 360
cttgggcaga agagcacata tgaagagaag agaaatggga aatggggaag acaacgcaga 420
gcaccatatc ttggggtgta tatagaagct acaggacaag tgtaattttt atcattgcat 480
ggggagcatt gacataattt ctactgcagc tgagcatttt ttaatatgga taataggatt 540
ctgcaagtga tacatttggt cagagaactt aataaactaa gtcaagtggg gatangtcct 600
gtgacagaat tgtgtgatac agggcaaaca ggagttgggt tatgggggaa aatgccaagt 660
tgaaatatgt tttgatcctt tggngaaacc tatttttca tttaaacctg gtccttaaat 720
cccagttatg ttcccagaac aatacaanaa atgtttaaaa tgttccaatt tgtaagaagg 780
anancaangt natttta 797

<210> 4470
<211> 679
<212> DNA
<213> Homo sapiens

<400> 4470
ggttaaattt ttctgctaca ttgtctgctc agctcgtatt ctggtcatag aggaacctga 60
agccagagaa actagacaaa aaggaacctc tttcaggagc tataaaagaa agggaggaat 120

0002-0-0-0-0-0-0-0-0

catgtccaca attgcagctt tctatggcgg caagtccatt ctcatcacgg gggccacagg 180
ctttctgggc aaagtgctaa tggagaagct gtttcgcacc agcccagacc tgaaagtcat 240
ttacatcctt gtgaggccca aggctggcca gacactgcag caggggttt tccagatcct 300
agacagtaag ctatttgaga aagtcaaaga agtttgtcca aatgtgcatg agaagatcag 360
agctatttat gcagatctca atcagaatga ctttgccatc agcaaagagg acatgcagga 420
gcttctctcc tgtacaaaca taatatttca ctgtgcancc actgtacgct ttgacgacac 480
tctcagacat gctgtgcaac ttaacgtcac tgccacccgg cagctcttgc ttatggctag 540
tcagatgcca aagctggaag cctttataca tatctctact gcctattcaa attgtaacct 600
gaagcacatc gatgaagttt atctatccgt gnnctgtggg agccanaaaa nntcattgat 660
tcccttgagg tgggtanac 679

<210> 4471
<211> 683
<212> DNA
<213> Homo sapiens

<400> 4471
gtcacacatg gacagcctca tctattttat tgacccattt ccagatgctg ggattaccga 60
gttacattaa tacacagctt tttatggtat acagtaatgt aatatattag cctaatgtgt 120
taggactcct taaacaaggg atactgtaat cattaataca gttgatccat taggcttggc 180
acagtgttta ttttatggaa acactctaaa agaaaaacag acctgaagtt catcatgtgt 240
aaggttacac aaatctatct ttcaaatgag ttcattactc taaataattg tcagaagtta 300
catttttgtt taatataatc tttgcagtaa ccttccaaat tagggcaatt tttctgtcca 360
gatctgccta ctgaactaga atatttaatg agcaacaact tctgttgtga attaacggac 420
tgatattggg gtttgataaa tcagtttcct aaggtttgga taagccaaga gttagactct 480
aagaatataa aaaggcctag ataacatcat aaaagtaagg ttctagatcc acaaagcaga 540
gaactagacc cagattataa gtcactccag aggtcccatt tttctggatt tgagggaaga 600
agtgtttgat gacaagtatt tgnagtgant ttatatccat tttcttttaa aaagtaatag 660
nttgggaatt agntacntgt tta 683

<210> 4472
<211> 751
<212> DNA
<213> Homo sapiens

<400> 4472
aagaatagtg ttccacagac atctcagagt ctacacataa tcaacaaact gaccctggtc 60
ttctacatcc catgcttgat aatgccacat caactcagtt gtccaggcca gggacctggt 120
aatatttgaa gagttctcct tgttcttcag ccagttgtct caagtgccaa ttctacctct 180
caagtgtgta tctaattgtt tccttccttg ctactgctac tactttagcc attgccactc 240
cccatgagat tactgcattg atatgatggg gctctcctgg ttactaatct taaactcctt 300
cagtcaactt ccccactact ctctgagtag aaagtctaaa atacagataa tcatgacctc 360
ccaccatcca ccaccctgaa agtcatttta tgtctccttа tattattgaa cacaatgtct 420
caattcaacg tcgtanacaa agccatccat aatttgaaca gcatcctttc tctccattct 480
cccacattta ggttangtcc tggcccacgc tacccttca taagtctacc aacactccac 540
atcctttcac atccccanag tttgggatgt gctatttaaa tttgtcctcc ccaancattt 600
gtacttcctg gcaaacacac atactttctt ctccaggata actcatattc aattcttgaa 660
gacttgattc aagtttttc cccccggggg ncctccaaa aaccttcttc cccgggccca 720

0088470 6456250

attttgggaa antggnngtt ccccccaaaa n 751

<210> 4473
<211> 516
<212> DNA
<213> Homo sapiens

<400> 4473
gtttaagttc agcgcagcga ctcggggacc tggagctgac gcctagacac ttgtattagc 60
tttaatagaa gagaaatgga ggagccatag aatattaagg atgaattcag gaaggcctga 120
gaccatggaa aacttgcctg ctctctacac tattttccaa ggagaggttg ctatggtgac 180
agactatggg gcctttatca aaatcccagg ctgtcggaag caaggtctgg tccatcgaac 240
tcatatgtca tcctgtcggg tggataagcc ctctgagata gtagatgttg gagataaagt 300
gtgggtgaag cttattggcc gagagatgaa aaatgataga ataaaagtat ccctctccat 360
gaaggttgtc aatcaaggga ctgggaaaga ccttgatccc aacaatgtta tcattgagca 420
agaagaaagg cggaggcgat ncttccagga ttacactggg caaaaagatt acccttgagg 480
ctntcttgaa cactanctgc aanaaagtgt ggntgt 516

<210> 4474
<211> 820
<212> DNA
<213> Homo sapiens

<400> 4474
aaggatgaaa gcctgaacta gagcagtgga aatgcgaatg tggagcagag gaacgattca 60
agaaattctg cggtaaaact catcagactt catcactgat taaagattgt cttctcctcc 120
aaggtctaca tgattacctg aagtttaata ataatgcaag aagtgtttgt gggaagcaga 180
gaagcaagca actgtatttc ttgttctcac ctaagcatta ctggaggata agccacatca 240
gtctacaaag aggttttcat acaaacataa taagatgtaa atggaccaaa agtgaagcac 300
attcttgcag taagcactgt tactctccga gcaaccatgg tttacatatt gggattttga 360
aacttagcac ttctgctccc aagggactta caaaagtgaa catttgtatg tcccgtatta 420
aaagtacttt gaactctgtt tcaaaggctg tttttggcaa tcaaaatgaa atgatttcac 480
gtttagctca atttaagcca agttcccaaa ttttaagaaa agtatcggat agtggctggt 540
taaaacagaa aaacatcana caagccatca aatctctgaa aaaatatagt gacaaatcag 600
cagaaaagag tcctttttcca gaagagaaaa gtcacattat anacanagaa naagatatag 660
gtaaacgcag tcctttttcaa tacacaagtt ctataaccac aaaatttggg gactcaatct 720
actttttatc aaaatcatat taattcacat ttcaaaacgt aaggggaaaa atgtctcaac 780
aaaaagggga aatggnncat tttccngggc aaatcaanan 820

<210> 4475
<211> 679
<212> DNA
<213> Homo sapiens

<400> 4475
gaagtgaatg agccgtgcca aaaagacggt tggatcctgc atagtggtga gaggggtgat 60
ccattctgcc tcatcattta agctgtctgg agtacaagtt cagggaccta actgtggaag 120
aactaaggaa tgtaaatgta tttttcccac atttcaaata ttccatggac acctatgttt 180

0080205 "0 5ht 0 5 0 0 0 0

ttaaagatag ttctcagaaa gacctgctga attttactgg cacaattcct gtgatgtatc 240
agggtaatac atataacata ccaattcgtt tctggatttt ggattctcac cctttcgctc 300
cccctatttg cttcttgaag ccaactgcaa atatgggaat cttagtcgga aaacatgtgg 360
atgctcaagg cagaatatat ttgccctatc tccaaaactg gagccatcct aaatctgtca 420
ttgntggatt aattaaagaa atgattgcca agtttcaaga ggaacttccc atgtattcnc 480
tatcatcatc tgatgaggca cggcaggtag acttgctaac ctatattgca aaaatcactg 540
aaggngtttc aagatacaaa ttcaaaagag ctggggcaaa tcatganant aaaccagtca 600
ataaaattac ngtggttgga gggtgganaa actccggtat tgcctgcaca tttagcaatt 660
tcagcaaang ggtattgca 679

<210> 4476
<211> 587
<212> DNA
<213> Homo sapiens

<400> 4476
cttttctccc gccggctcta acccgcgctt ggctaaggtc cgcgggaacc cgtgagccac 60
cgagagagca gagaactcgg cgccgccaaa cagcccagct cgcgcttcag cgtcccggcg 120
ccgtcgcgcc actcctccga tggccacaga tgtctttaat tccaaaaacc tggccgttca 180
ggcacaaaag aagatcttgg gtaaaatggt gtccaaatcc atcgccacca ccttaataga 240
cgacacaagt agtgaggtgc tggatgagct ctacagagtg accagggagt acacccaaaa 300
caagaaggag gcagagaaga tcatcaagaa cctcatcaag acagtcatca agctggccat 360
tctttatagg aataatcagt ttaatcaaga tgagctagca ttgatggnga aatttaagaa 420
gaaagttcat cagcttgcta tgaccgtggn cagtttccaa caagggggtt ataccttga 480
ccggaatgtg ttatccaagc tgttaaatga atgcanaaga aatgctgcac caaaacantt 540
aannggccaa ctcantggca aagtcaaaat ggaccgggtt aaaaagg 587

<210> 4477
<211> 628
<212> DNA
<213> Homo sapiens

<400> 4477
gttagatata gttgttatga tttgtatcaa tccattttca cactgctata aggaactacc 60
tgagactggg taatctatga agaaaagagg tttaattgac tcacagttct gcatggctgg 120
gagtcctcag gaacttacaa tcatggcaga aggggaagca agacatttct tatatggcag 180
caggacagaa agagagagag tgaaggggga agtgccacac acttccaaac aaccatatct 240
tgtggttaat taaaaagtac tcattggtgt gccttgtata gaaaaaatat acactcacta 300
tcatgagaac agcaaggagg gagtctgccc ccaagattca atcacctccc agtagacccc 360
tcccctgaca tgtggggatt acaattcaag atgagatttg ggtggggaaa cagagtcaaa 420
ccatatcgtg attgttctat aataaagaga tgcccacatg tgtttcatca gggacagtgc 480
tcattaacca gttgtcctgc cgtaatttat tantagtatc ccccttgct ttcaaaaagt 540
gtcctaagtt tacaaaaagt atagaaattg gnggacagaa tagtggntgc ccnangattg 600
gaaaaagggt aagggtaaag ggtgcana 628

<210> 4478
<211> 764
<212> DNA

0088270.9150

<213> Homo sapiens

<400> 4478
atatattgtc agagactgcc aagcagccgg acacacgggg gcacagaatc actgaagggg 60
aaaaatacag aaaatatggg tttctacggc acattaaaaa tgatttttta caaaatgaaa 120
agaaagttgg accatggttc tgaggtccgc tctttttctt tgggaaagaa accatgcaaa 180
gtctcagaat atacaagtac cactgggctt gtaccatgtt cagcaacacc aacaactttt 240
ggggacctca gagcagccaa tggccaaggg caacaacgac gccgaattac atctgtccag 300
ccacctacag gcctccagga atggctaaaa atgtttcaga gctggagtgg accagagaaa 360
ttgcttgctt tagatgaact cattgatagt tgtgaaccaa cacaagtaaa acatatgatg 420
caagtgatag aaccccagtt tcaacgagac ttcatttcat tgctccctaa agagttggca 480
ctctatgtgc tttcattcct ggaacccaaa gacctgctac aagcagctca gacatgtcgc 540
tactggagaa ttttggctga agacaacctt ctctggagag agaaatgcaa agaagagggg 600
attgatgaac cattgcacat caagagaaga aaagttataa aaaccaggtt tcatacacaa 660
gtccatggga aagtgcatac atcangacaa gcacangatt tgntaccaac ctgggaggcg 720
aaggagaact caaatctccc taanggngct gaaaggggca ttat 764

<210> 4479
<211> 666
<212> DNA
<213> Homo sapiens

<400> 4479
gttgcctacc acatcagcat catgttctat ataataggag gtgtggccac tctcctcctc 60
atccttgtca tcattgtgtt caaggagaaa cctaaatatc cccccagcag ggcccaatcc 120
ctgagctatg ccttgacctc tcctgatgcc tcatacttag gttccatcgc ccggctcttc 180
aaaaatctca actttgtgct gcttgtcatc acctatggtc tgaatgctgg tgctttttat 240
gccttgtcca ctcttctgaa tcgcatggtg atctggcact acccgggggga agaagtgaat 300
gctggaagaa ttggcctgac gatcgtcatt gcaggaatgc ttggggctgt gatctcagga 360
atctggctgg ataggtccaa aacctacaaa gagacaaccc tggtagtcta tatcatgaca 420
ctggtgggca tggtggtgta cacgtttacc ttgaacctgg gacacctgtg ggtagtgttc 480
atcactgctg gcacaatggg cttctttatg actggctatc acccactggg atttgagttt 540
gctgtggagc tcacgtaccc aagaatcaga aggnatctcc tccgggctcc tcaacatatc 600
tgcgcaagta tttgggatna tctttaccat ctcccanggg caaattattn gcaactatgg 660
gancaa 666

<210> 4480
<211> 717
<212> DNA
<213> Homo sapiens

<400> 4480
tgtttcttgt tgctttggtt ggttcttcat ctacctttct ctgtttaaat ataaaaatca 60
ggtggaaaat atggaggact ttgattaatc aaactagtta agagatcatt tagtggtgcg 120
tccacacaat agtcatttct gttttttttc tttactttca acctttcttt aggctaaaga 180
gaagcttgtt tgttttcttt tctttttcca ctcatgtgca caatgaagtt tttagggggt 240
tgcaagtgta tagttcattt attttctttc ttgtttaaca attaattaca ctattccagg 300
ctatgaagaa aaacacaaat ggaagtatca accttactgg tagagtgcat ttctaattct 360

0050503.0004800

gctttcacag tggtaacgtc ttgttctcca aaacgtgtct tcctgtgaac atagctgtct 420
gggtcaggac tgctctagag aaatgctatc atgtgtcatg aaagttatac ttaactangg 480
ttaggccaga caaatactca atgtcatttt aaagaatcag agtgctataa ttttagctaa 540
tccctttaa ttccgatgtc attttggtca taagtttcta gaccaaactg gggagatccc 600
cgttaaaaaa gtatgtatac ctggaacata nattttaaga ttacccaant ttccaaaaat 660
tgtgtaaana ggattttggc aacaangtaa ggttgaacaa gtttaaaant ccggtca 717

<210> 4481
<211> 795
<212> DNA
<213> Homo sapiens

<400> 4481
gttttctaag acctccctgg cccgccatac gccgatcctg aacctacgaa aacccaagac 60
tgcgggcacg gtggctcatg cctgtaatcc cagcactttg ggaggccgag gcgggcagat 120
cacgaggtca agaagtcgag accagccttg ctaacatggc gaaaccctga ctctactgaa 180
aatacaaaaa ttagctgggc gtgatggcgt gcgcgcctgt agtcccagct gctcgggagg 240
ctgaggtagg agaatcgctt caatccggga ggtggaggtt gcggtaagca gagattgcgc 300
cactgcactc tagcctggcg acagagactc cttcaaaaac aacaacaaca acaacaacaa 360
aacaaaacct cccaagaccc tagtgggcag acacacagcc agccaagaca tggagaggag 420
cacattagca gaagaagacg caagtggctg gtcctcgaga ggacgttgag aggagcatgc 480
caagcaagaa gagcacacaa cgacaggcac cgacacacca ccggcaggcc atgcaccagc 540
agaatgatgc ggagtttgac ggggcagtca agagaagagc ctgggccgcc aangggcccg 600
actccagggg aaaacatctc ccttctggnt cccccatctg ctgagaagct acttctactc 660
aataaaactt gcactcantc tccaagccca cgtgttaatc cgattcttta agtgtcacct 720
cccaaatgtg gaaaatgcat tgtctttctt ctttcccnag gccaattggn cctcaaaant 780
tnagncaagg tttaa 795

<210> 4482
<211> 414
<212> DNA
<213> Homo sapiens

<400> 4482
gcgccggtgg cgggactctg gggaaaatgg ctgcgtcttc gagtggtgag aaggagaagg 60
agcggctggg aggcggtttg ggagtggcgg gtggtaacag cacacgagag cggctgctgt 120
ctgcgcttga ggacttggag gtcctgtcta gggaacttat agaaatgctg gcaatttcaa 180
gaaaccaaaa gttgttacag gctggagagg aaaaccaggt cctggagttg ttaattcacc 240
gagatgggga atttcaagaa ctaatgaaat tggcacttaa tcagggaaaa attcatcatg 300
aaatgcaagt tttagaaaaa gaagtanaga agagagacag tgatattcag cagctacaaa 360
aacagctana gggagcagaa caaatactgg caacanctgt ttaccaagcc aagg 414

<210> 4483
<211> 701
<212> DNA
<213> Homo sapiens

<400> 4483

0962946.0720

cgggttttag catgtatagg agattccaaa gcagagttac ctatatcaat tttagtacta 60
ttattttcat attctactgg ataagaaatt acttatttgg aactaagaat tattcttgca 120
acagaagctt atcagtaaca ctatttgatt gctttttgct gtgtgcacag gtgaggacct 180
gtctagactt ctatactatg tacattgtat taattttgtt cataaattag gtaattgagt 240
tatagatact aatttaatat ttaaaaaatt tagattgttg attttaaata tcagaataac 300
caaactgtaa caacagtgct gggattttgg tatttaaaaa gggcagagta taccaagaat 360
attgaaaact ggtattgaaa tcactacata taattgaatt atgaaaaagt acctttaaga 420
taataaagca ctacataaat atgagctcat atcatatatt tgacagtagg gcattatttt 480
tacaggttaa cattcaatta atctgactat gaattagaaa aatcttgaat ttgtagagtt 540
catttaactt tattaaagca atttgccaac tcagctacag aaatacagaa aatattacta 600
tctggagaac tacccagtcg taagtttatc ntcgttgaaa ttgcctaagc agaggattan 660
gtggccaatc ctcaaggaat agtatacgaa ggnttcccgc a 701

<210> 4484
<211> 854
<212> DNA
<213> Homo sapiens

<400> 4484
tattgttttt ttaagcttct tcatctacaa gcagagatgg taaaccttgc atatttttga 60
aagcatttga agacctcaaa tcaactgttt atgtttatgt caaatcttta agagattttt 120
ctacagaatc aatgtctttg gttccagcaa caaattatat atatacaccc ctgaatcaac 180
ttaagggtgg tacaattgtc aatgtctatg gtgttgtgaa gttctttaag cccccatatc 240
taagcaaagg aactgattat tgctcagttg taactattgt ggaccagaca aatgtaaaac 300
taacttgcct gctctttagt ggaaactatg aagcccttcc aataatttat aaaaatggag 360
atattgttcg ctttcacagg ctgaagattc aagtatataa aaaggagact cagggtatca 420
ccagctctgg ctttgcatct ttgacgtttg agggaacttt gggagcccct atcatacctc 480
gcacttcaag caagtatttt aacttcacta ctgaggacca caaaatggta gaagccttac 540
gtgtttgggc atctactcat atgtcaccgt cttggacatt actaaaattg tgtgatgttc 600
agccaaatgc agtattttga cctgacttgt caactcttgg gcaaagcaga agtggacggg 660
ngcatcattt cttctaaagg gtatgggaat gggcaaccag gacaccaatt tccaatcctt 720
gggagaagtc ctaaatacaa ggacctttgt tccttgaaag ggggatttta agncacatcc 780
atccggntta caaaaatcct gacaattaga caattttagn ccaacggata accaatggtt 840
caaagtgggc aann 854

<210> 4485
<211> 749
<212> DNA
<213> Homo sapiens

<400> 4485
ctccaagatg tgcatagcca aactgggata gaaggcaaac tccccaaagc tacctgctgg 60
ttttgagagg ggtggtaaga catggcaatt cccaggagta gtagaaaata atatgcctga 120
ctaccaacag ctcaagtatg cttatttgca catcctagac ttggtgtctg taagactcag 180
ttaccacttt tattttcctg tagctaggag ttagcaaaag gaactggggc cttccagccg 240
agccactaaa cctgtcttat ttggaatggg gattgtccag cgaagggagc aaacatgaat 300
tagatgttaa gctattgagc tgaagaaaag aaagcagttc acatttaggt gaaatagatg 360
atgttatcag gaagccaggt tcccaccaga gtcggtgctt ggtacctggt ctctccagtc 420

0956345.0076800

tcaacagact caggtcaggt ctctcaccca ggaagcaacc actcaataaa atagagaaca 480
tctgagaatt acaaatgtct atgcttgatt gctcctctaa atccagtgca taggttaacc 540
ctgcatgccc atttcttcct gggcttcttg atggcaatgt gttctaataa ctggtcttgt 600
gttcatgcta aagacaaact tacatgaagt ttttcagttt aagacattcc agtgaatggc 660
tgctatgtgt ttctggcact cantcctaaa ccaagtctta naagatttca gaatgacctt 720
taaagatgcc aaanancttt ttccnttcc 749

<210> 4486
<211> 670
<212> DNA
<213> Homo sapiens

<400> 4486
gttgcaggca cccaggtgtt gactgcgtgt ccattgttgt tatagttggt tgaatctgtc 60
ccattaattc tccttcccca ggcaagactc gtggctgtga cccatgggcc tctgaggagg 120
cgttgtaagt ccgcccagct ccccacttgc tgtgctctca ctcaatgcga agggaaccaa 180
ggtaccaggg ccaagtgggt ccagacatcc acacggattc tgaaagggca ggtcaagcag 240
gcacgtgggg cccaggttac cccttattcc ccgctgtggc atgggaagct gggaagggct 300
gggggttggg gtatcatggg atgtgcttcc ttaacggttc ctttgtgtca ctgccagact 360
ttgtccagcc atcagccacg gcctctcgac agcaccaaga tggaagtcaa aggtcagctg 420
atcagctctc ctaccttcaa tgccccagct gccctgttcg gagaggctgc cccccaggtg 480
aagtcagagc gtctgcgggg gctgcttgac cggcagcgga ccctgcanga ggccctgagc 540
ctgaaacttc aggagctccg caaagtgtgt ctccaggagg cggtgagggc ctggncctan 600
gggtatcagg cggngaggtt gggaggangt gaggatctgg gggcccctag gtacanagac 660
tttgggtggg 670

<210> 4487
<211> 679
<212> DNA
<213> Homo sapiens

<400> 4487
aagagcagta acacaaacag ggctgaaaca cgccctcctc ccgtccccac acccccgcga 60
cttgccatgt tgcgggtgat gtgaaggaga gaagtgctgt ggcccttcag ggagcacaga 120
cctaggggct ccctgagcca gggctgtgac accctctttg gggctctgcg gtttctggta 180
tcttcaaact tccgggcacc actgcattcc ccttgtccag acacaggtgc ccacagcaga 240
agccgcttgt ggttcatcag atccagctgc agacttgcat agaaccggcg cctttgccgg 300
cgcctggagc tgcctgccca gctgcagcag ctggtgtgtc cggctctgcg cagtggccaa 360
accctgcgtt cgctcgcctg cacacccctc gctgttccgt gcctggctca ccctcggcag 420
gcgtggaatc ctggctggta gcatgagctg agcacagcct gccaggccac gtcagtggaa 480
caagtctggc ggggcctgat caaaactcag gcaaaggcac cactggtcac agagctttct 540
anctggaaaa gcaacacctg aaggatcccg tgacacaatc aacctgctaa ggagatccct 600
ggccaaccct gaaangctgc aggaaactgc ctccatccaa ggcctcttta aaanaaggga 660
ganttgcann agaaccgtt 679

<210> 4488
<211> 771
<212> DNA

US20050250120A1

0050205450.seq

<213> Homo sapiens

<400> 4488
ctgtacaagt ttactgctag tgcctcacat acagagagaa aactgaaaca ggcaataaac 60
tattcaaaaa gtttagacat ggagaaagga gttgagaatg acctaagcta tcagaatata 120
gaggaagaaa ttgttgagct tccagatttg gattacctgc gaaccatgac tcatatagtc 180
tttgtagatt ttgataactg gtcaaacttt tttggtcatc taccagggca tctaaaccaa 240
ggaacattta tttggggctt tcaaggagga aacaccaatt ggaagcctcc gctcaactgt 300
aagatttata actacctgaa caggattgga tgcttcttcc ttcatcctcg ctgtagtaaa 360
agaaaagatg ctgctgattt tgccatatgt atgcatgctg gccgtctaga tgaacaacta 420
cccaagcaaa ttcctttcac catcctctca ggagatcaag gttttctgga gctagagaat 480
caatttaaga agactcaaga ggccagctca tatactaaac cctcaccact tagagggaga 540
tatgatgtgt gccttgttaa atagcatatc tgataccacc aaagaatgtg acagtgatga 600
taacatgggt gccaaaaata cttcaatagg agaagaattt atatccacag aagatgtgga 660
attagaagaa gctattagaa gaagtcctga gggaaatggt aattaaagat ntttaccaca 720
caacatcaag tgggccttga aanaagaccn gagataacna aantccttga g 771

<210> 4489
<211> 764
<212> DNA
<213> Homo sapiens

<400> 4489
gtgtcttgga attcgttctt ttgctgatgc ccaaggttgt acagatttgc ataaagtggc 60
tcacaattat actatggagc atttcatgga agtaatcaga aaccaggaat ttgtattatt 120
accagccagc gaaattgcaa agctcttggc tagtgatgac atgaacattc ctaatgagga 180
gacaatattg aatgcacttc ttacttgggt ccgtcatgat ttggaacaga gacggaaaga 240
tctaagtaaa cttttggctt atattaggct acctcttctt gcaccacagt tcctggcaga 300
catggaaaat aatgtacttt ttcgggatga tatagaatgt cagaaactca ttatggaagc 360
aatgaagtac catttattac cagagagacg acccatgtta caaagtcctc ggacaaaacc 420
taggaagtca actgttggta cattatttgc agttggggga atggattcaa caaaaggagc 480
aacaagcatt gaaaagtatg atctccgtac aaatgtgtgg actccagtag caaatatgaa 540
tgggaggagg ctacagttcg gtgttgcagt gctagatgac aaaactgtat gtggttggag 600
gaagagatgg actgaagact ttgaatactg tanaggtgct acaaccccaa aacaaaaact 660
tggagtgtga tgccacctat gtccacacat agacaatggc cttggnngtg gctgtaccng 720
gaagggccca tgtatgcccg tanggaagga catgatnggc tgga 764

<210> 4490
<211> 693
<212> DNA
<213> Homo sapiens

<400> 4490
tacaaagcaa accaggagaa ttttcataat acctgataac tatgtaagac ttggaatatt 60
tgaatttcta ggacatggga ttgtgcaacc attcatttta tcccataata ttgaaatctc 120
cctcagataa gcctctcggc acctaataga gttttcttag tgaagggcta cctttctgtg 180
ggtaacaggg aagggcaaaa taaacaacca aataatatca taatcacgag tgtcaatgat 240
tgctggaaca ggtgggggtt ggtcattaaa ttctagttgt ttccactatt ccagtaggag 300

ttgtgtgaat gttagcaaaa gaccagggtg ttacgatctg actgtgtttc atcaattgcc 360
ttgacttttg gatgaaatgc gatttgagga catatcatta ttagatttgc cacagattcc 420
aatttttttc tctaatatga ggctaaccat gatgtccttt cccaggaagg acaatctctc 480
ctttatcagg gaaaaatcgg taagggcttc ctcaattttc tccttcatcc ccaccacaga 540
gtcatanagg tcaagtcctt ttcttgggaa acctaaaaaa tgcaaattcc aaggntgctg 600
ctaaggtgta ctaattttgg cacagtgaca tgccctgtca cagggcgtat gtgntctgtt 660
anacaagttg aaaatattgg gttaaaccnn att 693

<210> 4491
<211> 725
<212> DNA
<213> Homo sapiens

<400> 4491
tttattttct gatctcagaa gaattgtata ttgggataag tttttaattc tataacttaa 60
aagtaaaaat cctttgtaat tttatgttct aatagtttta gcagtttggt gtgattacac 120
agagcacatg catattaacc aaaataagat catattatat accattgtat aatttttttct 180
ttttattacc aaattggtac attgaatact acttcacctt tttatggctg cttagtgttc 240
cattttatta ctgattttaa taactcccaa ttgatgaaca ttggggttgt tcccaaattt 300
cccctattat gggtaaagtt atgttcataa tgtctagcta tatttctgtg tacatttata 360
atctttaggc taaattcctg gaggtagaat tgctagatcc acatgtatgc acagtttaaa 420
ggtgcttttt catagcaatt tatggcccca agaaagtgag agtgagtgtc tttgtttatg 480
ttgctatgaa aggacacctg gagctgggta atttataaag aaaagaggtt tatttggctc 540
acngttctgt gggctatgaa agaagcatgg tgccggcatc tgtttcnagt gagggcttca 600
ggctgtttcc actcaaggtg gaaggggaag gggggagcct gtgtgtgcaa gatcacctgg 660
caagagnagg aagaaggaaa gaggggangg agggaggana ngaggtnagt gggctttttt 720
tttaa 725

<210> 4492
<211> 830
<212> DNA
<213> Homo sapiens

<400> 4492
aaaagcgcta gggttgcaag tggcaccaag agacgtgccc ttgtcccggg gtccatttga 60
gggtgagcgt gttggtgccg agctgttttt ttgttttgtt ttgttttgtt ttgtttttga 120
gaccgaatct cgttctgtcg cccaggctgg aatgcagtgg tgtgatcttg gctcactgca 180
acctccacct tccgggttca agtgaatctc ctgcctcagc ctcctgagta gctgggatta 240
ctggcaccca ccaccacgac cagctaattt ttgtattttt agtagagacg ggttttcacc 300
atgttggcca ggatggtctc aatctcctga cctcaggcgg tctgccttcc tcagcttccc 360
aaagtgctgg gattacaggt gtgagccacc gcacccggcc agtgctgagc tgttttgaca 420
acttggaccc cgggtcctct gtgggtagga aaatcagctc cctctttgct cctctggggc 480
agctgcacct cgggccagct ttctgcctgt ctgcctgccg gcactgctgg gtcgctgtac 540
ccaaacgcac agccggtgcc ccgtgctana aggtcttcaa gtttccagaa gaaccaaagc 600
atctttggac ctacctaagg gaaggacctg cctgtgaacc tttgccctgt cctgggangg 660
tccagctttg gggctgaaat gggcaagcac ccaacgctgg ggccgtctgg gtgcctggac 720
cccaccttgc tgggtgggcc ccttttttggc aatggggcct ccctgggggc ctggcctgtt 780
naaccggggg aattctnggg ggtnggaagc tngncctggt ggggtggggt 830

0562456.0720800

0095045 0095045 0095045

<210> 4493
<211> 768
<212> DNA
<213> Homo sapiens

<400> 4493
aaagcaaacc taggaagtag ctttccaaca taaagtggag gtttcaacac aggagacttt 60
aagcaagttc cagtgtgtct atatttggtc tggctgatcg gctggactct ggccttcccc 120
gctcacgtta gcagacagct ctgccctagt gggcgcttag cctgcgacgg cagcccgaga 180
ggatgtctaa caagcttctt tctccccacc cccattcagt tgttctcagg tctgaattca 240
aaatggcctc atctcctgct gtccttcgag cgtcccggct gtaccaatgg agcctgaaga 300
gttcggcgca gttcctgggg tctccacagc tgaggcaggt tggtcagatc attagggttc 360
ctgctcggat ggcggcgacg ctgatcctgg agcctgcggg ccgctgctgc tgggacgaac 420
cggtgcgaat cgccgtgcgc ggcctagccc cggagcagcc ggtcacgctg cgcgcgtccc 480
tgcgcgacga gaagggcgcg cttttccagg cccacgcgcg ctaccgcgcc gacactcttg 540
gcgagctgga cctggagcgc gcgcccgcgc tgggcggcag cttcgcgggg cttgagccca 600
tggggctgct ctgggccctt ggagcccgag aaaacctttg gtgcggctgg tgaaaccgcg 660
acgttgcgaa cgccctttgg gcgttggtgc tnggaggtgc tgggatgggc caagaanccc 720
gaaccccggg gcgggntgct ggtgccaaaa cgcngggaag aagnggcc 768

<210> 4494
<211> 541
<212> DNA
<213> Homo sapiens

<400> 4494
actcgaacgc gcgacggcgg ggggaagatg gcggagtccg gcggtagcag cggtggtgct 60
ggtggcggcg gcgctttcgg cgcgggcccg ggccccgagc gcccgaacag cacggccgac 120
aagaacgggg ccctcaagtg caccttctcg gcacccagcc acagcaccag cctcctgcag 180
ggcctggcca ccctccgcgc tcagggccag ctcctcgatg ttgtgctgac tattaacaga 240
gaggcctttc ctgcacacaa ggtcgtcctg gctgcctgca gcgactactt cagggccatg 300
ttcaccggcg gcatgcggga ggcaagccag gacgtcatcg agctgaaggg cgtgtcggcc 360
cgtggcctgc ggcacatcat cgacttcgcc tacagcgccg aggtgacact ggacctggac 420
tgcgtgcagg acgtgctggg cgcngccgtg ttcttgcaga tgctgccccg ttgtggaagc 480
tgtgcgaaga gttcctgaan ggcnggcatg aagcgtngag accttgcctc aacatcggnc 540
a 541

<210> 4495
<211> 714
<212> DNA
<213> Homo sapiens

<400> 4495
ttagcccttc cctttctgct tccatttcta tcccaaaata tgagccacaa agagaaattt 60
ggggaattag aaggaagaga cttaagggaa aatgtatatg tcattggtgt atgtgtcagt 120
tttcagtcat aacttgggtt gggggaagtc agtgtaccct ttactcttgc tgaggaaatt 180
tcttctgagc cttagccaca tcccacttgc ccagggcatc attcttttct ttttttttc 240

tggcatatat ctctacttca gattcaaact tggccattac ctctggccag ccaagcagct 300
gtcccctgag agggggggcca actctcctgc ccctcactgc ctgcctccca aggctgccct 360
agggctcagc tgaagaaggc ggttgtgctt tgctgccccc tgttgctcaa gtcctgcttt 420
tccataggag ctgccgggct gtatgtctgg atgtgacttc tccaggcagg tcctcctctc 480
ctgcccgcag tgctctggct cctcagggta ggtttctgtc caggacatgg cccctgaaag 540
ggcttggnaa aagccccctt gcgtantact gggctgagct tctaacttgc tgccccaaga 600
actccagaga gtgacccaaa catctggtat agcctctaat cttaactagt caagtcatgg 660
tttctccttc aaggccncct tccnaagaac agtttccctg gnngaancag aata 714

<210> 4496
<211> 776
<212> DNA
<213> Homo sapiens

<400> 4496
gagaccaagc cctgagacac agtgttgaga gccaagacat aaagttgtgg agattcagac 60
ccagagccca gcagggcaca ggctggaggg gtgatgtgag tgatcagtaa cactatgaag 120
actctgctcc tggatcagga atgctttttt gtccctgttt ttggattttc caccatgatc 180
agccaatgca gaaagaaatc taaaggtgaa ggaaaggcag cgttcagcac tgagcaagtc 240
catgttggag aaagttcaca gggaattgga aatccttgtc ttcgtggttc ctggctcagc 300
aggacccctg tggggcctct ccctctcttg ggaaagagat tgctctagaa ggtttactac 360
accagtgagg agaagatgag cgcaggggggg attggccggc tgagggcgaa atcaagactg 420
gagccaagtg cgctgagctc tcacatgagg tcctttgctc ctgttccctg gaggcataag 480
tggctggggt agagagaagc aggggtattt cttctgtcct ttcttgctta gggattgggg 540
gtggaaatct ccccgcatct aaggaaattt gaaaaagaca aactatggct gcttcttcaa 600
gcaaaccacc tcaacacact atccanggga taaaacccgc ttgctgctgc taaattatgc 660
caagagagaa cattctgata tttctcccca aattctaggc angcancgtt aacttggggc 720
ttaaaaggca tggagttttt gagttgcaaa nctaaggttg aantgctgaa anctac 776

<210> 4497
<211> 355
<212> DNA
<213> Homo sapiens

<400> 4497
gttttgccgg cagcccccgg gcagcgttca tagctcctgc ccgggcgggc gcgcggcggc 60
ggcggcagag gcggctgagc ctgagcgggg atgtagaggc ggcggcagca gaggcggcac 120
tggcggcaag agcagacgcc cgagccgagc gagaagagcg gcagagcctt atcccctgaa 180
gccgggcccc gcgtcccagc cctgcccagc ccgcgcccag ccatgcgcgc cgcctgctga 240
gtccgggcgc cgcacgctga gccctccgcc cgcgagccgc gctcagctcg ggggtgatta 300
gttgcttttt gttgtttttt aatttgggcc gcggggaggg ggtttngnng tggtc 355

<210> 4498
<211> 717
<212> DNA
<213> Homo sapiens

<400> 4498

09623469 - 072808

caactcactg atgaaaagga ataaaccaca aatgcctgca acgccatgat gaatctcaaa 60
acatgctgag tgtagagaag ccagacacaa gagtagatac tcctatacaa ttccacttac 120
atggaaatct agaaaagaca attcgaatat atagtggcaa aaagcagaag agtggttgcc 180
tggaaccagg gtgggaatga agattaactg cccagaggca taaaaaatgg ggtggtgggg 240
gcggtgatgg aaaagtgcta tgccttcact gtacctttgt caaaacttgt tgaactgtat 300
acttcaaatg ggtgtgtgtt ttattgaagg taaatttgac cccaataaca tttatttta 360
aaaattaaga gcaaacagaa aaagcttaga ctaggaatct ttaatttgaa ctataattct 420
gtctactgtt tccactgagg tggtctttca gcaaatgact cagtagtttt aagcctcagt 480
ttcttcaact gtaaagtggg aataacaaca ggcaccccat ggggttgcct atgaaatgca 540
atgatgaatg acctaancct taatgagcgc cctatgtgcc aagcactgtg ctgaatgctt 600
tgcagaaaac gaaattcatc cttatcagat angttcctgg aacactggaa aagcactatn 660
caaatgttag ttacagggaa tccntgcacn ttngaagggg cctgttaaat tggtgaa 717

<210> 4499
<211> 685
<212> DNA
<213> Homo sapiens

<400> 4499
tttttaacca cctttactct cttctacatg aagagttggt ggcttaatat gaaaatccag 60
gttattttgt ggccttatcc cctaaaatat tttaggcatt accatatcag tttttatttt 120
tatgtttatt tattattatt atttttgag acagagtctc actgtcttgc ccaggctgga 180
gtgcagtggc ctgaacttag ctcaccgcaa cctccacctc ccgggttcaa gcaattctcc 240
tgcctaagcc tctcgagtag ctgggactac aggcgtgcgc caccatgccc ggctaatttt 300
tgtattttta gtagagtcgg gggtttcact atgttggcca ggctggtctc aaactcctga 360
ccttgtggtc cacccgcctc agnctcccaa agtgctggga ttacagtcat gagccaccat 420
gcccagccta ccatatcagt ttttaataac ttgaactgaa attattggct tggnaatant 480
tgggcaggcc attaattcnc attagaaant tacttaatat ttcaaaaaat tgactaaaac 540
tggnaatctt tggggaggcc cattttgcaa gtggaaacct gtatttatca ttaagtttgt 600
ctttaactat ttgttaacag attttaacag ttcaaatgaa anatgttaac ganatgcnnt 660
ttgagtccgg ggataccnca ggtta 685

<210> 4500
<211> 692
<212> DNA
<213> Homo sapiens

<400> 4500
aagtaggcgg agaaagcaga ggaggaccgg cgggccaagc tttcctagcc tgacagcagc 60
catttcggaa cgtacgtccc agccctcttt agctacttag cgcctctggg cccgagaaca 120
cctgctcctt ggctcagtct ggcgccaccg gcatcacgga actgtacttc ccagagacgt 180
cacaccggga gacttccgat tcccgctctt gagattggac tctcacgtgc aggagccagt 240
cctcgctggg ctctagcggg cttctgatgg aggagctact cctctgggag gacagaantt 300
agcancagcc tctgtcacca tccaaagatt acaacccatg aaaccattga atttgtgcct 360
tgtatcagaa agcaaaggag aatgaaaaag cacagctaac attgcttgag gatctaggcg 420
attaattctt tagactgtca tcatgggtat ccgangacta atgagttttg tggaagatca 480
taagcaatga attcttcact gatttgaagt tgcgggacac aaaaaattgt caatgatggg 540
gtatgctcct tttccaccgt ctttgcttca agttcaaact tggatttccg gtatggangg 600

0356030.0720000

gacnatgatt cctttgcaga atgttggnca aaaaattctt tgaatcactg tttgcnttgt 660
aaaaaaatgc ccaaaatgtt ggattaanat gg 692

<210> 4501
<211> 678
<212> DNA
<213> Homo sapiens

<400> 4501
aagtcatgct ggaaactccg gagtacagaa gtaggtttac gagtgaagag accctgatgt 60
tctgcatgag ggtgatggtg ggagtcatca tcctctatga ccatgtccac cctatgggag 120
ctttctgcaa gacatccaag atcgatatga aaggctgcat aaaagttttg aaggagcagg 180
ccccagacag tgtggagggg ctgctaaatg ccctcaggtt cactacaaag cacttgaacg 240
atgaatcaac ttccaaacag attcgagcaa tgcttcagta gagctctgct caaagaagag 300
gatctatgtg ctgacctcag aagatgtata tgtttacata atttaataca gattgatgtt 360
aatacttgtg tatttacata accgtttcct tcttgtcact gaaatatatg gaccttaatt 420
tgtatcctga ctgactcaac ccagcagagc ataaattgac ttgagagcct tacctttgat 480
gtctgaaatg aaacccccct ctccaaaggc aaaattcgga gactttgatc tttgctactg 540
gagtccttta acaacaccta taacgataaa aaattcctaa ttgtttgtgg tagtatttta 600
attctanatg tgttatctct ccgggaagta tangtttata ggaaacacaa natanttgat 660
ttcccggtgt cngttcag 678

<210> 4502
<211> 788
<212> DNA
<213> Homo sapiens

<400> 4502
ctgcaccggg ccaggcaaga tggcggccat ggagaccgag acggcgccgc tgaccctaga 60
gtcgctgccc accgatcccc tgctcctcat cttatccttt ttggactatc gggatctaat 120
caactgttgt tatgtcagtc gaagacttag ccagctatca agtcatgatc cgctgtggag 180
aagacattgc aaaaaatact ggctgatatc tgaggaagag aaaacacaga agaatcagtg 240
ttggaaatct ctcttcatag atacttactc tgatgtagga agatacattg accattatgc 300
tgctattaaa aaggcctggg atgatctcaa gaaatatttg gagcccaggt gtcctcggat 360
ggttttatct ctgaaagagg gtgctcgaga ggaagacctc gatgctgtgg aagcgcagat 420
tggctgcaag cttcctgacg attatcgatg ttcataccga attcacaatg gacagaagtt 480
agtggttcct gggttattgg gaagcatgac actgtctaat cactatcgtt ctgaagattt 540
gttagacgtc gatacagctg ccggaggatt ccagcaagag acagggactg aaatactgtc 600
tcccttaac tttttgcata catactgggt tgagtcagta catancantg ggaagctgca 660
aaaggggccg aaacaaaaaa tggnagtttt tctaaccaaa tgtccaaacc aaatgggctc 720
caaatccaan ctgctatttg acatgggttt aataatangg gngctacttt ttaccngacg 780
gggnttta 788

<210> 4503
<211> 857
<212> DNA
<213> Homo sapiens

0956203.0002

<400> 4503
agtgtaataa ggtcccggag aagtgtcact ggccctgagt gggacccggt agcccgttcg 60
ctccgcgccg gcggcctgtc cccgcggctt ggcgggctag ggcaggggaa atgttgcagg 120
aggagtcgga cctctctctc attattgccc agatagtcca aaagctcaag ggctccaatt 180
tgtactctca gctggaacgg caggcctggg ccagtcttca gagacctgag attaaacttg 240
aatcactgaa agaagatatt aaggaattct ttaaaatatc aggttgggag aagaaacttc 300
agaatgctgt ttatagtgaa ctgagtgtgt ttcctttacc tagtcatcct gctgcacctc 360
ctgaacatct taaagaacct ttggtataca tgaggaaagc acagggaagt tgggaaaaaa 420
gaattttgaa gagtttaaat agtatgtgca ctgaactgag tatcccactg gcacgaaaga 480
ggccagttgg agaacagaaa gaacttctta ataaatggaa tgaaatggga actgatgaac 540
cagatttaag ccttttcaga cctgtttatg cacctaagga ttttcttgag gtattaatta 600
atcttcgcaa cccaaattat gaaaacggtg attctcccta gtttcaggga ctcatttggg 660
gtttaattca agttccactg aaaagtaaaa gacatcccct gaaatttgaa aagaatgcct 720
ttgtgggaac ttgggcttaa aattattagg gacaaactgg ggtatnagaa tgaattccta 780
cacaaagtng ccctcctggn aaacttttt gaaaaattgn gcaatgttac gnttttggg 840
gccaaaaaaa ggttcct 857

<210> 4504
<211> 411
<212> DNA
<213> Homo sapiens

<400> 4504
attaatatat gaagaaaact gaacagtcct taatctgtgt aggcattaca tccatttgta 60
ggaggtattt ggtgacttgg tacaggtttc tttgttttgt gtggtttgtt gaagatgcaa 120
tgaccgggat gaatgagtga acagctgggt gaggcagggg atgggcatta tgaagttggg 180
ggatatattg tagatgaaac agatgaccct aaggaggtaa tgagggggtg gactaaagaa 240
tgacgaatgg gagaagggaa aatattgaat tcatcttagc acaagtatat catcctttga 300
agaataatcc aaaacacatt ccagacatta attgtgaaat tcctgaaaaa tgtgggtgtg 360
cttaacatct cccangctat ggtgcaagca gagatgatan tgttgcttta n 411

<210> 4505
<211> 855
<212> DNA
<213> Homo sapiens

<400> 4505
gtgatccggg gccccgggaa cccgagctgg agctgaagcg caggctgcgg ggcgcggagt 60
cgggagtgca ggcctgagtg ttccttccag catgtcggag ggggagtccc agacagtact 120
tagcagtggc tcagacccaa aggtagaatc ctcatcttca gctcctggcc tgacatcagt 180
gtcacctcct gtgacctcca caacctcagc tgcttcccca gaggaagaag aagaaagtga 240
agatgagtct gagattttgg aagagtcgcc ctgtgggcgc tggcagaaga ggcgagaaga 300
ggtgaatcaa cggaatgtac caggtattga cagtgcatac ctggccatgg atacagagga 360
aggtgtagag gttgtgtgga atgaggtaca gttctctgaa cgcaagaact acaagctgca 420
ggaggaaaag gttcgtgctg tgtttgataa tctgattcaa ttggagcatc ttaacattgt 480
taagtttcac aaatattggg ctgacattaa agagaacaag gccagggtca tttttatcac 540
agaatacatg tcatctggga gtctgaagca atttctgaag aagaccaaan ngaaccacaa 600
gacgatttaa tgaaaaggca tggaancgtt gggtgcacac aaatcctctc tgcccctaaa 660

0956969 D7220

gctacctgca ctccctgtgg acccccccat caatccaatg gggaaacctn gaccctgttg 720
acaaccaatc ttcaatccaa gccacaaacg ggactcatca aagaattggg gtcctgttgg 780
gntccctggn caaccaattc aaacaaatca atggtgtaag aacctttttc caagaaagag 840
ccncnaggna aatcc 855

<210> 4506
<211> 768
<212> DNA
<213> Homo sapiens

<400> 4506
atgtgactgc actgaaatct aaggatcgga aagaatctgt ggttcaggag gaaaattcct 60
tttcagaaaa tcagccattt ccttctctta agatggtttt agagtctttg ccagaagatg 120
tagggtttaa cattgaaata aaatggatct gccagcaaag ggatggaatg tgggatggta 180
acttatcaac atattttgac atgaatctgt ttttggatat aattttaaaa actgttttag 240
aaaattctgg gaagaggaga atagtgtttt cttcatttga tgcagatatt tgcacaatgg 300
ttcggcaaaa gcagaacaaa tatccgatac tatttttaac tcaaggaaaa tctgagattt 360
atcctgaact catggacctc agatctcgga caacccccat tgcaatgagc tttgcacagt 420
ttgaaaatct actggggata aatgtacata ctgaagactt gctcagaaac ccatcctata 480
ttcaagaggc aaaagctaag ggactagtca tattctgctg gggtgatgat accaatgatc 540
ctgaaaacag aaggaaattg aaggaacttg gagttaatgg tctaatttaa gataggatat 600
atgattggat gcctgaacaa ccaaatatat tccaaagtgg gagcaattgg gaacgcctga 660
aancaaggaa ttgcccaaaa gccttaaaga ancctgtttt ggggtcccca actggttaan 720
ccgccttttg gtcccctcca aaccntttg nggttggggg ggaantcc 768

<210> 4507
<211> 652
<212> DNA
<213> Homo sapiens

<400> 4507
attaaaaatg tactcatttt aggaaaattc tcctaagata cttgagttat aattgctata 60
gaggacatgt acatattctc agttgataga gaatacttgt cctgaaagtg cttcatgtcc 120
tggagggact cagaggtctc atggttcaaa gattcaggtg gttctgagac atgatctgtt 180
tattctcttc tatcccatta tcgctttaac tttattgtat ttttactttt tggaaatgag 240
aatagtgggt ctttgttact ggacccgtga ctttaaaaaa ggaagttctt tttatttatt 300
attattatta tttaattcaa tcctccaaga catcagaaaa aagagggagt tcttgaatat 360
cttttggctt agttattatt tgatttcata tatcatctca gatttaccta aacttggata 420
aatgtaattc atatacttat ttgataaaaa tgtcntttaa aaaattttaa ttcaccaaac 480
tacttcagga aataaaatgt ttccttaaga aaaaatatgt ttagtaatgc gttttcncct 540
gaaaataaca gggtaaaaaa gntcncctta atggatgcca gggtaataag gcaagtttaa 600
gctcctttca aaacccctaa anttgggggg aaagaaattt ggncccnttg gg 652

<210> 4508
<211> 779
<212> DNA
<213> Homo sapiens

0962050 - 0962050

<400> 4508
agggagctct cgaggcaacg ccggggcgcc cgaggtctgg aaggcgcaga aatggagcaa 60
gagccacaaa atggagaacc tgctgaaatt aagatcatca gagaagcata taagaaggcc 120
tttttatttg ttaacaaagg tctgaataca gatgaattag gtcagaagga agaagcaaag 180
aactactata agcaaggaat aggacacctg ctcagaggga tcagcatttc atcaaaagag 240
tctgaacaca caggtcctgg gtgggaatct gctagacaga tgcaacagaa aatgaaagaa 300
actctacaga atgtacgcac caggctggaa attctagaga agggtcttgc cacttctctg 360
cagaatgatc ttcaggaggt gcccaagtta tatccagaat ttccacctaa agacatgtgt 420
gaaaaattac cagagcctca gtcttttagt tcagctcctc agcatgctga agtaaatgga 480
aacacctcaa ctccaagtgc aggggcagtt gctgcacctg cttctctgtc tttaccatca 540
caaagttgtc cagcagaagc tcctcctgct tatactcctc aanctgctga aggtcactac 600
actgtatcct aagggnacag attctggggg agttttcatc agttggagaa ggagttttat 660
anggaatcat tctcaagcca ccgcctcctt gagaccttan ggctgggaat nccagattga 720
antgattttt gatacccaaa atgggagtac aagatttttt tttgnnaaat ccctggcaa 779

<210> 4509
<211> 840
<212> DNA
<213> Homo sapiens

<400> 4509
aatgtcttag aaaaaggctt tctaaaagaa aaagagcaag aggccatttc ttttcaagat 60
agatacaaag aacttcagga aaaacataaa caagaattgg aagacatgag gaaagctggt 120
cacgaagccc tcagcattat tgtggatgaa tataaggcac tactgcagtc ttcagttaag 180
caacaagtag aagctattga aaaacagtac atttctgcaa ttgagaaaca ggcacacaag 240
tgtgaggagt tgctaaatgc tcagcatcag aggctccttg aaatgctaga tacagagaag 300
gaactgttaa aagaaaaaat aaaggaagct ttgattcagc aatctcaaga acagaaggaa 360
atattggaaa agtgtttgga ggaagaaagg caaagaaata aagaggcatt agtatccgct 420
gcaaagcttg aaaaagaagc agtgaaggat gcagttttaa aagtcgtaga agaagaaaga 480
aaaaatttag aaaaagcgca tgctgaagaa agggaattat ggaagacaga acatgcaaaa 540
gatcaagaaa aagtatctca ggaaattcaa aaagctatac aagaacaaag aaaaataagt 600
caggaaactg ttaaggcagc aataatagaa gagcagaaac gaagtgaaaa ggctgtggaa 660
gangcaatga aaaagaacaa gagatgaatt tgatagagta tataaaagaa cagaaaaggc 720
tcgattaagt catcccgcca aagaagcctg tccagtttgg aactggtcct cccccngtgc 780
acagnaaaca gttaagtgcc tttaatagcc tacggganca anttgacatt ggantaaaaa 840

<210> 4510
<211> 803
<212> DNA
<213> Homo sapiens

<400> 4510
agccgcctgc tagtggcgct gctagccggc cggcgcaggc tgccgagcgg gtgagcgcgc 60
aggccaggcc aaagccctgg tacccgcgcg gtgcgggcct cagtctgcgg ccatgggggc 120
gtccgcgcgg ctgctgcgag cggtgatcat gggggccccg ggctcgggca agggcaccgt 180
gtcgtcgcgc atcactacac acttcgagct gaagcacctc tccagcgggg acctgctccg 240
ggacaacatg ctgcggggca cagaaattgg cgtgttagcc aaggctttca ttgaccaagg 300
gaaactcatc ccagatgatg tcatgactcg gctggccctt catgagctga aaaatctcac 360

0050290 0050290

ccagtatagc tggctgttgg atggttttcc aaggacactt ccacaggcag aagccctaga 420
tagagcttat cagatcgaca cagtgattaa cctgaatgtg ccctttgagg tcattaaaca 480
acgccttact gctcgctgga ttcatcccgc cagtggccga gtctataaca ttgaattcaa 540
ccctcccaaa actgtgggca ttgatgacct gactggggag cctctcattc aagcgtgagg 600
attgataaac cagagacggt tatcaagaga ctaaaggctt atgaagacca aacaaagcca 660
gtcctgggat attaccaaga aaaaaagggg gtgcttggaa aacaattctc ccgggaacaa 720
gaaaaccaaa caaggatttt gggccctaag gttntaatgg ctttccctaa caaanaccta 780
aaangnttnc caacaaaagg gaa 803

<210> 4511
<211> 713
<212> DNA
<213> Homo sapiens

<400> 4511
atccgaggca ggcgttggtt ctgtgcgcct caggagtata atgtctcagg aaggcgatta 60
tgggaggtgg accatatcta gtagtgatga aagtgaggaa gaaaagccaa aaccagacaa 120
gccatctacc tcttctcttc tctgtgccag gcaaggagca gcaaatgagc ccaggtacac 180
ctgttccgag gcccagaaag ctgcacacaa gaggaaaata tcacctgtga aattcagcaa 240
tacagattca gttttacctc ccaaaaggca gaaaagcggt tcccaggagg acctcggctg 300
gtgtctgtcc agcagtgatg atgagctgca accaagaaat gccgcagaag cangctgaga 360
aagtggtgat caaaaaggag aaagacatct ctgctcccaa tgacggcact gcccaaagaa 420
ctgaaaatca tggcgctccc gcctgccaca ggctcaaaga ggaggaagac gagtatgaga 480
catcagggga gggccaagga catttgggac atgctggata aagggaaccc cttcnaagtt 540
ttacctcact anagtctctg ggagttaagc caaagtataa ctctgggagc cctccacatc 600
aagggatatt ttatcncctt tatttgggac gcttgtttct tcaagctcag tttaactact 660
gctttgacnn tggactggct cgttaaaaca ntatncacca agagttcaag gaa 713

<210> 4512
<211> 778
<212> DNA
<213> Homo sapiens

<400> 4512
tatatatgat ccccttggca ttgttgctga tctttgtcta caatttcatc agacctgtga 60
aaggcaaggt cagcagcatc caggacagcc aggagagcac agacatagat gacgaggagg 120
atgaagatga caaggaatct gagaaaaagg ggttgattga aagaatctat atggtacagg 180
atattgtttc aactgttcaa aacgtcttgg aggaaatagc ttcttttgga gaaaggatta 240
agaacacatt taactggacg gtccccttcc tttcatctct ggcctgtttg attctggcag 300
cagccaccat cattttgtat ttcattccac tgcggtacat cattttaatc tggggcataa 360
ataaatttac taagaagctt cgaaatccct attccatcga caataatgag ctactagact 420
tcctctctag ggtaccgtct gatgttcaaa aggtgcagta tgcaagaatt gaaactctgc 480
aagcagccac agccccctgc ggaagaagcg cancgctctc tanggcacac accgactttg 540
gacagcagca cccaatattg ggtttggttg agtagaccaa tgttatggct gtttcagtgg 600
gacccaaggt gtccntctga aatgcatgcc ctgtggnacc cctctgtata cttcctcctc 660
cttcacgtgc acaagacata cacacatgtt gcacacaccc tcaagcatgg gtgtcctaaa 720
ttgcnnanag gggcanccca ncgaaaaagc aacaaacccc aaagactgtg aaaagact 778

0082/07.59452960

0 9 5 2 5 6 5 9 . 0 2 2 2 0 0 0

<210> 4513
<211> 824
<212> DNA
<213> Homo sapiens

<400> 4513
ctccctccac ctaccacgtc tgccctcgcc gctctagccc tgcgccccag cccggccgcg 60
gcacctccgc ctcgccgccg ctaggtcggc cggctccgcc cggctgccgc ctaggatgaa 120
tatcatggac ttcaacgtga agaagctggc ggccgacgca ggcaccttcc tcagtcgcgc 180
cgtgcagttc acagaagaaa agcttggcca ggctgagaag acagaattgg atgctcactt 240
agagaacctc cttagcaaag ctgaatgtac caaaatatgg acagaaaaaa taatgaaaca 300
aactgaagtg ttattgcagc caaatccaaa tgccaggata gaagaatttg tttatgagaa 360
actggataga aaagctccaa gtcgtataaa caacccagaa cttttgggac aatatatgat 420
tgatgcaggg actgagtttg gcccaggaac agcttatggt aatgcccttа ttaaatgtgg 480
agaaacccaa aaaagaattg gnacagcaga cagagaactg attcaaacgt caagccttaa 540
atttccttac tcctttaaga aactttatag aaggagatta caaaacaatt gctaaagaaa 600
ggaaactatt gcaaaataag agactggatt tggatgctgc aaaaacgaga ctaaaaaagg 660
gnaaaagctg cagaaactan gaaattcatc tggaacaagg aattaagaat aactcaaaag 720
gtggaatttg atnggtcaaa gcaagaggat tancaagact ttctgcctaa naggggggaaa 780
tcaagnaagt tacaacaatg gcccaatcaa accttcgnct ggtc 824

<210> 4514
<211> 832
<212> DNA
<213> Homo sapiens

<400> 4514
atggcccggg acccccccaaa cagagttccc cccaccactg agggcacccg agggctcctc 60
agctgcctgc cagatgtgga aagggccacg ctgacgcttc tcctggacca cctgcgcctc 120
gtctcctcct tccatgccta caaccgcatg accccacaga acttggccgt gtgcttcggg 180
cctgtgctgc tgccggcacg ccaggcgccc acaaggcctc gtgcccgcag ctccggccca 240
ggccttgcca gtgcagtgga cttcaagcac cacatcgagg tgctgcacta cctgctgcag 300
tcttggccag atccccgcct gccccgacaa tctccagatg tcgcgcctta cttgcgaccc 360
aaacgacagc cacctctgca cctgccgctg gcagaccccg aagtggtgac tcggccccgc 420
ggtcgaggag gccccgaaag ccccccgaag caaccgctac gccggcgact ggagcgtttg 480
cgggcgggac ttcctgccct gtgggcggga tttcctgtcc ggggccaaga ctacgaccac 540
gtgacgggca gtgacagcna ggacnaggac naggaggtcg gcgagccgag ggtcaccggt 600
gacttcgaaa gacgacttcg atgcgccctt caaaccggca acctgaatct caaagacttt 660
ganggccctc atcctgggat ctgggagaan agaagctctc caaagcaaat tcaaanttgt 720
gcctccngaa gccaagattg aaccgggggt ggggaacccc cggggttang taaaggggac 780
ccgggccgnc ccaaantggg gttaaagggg ggggtgcccc ctngggntgg ga 832

<210> 4515
<211> 645
<212> DNA
<213> Homo sapiens

<400> 4515

gacatgcatt accgggtaaa ggagaagatt atcaagaagt ttgagtgcaa cctcctggtg 60
gtgtgtgcca atcacatcat cctgtgccag gagaaacggc tgcagtgcct gtccttcagc 120
ggagtgaagg agcgggagtg gcagatggag tctctcattc gttacatcaa ggtgatcggt 180
ggccctcctg gaagagaagg cctcttagtg gggctgaaga atggacagat cctgaagatc 240
ttcgtggaca atctctttgc tatcgtcctg ctgaagcagg ccacagctgt gcgctgcttg 300
gacatgagtg cctcccgtaa gaagctggcc gtggtagatg aaaatgacac ttgcctggtg 360
tatgacatcg acaccaagga gctgcttttt caggaaccaa acgccaacag tgtagcttgg 420
aacacccaag tgtgaggaca tgctctgctt ctcgggagga ggctacctca acatcaaagc 480
cagcaccttc cctgtgcacc ggcagaagct gcagggcttt gtggtcggct acaatggctc 540
caagatcttc tgcctccatg tcttctccat ttctgccgtg ggangtgccg cantccgctc 600
ccatgtacca anttacctgg ataagaaact gttcaagggn aancc 645

<210> 4516
<211> 777
<212> DNA
<213> Homo sapiens

<400> 4516
gatcttcaag tatggggtct gctgggcttg tcgcggctgc atgggctttt cgcggtctat 60
aagccccccgg ggctaaaatg gaagcacctg cgggatacag tggagctaca acttctgaag 120
ggtctcaatg ccaggaagcc tcccgctcct aaacagcgtg ttcgcttctt gctgggcccc 180
atggaaggca gcgaagagaa ggagctgacc ctcacagcca ccagcgtacc ctctttcatc 240
aaccatccac tggtatgtgg accagcattc gcccatctca aggttggcgt gggacatcgg 300
ttggatgccc aggcttctgg agtacttgtg ctcggcgtgg gacatggatg caggctcctc 360
accgatatgt acaatgctca tcttaccaag gattacacag tgcgtggcct cctgggcaaa 420
gctacagatg acttccgtga ggacgggagg ctggtagaga agacaaccta tgaccacgtg 480
accagagaga agctggaccg cattctggcc gttatccaag gctcccatca gaaggccctg 540
gtgatgtact ccaacctcga cctgaaagac ccanggaggc ctatgaagat ggccgttgaa 600
gaggcctgat ncggcccaat gaacaaagtc ccccgatgct gataactggg naatcccgat 660
gcctctactt tgcaactccg ggaaattcct cttaaaaggg tgcaattgca atggcattga 720
naacccanaa aaggaacttc cgggnaaant ttgggntcaa aggaaaaatc ccggcct 777

<210> 4517
<211> 916
<212> DNA
<213> Homo sapiens

<400> 4517
tcttaaaatg atttctgtct gtgctgcgaa acaaagacaa ggtgaggtgt ttttcttttt 60
tgtaataata taaagctgtg tgtttctgat tggatgattc actatgtgca ttgttttctc 120
ctaagtgctt ttagtaggta gcaatcaaat ggtgtaaata aggatgttct tttcctgttc 180
cttttatttt tttctctctt tattattctt ttattgacac cactagatag ctggccactg 240
gtcatgccat tgccaagatg aagaaaaagc aaactacact ttggcctctg gttctgaatt 300
gcagaaatca aaggatgcag taggtgtcta tgtcagaatt atggatcaga ggcagacaat 360
gacgagtgaa gatggttgtg aagccctctt cattcctgga ggagcctgca tctcatctct 420
cangccctct ttctctgtgg gtctcaagaa cagcantggg gaccattgag cacttgaatg 480
gnctgtttgt ccaagggctt gcaaaggaca agcaagagtt canagagctc aaggatagaa 540
acatcagagc ctcctccang gggcttcann tgaaaactcc gatgaactgg tacctgaagg 600

0088276 - 6945-0

gaantttttc ttaaatcaaa ccccttgggg tgggattaaa tacaagggaa acaaccaaaa 660
cctttgtggt accgtaatga aaaagtccaa tggttgttta aancaanttt angaatttaa 720
aggagggttt taaagtccag aaggggaatn aatctgggaa gggcccgggc ttttggtggc 780
aaagcctttt taacaagccc ttcctgcaan ntggtcccct taacccctgg gccttgttac 840
aattgggggg aaaangggcc taatggtttt taaaacaaaa gntggctttt aaaaagggcc 900
ctcctgaaaa agtttt 916

<210> 4518
<211> 760
<212> DNA
<213> Homo sapiens

<400> 4518
atttacaatt gattaaaagt atccatgtct tggatacata cgtatctata gagctggcat 60
gtaattcttc ctctataaag aataggtata ggaaagactg aataaaaatg gagggatatc 120
cccttggatt tcacttgcat tgtgcaataa gcaaagaagg gttgataaaa gttcttgatc 180
aaaaagttca aagaaaccag aattttagac agcaagctaa ataaatattg taaaattgca 240
ctatattagg ttaagtatta tttaggtatt ataatatgct ttgtaaattt tatattccaa 300
atattgctca atatttttca tctattaaat taatttctag tgtaaataag tagcttctat 360
atctgtctta gtctattata attgtaagga gtaaaattaa atgaatagtc tgcaggtata 420
aatttgaaca atgcatagat gatcgaaaat tacggaaaat catagggcag agaggtgtga 480
agattcatca ttatgtgaaa tttggatctt tctcaaatcc ttgctgaaat ttaggatggt 540
tctcactgtt tttccgtgct gatagtaccc tttccaaggt gaccttcagg gggattaacc 600
ttcctagctc aagcaatgag nctaaaagga gccttatgca tgatcttccc acatatcaaa 660
attaactaaa agggcactgg aagtttggca atttttcctg ccctgctcct gccnaaganc 720
nttttttttt tttttaactt tcaattanna accatattat 760

<210> 4519
<211> 710
<212> DNA
<213> Homo sapiens

<400> 4519
taagctttgg taaataagac atatctgcta caaaagatgg tggatgtttc atataccttc 60
tcttcttcac attttaaaat attttgtttt ctttttttgt aaaatttagt ccaagcgtgc 120
agcaccatga gaatacaata gaatggtaga gtgactgact taagctaata ataacattct 180
aagattaatt gaaacataaa tgacccccag aacaaatatc tgagtgacaa aaattctggt 240
ctttaaaaat gttatctata gttagataaa gtttggggca gtggaggcta tcttaaaatt 300
aatcatccaa tgaatatcag caatggattt acagttttcc ctctgacttt ctaggttgtc 360
ctggaaaaga cctaagtgtt tctgtagatc tgggctccta aaactctctc cgaaaaataa 420
taaactagaa gggtgctaga tatatgttca gtgatgatta gaatcttaac attaaacaat 480
tattgtttaa aagcaataaa tctgggctat attctgtcca tggctcatat gtatttaaaa 540
agaatggaaa gaattttgag agtaaatttt ttgaatgtta ttttcctttt aaattggnaa 600
cttaaattgg gttatcctta aagacatggg tggggaacca ctggnanang gaaatcnaat 660
accccaatgg cctttggaga aaatttgtta agcctacatt aattgggntc 710

<210> 4520
<211> 208

09/529,459 PCT/US98/22050

<212> DNA
<213> Homo sapiens

<400> 4520
agtgcgtgag tttggtggcg gccggctgtg cagagacgcc atgtaccggc tcctgtcagc 60
agtgactgcc cgggctgccg cccccggggg cttggcctca agctgcggac gacgcggggt 120
ccatcagcgc gccgggctgc cgcctctcgg ncacggctgg gtcgggggcc tcgggctggg 180
gctgaggctg gcgctctang tnaaactg 208

<210> 4521
<211> 621
<212> DNA
<213> Homo sapiens

<400> 4521
agatttaccc atatatttat catttttttgg tatctcttct atacctccaa acttccattt 60
ggaataattt accttctgcc tgaaaggact ttgtcatttc ttttaataaa ggtctgctga 120
taagaaattc attcaagttt ttgtctactt ggaagtattt atttcatgat cactcttaaa 180
ggatattttg actgggtgta taactctagc ctgttaatta ttttttttcaa gcactacaac 240
gatctcattt ccattggtat ctgttttccc atgtttctgt tgagtagttg gctgtcaaac 300
taacaaatgg tcatttaaag ttaatctacc acttttcctt tggctgctct tgatatttct 360
ccttgtcttt ggtttttgca gttttatttt ttgttgactt tttttttaa tcttgcttgg 420
gttctgcagg acttcttaga tctgtattga tngtctgtat cattttggga aatatctcaa 480
ccattatctc tttaaatatc atttttgcct atctctcttc ttttgttgag gaccccaact 540
tcccatatga tgaaatttct cacaattcna atttccngta tcncttggct gccctaagcc 600
tggggttgcc tgggaaagca a 621

<210> 4522
<211> 828
<212> DNA
<213> Homo sapiens

<400> 4522
ggagaacttc cccaacctag caagacaggc caatattcaa atcagtaaat acagagaaca 60
ccacaaagat actcctcgag aagagcaacc ccaagacaca taatcatcag attcaccaag 120
gatgaaatga agaaaaaaat gttaagggca gccagagaga aaggtcggtt tactcacaaa 180
gggaagccca ttaaactaat agcagatttg tctgctgaaa ccctacaagc cagaatagag 240
tgggggggcca atatttaaca ttcttaaaga aaagaatttt cagcccagaa tttcatatcc 300
agccaaacta agcttcatta gcaaagaaga aataaaatcc tgagagacaa gcaaatgctg 360
agcgattttg tcactaccag gcctgcctta caagagctcc agaaggcagc actaaacaca 420
taaaggaaaa accagtacca agccactgca aaaacataac aaactataaa gaccaccgac 480
actatgaaga aactgcatca actaacaggc aaaataacca actagcatca taatgacagg 540
atcagattaa cacataacaa tattaacctt aaatgcaaac gggctaaatg ccacaattaa 600
aagacacaga ctggcaaatt ggatagagtc aaaatccatc attgtgctgt attcaggaga 660
cccatctcac ggtgcaaaga cacacatagg gctcaaaata aagggatgga gggaatattt 720
accaagcaaa atgggaaagg gaaaggaaaa aaaagcaagg gggttgcaat cctaaggtct 780
cctcattana gcaggacctt ttaaaaccca aacaaanngg nttaaaan 828

<210> 4523
<211> 575
<212> DNA
<213> Homo sapiens

<400> 4523
attttgtatg cgatcgtggc aggattgcgg acgggcagca ctctttctgc agaaggtaaa 60
aatcaccttg ctgaggaagc ttttcgtctg ctgattcttc tttgtgacat cggggaataa 120
ggatttattt ctaacagtct tgggggctcg tctgggatca cccagtctcc ttcgggtcgg 180
ggtctctgat tcccgccccc ccaccaaggg gaggcgcccc actgccttac tgcggtggcc 240
tcagggactg ggaatccgga cttacctgtt gtgatgaata aacccggacc ctcagcaacg 300
tggaaaacgg cgaataggct tgcattgcac tgcctcgggg accaagataa actctgttca 360
cagagcaaag taaagaaacg tcccaagggt gcgacaaagt acttgcttgg tggtcnggat 420
attctggagg ttaaaagtgt gtgtgaatag tcacaagcct cactgcagct gggtgttgct 480
tgngtaaatc atgntaaagt cctactgctg ggacccgagc cgaagtgagt cctgcctgcn 540
gttccgttng ntaccctcat acggcttaag ggcgg 575

<210> 4524
<211> 774
<212> DNA
<213> Homo sapiens

<400> 4524
ttggtgatgt gcacgtttct gaatttcaag atttttttc tgtgtccttc agggagaata 60
aatttctata tagtgtcaag atgctacata atgggataaa gaattatagt taagtgggtg 120
aatctcattg tgctttttgt actgtgtagc ataataccaa attcctctat tcactaaata 180
aacattgtgt gaatactgtc ctaaaacagc ctgttgaagg atacaaaagg atatctagaa 240
aaagcagttg aggattggtt tggattgttt caagtgatac caaaatattt attttgaggt 300
aaatagccac agtagtatag agccaagagg taagcacaga tcaaacatat ttaagggcta 360
tctaaaaata ataaggaatt tggacatttt tctgtaggca acagagcagg cttttcactt 420
aggatgctgt cattgaagaa tttggccatg atcaaagtag ccctttatgt agttaaatgg 480
gggtctcttt aggcttcata gattttgcat gtttgggttt ctatttagtt tgttttctct 540
gatggacaaa ggcaggggac cagattctgt attatcctgg aaggactgtg ggaatgtgtc 600
aaaggagaac cgaatttgaa cactgacctt gtcattaact anctgcatgg cttgagccnt 660
atcacctgtc agggatttca agcttcccct atttgcaaaa tgggaagtan naaggctgtt 720
ggaaataagg taaanggtta aaagccttcc taaaaatngg gncacccttt ttaa 774

<210> 4525
<211> 777
<212> DNA
<213> Homo sapiens

<400> 4525
tgacaaaaaa caggttgggc acaataaaca accaagtata aggagctcag aagatttcca 60
tctaaatagt ttcaataatc ctccaagaca atatcagaaa ataatgaaaa ggctcattaa 120
aagatatgta ctgcaggccc agatagataa ggagagtgat gaagtgaacg aaggggaact 180
gaaggaaatt aagcaggaca tctcaagtct ccgctatgaa ctccttgaag aaaaatctca 240
aaatacagaa gacctagcag aacttattag agaacttgga gagaaattat ccatggaacc 300

0962945 0072800

aaatcaagag gaaaccaata gataatgcga agacttcctt agaaattcat atttatttgt 360
ccacttgaag ccatattatt ttctgattta ttttcttaag tgccaatggg cccacctttt 420
aaacaagaaa acgttaaata acttgggcca tcctatcatc tggagcccta gtatctaatt 480
tttttggtga ttaaactcca ttgttcaagg taaaggctgt agataatgag ggaaaattat 540
gcccagttgt ttggtgcttg ttttaaaaac tggctttctt ggatataact aactcctgtg 600
atgatgtcan tgccatgtan tgtccggcct gnaaaatggg tcccaagcng gacaggggggc 660
ttgacccacg tttacctccc ccatggcggg ttttttccct ccngaaggtt ttattttcaa 720
gggttccctt ccttgcccnt ggcnccgggg tgggattccc cccngcntgg gggggaa 777

<210> 4526
<211> 541
<212> DNA
<213> Homo sapiens

<400> 4526
gattatttcc tttctcatga aacaaagtaa caactctgtt aggtatgttg ttagtctgtc 60
tcatagttga gatccagttt tgaagatgta aagcaaaaag cacaccgctg atttttctcc 120
cctcttgcat gtcaaaatac tatgtacata ccacataaac actagggtat ctgttaaata 180
tattttatgt tgataccgtt tttacttggc aaagttggat gcacaaagaa tagtagtctc 240
atattttaac aatgctgtgg atttcttctg tagacattta tttcctgtta cctgcaaggt 300
gtttaggatt tggatttttt tttgatgttt tggtcttttt ggatagttgc taaagttctt 360
cactatttta cctaggctat ccttataaat aaataccatg aatttttaaa accacacagg 420
tcacttaaag gtcccncctt cctgggggggt acccanggcg ttaaaatgaa atttggggag 480
ntatcctaga ggtangtaat cccctccaag gtggtantcc ggtcctttaa cctccctgaa 540
n 541

<210> 4527
<211> 418
<212> DNA
<213> Homo sapiens

<400> 4527
ttgcgcggct gctcctcggc ggggccggct tcgcggggag ccttccccgg ggaccggaag 60
cgcgagagca gccgcggcca gctcagagct gccctggccc cgccctcttc cggccgccgc 120
gcctcttgcc gccgcagcag cagcagtacc ggcatcctcg gctcgcgctc gctaccttcg 180
cccgctccgc gcaatctggg tgccgccggg gagcccagcc cagcgccgga cgcgtagtca 240
atccgttgcc cagcgttggc cagcggctgc cgcttgtcca gggggagaat cagcacgatc 300
ctggtctggg ggtggaacag gggcgtgagg cgggagagcg cgctagggcc gagcccacna 360
cccggggccg ctccgcnctt ctcctgggaa cctcgtccan ccgggtcctg tcgtccaa 418

<210> 4528
<211> 590
<212> DNA
<213> Homo sapiens

<400> 4528
tttaaatttt tgaagggacc aaggccactt ctcttataga ctgtcctata ttctagactg 60
gtctgtatgt ttcctcatag cattgtttaa cttgttcttt gatccatttc ttgtaaactg 120

0003950720

gaatttaggt ctgaaggctt aattagattt aagttaaact ttttttttt tcttccccaa 180
gaataattta tacaggatgc tgtttcatac tgcttaaaag cacatgacaa atgttagact 240
gtccccacta ttagcaatgt taagattgat cttgcagtaa aggttctcag aactttatct 300
ctccattgta aatatttcct tttcccaagt aatctgggac atcataanag tatcttattc 360
ttggttgggc acagtggctc acacctgtaa tcccagcact ttgggaggcc gaggcancgg 420
accacttgaa gtcaggaatt cgagaccagc ctggctcaca atgatgaaac tccatctcta 480
ctaaaaatac aacaaattag ttgggcatgg tggcgcatac ctgtaatccc agctactcac 540
gaagctnatg cangagantc acttgaaccc tgnggaggca anagattgca 590

<210> 4529
<211> 690
<212> DNA
<213> Homo sapiens

<400> 4529
tattattcaa gatcaaacca agaagatgcc atggactttg gcatctccct tctcttctat 60
ggcctctact atggagttct ggaacgggac tttgcagaaa tgtgtgcaga ctacatggca 120
tctaccatag ggttctacag cgagtcgggc atgcctacca aacatctttc agacagtgtg 180
tgtgctgtgt gtgggcagca gatctttgtg gacgtcagtg aagaggggat cattgagaac 240
acgtataggc tgtcctgcaa tcatgtcttc cacgagttct gcatccgtgg ctggtgcatc 300
gtgggaaaga agcaaacgtg tccctactgc aaagagaagg tagacctcaa gaggatgttc 360
agcaatccct gggagaggcc tcacgtcatg tatgggcaac tgctggactg gcttcgatac 420
ttgggtagcc tggcagcctg tcatcattgg tgtagtccaa ggcatcaact acatcctggg 480
cctggaatag tgatgaagag catcagtgga aaacccaccc cacacgccat ggacctcagg 540
gcactctcct ccctgcccac aaaagacctc ctgggtggga aagactcaaa ggggcncttg 600
ggccactcaa ggacccctc cgggctgttt tcnggacctg gggggaaggg gatatgatgg 660
ganaaccang ccanttgggg ggctggtcaa 690

<210> 4530
<211> 549
<212> DNA
<213> Homo sapiens

<400> 4530
gaggccaaga gcgcgggcgg cgaggcaaga tggcggcaac caagaggaaa cggcgtggag 60
gctttgcagt tcaggcgaag aagccaaaaa gaaacgaaat agatgcggag ccgccagcta 120
agcggcacgc cacagcagag gaggtggagg aagaagagag ggaccggatc ccaggccccg 180
tttgcaaggg aaagtggaaa aataaggaac ggattctcat cttttcttcc agaggaataa 240
attttagaac aagacattta atgcaggact tgagaatgtt gatgcctcat tctaaagcag 300
atactaaaat ggatcgtaag gataagctat ttgtgattaa cgaggtttgt gaaatgaaga 360
actgtaataa atgcatctat tttgaagcta agaaaaaaca ggatctctat atgtggtaag 420
agaatgtatt aagattttgg ttaaactcat ttaagtggat ttgttcnttg naccttttat 480
gttatagact cctaatgttt catgttaang gttgagaatg aagcaaactt ttggntttca 540
cnaaacttg 549

<210> 4531
<211> 619
<212> DNA

09525800.070705

<213> Homo sapiens

<400> 4531
tatcattttt aatttcaagt acatattttt gaagtaaatc aattgtatat attaactatt 60
caactgtctc ttggtcagtc cattataata accctatttt aatttttctt tccttttaa 120
tgcacccaaa gtcttttatt tacttttta actacagcca cactttgagc aggtatggaa 180
cacaatcatt gattaatcta atatatacaa tagggagaac cgtaactaca gatttacaga 240
ttgtggagct gcagcagttt ttcagtaaca tgttggagga acaccagagg atcagagttc 300
atgccaactt acagacaata aagaatgaaa atctgaaaaa caagaagcta agtgccagga 360
tagctgcgtg gctaaggnga aacacatagc ttggggctat ctttcagcac tcctcctgca 420
tattaaaatg tagtttgntc acaagttttg ncctccaata ctttgtgagt ccgggaaacc 480
acacatttta tttggatttc aagtcacatt tattactcag agtgccaatc ctcncanaat 540
gtcatgtttg gncctgaagg tgggtgantg ctgacaattt tgccaatgct gctgtatttc 600
tgggaaagat gtcacntca 619

<210> 4532
<211> 742
<212> DNA
<213> Homo sapiens

<400> 4532
gtgatcgaaa gcatggcgtc ggtggtgttg gcgctgagga cccggacagc cgttacatcc 60
ttgctaagcc ccactccggc tacagctctt gctgtcagat acgcatccaa gaagtcgggt 120
ggtagctcca aaaacctcgg tggaaagtca tcaggcagac gccaaggcat taagaaaatg 180
gaaggtcact atgttcatgc tgggaacatc attgcaacac agcgccattt ccgctggcac 240
ccaggtgccc atgtgagttg ctccgttgct gccccccttt ttccttttct aggttgacct 300
ctccttgccc ctaagcatgg taataacagt tgcatgtatt gagtgcttac caaatggcaa 360
gcattgtgct gattcccatg cctacacgat ctcatttctt ccttaccaca tccctgtaag 420
taaggtgaaa tgccaagaga cctagacggg gtggaaggag caagtgactg ctgggatttg 480
caccaggtct gcctaactcc cagatcacta tgatttgccc tggtgttgca ttggcctggn 540
attcttggtt ctcctttcta accctcagtt cttggaggac aagataccct ggtgatttaa 600
aatattattt tagtcttggg gaaactaaat ttcaatttat taagtttttc attattcnaa 660
gacttcttcc tttgtataaa cttacttgca anatgggntg aaaanatanc ttgaaatttt 720
aatgaaaata gaaattcaag tg 742

<210> 4533
<211> 516
<212> DNA
<213> Homo sapiens

<400> 4533
gaataatttg gtatttgcta attcagtatt tgccacactt tatagaacac aactacctca 60
aatacaagaa ttgactataa atcaaaaact tttttttta atggtttcca gtggatagag 120
gaataaaaac agggtggagg ggacaggaat ggatttttga caaatttaac tttggtatca 180
tataaatgta taattataaa taaatgaata agaagtaatc tctaaaaatc aaaagcacag 240
tgaagtaaat gaacctaact atatattaaa taggtaaatt tctagtggga tgtatatgaa 300
ggacaaaaag aattgtaaaa ttttcctaaa ctgtaatagt aattatatta tttgtaataa 360
aagtattaat ctgaaagtat taatgtntaa tacaggatga aacaaataag taactggtaa 420

09/29/06, 07/29/06

tgtcatggga ancaagattt tcagcaaaga aagntaaaat attaattgta ngggtttgca 480
naacttattt aaaaccaaat ttggantggg aatatc 516

<210> 4534
<211> 368
<212> DNA
<213> Homo sapiens

<400> 4534
agacgctggt agctcctggg ccagctcaag gtgtttcctt ttgcctggta accaggagga 60
gtggctgagg cagggcatgg agcggagcaa cgcagctaca aagtgcggag aggagccccg 120
ctctggatcc cgccggctcc ccaaggctga aggagacaag tctggatccg caggagcccc 180
cagtaagaac agcagccgcc tgggggggccg accatgtatg tgtacagctg gccgccgccc 240
aaacagggcg tctggccgcc gccgccgcag ctgctcacct gcacctacct ggccgccccc 300
ctgctgctac ccccantcca ggcccacanc ttccgcagcc ggcccgggag cctgcatgcg 360
ggcgantg 368

<210> 4535
<211> 717
<212> DNA
<213> Homo sapiens

<400> 4535
cactcgcccc gtcacgtggc aagctggagt acccaggcca ggcccctgaa gcagagaagg 60
acaaaatggt gtgggaaatc ctggtgtctg agcgggacat cagagccctt atcccactgg 120
ccaaggctga ggagctggtg aatacagcac cactgactgg agtgccccag catgtccccg 180
tgcgccttgt cactgtggac ggcgggggggg ccttggtgga ggtgacagag catgtcggct 240
gcgagtctgc caacacacag gtcctgcagg tgtctgaggc ctgtgatgcc gtgttcgtgg 300
ctggcaagga gagccggggc gcccgggggg tgcgagtgga cttctggtgg cgccggctcc 360
gcgcctcgct gcggctgacc gtgtgggccc ccctgctacc gctgcgtatc gagctcaccg 420
acaccaccct cgagcaggtc cgcggctgga gggtacctgg ccctgctgaa gggcctgcgg 480
aacccgctgc agaggcgtcg gatgaggccg anaggcgcgc ccgtggctgc cacctgcagt 540
accaacgggc cggtgtgcnc ttcctcgccc ccttcgcggn ccaaccgctg gacggcggnc 600
gccgcctcac gcacctgctt gggccccgac tggctgctan aacgtgtcca actccgtggc 660
gccacacgcc cgcgttgctg gactcccgtn taacctctct ggangggtgg ccntntc 717

<210> 4536
<211> 732
<212> DNA
<213> Homo sapiens

<400> 4536
ttagggcggg agcccggcga gggcgccggt gctttgttct gtctgaggcc aggaagtttg 60
accgcgctgc catgccgaac cgtaaggcca gccggaatgc ttactatttc ttcgtgcagg 120
agaagatccc cgaactacgg cgacgaggcc tgcctgtggc tcgcgttgct gatgccatcc 180
cttactgctc ctcagactgg gcgcttctga gggaggaaga aaaggagaaa tacgcagaaa 240
tggctcgaga atggagggcc gctcagggaa aggaccctgg gccctcagag aagcagaaac 300
ctgttttcac accactgagg aggccaggca tgcttgtacc aaagcagaat gtttcacctc 360

US 2002/0055469 A1

cagatatgtc agctttgtct ttaaaaggtg atcaagctct ccttggaggc atttttttatt 420
ttttgaacat ttttagccat ggcgagctac ctcctcattg tgaacagcgc ttcctccctt 480
gtgaaattgg ctgtgttaag tattctctcc aagaaggtat tatggcagat ttccacagtt 540
ttataaatcc tgggtgaaat tccacgatga tttcgatttc attgtcaggc tgcaagtgat 600
tctagtcaca agattcctat ttcaaatttt gaacgtgggc ataaccaaag caactgtgtt 660
acaaaacctt tanagattta ntcatcccaa ccaanggaac tnggncacct atccactgga 720
agtctgatga ta 732

<210> 4537
<211> 767
<212> DNA
<213> Homo sapiens

<400> 4537
aaaaattact atgaagtact tggagttacg aaagatgctg gtgatgaaga tttgaaaaaa 60
gcttatagaa agcttgcttt gaagtttcat ccagacaaaa accatgcact tggagcaaca 120
gatgctttta aaaagattgg aaatgcttat gctgttttaa gtaatccaga aaagcgaaaa 180
cagtatgacc tcacgggcaa tgaagaacaa gcatgtaacc accaaaacaa tggcagattt 240
aatttccatt gaggttgtga agctgatata actccagaag acttgtttaa tatatttttt 300
gggggtggat ttccttcagg tagtgtacat tctttttcaa atggaagagc tggttatagc 360
caacaacatc agcatcgaca tagtggacat gaaagagaag aggaaagagg agatggaggt 420
ttttctgtgt ttatccagct gatgcccata attgtattga tcctcgtgtc attattaagc 480
cagttgatgg tctctaatcc tccttattcc ttatatccca gatctggaac tgggcaaact 540
attaaaatgc aaacagaaaa cttgggtgtt gtttattatg tcaacaagga cttcaaaaat 600
gaatataaag gaatgttatt acaaaaggta naaaagaagt gtgggaggaa gattatgtga 660
ctaatattcg aaataactgc tggaaaagaa aggcaacaan nnacagatat gcagtatgca 720
gcaaaaggta taccggtgaa ngatcgactc cgaagggaag gnaaatg 767

<210> 4538
<211> 645
<212> DNA
<213> Homo sapiens

<400> 4538
atggaacagc ggttagctga gtttcgggcg gcgcggaaac gggcgggtct ggcggcccaa 60
ccccctgctg ccagtcaggg cgcacaaacc ccaggagaga aggcggaagc agcagcgact 120
ctaaaggcag ccccaggctg gctaaagcgg ttcctggtat ggaaacctag gcccgcgagt 180
gcccgggccc agcccggcct agttcaggaa gcggctcagc cccagggcag cacatcagag 240
acaccatgga acacagccat tcctctgccg tcgtgctggg accagtcttt cctgaccaat 300
atcaccttct tgaaggttct tctctggttg gtcctgctgg gactgtttgt ggaactggaa 360
tttggcctgg catattttgt cctgtccttg ttctattgga tgtacgtcgg gacacgaggc 420
cctgaagaga agaaagaggg agagaagagc gcctactctg tgttcaatcc aggctgtgaa 480
gccatccagg gcaccctgac tgcagagcag ttggagcgcg agttacagtt gagacccctg 540
gcagggagat angacccanc tgtgctgtca tgcagctaac ctctgatgtg gtcttcctca 600
acattggnta tggattttgn tttcaagtgt atangactaa aggca 645

<210> 4539
<211> 507

09529900.090704

<212> DNA
<213> Homo sapiens

<400> 4539
gagaaaagtc ggcagcagag ggaacaggga agaaacctaa aggctgcagg ctgccangtg 60
tgcttggaga gccccttct tccgccgggc ctcgcaagca ncgtatgact gtggagaagg 120
gcggtgggca aggagggaac tcgagagcag cctccatggg cacacaggag ggctggtgcc 180
tgctgctctg cctggctcta tctggagcag cagaaaccaa gccccaccca gcanaggggc 240
agtggcgggc agtggacgtg gtcctagact gcttcctggc gaaggacggt gcgcaccgtg 300
gagctctcgc cagcagtgag gacagggcaa gggcctccct tgtgctgaag cangtgccag 360
tgctggacga tngctccctg gaggacttca ccgatttcca agggggcaca ctggcccaag 420
atgacccacc tattatcttt gnggcctcan tggacctgtc canattcccc angccgaggc 480
cttgctccat gctgactgca ntgggaa 507

<210> 4540
<211> 774
<212> DNA
<213> Homo sapiens

<400> 4540
aaacaaggcg gtgtgattga aggtgggtaa cgtggtcaag tgacaggggt gggtctgctt 60
agataagatg gcctgggaaa ccttttctga ggacatggct tttgaatgga ggctagaaag 120
atgagagaga cccagccata gaatgatttc agttaagagt attctatgaa gaaagagcag 180
caaatgctaa ttccctaagg tagatataag gttggcatgt tggaaagaca gaatgggttt 240
gcttctaaga ttctttccag tggaatttca gaaattttgt gattctattt cattaactcc 300
tgaggtttgg ctacaagacc agaccctact cttgttttat atgtgtagct ggcagaatat 360
aggtttaata gtgagacaag accaagaact acatgccagc tccattgttc aatttctgtg 420
tggtcttaag caatttagct aacctctcca agtcttaaaa cagcatggct tcaaatacat 480
aagagtttga atttgttgtg tttgatgctg tcatgaactt ttgattaaga gagtgatatg 540
atcaaaatta agcttaggaa atattgcagc tggatgtagg atggattata gcaccaggag 600
ggaaagaatc taagaagcta ttgcactggt ccattcaaac attggttaga gttgcatgtc 660
ctgctgtgaa aagagagatg gcagagacct gtgcaagaaa ccnttgtaag acagatnagc 720
aggaanctcc tgctnccatg ganggtcaaa gggtcaaatg tgttaagcag ttaa 774

<210> 4541
<211> 750
<212> DNA
<213> Homo sapiens

<400> 4541
actaaaaaag ccaatgctga agagctagcg aataacctta aacaggaggg tcataatctt 60
gggctgctcc atggggatat ggatcagagt gagagaaaca aggtcatttc agactttaag 120
aaaaaggaca tcccagtcct ggtggccaca gatgttgcag cccgtggtct ggacattcct 180
tcaattaaga ctgtcattaa ctatgatgtg gcacgagaca ttgataccca cacgcatagg 240
attggccgca caggaagagc gggtgagaaa ggtgtggcct ataccctact cactcccaag 300
gacagcaatt ttgctggtga cctggtccgg aacttggnag gagccaatca acacgtttct 360
aaggaactcc tagatctggc aatgcagaat gcctggtttc ggaaatctcg attcaaagga 420
gggaaaggaa aaaagctgaa cattggtgga ggaggcctan gctacangga gcggnctggc 480

0962964.0772800

ctgggctctg agaacatgga tcgaggaaat aacaatgtaa tgagcaatta tgaggcctac 540
aagccttcca caggagctat gggagatcga ctaacggcaa tgaaagcagc tttccaagtc 600
acagtacaag agtcactttg ttgcagccaa gtttaagtaa tcagaaggct gggaaattct 660
gctgctgggg caagttgggg tgggactagt gcagggagct ttgaattctg tttccaanta 720
aactcaagca naacaggggc cantannagt 750

<210> 4542
<211> 608
<212> DNA
<213> Homo sapiens

<400> 4542
agttccctca agcgcccgta gcttcggcgg agtctgcgcg atgggcgacc cggaaaggcc 60
ggaagcggcc gggctggatc aggatgagag atcatcttca gacaccaacg aaagtgaaat 120
aaagtcaaat gaagagccac tcctaagaaa gagttctcgc cggtttgtca tctttccaat 180
ccagtaccct gatatttgga aaatgtataa acaggcacag gcttccttct ggacagcaga 240
agaggtcgac ttatcaaagg atctccctca ctggaacaag cttaaagcag atgagaagta 300
cttcatctct cacatcttag ccttttttgc agccagtgat ggaattgtaa atgaaaattt 360
ggtggagcgc tttagtcagg aggtgcaggt tccagaggct cgctgcttct atggctttca 420
aattctcatc gagaatgttc actcagagat gtacagtttg ctgatagaca cttacatcaa 480
gagatcccaa gaaaagggaa tttttattta atgcaattga aaccatgccc tatgttaaga 540
aaaaagcana ttgggccttg cgatggatan cangatagaa aatctacttt tgggggaaag 600
agtggtgg 608

<210> 4543
<211> 414
<212> DNA
<213> Homo sapiens

<400> 4543
acggcgagat taagctcagg gtcaagttct gagcaaaaag tgtcaaggag ccttttttgca 60
acctcctata atattgaaac agattctgtg ccctttaaag gagataataa ctaacatctg 120
gggagcgctt tacaatttag aaaaggcctt tcacacacag gcctgtttca tcttcacaac 180
aatcttataa aacagatata ttgttcccat ttcccaaata atgaaacgga agcgccgaaa 240
atatctccta tagggctctt caaactgtgg tcaacttagt aaatgatgtt gacagtggaa 300
gtgtgatcat tttattttcc tgcctttgga attgaagatt gtaattttgc aaaaattttg 360
ttgaagatga tgtacctttg ggtcaganan ctggagtaca atggnaccat ctca 414

<210> 4544
<211> 553
<212> DNA
<213> Homo sapiens

<400> 4544
aataaaagct gtggtcccca ggagtcctga acatctgggg acagcgggaa aacatgagtg 60
actccaagga accaagggtg cagcagctgg gcctcctgga agaagatcca acaaccagtg 120
gcatcagact ttttccaaga gactttcaat tccagcagat acatggccac aagagctcta 180
cagggtgtct tggccatggc gccctggtgc tgcaactcct ctccttcatg ctcttggctg 240

0952946-070800

gggtcctggt ggccatcctt gtccaagtgt ccaaggtccc cagctcccta agtcaggaac 300
aatccgagca agacgcaatc taccagaacc tgacccagct taaagctgca gtgggtgagc 360
tctcagagaa atccaagctg caggagatct accaggagct gacccagctg aaggctgcag 420
tgggtgagtt gccaagagaa atccaagctg caggagatnt accaaggagc tgacccggct 480
gaaaggctgc aattgggtga nttgccaaag aaatccaagc tgcanggaga tttancaagg 540
agctganccc ggt 553

<210> 4545
<211> 882
<212> DNA
<213> Homo sapiens

<400> 4545
atgttcatgt agggaagtcg ggccccgggc cgccaccgtc acctcggccg ctgccgctgt 60
cgccatcgcc ttgtttcccc atcccccgcc atggccgagg acctctctgc ggccacgtcc 120
tacaccgaag atgatttcta ctgccccgtc tgtcaggagg tgctcaaaac gcccgtgcgg 180
accacggcct gtcagcacgt caataggagt gaaacatcca catctgataa cacagaaact 240
taccaagaga atacaagttc ttctggtcat cctactttta agtgtcccct gtgtcaagaa 300
tcaaatttta ccagacagcg tttactggat cactgtaaca gtaatcacct atttcagata 360
gttcctgtga catgtcctat ttgtgtgtct cttccttggg gagatcctag ccagattacc 420
agaaatttcg ttagtcatct aaatcagaga catcaatttg attatggaga atttgtgaat 480
cttcagctag atgaagaaac ccaataccaa actgctgttg aagaatcttt tcaagtaaac 540
atctgaaggc tgtagacatc tctgcatctt tgtacctgca agtgccatct ttaaggggga 600
aactacatga agtcaccgtt acaagtaact tgatgtgtat attaataaaa gtaattcagt 660
cattttagtt tttgattgaa aaataaaggt agggcttcta aaaacttcat catcttgata 720
agttaaaaaa tgaaaagtta tgacattagc tttaaaggtg taaaaaagat gtttcactaa 780
tgtaacngtg aaaagagaat ccctggttgg aacnttaacc tttttggtaa tnataaattt 840
tggaattttt caataatnaa gttgcctttt gaaaatttgg ng 882

<210> 4546
<211> 737
<212> DNA
<213> Homo sapiens

<400> 4546
agcaatgcac acgaagcaga cagagaagca acatctttaa ggtactgagg gcaggagaag 60
ttaatgtaga atactatgcc agaaaaaata aattcccaaa agtggaagtg aaataaggac 120
atttagagat gtacaaaagc tgaccgaatt cactaccagt caacccacac tacaagaaac 180
atcaaatgag tcctccaagc agaaggaatc caataccaga tgaaaatcca gatctccacg 240
aggaaatgaa gaacaccaga aatggatcgg ncctttcttc aaataagagc agttgggata 300
acaaagctgt tcagttgtac ccttggnatc cactgaaatc ctgggtaggg aagctccagt 360
accaccaact ggaaagactg ggaatgccta atagctggta ctggccattg tcgtaggctt 420
tgtccactct gacaaactga agatggggac tccactcanc ttcgccagcc acaggnggan 480
ctccaaacga ggttangtcg acttcccgat aactttagat tctgaaacct cacgggattt 540
ttcctcnctt ccctttgatc tcncctccgc ttgctcaaca aggacaggac tcgctggcct 600
ttctttcccg tcanaaaagg gatcccttgc ggacangacc taaagttgag taactgggtt 660
ccccctantt tgtccttccg gggcctgggg tgtccccggg ggctcaaggg tgancgggga 720
gaccctannt accgggn 737

09529460.020308

<210> 4547
<211> 740
<212> DNA
<213> Homo sapiens

<400> 4547
aagagccgct aggctgccct gcccgaaggg ctcaactgtc agtgagcctg cgcaggaggc 60
caataggctg ccaatactcc ttggactccc cgccagggcc ctgctgtcag tgcgcctgcg 120
cgcgggtccg gcgccgaggt tcttgactgc tgtgccggac gccaggtgta gccatgcagc 180
gagccgattc cgagcagccc tccaagcgtc cccgttgcga tgacagcccg agaacccccc 240
caaacacccc ttccgcagag gcagactggt ccccgggcct ggaactccat cccgactaca 300
agacatgggg tccggagcag gtgtgctcct tcctcaggcg cggtggcttt gaagagccgg 360
tgctgctgaa gaacatccga gaaaatgaaa tcacaggcgc attactgcct tgtcttgatg 420
agtctcgttt tgaaaatctt ggagtaagtt ccttggggga gaggaagaag ctgcttagtt 480
atatccaagc gattggttca aatccacgtt gatacaatga aggtaattaa tgatcctatc 540
catggccaca ttgagctcca ncctctcctc gtccgaatca ttgatacacc tcaatttcaa 600
cgtcttcgat acatcaaaca gctgggaagt ggttactaag tttttccaag gaagcttcac 660
acaatcgant tgagcatant ccnagggttg gggtatccta acaaggatgt ccaattcaag 720
gcactggggt ngaaaaanaa 740

<210> 4548
<211> 734
<212> DNA
<213> Homo sapiens

<400> 4548
gtgcgctggt gaggtggcgt ccgttctacc cggtcgctcc cgttccgcgc catgcagagc 60
ccagtctctg gcacctggct gctctgatct ggtctcagcg cggagggagc agagggagtc 120
catggaggat ccctccgagc ccgaccggtt ggcgtccgcg gacggcggga gcccggagga 180
ggaggaggat ggggagcggg agccgctgct accgcggatc gcctgggccc acccgcggag 240
aggcgcccca ggcagcgccg tgaggctgct ggacgctgcc ggggaggagg gcgaggccgg 300
cgacgaggag ctgcccctcc cgcccgggga cgtgggggtc tcccggagtt cgcccgccga 360
gctggaccgg agccgccccg cggtttcagt aactattggt acttcagaga tgaatgcatt 420
cttggatgac ccagaatttg ctgatattat gctgagagca gagcaagcaa tagaagttgg 480
aatttttcca gaaagaatct ctcaaggttc aagtggaagt tactttgtga aggatcctaa 540
gaggaaaatt attggtgtgt ttaaacccaa atcagaagan ccttatggtc aactcaatcc 600
aaaatggacc aaatatgtcc ataaggtctg ctgcccttgc tgctttggcn anggtgcctg 660
attcctaanc aagggtacct ttccgaaacc gggtgcctat ccttgtggga caacaanctt 720
catctganca ttgt 734

<210> 4549
<211> 847
<212> DNA
<213> Homo sapiens

<400> 4549
gagagttcat ctcaaagcct gngcaaggat tggagaggtc aataagagtc agcgccttta 60

0060606.0020800

aaaagaaatc tactcactct tctgtgtgca taaggccgag cagaggttct tcgtctcaag 120
aggaactgac ttctgttgag cactcaacac gccacagaga ccagccatct tgcaacctca 180
cctcacagca tggagagagg agaccaacct aagagaacca ggaatgaaaa cattttcaac 240
tgcttataca aaaaccctga ggcaactttt aagctgattt gctttccctg gatgggaggt 300
ggctccactc attttgccaa atggggccaa gatactcatg atttgctgga agagacagca 360
tctcaccatg ttgccaaggc tggtctcaaa ctccggcgct caagtgatcc tcctgcttca 420
gcctacccat gtgctggcgt gagccaccgt aggcgtgagc caccgtgcct ggccaaaatt 480
cttggtctat tctggattct aatttttttt atgcactcct taaggcttcc tggaagagaa 540
agcagagttg aagaanctct tgaaaatgac atctcccagt tagnttgatg aanttgtttg 600
tgctctgcag ccaagtcatc caaggataaa ccatttgcat tttttgggca caagtatggg 660
attctacatt gctttttaag gactgcacta aggtnctaaa agaaaacaat caancaagaa 720
ccaattgcat ttaantttg gcaaggggca actccctgta naattcaaag ggcctggcat 780
cgnaatccca aaagatgatg aattgtcaga aggacnaatt aagnccataa ccctaaggga 840
antttgg 847

<210> 4550
<211> 783
<212> DNA
<213> Homo sapiens

<400> 4550
acagcaagat ccgagccttc atcctcccca aggcagaggt gtgcgtgcgg aaccatgtcc 60
agccctacat cccatccatc ctggaggccc tgatggtccc caccagccag ggcttcactg 120
aggtgcgaga tgtcttcttc aaggaggtca cggacatgaa cctgaacgtc atcaacgagg 180
gcggcattga caagctgggc gagtacatgg agaagctgtc ccggctggcg taccaccccc 240
tgaagatgca gagctgctat gagaagatgg agtcgctgcg actggacggg ctgcagcaac 300
gatttgatgt gtccagcacg tccgtgttca agcagcgagc ccagatccac atgcgggagc 360
aaatggacaa tgccgtgtat acgttcgaga ccctcctgca ccaggagctg gggaaggggc 420
ccaccaagga ggagctgtgc aagtccatcc agcgggtcct ggagcgggtg ctgaagaaat 480
acgactacga cagcagctct gtgcggaaga ggttcttccg ggaggcgctg ctgcagatca 540
gcatcccgtt cctgctcaag aagctgggcc ctacctgcaa gtcggagctg ccccggttcc 600
aangagctga tcttcnagga ctttgccaag ttcatcctgg gtgggaaaca cgtacgaagg 660
aagtggtgct gcaaaaccgt catgaangga caccctgcaa gcctgtnaaa nggaaggccc 720
ccngntgcaa aaggaaagca caaacctcta accgggaaca acaatggggc atgcacaaac 780
aag 783

<210> 4551
<211> 534
<212> DNA
<213> Homo sapiens

<400> 4551
tttgtttgtc aaattccaag catatgtctt aaaaggcatt tttgactatc acctccaagg 60
gaatagcttg agaaacccaa agtactatgc tgcagtcggg ggagaggtgg attgcagcag 120
tatcctcaac tacctcttct cactgtcagt gacaccatct tggaatacct ttgggaagca 180
gcaggaaatg tgcatgtggg tagagatcaa aggaggcaat ggctccaagc cttgccatag 240
ggctgcctcc aaggacacag aaggatgcca gttgccacag gtccctgccc tgtgtcacct 300
gtctgccctt cattaaggtg agaaatctgc agatagcatc attaagatca gttttaaggg 360

09525469.092808

gtatagggag ggtgagggaa gtgggggtg ttaggtaagg gttgggggta aaggttttgg 420
gatgtcttan ttagaaacca gattaataga anagtangcc tgatatatta catcatgagc 480
catagtggtg gggaaagaac tttancaata taaccctanc tcctcatttt tagn 534

<210> 4552
<211> 764
<212> DNA
<213> Homo sapiens

<400> 4552
agaggggcta ggctctggga ttcaagatgg aggcgctgag tcgagctggg caggagatga 60
gcctagcggc cctgaagcaa cacgacccct atatcaccag catcgcagac ctcacgggcc 120
aggtcgctct gtacaccttc tgccccaagg ccaaccagtg ggagaagact gatatagaag 180
ggaccttatt cgtatatcga aggtcagctt ccccttacca tggttttacc attgtgaatc 240
gactaaatat gcacaatcta gttgaaccag tgaataaaga tttggaattt cagctccatg 300
aaccatttct tctgtataga aatgcaagct tgtcgatata tagtatctgg ttttatgaca 360
agaatgactg tcaccgcata gcaaaactca tggctgatgt ggtagaagag gagacacggc 420
gatcccagca agctgctcgg gacaaacaga gtcccagcca ggccaatggc tgcagcgacc 480
acaggcccat cgacatcctg gagatgctga gcagagccaa ggatgagtat gagaggaatc 540
agatgggtga ctcaaatatc tccaagccct gggttacagc caagcactca gctctccaat 600
ctggggaagc accgagactc tanaagaaaa gcctccgggt cacaggataa gtctgctcca 660
tctggacaca aagnatctga cggtagaaga gntatttggg aactccttgc caaanggaac 720
aaaccagcaa ttnttggggt cctgggttca aaaagaaaat tggn 764

<210> 4553
<211> 636
<212> DNA
<213> Homo sapiens

<400> 4553
acattcgatt tattgggagg cctacttgca gcatattacc tatcaggaga ggagatattc 60
aagattaaag cagtgcaatt ggctgagaaa ctccttcctg cctttaacac acctactggg 120
attccttggg caatggtgaa tttgaaaagt ggagtagggc gaaactgggg ctgggcatct 180
gcaggtagca gcattctggc tgaatttggt acactacata tggagttcat ccacctcagc 240
tacttgacag gggacctgac ttactacaaa aaggttatgc acattcggaa actacttcag 300
aaaatggatc gtccaaatgg tctttatcca aattatttga accccagaac agggcgctgg 360
ggtcagtatc atacatctgt cggtggcctg gggagacagt ttttatgaat acttactgaa 420
agcatgggtt gatgtcagat aaaacagacc atgaggcaag aaagatgtat gatgatgcta 480
ttgaggctat agaaaaacat cttattaana antcncgtgg agggcttacc tttattgggg 540
aatgggaana atgggcactt ggaaaaaaag atggggcatt tggcctgctt ttgctggggg 600
aatttttanc accnaggcnc aatntgggtt cccaag 636

<210> 4554
<211> 757
<212> DNA
<213> Homo sapiens

<400> 4554

0960960 - 092800

gaggcccagc tcgcgcagtc gttcgggtga gcgaagatgg cggccgagag ggaacctcct 60
ccgctggggg acgggaagcc caccgacttt gaggatctgg aggacggaga ggacctgttc 120
accagcactg tctccaccct agagtcaagt ccatcatctc cagaaccagc tagtcttcct 180
gcagaagata ttagtgcaaa ctccaatggc ccaaaaccca cagaagttgt attagatgat 240
gacagagaag atctttttgc agaagccaca gaagaagttt ctttggacag ccctgaaagg 300
gaacctatcc tatcctcgga accttctcct gcagtcacac ctgtcactcc tactacactc 360
attgctccta gaattgaatc aaagagtatg tctgctcccg tgatctttga tagatccagg 420
gaagagattg aagaagaagc aaatggagac atttttgaca tagaaattgg tgtatcagat 480
ccagaaaaag ttggtgatgg catgaatgcc tatatggcat atagagtaac aacaaagaca 540
tctctttcca tgttcagtaa gagtgaattt tcagtgaaaa gaagattcag cgactttctt 600
ggnttgcaca gcaaattagc aagcaaatat ttacatgttg gntatattgt gccaccaagc 660
tccaagaaaa gagtatagta ngggatggac caagggcaaa agtgggtaaa agaagactca 720
tcatccactn gagtttgtna gaaaaaacng gngagca 757

<210> 4555
<211> 837
<212> DNA
<213> Homo sapiens

<400> 4555
gtcaacaacc cccgaggaaa tttccacccc aatagaaaca acatatagaa cggaacattc 60
aggtccacca gagtgggcaa cttaaatcct ggagctaaaa tatgggtaca gtgtccatca 120
gatcctgccc ctaagactgc tgaccttgta gctattggag cagaatatga aggcacagta 180
caatttccta aagatgaaaa acagtatcat gttcccctcc atttttgtta ctacagagaa 240
taacctgtct gctagtaatc agcacctgga tcaccatgtc tgaggctgag aatgagttca 300
tcaactgggt agccactgct gcaatagaag ccaactgcag tcagtgctgg ctctgtgttg 360
agttgccaga ggccgctggg aatgggctac cttggagaat tgtccctgct aacatttctg 420
aatggatatg ccaataccaa tgggagtggg ataacacttg gttttgtttt gatttttga 480
gccagagtgt ctctctgtcg cccaggctgg agtgcagtgg cacgatcttg gctcagtgca 540
acctctgcct cctgggttca agcgattctc ctgcctcagc ctcccaagta nctgggatta 600
taggtgcatg tcgccacgcc tggctaattt tttgtatttt tagtanagac ggggtttcac 660
cgtattgccc aggctgatgt caaactcctg agttcangtg atctgccctc ctcgggctcc 720
caaaggtgcc tgggattcan gtgttgancc aacgngcctg gcccggggat aacactttga 780
aatccaaacc tgggccttct tttaaccaaa acantccaan ttttgccctt gccccaa 837

<210> 4556
<211> 671
<212> DNA
<213> Homo sapiens

<400> 4556
tctaaaaatg tattttactg tggtgcttaa cttcttatta attaaatccc gtatcagaaa 60
ccttgcctgt gactttagaa agggcttttg attattgttt tttcttcttg ctcttgaaag 120
taatctggtc ccagggaatt actggtttaa ctgaacatct ccagaattat ttaaggtgtc 180
aaaatatata accttcacat tgaaagataa aatttatggg cataataaaa atttgaatca 240
ttcaggtaat tttcaaaaaa tggagaccat ttgtctttaa ctgaaggtat atgtttaaga 300
tcatagtcta ccctagtatg gtgctttgcc acaaagtgat ttctgaagaa tggttctttt 360
taagataatg acttcatatg atcattgttt catgttactt gccacaaata actttaattt 420

0956756.0978800

aggttgaaac tggaactgtt tgtttctcat attagctact tctctattag gagcacaaga 480
accatagtta aatgcaacat gagctacttt agtcctgttt gtttaaattt gtgttgtcca 540
tgtattatga tttattaact tgttgatgca tgtaaattgg gtgcattttg ttgccatgta 600
tgttaaatgg tgaccaatgt ttttacaaag gaattgaaca aaaaaagtat cttttaanaa 660
anaacganan n 671

<210> 4557
<211> 882
<212> DNA
<213> Homo sapiens

<400> 4557
gtaactgaaa gagttgaaat gtcagtgaat gacaaagcag aagcaagtgg ctgcagaaga 60
tggtaaacgt agagaagaat tggttctcag gtgtctgtat agatggccta atagttctct 120
ataccaactg tagttctttt tctgttcttt caattcagta gagtaaaaat aaaaaacagt 180
gtcattttca ttcagaaact gagcagtttc taacttagct ggtttgggag ctttgctttc 240
caagtttttt tttgttttaa ggcaaactta aaattttaat ggaaacattt catatgaagc 300
caagtctcac tgagatcacc ctactgctta ataattcaga aaattttcac atgcaaagtg 360
tttggaattt tatgtatgtt atgaaagcca tcttttacaa ttcttaatca catctctgcc 420
taaactgatt catgatgttt atgttttcct gtttgtagtg tacaaaatga agctgaaggc 480
tcacatgtta aaatgaccct gaatagaata ggaagaacaa tgttcttaca ggtcataatg 540
tatttcacaa ttaaaaaact aaaatatgta cccatttta agaaatcata cttctctcca 600
cattgatctt ttcatttctt actagctttt aagaaattaa atacttgcct gagatagaaa 660
tactttaatt ttggaacctt aanggccaaa tggactaaac ttcaaagtaa aganttttgtc 720
agaataaatt gagaccatta anccaatata atacttggtc aagagcactg naatcccgga 780
agaggagaaa atttgggtaa aaattaaaaa nggttggggt gatcttaaat gcctcagtta 840
angcacgtnc aagtatcaat ttggntgggt ggacnaacct cc 882

<210> 4558
<211> 721
<212> DNA
<213> Homo sapiens

<400> 4558
cagcagaagg caaagggaaa gcaagcccat cttacatggc aggagcaaga ggaagagagc 60
aaaggggggag gggttacaca cttttctttc ctttttttttt tttaagatgg agtctcactg 120
tcacccaggc tggagtgcag tgatgagatc tcagctcact gcaacctctg cctcccgagt 180
tcaagcgatt cttctgcctc agcctcccaa gtagctggga ctacaggcat gtgccactat 240
acccgggtaa tttttgtatt ttcagtagat acaaagtttt ctcatattgg ccaagctggt 300
ctggaactcc tgacttcagg tgcctcagcc tcccaaagtg ctgggattac aggcaagagc 360
caccttgctc ggctggggtt acacactttt aaacaaccag atctcgtgag aactcagtca 420
tgaggcagta ctaggggggat ggtgcttaac cacctatgat gcaatcacct cccaccaggc 480
cccacctcca acactgggga ttacaattca acatgggatt tgggtggaga cacagagcca 540
aaccgtatca gtcatttttc ctttactgaa ggaaaatttt ggntgtgggg ttaagtacta 600
aagatanccc atgtagactt tttctgaaga taccccaagt ggnnaagatt tttaattagg 660
catttatttg gcacctattg cattcnaggc attgngataa ggagcttggg ggatnaaaag 720
g 721

0960960 - 070800

0956205.0720300

<210> 4559
<211> 851
<212> DNA
<213> Homo sapiens

<400> 4559
atgccaccct gtcatgaaca tatttataat cagcgtagat acatgagatc cgagctgaca 60
gccttctgga gagccacttc agaagaagac atggctcagg atacgatcat ctacactgac 120
gaaagcttta ctcctgattt gaatattttt caagatgtct tacacagaga cactctagtg 180
aaagccttcc tggatcaggt ctttcagctg aaacctggct tatctctcag aagtactttc 240
cttgcacagt ttctacttgt ccttcacaga aaagccttga cactaataaa atatatagaa 300
gacgatacgc agaagggaaa aaagcccttt aaatctcttc ggaacctgaa gatagacctt 360
gatttaacag cagagggcga tcttaacata ataatggctc tggctgagaa aattaaacca 420
ggcctacact cttttatctt tggaagacct ttctacacta gtgtgcaaga acgagatgtt 480
ctaatgactt tttaaatgtg taacttaata agcctattcc atcacaatca tgatcgctgg 540
taaagtagct cagtggtgtg gggaaacgtt cccctggatc atactccaga attctgctct 600
cagcaattgc aagttaagta agttacacta cagttctcac aagagcctgt gangggatgt 660
cangggcatc attacattgg gtgtcccctt tcccaagatt taagcctttt gggatacaag 720
acctangttt acaatataat aaatattaat ggctaacctt ttaaaggatn taanaantag 780
ggtggtaaac cttgaccaca aactaacngg ttttttttga aataacaatg attcaagggg 840
ttanaagggg t 851

<210> 4560
<211> 707
<212> DNA
<213> Homo sapiens

<400> 4560
tcaccaagat tgatgcagtg ctgttgtctc accctgatcc tctccacctt ggtgccctcc 60
cgtatgctgt cggaaagttg ggtctgaact gtgctatcta tgcaaccatt cctgtttata 120
aaatgggaca gatgttcatg tatgatcttt atcagtctcg acacaataca gaagatttta 180
cactctttac attagatgat gtggatgcag cctttgataa aatacagcag ctaaaattct 240
ctcagattgt gaatttgaaa ggnaaaggac atggcctgtc tatcacacct ctgccagctg 300
gtcatatgat aggtggaaca atatggaaaa tagtcaaaga tggggaagaa gaaattgttt 360
atgcagttga cttcaaccac aagagggaga tccatttaaa tggatgttcc ctggaaatgc 420
taagcaggcc ttccctactt atcacaagat tcattcaatg ctacatatgt acagcctaga 480
agaaaacaga gagatganca acttctgaca aatgtcctgn aaacacttcn aggggatgga 540
aatgtgttaa tancagtgga cacagcaggc agagttttgg gacttgctca acttcttgat 600
caagatttgg aggactaaag atgcagggat tgggtggttt acncattggn acnccnaaat 660
aatgtcaagt tacaaaaggt ggggggagtt ttcnaaggtc ccaggta 707

<210> 4561
<211> 692
<212> DNA
<213> Homo sapiens

<400> 4561
ttaatatcct aaccttgtta tctcttgcct cctcctctct gtttttattt gttttcaagg 60

ttttcataa aaacaaatac tagttttgaa ggatttttc ttacatttaa ctgctcaaac 120
ataatatttt tggggacacc ttcttatgga ggagtttgaa aacttttat gttcttgagt 180
ttgtccaata tcagctgctt ttgggaaagg aaacaaaaaa gtgaaggaaa tattttcagg 240
aagtttttct caacctacaa aagctttaaa aataagaaat tgacaagtaa ctanactatg 300
atatgccttt gctttcatca caaaagttca tcagcaaaca ggaaaaaaaa agacccctaa 360
aaagcctaaa gctttaaatt gtctccaaat tcttaaaatt agtcatccgt cctaaatggt 420
acatttaatt gncaagcaac cctgtccgga tttgaaatag atgatatgat aaaacatgca 480
ttaacatgag tagtttattt tggtgggctc canagtgtaa gaatatttta ttttttgttt 540
gacataaaaa gtgaagttga cttgcgggaa taacaatcca gcaatgcttt caatctttct 600
gaataacaca agaataacgg ngctanaagc ttccgggatt anttgtccaa ttccagttaa 660
aggagtgngt tacatttaag gtttgggaat an 692

<210> 4562
<211> 682
<212> DNA
<213> Homo sapiens

<400> 4562
caaagatgga atacgtctga atcttatttt gatacgatac actggagaca attcacccta 60
ttccccaact ataatttatt ttcatgggaa tgcaggcaac ataggtcaca ggttgccaaa 120
tgcattactt atgttggtta acctcaaagt taacctttg ctggttgatt atcgaggata 180
tggaaaaagt gaaggagaag caagtgaaga aggactctac ttagattctg aagctgtgtt 240
agactacgtg atgactagac ctgaccttga taaaacaaaa atttttcttt ttggccgttc 300
cttgggtgga gcagtggcta ttcatttggc ttctgaaaat tcacatagga tttcagccat 360
tatggtggag aacacatttt taagcatacc acatatggcc agcactttat tttcantctt 420
tccgatgcgt taccttcctt tatggngcta caaaaataaa tttttgtcct acagaaaaat 480
ctctcantgt agaaatgcct tcacttttca nctctgggct cctcagatca attaattcca 540
ccagtaatga tgaancaact ttatgaactc tccccatctc cggnctaaga gattagccat 600
ttttccagaa tgggactcac aatgacacat ggnaagtgcc aaggnnattt cactgcacct 660
tgngacaagt tcatcaaagg aa 682

<210> 4563
<211> 631
<212> DNA
<213> Homo sapiens

<400> 4563
tatataacta agaaccccc tgggctgtat ttttggtcaa aggagtctcc aaggcggctt 60
acaaaagctt ccttttcac ttgaccaccc ttgctcattg gttacttgtg aagggaattg 120
gtcagtttcc acctcagcac tttgccttat caacatgcgg tcgccatcta gtggccaaag 180
gttgtctcca ccaagctacc cagatggaag gcaaataaat cctttcggcc accctgctgt 240
ccatcgtgaa ctttgggaat gaaatataat ggcctgaacg aactgccttt gtgttcagag 300
atcagtgcaa cactagggtc agaagactcc agaagcagcc acttagtaga ctctcacgca 360
gaactgagaa atgcactaac tgtcctgtgg gcaaaagaga caggagtggg ccaagagaag 420
tccaagtgcc ggggaaaggg ttactgtact gcaatactgg naanccanct gctgaccttg 480
taaagtaaac ctttgctggg tggcccaaat tctggcccnc aaggcaagat aagaaattgg 540
gtgtaaagga ttttgttggg ggggcctggc caatgatctt tganangaat ccccgaatna 600
nccaatagtt ttttttggtc naatttttgg g 631

09629459.072800

<210> 4564
<211> 818
<212> DNA
<213> Homo sapiens

<400> 4564
agagaggggt gcaagatcct gatttttcag gagttcaagc gacaatggca gcccaatacg 60
gcagtatgag cttcaacccc agcacaccag gggccagtta tgggcctgga aggcaagagc 120
ccagaaattc ccaattgaga attgtgttag tgggtaaaac cggagcagga aaaagtgcaa 180
caggaaacag catccttggc cggaaagtgt ttcattctgg cactgcagca aaatccatta 240
ccaagaagtg tgagaaacgc agcagctcat ggaaggaaac agaacttgtc gtagttgaca 300
caccaggcat tttcgacaca gaggtgccca atgctgaaac gtccaaggag attattcgct 360
gcattcttct gacctcccca gggcctcatg ctctgcttct ggtggttcca ctgggccgtt 420
acactgagga agagcacaaa gccacagaga agatcctgaa aatgtttgga gagagggcta 480
gaagtttcat gattctcata ttcacccgga aagatgactt angtgacacc aatttgcatg 540
actacttaag ggaagctcca gaagacattc aagacttgat ggacattttc ggtgaccgct 600
actgtgcgtt aaacaacaag gcaacangcg cctgagcaag anggccaaag ggcacaattg 660
ctgggcctga ttcaancgcn ttggtgaggg aagaacaagg aaggctgcta cactaatagg 720
atgttccaaa nggccggang aaggagatca gaagcaaaca caagcaatgc aagaactcca 780
caaaatggga gctggngaaa aaanaaagcc ccgnttaa 818

<210> 4565
<211> 765
<212> DNA
<213> Homo sapiens

<400> 4565
actttgttcg ctcctcagtc gtccaggcgg attccttttt cgccaggcac caaggcacag 60
cttagagtag acccgagtcc tgctctgcgg agttcgtctt cccagcgaag gtacagaggc 120
ggatgaactg ctgagacttg attgacgtat tttaagattt ttttaacttc tgaagtctag 180
caggcctgta agaacaaaaa tcattctgta ggaattaaaa acagaatcca gtcttgacaa 240
catatccaca atgtctgatg tatctactag tgtacaatca aaatttgcta gacttgcaaa 300
gaaaaaggaa aatatcacct atatgaaaag agagcagtta acagaaactg ataaggacat 360
agctccggta ttagatttaa aatgcaagga cgtatcagca attatgaata agtttaaggt 420
cttaatggaa attcaagacc tgatgtttga ggagatgagg gaaactctta aaaatgacct 480
aaaagcagtt ttaggaggaa aagctacaat acctgaggta aagaattcag agaactccag 540
tagtaggaca agagtttcag caaataatca atttagcatt acaaaaaaca gggatggtag 600
ggaaaatana aggagaaaac tctaaaatan gtgatgataa tgaaaattta acctttaaat 660
tagaagtaaa tganctgagt gggnaaatta gacaacacta acgaatacaa ttagtaatga 720
tgggaaggaa atttncccaa gggtgaaatc accaaagttn ccnaa 765

<210> 4566
<211> 790
<212> DNA
<213> Homo sapiens

<400> 4566

09559459.0N3800

agactgaaaa ctaaagcctg cagagacctc tgaaggaaaa cctgtcccgg gctctgtcac 60
ttcacaccca tggctaaccc tggaggtggt gctgtttgca acgggaaact tcacaatcac 120
aagaaacaga gcaatggctc acaaagcaga aactgcacaa agaatggaat agtgaaggaa 180
gcccagcaaa atgggaagcc acatttttat gataagctca ttgttgaatc gtttgaggaa 240
gcacccctc atgttatggt tttcacttac atgggatatg gaattggaac cctgtttggc 300
tatctcagag acttttaag aaactgggga atagaaaaat gcaacgcagc tgtggaacga 360
aaagaacaaa aagtacgtat gcgcacctcc ctggatcttt gtcaatgcct actcctctct 420
aaagtgttct cagaagtggt gatgcaggtg cagattctag aaagcatgag gtgctcagga 480
actattcagg gcaaatttca ttcatctcca cctgctaaac cccattaccc atgggcttat 540
ggacctgttt ttacaaacat ctcatgggca actactattt gccacatacc aaactaaggc 600
ttttcccata ccttgtaata tttaattttt gtaacaaccc catgatatag atattaaact 660
ataattttga agataaaaac atcaanatat aaaagcaagt gctcccgggt gggactgtac 720
tttgggcctc taattgnaat tgggtattat ttatgcncca tccctgaaaa anggaaaant 780
gcaatttnag 790

<210> 4567
<211> 531
<212> DNA
<213> Homo sapiens

<400> 4567
ttgcttttgg gttttttttt cctgtttcca cccctccccg ttatttttc ctttggatgg 60
ttaaaagcat tgcaggcacc cgggaaggtg agcagagggt angtgggtgg gcttgtcccc 120
tccccggtcc cccgccctgc tcacctctac tatgaaggtg cccccangtc acctgtgctg 180
cccgccatct gcccacgtgg cttgcagtga ctcaggagag caggcccaca gcgtttgcca 240
tcttgcanag ctggggangg gcacaagacc ctgccctcgt gttccctccc agcccgcagt 300
atttcaggga caggctcttc ccctctatcc ctcaccctga gagcacccct ggnggcttgg 360
ttggggaagg gaggggctgc ctgtctctgg aggtgtcagg caagcaggtg gcaggcagnt 420
cacccaacca ccccatggga tcccccancc ctttaaccgn gcctgccttg tccccatgat 480
agttgacaat cgggggnttc ctgcaaggcc cgtctgtctg tcaannactc c 531

<210> 4568
<211> 490
<212> DNA
<213> Homo sapiens

<400> 4568
tagatttgtc ggcttgcggg gagacttcag gagtcgctgt ctctgaactt ccagcctcag 60
agaccgccgc ccttgtcccc gagggccatg ggccgggtct cagggcttgt gccctctcgc 120
ttcctgacgc tcctggcgca tctggtggtc gtcatcacct tattctggtc ccgggacagc 180
aacatacagg cctgcctgcc tctcacgttc acccccgagg agtatgacaa gcaggacatt 240
cagctggtgg ccgcgctctc tgtcaccctg ggcctctttg caatggagct ggccggtttc 300
ctctcaagag tctccaagtt caacagcacc cagagcctca tctgtatcct ttctgcctgg 360
ccaactttcc cacacgagcc acttctatca ggactccctt caggcacctg acacaatagg 420
gtctgctgta gccaatcctt ccaagttcaa agatnttcaa cgatgtgcna aatcctgcng 480
tttacaaggg 490

<210> 4569

09822.0056-00000

0050250.0050250-00756

<211> 546
<212> DNA
<213> Homo sapiens

<400> 4569
gtagtttact ctcagcagca gccaaagcac agctagcaaa tcaaaacaaa cttgctggta 60
acaacagtag cagcagtagc aattctggag ctgttgccgg cagtggcaac actgaaggac 120
atagcacttt aaacaccatg ttccctccta ctgccaacat gcttctccca acaggtgaag 180
ggcaaagtgg tcgagcagca ctaagagata agctgatgtc tcagcaaaaa gacgcattgc 240
ggaaaagaaa acaaccacct acgacagtgt tgagtttgct cagacagtct caaatggata 300
gttctgcagt tcctaaacct ggacctgact tgctaaggaa gcagggtcag ggttcatttc 360
ccatcagttc aatgtctcag ttactacagt ctatgagttg tcaaagctct cacttgagta 420
gcaatagtac cccggggttg tggggcctca aatactgctt gccntgctcc gctaaccagc 480
tgcattttac aagnttccag tatgaactcc agtggttcct canaacatac ctttnanagg 540
gggaaa 546

<210> 4570
<211> 729
<212> DNA
<213> Homo sapiens

<400> 4570
gtctgcgaga ccgacttgga cggagccgag ctgaggctcg gcttcctgct gatggtcagg 60
gttttggcaa ctccccggtg tgagaggggt agggagtgct cccggcggcg acggggccga 120
gttcaccagc cgccggggca gtagtcgaag gcccggcgcg gcatgtcctg ggtgccgcgg 180
tgcgggcagt gaacgcgcgc cgggcgggat gggccggcgc cgggcgccag agctgtaccg 240
ggctccgttc ccgttgtacg cgcttcaggt cgaccccagc actgggctgc tcatcgctgc 300
gggcggagga ggcgccgcca agacaggcat aaagaatggc gtggtgagag cgcanggcca 360
ctggggctgg gtcttgctgc gggctggcgg cgattccaag gtggccgggg ggtcgcgggg 420
cgggccacac tccagcttcg ggccctgccc acttctgttg ggaagacccg cttgcctgac 480
gcccaggggc gaatttcagt cgagaactca ncgggcggag gagaggcttt taaggtaaag 540
tgaaaactgc acacagctgc agagtcgcca ngaacgcttc agctccgcct cagagcaact 600
ccaaggggtc ttatactggc cttttccggg aagtcntgcc ctgccctcta acaacngcna 660
aagttgtgca attgggttta agctaagttn cctccctctc ctgaacntca acctgttctg 720
taaaaataa 729

<210> 4571
<211> 801
<212> DNA
<213> Homo sapiens

<400> 4571
aaactgatag gtgcagatgg catcacattt gtatttgtgt ttcnttaatt atgactcctg 60
agttactttt gatcatcctt gcttgcatgg aagctttctt tttaagtaac gtggacattt 120
accaaacatc ctgcatgtgt cagtagacat gaggcagctg agactatagt gggtagagga 180
aaaattattg gcttggaaat aggcatcttg gattcaagtt ccgtatctac tgctttaatt 240
aagtggcttt gaataaattg cacattatcc ctaaagttac cttcttcagg ttttaagtta 300
gctgagacta aaatgacttg taaagattac ccaacaagaa agtctgtagt aatgccagca 360

tgtagttcat gctcaatgat gactagcttt aatatttatt gagcacatac tgtgtgctaa 420
actccatgtg ttttgcatat atcagtgcat ttaataatca caaaaagtat atgggttttt 480
tgaactataa tttgtcacca tgttacagaa gaggaaacta aaggccagag tgggataaat 540
tacttgatcg tgggcaagtt agtanagctg agattcaaac cctggcagtc ctgaatccan 600
agccttgtgc tccaaactac taaaggtcaa tcaatcaagt tccctaaaaa ggngaaagat 660
cccaaaancg ggaactgttc aattatggga acccactagc ccacatgtgg ctgtttgagc 720
aacttgaaaa tgtggctaag nccaaactgg agaagtgccn aaagtttaaa attacaaacc 780
cgnatttttg aanaangtaa a 801

<210> 4572
<211> 739
<212> DNA
<213> Homo sapiens

<400> 4572
aaaaagtgat gaaggcctac gagtgcggcg cggcctgaag gggcacgcgg gggacctgca 60
aagctagtga ggggcggggc aggcggcgcg gtgggggcgg gccgagcccg gaggccagat 120
gagcggacac agccccacgc gcggggccat gcaggtggcc atgaacggta aggcccgcaa 180
agaggcggtg cagactgcgg ctaaggaact cctcaagttc gtgaaccgga gtccctctcc 240
tttccatgct gtggctgaat gccgcaaccg ccttctccag gctggcttca gtgaactcaa 300
ggagactgag aaatggaata ttaagcccga gagcaagtac ttcatgacca ggaactcctc 360
caccatcata gcttttgctg taggggggca gtacgttcct ggcaatggct tcagcctcat 420
cggggcccac acggacagcc cctgcctccg ggtgaaacgt cggtctcgcc gcagccaggt 480
gggcttccag caagtcggtg tggtgaccta tggtggtggg atctgggagc acctggtttg 540
accgtgacct gactctggct ggacgcgtca ttgtcaagtg ccctaactca agtcngctaa 600
agcancanct ggtgcacgtg gagcgggcca atcttcgcat cccanacctg ggcatccaat 660
ctgcaacgaa aatatcaaac gaagaacttt tggggcccaa caacaagaga ttcatnnaat 720
ccccaattcn tggcaaaan 739

<210> 4573
<211> 688
<212> DNA
<213> Homo sapiens

<400> 4573
ataccttga gtcttgcaga agagaaacta ccaacaggca ttaatcctct cactctacac 60
atcatgagaa ggacaaaaga atatgtaagt aatgacgcgg cacagtcaga tgatgaagag 120
aagttacagt ctcagccaac agatactgat ggtggaaggt taaaacagaa aacgactcaa 180
ctaaagaagt ttcttggaaa atcagtaaag agagcaaagc accttgctga ggaatatggt 240
gaacgtgcta taaataaagt taaaagtgtt agagatgaag tgtttcatac tgatcaagat 300
gatccttcat caagtgatga tgaaggaatg ccatacacaa gaccagttaa attcaaagca 360
gcacacggtt tcaaaggncc ttatgatttt gatcaagtna aagtggtgca agatcttagt 420
ggtgaacata tgggagctgt ttgggccatg aaattttctc actggnggcc gantacttgc 480
ctcagctggn caagacaatg tagtgagaat atgggcttta aaaaatgctt ttggccattt 540
caacaatatg cgaatgaaat acaataccna aaggacntgt gtccccaaca acctcccaag 600
gaaagtctaa ngttcancaa aatccgggta caagatacaa gggggtntgc actggaacct 660
gatgaagaac ccngatgata aaaacnca 688

0962034.0702000

<210> 4574
<211> 422
<212> DNA
<213> Homo sapiens

<400> 4574
cagtttcatt tcactcatta agctcagcac actgctgccc attcccaggg tggacagccc 60
atgcagaggc tttgctaggt gaaaaagctt ggtttgctaa aagtcacagg cagaatcctg 120
caggtccatg cccttagatg tgccaaattg taagttgcat agattttagg ggtttggggc 180
aaaaaggaaa cttatgttta agtgctctag ggaaagaggc attgtttcca ggtggtttca 240
ttgtcatatg atctccaggt tcagaaggca agtagtgtct ggagaaacga ttcctggccc 300
tgagaaattg accattaatt tctgacagat agtttaagtg cctcctgtga catacaaaag 360
agacacacac tgtccttgtn gaaatcatga nctgcaagag gagacactat caagntatcc 420
ca 422

<210> 4575
<211> 513
<212> DNA
<213> Homo sapiens

<400> 4575
attatgacac ccgtctgtgt cactgctctt gacaatgaca gaacctacaa aaggatccag 60
ggtcctcagc ccccatctgc ctcccagcct cacttcctgc acttccatga aaataacctt 120
tgttcccccc acaaggaact tcttgcagtt atccaaatgt tccctgtcct ggtgcacact 180
gaggcccctg catggagcca atccttcact taaatcacta tgcccccatg ccttcatctg 240
gagaactcac acttctgttc agaccctcan atgtgactgc ttccgtgtta ctgctttctc 300
tgccaattca ctgggcctgg aaaatacttc tggaaactcc aagggagaag ttaccaagct 360
ccccccttccc tgggggcttt gctgatgcct ctgtcanagc actcagcaca tgacactcgg 420
attactggnt canantcccc tgcttccaaa ggctctgcct gnatgcctcc aagggttatt 480
tccaaagcac ccagctcant gcctgtccat tgg 513

<210> 4576
<211> 676
<212> DNA
<213> Homo sapiens

<400> 4576
cccatgacaa tgcagatttt ggcaaagctg catctgctgg tgagcagcta gaactgaact 60
ttttgatcat ctcaaacaaa aagtctggac gtattaaaca atatctccat tcccctccct 120
gccaacccct gatgacctct cttcaacttt cggagaagct aaaacttact tatgaggaaa 180
agtgtgaaat tgaggaatcc caattgaagt ttttgagaaa taagaatcac ggccgggcgc 240
ggtggctcac gcctgtaatc ccagcacttt gggaggctga agcgggcgaa tcacgaggtc 300
aagagattga gaccatcctg gccaacatgg tgaaaccccg tttctactaa aaatacaaaa 360
attagctggg cctggtagca cgtgcctgta gtcccagcta cttgggaggc tgaggcagga 420
gaatcacttg aacctgggag gcggaggttg cagtaagctg agaccacgcc actgcantcc 480
aacctggcaa cagagtgaga ctccatttca aaaaagaaaa acanaanaag aaataagaat 540
cactaactgc ncttatagaa attatgatat tcaagtaaaa taatgaaaat aaagcacttt 600
attttcaaat tattangtat tttttcccng tanataagnc ctcaaccaat tttaaaattg 660

09829469 - 070208

caatgataat ataana 676

<210> 4577
<211> 713
<212> DNA
<213> Homo sapiens

<400> 4577
ttctctcttt gtttaggcan gatcattatt tatttaactg tagttgcatt gtgaattatt 60
tgtattatgt tgttccagat cattttctca tagtggcttt gatttggctc tgccttggtg 120
tttgagccca aagttgaatc tttttctctt tgttttcttg aagtgcagga tataatctga 180
aattccattt gttgagtctc ttacatcacc atgtgtgtga tgtggaatga agagatgtga 240
aagatggatt catgagacca agcgtgggtg ataatgaact ctgaaaacat tttataaaac 300
aattatcccc attcttgttc tctgttagca ctttgtttgc aaaatacttc ttaattattt 360
gttagcgata catgtcagct gaggtccttt ttatgcccct ggtctagatg gtggtgatgg 420
attaaatggg tttctgtagg tcccagagat tttaaggcta atgataatta agtattgtta 480
ttgggccagg cagtgttcta ggatatttac cgtttttaca ctgatttgtc cctcccaaca 540
accttctggg atgggttact attaccgtat tcattttaca aatgaaantg ggattcanga 600
tgggtaaata acttatccaa gggtacttag ccagaagttg tcaaagtcca anatttgaac 660
ccaaggctgt cctggctncc aanagtccaa ggattccang ncaattgcgc caa 713

<210> 4578
<211> 727
<212> DNA
<213> Homo sapiens

<400> 4578
attccatggc ggcgcggcgg cgacggagca ccggcggcgg cagggcgaga gcattaaatg 60
aaagcaaaag agttaataat ggcaacacgg ctccagaaga ctcttcccct gccaagaaaa 120
ctcgtagatg ccagagacag gagtcgaaaa agatgcctgt ggctggagga aaagctaata 180
aggacaggac agaagacaag caagatggta tgccaggaag gtcatgggcc agcaaaaggg 240
tctctgaatc tgtgaaggcc ttgctgttaa agggcaaagc tcctgtggac ccagagtgta 300
cagccaaggt ggggaaggct catgtgtatt gtgaaggaaa tgatgtctat gatgtcatgc 360
taaatcagac caatctccag ttcaacaaca acaagtacta tctgattcag ctattagaag 420
atgatgccca gaggaacttc agtgtttgga tgagatgggg ccgagttggg aaaatgggac 480
agcacagcct ggtggcttgt tcaagcaatc tcaacaaggc caaggaaatc tttcagaaga 540
aattccttga caaaacgaaa aacaattggg aagatcnaga aaagtttgag aaaggtgcct 600
tggaaaatat gatatgctac anatggacta tgccaccaat tactcaagga tgaagaggaa 660
acaaaggaaa ggaggaatct ncttaaatct ccccttngaa gccaanagnc cacagctaag 720
attnttc 727

<210> 4579
<211> 613
<212> DNA
<213> Homo sapiens

<400> 4579
gagtttttgt atttttaagt aagagatggg tttcaccatg ttggtcaggc tggtctcgaa 60

09605350.0N2000

ctcctgacct catgatccgc ccacctcagc ctcccaaagt gctgggatta caggtgtgag 120
ctaccacgcc tggcctatta tgatttttaa tgaagtttgt cataaccaag tacttgtcat 180
tttctgatga gaacactgaa agtttagggc atgtagtgcc aacttttggc agtatttctt 240
cacaggtggt ggcgtgttct tccatcagga gtcatgtaat gtttggtgat ctctcgtgat 300
gttagcagct gttgctgttt gatgccttat cccttaattc attaagggtt gcaaaatgga 360
gatatcctaa tgctatcatt ttttcatctg ttaggtgaag ttttacttac ataaaaactt 420
catctcttct tgcttctgct aatggtaacc attcttttc agtatcataa taagcttgtt 480
aaacaaattt gatgtgtttt aaaagtgcca gctaaagtan aaagacatca ttaagaacaa 540
ctatgacatc ttcccataaa acttcccttg ntaactanac tgcatggatt attgggtttg 600
gatgccggta nan 613

<210> 4580
<211> 662
<212> DNA
<213> Homo sapiens

<400> 4580
gaagaaaggc gagcagaaca gaggaagtat ggagtgttct ttgatgacga ctatgactac 60
ctgcagcacc tgaaggaacc atctgggcct tcagagctta ttccctcaag taccttcagt 120
gcacacaaca ggagagagga gaaagaagaa acgctagtaa ttccaagcac tggaattaag 180
ttgccttcat cagtgtttgc ttcagagttt gaggaagatg ttggattgtt aaataaagca 240
gctccagttt caggacctcg actggatttt gatcctgaca ttgttgcagc tcttgatgat 300
gattttgact ttgatgatcc agataatctg cttgaggatg actttattct tcaggccaat 360
aaggcaacag gagaggaaga gggaatggat atacagaaat ctgagaatga agatgacagc 420
gagtgggaag atgtggatga tgagaaggga gatagcaatg atgactatga ctctgcaggc 480
ctattgtcag atgaagactg tatgtctgtg cccggaaaaa ctcacagagc tatagcagat 540
cacttgttct ggagtgagga aacaaagagt cccttcacgg agtattcgat gacttcctca 600
gtcatganga gaaattgaac agctgaccct acaangatga naaggttgan aagttttaan 660
ga 662

<210> 4581
<211> 808
<212> DNA
<213> Homo sapiens

<400> 4581
attttgactg agcaacccta gtgacaggag ccgaagcagc agcgcaggtt gtccccgttt 60
cccctccccc ttcccttctc cggttgcctt cccgggcccc ttacactcca cagtcccggt 120
cccgccatgt cccagaaaca agaagaagag aaccctgcgg aggagaccgg cgaggagaag 180
caggacacgc aggagaaaga aggtattctg cctgagagag ctgaagaggc aaagctaaag 240
gccaaatacc caagcctagg acaaaagcct ggaggctccg acttcctcat gaagagactc 300
cagaaagggc aaaagtactt tgactcagga gactacaaca tggccaaagc caagatgaag 360
aataagcagc tgccaagtgc aggaccagac aagaacctgg tgactggtga tcacatcccc 420
accccacagg atctgcccca gagaaagtcc tcgctcgtca ccagcaagct tgcgggtggc 480
caagttgaat gatgctgccc ggggctctgc cagatcctga gacgcttccc ctccctgccn 540
caaccggggt cctgtgctgg ctcctgcccc ttcctgcttt tgcaagccag gggtcaggag 600
gtggctcggg tgttgggctg gagaaggcan aancccttc ctgttggtgt ccancacatg 660
gagcccctg ggctgagcac caaagacctt gaaacctttt tgtttttacc ttttttttcc 720

0560203.0050800

aaantaacaa gttggganga aattatcaat tgaaaattct ggggggttgg ggggttgggg 780
gttttaaaag ggtggggggn tgggaann 808

<210> 4582
<211> 798
<212> DNA
<213> Homo sapiens

<400> 4582
agattgtgaa tatttaccta atgataattt ttagagaagg agatatcata gatgagtatg 60
attgggaagt tcagaaaact aaaatttgat ttttacagcc atccaactat agaatcatta 120
gaatttagtc atttatggat aaattaaaat gaacacctgg actcttgtta aaatcagaaa 180
gtccaaacca aagataggca cttcccattc accattctgt tttaaagcag taaaaattga 240
ggtgcccttg gatatccaca agcctaaatt gagtacaccc ttgaaccaga gcccctcagt 300
taatggggtg accgacatgg ggtagctgat cccaggggge attcccctct cgagctggcc 360
ctgcactggg tggcctgggg attgtgcttc cttgcacagt ggtgcacatt tctatgtgtg 420
gatgagattt cttgtcaact tttcctgcca agacactaaa tgcttttcag tgctaatact 480
gacctgatag tagagatttc tttccctgag tcggatggta gcaggattta cttggtaacc 540
cttgattaaa atacctgttt ttttgtttgt ttgttttcct ttgtttttta aggaaataag 600
tcaatangcg gagggaaatg ttccatatgc actattaaat aattttgtta acaacctgcc 660
ctgggataaa agtgaatgga agtacatgac tgagtaacag taattaaatc cttgnnctga 720
ttgtttaatt gggggacngt atangccttc cttgactgga caatnagaat gttggnatta 780
agtttttcaa ttgggtcc 798

<210> 4583
<211> 805
<212> DNA
<213> Homo sapiens

<400> 4583
aatttgttca agtaggccat ggccaagaca gacagtgggg attgtgcata tttgatgaca 60
tcatagagca ctgcagtcca acttcattta aatatgtaga atattttcgg tggccaatgc 120
tactaaatat gcgagataac aaccctgaag tcaggcaagc tgctgcttat ggcctgggtg 180
tcatggcaca gtttggtgga gatgattatc gttctttatg ttcagaagct gttccacttc 240
tggtaaaagt tattaagtgt gcaaattcca aaaccaaaaa aaatgtcatt gctacagaga 300
actgtatctc agcaataggg aagattttga agtttaagcc taactgtgta aatgtagatg 360
aagttcttcc acactgatta tcatggcttc cactgcatga agataaagag gaagctattc 420
agactttgag ttttctctgt gacctaattg aaagtaacca cccagttgta attggtccaa 480
ataattccaa tcttcccaaa ataatcagta taattgcaga aggaaaaatt aatgagacta 540
ttaactatga ggatccttgt gccaaacgcc tagctaatgt cgtgcgtcag gtacagactt 600
ctgaagattt atgggtggaa tgtgtatcac aacttgatga tgaacagcan gaagccttac 660
aggagttgct aaattttgcc tgaagcactt taatataact tgaataatat cnaatataaa 720
gtaactacaa ataagtgttg tgaatagatt ttatataaat cagagaaatg gttttcnccc 780
ngctaagcaa tttaanantt cctcc 805

<210> 4584
<211> 837
<212> DNA

0052950.0250

<213> Homo sapiens

<400> 4584
aaaaattcta agagcaacct catgcagttc tctttgttga tgaaaaggat gttgtagaga 60
taaatgaaaa gttcacagag ttacttttgg caattaccaa ttgtgaggag aggttcagcc 120
tgtttaaaaa cagaaacaga ctaagtaaag gcctccaaat agacgtgggc tgtcctgtga 180
aagtacagct gagatctggg gaagaaaaat ttcctggagt tgtacgcttc agaggacccc 240
tgttagcaga gaggacagtc tccggaatat tctttggagt tgaattgctg gaagaaggtc 300
gtggtcaagg tttcactgac ggggtgtacc aagggaaaca gcttttcag tgtgatgaag 360
attgtggcgt gtttgttgca ttggacaagc tagaactcat agaagatgat gacactgcat 420
tggaaagtga ttacgcaggt cctggggaca caatgcaggt cgaacttcct cctttggaaa 480
taaactccag agtttctttg aaggttggag aaacaataga atctggaaca gttatattct 540
gtgatgtttt gccaggaaaa gaaagcttag gatattttgt tggtgtggac atggataacc 600
ctattggcaa ctgggatgga agatttgatg gagtgcaact ttgtagtttt gcgtgtgttg 660
aaagtacaat tctattgcac atcaatgata tcatcccaga gagtgtgacc ncaaggaaag 720
gaggcctccc aaacttgcct taatgtcaag aagtgttggg gacaaagggt caaccaagtc 780
ataataaacc aaanggntac aagggtttaa cctcagnccc tggaaaatng aaacnag 837

<210> 4585
<211> 704
<212> DNA
<213> Homo sapiens

<400> 4585
ggactatgtc tgcatttctg acaattactg gctgggaaag aagaagccct gcatcaccta 60
cggcctcagg ggcatttgct acttttcat cgaggtggag tgcagcaaca aagacctcca 120
ttctggggtg tacgggggct cggtgcatga ggccatgact gatctcattt tgctgatggg 180
ctctttggtg gacaagaggg ggaacatcct gatccccggc attaacgagg ccatggccgc 240
cgtcacggaa atcaggagca caagctgtac gacgacatcg actttgacat agaggagttt 300
gccaaggatg tgggggcgca gatcctcctg cacagccaca agaaagacat cctcatgcac 360
cgatggcggt acccgtctct gtccctccat ggcatcgaag gcgccttctc tgggtctggg 420
gccaagaccg tgattcccan gaaggtggtt ggcaagttct ccatcaggct cgtgccgaac 480
atgactcctg aagtcgtcgg cgagcangtc acaagctacc taactaagaa gtttgctgaa 540
ctacgcagcc ccaatgagtt caangtgtac atgggccacg gtgggaancc ctgggtctcc 600
gacttcagtc aacctcatta cctggctggg gaaaaganco atganggaca atttttgggg 660
ttgagccaaa cctnaccaan ggaaaggcgg gaantattcc ccgt 704

<210> 4586
<211> 902
<212> DNA
<213> Homo sapiens

<400> 4586
agaaggtgaa atagacccta ccccctgatg gaggatccac ttgtatgtat aaggatggga 60
agctttgcag gcagccatct ttggaagcca tccaccacag tggctcaatc aacctggtga 120
tgacacagag tgaagtcccc actttccaag aattttcctt cacaagaaag ttcctttcat 180
ttcacccaca caggaatgtt gactttaaat gagaccaaga cctaaaaggc cacattcaca 240
gataggtaac agggcatctc tttgacaagc ctcaatcgct cttgggggct tcaatttcct 300

0050-0050-0050

catctgtaaa ataaagatag cctagagttg agttctacag ccttaaacct caaaggaaaa 360
gcctttatac aggtgttcta atttgcaact atcaccagat atttcccata aggccaggtg 420
cagtggctca tgcctgtaat cctatcactt cgggagacca aggcaggtgg attacttgag 480
gttaggagtt cgagaccagc ctagccaaca gggtgaaacc ccacctctac taaaaagaca 540
aaaattagcc aggtgtggtg gtgcactccc ataatcccag ttactgagga ggctaaggca 600
caagaatcac ttgaacctgg gaggcagagg ttgcagtgag ccaagatcat gccactgcac 660
tccagcctgg gagacagaga gagactctgt ctcaacaaca acaacaacaa naaattattt 720
cccgtaggat tttccaaaag gagggntagg aatgtgaagt caataattca caaatgcact 780
cctacttttt cggaggtata ttaggaatgc atatcctngn tggnacctac acaaangcct 840
cccttggaat tttaaacttc caganttttt ccccctggct taagggccgg caaccaaggg 900
gt 902

<210> 4587
<211> 801
<212> DNA
<213> Homo sapiens

<400> 4587
tatgaatgca cagcttgccc atcggggaca tacaaacctg aagcctcacc aggaggaatc 60
agcagttgca ttccatgtcc cgatgaaaat cacacctctc cacctggaag cacatcccct 120
gaagactgtg tctgcagaga gggatacagg gcatctggcc agacctgtga acttgtccac 180
tgccctgccc tgaagcctcc cgaaaatggt tactttatcc aaaacacttg caacaaccac 240
ttcaatgcag cctgtggggt ccgatgtcac cctggatttg atcttgtggg aagcagcatc 300
atcttatgtc tacccaatgg tttgtggtcc ggttcagaga gctactgcag agtaagaaca 360
tgtcctcatc tccgccagcc gaaacatggc cacatcagct gttctacaag ggaaatgtta 420
tataagacaa catgtttggt tgcctgtgat gaagggtaca gactagaagg cagtgataag 480
cttacttgtc aaggaaacag ccagtgggat gggccagaac cccggtgtgt ggagcgccac 540
tgttccacct ttcagatgcc caanagatgt catcatatcc ccccacaact gtgggcaagc 600
anccagccaa atttgggacg atctgctatg ttaagttgcc cgccaagggt tcattttatc 660
tggagtcaaa gaaatgctga natgtacaac ttctgggaaa attggaatgt ccgagttcaa 720
ggcagctgtt gtgtaaagac ntggaaggnc ctcaatcaac tggtcctaag gncattanag 780
ggttaagact cngggaacag c 801

<210> 4588
<211> 734
<212> DNA
<213> Homo sapiens

<400> 4588
ctgaaaacag tgaaactgag ttagaaagga ttttgcgtcg cagaaaggtg acagcagaag 60
cagatagcag tagtccaact gggatattag ccacctcaga gtccaaatcc atgccagtgt 120
tgggttctgt atccagtgta acaaaaacag ccttgaacaa gaaaactctg gaggcagaat 180
tcaacagccc gtccccccca acacctgagc caggtgaagg gccccgtaaa ttggaaggat 240
gcacaagttc caaggttacg tttcagcctc ccagtagcat tggatgcagg aaaaaataca 300
ttgacggtga aaaacaagcc gaaccagttg tagttttaga tcctgtttct acacatgaac 360
cccaaaccaa agaccaggtt gctgaaaaag atccaactca acacaaggag gatgaaggcg 420
aaattcaacc agaaaacaaa gaagacagca ttgaaaacgt gagagagaca gacagctcca 480
actgctgatc cataaaccag aagcctgaca tgtttggaag tccttttcaa taagcacatg 540

0552045.0002

attagtgttg ttatattggc aagggctgta gacattctgc tctggtcact gtattcagaa 600
tacangttct tttccggtgt cacttttgta agtagcaact ataaacataa gttaactgtt 660
tagcaaaaca cacattccca ntaaggnttt gggtttttgg atcctttana aangattgag 720
ggtttttttc ccna 734

<210> 4589
<211> 748
<212> DNA
<213> Homo sapiens

<400> 4589
aaaattctcc gttctatgac aaataccgag gagtgactga aaaaaaaatt aacaaacata 60
tagcaacagt taaaaataag taaatagaaa tctgcataga ccagaaattt acaactatta 120
ttgaagaaaa gaacagtaag aaaccagaaa gtagtatttt gggggcagct cacgtggagt 180
caggctcagt gtaggacttg agtgaaagac tttcccaaga agccccaggg ctaatctggg 240
cagccctgga tgcttaggtc tggaacccag ggccagaatc tttgacagcc agatccagta 300
aaggccaaaa ccaagaatct cctcccacac cagtggattc tcaacacaca gtgcacttga 360
tcaggctgtc agaattacct agagcagtgc atattctgat ggagagaatt ctctgaacaa 420
tcctgaattg catttaaaag tgtgcgaaat atttgtgtaa taaatccttc gtttgtgttc 480
atttgttaga agccaattct aaacattcaa atattcnaat atgtaaacaa aaaaactgga 540
aaaagaattt gcatttaatt tgaccggaga atatgtgctt ctcttagctg tgaatttttt 600
ttcactttaa tcagtttgct ttcagaacat aaactgcatt ctaaaccctg ttattttgtt 660
cctaatatta acancccna aagagaagtt agatgtttat atngaangcc agggaagttg 720
gtaaagtgat attatccngt gggattta 748

<210> 4590
<211> 606
<212> DNA
<213> Homo sapiens

<400> 4590
agttggtgga accgggagct tcgagtccgt ccccggtgct gcctgcgcgt tcacctgagt 60
ctcgctggag ctcttctcgc ccgcccacct catctcaacc cactttccgc ggggagcggc 120
gccaagctgg gccttcctcg gatcaggcgt cccctgaagt cggcacgccc ctctgcgtcc 180
cccttcggtc ccgctaggac cccgtccggg ctgccgtcgc ctcgtcgcta tggcgcccac 240
catccagacc caggcccagc gggaggatgg ccacaggccc aattcccacc ggactctgcc 300
tgagaggtct ggagtggtct gccgagtcaa gtactgcaat agcctccctg atatcccctt 360
cgaccccaag ttcatcacct acccccttcga ccagaacagg atcgtccagt acaaagccac 420
ttccttggag aaacagcaca aacatgacct cctgactgag ccagacctgg gggtcaccat 480
cgatctcatc aatcctgaca cctaccgcat cgaccccaat gttcttctag atncaagctg 540
atgagaaact tttggnanaa gagattcaag cccccaccaa gctccaagag attccancaa 600
ncacgc 606

<210> 4591
<211> 654
<212> DNA
<213> Homo sapiens

0960450.0072800

<400> 4591
gctgggaccc tgaggcggcc gtggttaggc ggctccccgg cggctcctcc gcggcggtga 60
cggcgaccgc actccccgct tcccgctccc cgcgctcctc cgcccgggtc cgccagccga 120
ggccgctccc gagcgtcgga agatgccggc cgtgtccaag ggggacggga tgcggggcct 180
ggcggtcttc atctcggata tccgcaactg taaaagtaaa gaagcagaaa taaaaaggat 240
aaacaaggaa ctggcaaata tcagatcaaa atttaaaggt gacaaggctc ttgatggcta 300
tagtaaaaaa aagtacgtct gcaagttgct cttcatcttt ctccttggtc atgacattga 360
ctttggacac atggaggctg tgaacctgct gagttcaaac agatacacgg aaaagcanat 420
cggctacctt ttcatctctg tgttggtgaa ctcaaacagt gagctgatcc gcctgatcaa 480
caacgccatc aanaatgacc tggccagccg caaccccacc ttcatgggcc tggccctgca 540
ctgcatcgcc aagcgtgggc anccgggaga tggccgaggc cttcgccggg gagatcctaa 600
ngtcctcgtn gcccggagac actatggaca gcgtgaanca aaagcgcggc cntg 654

<210> 4592
<211> 695
<212> DNA
<213> Homo sapiens

<400> 4592
gatatgttca tgacaaacat tttgaagttc tgcattctga cttggaacca cagatgaggt 60
ccatacttct agactggctt ttagaggtat gtgaagtata cacacttcat agggaaacat 120
tgtatcttgc acaagacttt tttgatagat ttatgttgac acaaaaggat ataaataaaa 180
atatgcttca actcattgga attacctcat tattcattgc ttccaaactt gaggaaatct 240
atgctcctaa actccaagag tttgcttacg tcactgatgg tgcttgcagt gaagaggata 300
tcttaaggat ggaactcatt atattaaagg ctttaaaatg ggaactttgt cctgtaacaa 360
tcatctcctg gctaaatctc tttctccaag ttgatgctct taaagatgct cctaaagttc 420
ttctacctca gtattctcag gaaacattca ttcaaatagc tcagctttta gatctgtgta 480
ttctagccat tgattcatta gagttccagt acagaatact gactgctgct gccttgtgcc 540
attttacctc cattgaagtg gttaagaaag cctcaggttt ggantgggac agtatttcag 600
aatgtgtana ttggatggta ccttttgtca atgtagtaaa aagtnctagt ccagtgaagc 660
tgaagacttt taagaagant cctatggnag acagn 695

<210> 4593
<211> 677
<212> DNA
<213> Homo sapiens

<400> 4593
tcaaaagaaa agaatttaat aaattcccct ttcccctgag ccagcttagg ggcaatgtcc 60
ttgtagagat ctggggtagg aggagaacga aaaccaaggt gggtaacatg cctgggtccc 120
tctctccaag ctgacacccc aaagagccaa agccttggca cctggtccca tcaggaccgc 180
tcactgaggg gatggcatct gagtggctgc tctgcagtca tgaggctgcc atgggtggat 240
acggactggt tgccaggtaa ccatatcctg catccctcac ttttcccttc ctggagttca 300
tactggggct tgatcccagc ccacaccttt cctacaggct ttctttccag cccgggccag 360
cccaggaaat tcagaaatct gtgggaccct ctgagggttc tgctagacca ggtttctcaa 420
tcttggcaca gttggcattg gacctggagc cttccctgcg cggggctgtc ctgggcggtg 480
tgggatgtgc agcagtaatt ctggcctcta cccactangt gccaagtagc acaccccanc 540
cccgaattgg gacaaccagg aaggtctcca gacattgcct catgttccct gggggggaaa 600

09825.0015.00

agcgcaccct ggttctgaac catctcttca nggntaaaga tttcctgaag gaancctcan 660
tccaacaagn tcagtaa 677

<210> 4594
<211> 684
<212> DNA
<213> Homo sapiens

<400> 4594
gtgctcaccg ccgcttccgg tccgcgtggg gtgcattctc gcgccggtgg cgaggttagg 60
gcccgcgttg cgacgtggtg cagcgcatac tttcacaagt gggtctccct tgtccgggac 120
tatggccacc gactcgtggg ccctggcggt ggacgagcag gaagcggctg tcaagtcgat 180
gaccaatttg cagatcaagg aagagaaagt caaagcagat accaatggta ttatcaaaac 240
cagtaccact gccgagaaaa cagatgaaga ggagaaagag gacagagctg cccagtcctt 300
actcaacaag ctgatcagaa gcaaccttgt tgataacaca aaccaagtgg aagtcctgca 360
acgggatcca aactcccctc tgtactcggt gaagtcgttt gaagagcttc ggctgaaacc 420
acagcttctc cagggagtct atgccatggg cttcaatcga ccctccaaga tacaagagaa 480
cgcattaccc atgatgcttg ctgaaccccc acagaatctg attgcccagt ctcagtctgg 540
cactggtaaa acagctgcct ttgtcttagc catgctcagc cgagtggngc catcagacag 600
ataccccaa tgtctgtgcc tctccccaaa catatgaagc tggngcntca aacaaggaaa 660
tnttgtttga ncaagatggg gcaa 684

<210> 4595
<211> 739
<212> DNA
<213> Homo sapiens

<400> 4595
gaatatttat atgtatctat ttttgtgtac tgttttcaag tgtactgaga tttaaatgtg 60
ttctattatt agagtagatc gaagaaaaaa ttagtctcag aaagagcttt tagtctgatt 120
gtttccattt cccatgtaat tttaagttaa gctaaagttt taaagtggca gttttctgtc 180
gatgactttt tcaagtgcta acactgtctc ttttgtgaaa atctggaaaa gtgctcatat 240
tcacaggtgg ctggtgctag tctaacttaa ttcatgtgta taactagatg gatttaaatg 300
gtctgagcct atgcctatct ttcaaattgg tgtggatttc atggccatag tactttacct 360
gttgaactct tgtgatttca caagattctc tacttatgtg ataggagggt atggccagtt 420
attcatctaa ctggactcaa tcttagaata gtaggaacat tatacccagt ttgcactaac 480
atgggccatt tgtagcccaa ccttctcttc catctacctg tccattcatt attgggacaa 540
ggaaaggtaa cttatttctc ttctgcacag agcataatgt gaaagtttta tacctacttt 600
taaaattctg cnttccagaa acaaaattcc tgcagtggtc taatttaatg tctttaaagt 660
ttcanattac aattaaaaac ctcatttttt ttttccattt ttgnacctaa cagtggtgaa 720
tactttacgt tgggnatcc 739

<210> 4596
<211> 229
<212> DNA
<213> Homo sapiens

<400> 4596

US 2006/0205690 A1 Sep. 14, 2006

gacagggcct ctttctttgc ttctctccac agctcttccc agccgggggg ctgagtgccc 60
tccccttct ctccctgccc ctccccttc tccccctca ccgcccagcg gggcttctaa 120
ctgacagttg tcgccgggcc ccgtccgtgc accgcctcct tctgcccgtg tcccccgcag 180
gtagaggggg gcgggagggg gtgtgaggga gaggagagag nnaatgana 229

<210> 4597
<211> 711
<212> DNA
<213> Homo sapiens

<400> 4597
gcggccgtcg cgtctgacag accactgcag accacgggcc gaggcccagc gcccgtccgc 60
agcgcggccg gcatggcggc gacaaggagc cccacgcggg caagggagcg ggagcggtct 120
ggcgctcccg ccgcaggaag tgaccaagtt cactcctgga tgctagctac aagccaagcc 180
ttagacactg tctggagaat ggcaaaaggc tttgtgatgt tggcagtttc atttctggtg 240
gctgccatct gctacttccg gaggctacat ttatattcag ggcacaagct gaaatggtgg 300
attggatatc tgcagagaaa attcaaaagg aacctcagtg tggaggcaga ggttgattta 360
ctcagttatt gtgcaagaga atggaaagga gagacacccc gtaacaagct gatgaggaag 420
gcttatgagg agctattttg gcggcatcac attaaatgtg ttcgacaagt aaggagagat 480
aactatgatg ctctcagatc agtgttattt cagatattca gccagggcat ctcttttcca 540
tcatggatga aagaaaagga cattgttaag cttcctgaaa aactgctgtt ttcacaaggt 600
tgtaattgga ttcagcagta cagttttggn cctganaagt atacaaggct ccaatgttgt 660
ttggaaaact acgggnaata tgtgggaatt atttgaaaac cacagtggac t 711

<210> 4598
<211> 758
<212> DNA
<213> Homo sapiens

<400> 4598
tgaaagatgt gtcatatcat gtgccctcta tgaggagttt tggattaagg taagaaaatc 60
atgtgctctt aaacttgaat atattataaa cattgatcta gtgactaacc ttttttgtac 120
ttctgttgaa tgttgttcat ataactatat ctgttgcatt aggagatggt ctgcttgcaa 180
ccagatttga ctgctgcata tgccaacctc gttgcctctc ttcgtccttc cttacagaaa 240
ctagtctagt ggttcaataa aggtgctgaa tgggtttaaa aatagaattt tatcgttctg 300
tcacaaattt aatggcttgt tcaactgtaa attattcagt atttcctctt ttctgtatgt 360
agtatgccaa gtacatggaa aaccatagca ttgaaggagt gaggcatgtc ttcagcagag 420
cttgtactat acatctccca aagaaaccca tggtgcatat gctttgggca gcttttgagg 480
aacagcaggg taatattaat gaagccagga atatcttgaa aacatttgaa gaatgtgttc 540
taggattggc aatggttcgt ttacgaagag taagtttaga acgacggcat ggaaatctgg 600
aagaagctga acatttgctt caggatgcca ttaagaatgc caaatcaaat aatgaatcct 660
cattttatgc tgtcaaaact agcccggnat cttttcaaaa tacaagaaaa aaccttccaa 720
aatcaangaa anggggcttt tgggaagcaa tcccaaag 758

<210> 4599
<211> 818
<212> DNA
<213> Homo sapiens

0088/2003

<400> 4599
agttattaat gaccgctgag caggcagcac catgtcagtg tgacaactga tcgggtgaac 60
gatgcaccac taaccaccat ggaaacaagg aaaaataaag ccagctcaca gggtctctct 120
tcactggatt gagagcctca gcctgccgac tgagaaaaag agttccagga aaaagaagga 180
atcccggctg cagcctcctg ccttccttta tattttaaaa tagagagata agattgcgtg 240
catgtgtgca tatctatagt atatattttg tacactttgt tacacagaca cacaaatgca 300
cctatttata ccgggcaaga acacaaccat gtgattatct caaccaagga actgaggaat 360
ccagcacgca aggacatcgg aggtgggcta gcactgaaac tgcttttcaa ggaggtgaag 420
cattccacag ataatcagct actctattca gggaaggagt gtaaacatca ccacttttg 480
catgtttgca taaaaaaggc ccactgaatc agttaaagac gaggaagagg aggagaaaga 540
gaaagaagag gaagatgttg ggcaacattt atttaacatg ctccacagcc cggaccctgg 600
catcatgctg ctattcctgc aaatactgaa gaagcatggg atttaaatat tttacttcta 660
aataaatgaa ttactcaatc tcctatgacc atctatacat actccacctt caaaaaagta 720
catcaattat tatatcatta agggaaatag tancttctcn tctccaaata tgcatgacat 780
tttttggnca atgcaaattg tggcaactgg gcacctta 818

<210> 4600
<211> 743
<212> DNA
<213> Homo sapiens

<400> 4600
atttttgtaa ctgcattcca gggcctttca gtggctttca ttctgaagtt cctggataac 60
atgttccatg tcttgatggc ccaggttacc actgtcatta tcacaacagt gtctgtcctg 120
gtctttgact tcaggccctc cctggaattt ttcttggaag ccccatcagt ccttctctct 180
atatttattt ataatgccag caagcctcaa gttccggaat acgcacctag gcaagaaagg 240
atccgagatc taagtggcaa tctttgggag cgttccagtg gggatggaga agaactagaa 300
agacttacca aacccaagag tgatgagtca gatgaagata ctttctaact ggtacccaca 360
tagtttgcag ctctcttgaa ccttattttc acattttcag tgtttgtaat atttatcttt 420
tcactttgat aaaccagaaa tgtttctaaa tcctaatatt ctttgcatat atctagctac 480
tccctaaatg gttccatcca aggcttagag tacccaaagg ctaagaaatt ctaaagaact 540
gatacaggag taacaatatg aagaattcat taatatctca gtacttgata aatcagaaag 600
ttatatgtgc agattatttt ccttgggctt caagcttcca aaaaacttgt aataatcatg 660
ttagctatag cttgtatata cacatagaga tcaatttgcc aaatattcac aatcatgtag 720
ntcnagttta catgncaaaa gtc 743

<210> 4601
<211> 785
<212> DNA
<213> Homo sapiens

<400> 4601
aagacaaatg aaaaactgta tacagtatgt gatgtggctc tctgtgttat aaatagtaaa 60
agtgctttgt gcaatgcaga ttcaccaaag gacccagtcc tcccaatgaa atttttaca 120
caacctgaaa aggacttctg taacgataag agttatattt cagaagagac aagagtactt 180
ctgttaacag gaaagccaaa gcctgctgga gtactaggtg cagtaaataa gcctttatca 240
gcaacgggaa ggaaacccta tgttagaagc actggcactg agactggaag caatattaat 300

05252360.0726

gtaaattcag agctgaaccc ttcaaccgga aatcgatcaa gggaacagag ttcagaggca 360
gcagaaactg gagttagtga aaatgaagag aaccctgtga ggattatttc agtcacacct 420
gtaaagaata ttgacccagt aaagaataag gaaattaatt ctgatcaggc tacccagggc 480
aacatcagca gtgaccgagg aaagaaaaga acagtaacag cagctggtgc agagaatatc 540
caacaaaaaa cagatgagaa agtagatgaa tcgggacctc ccgccccttc caaacccagg 600
agaggacgtc gacccaagtc tgaatctcaa ggcaatgcta ccaaaaatga tgatctaaat 660
aaacctatta acaagggaag gaagagagct gcagtggggt caggagagcc ctgggggttt 720
ggaagcaggt atgccaaagc accaaactgc aagatttanc aaaanggagc acacagaagn 780
caatt 785

<210> 4602
<211> 656
<212> DNA
<213> Homo sapiens

<400> 4602
ctatctgaag agagaagggg caagttacaa gcggatgaaa accttcgtgg gaagatttct 60
cactgacagg caattttcta ggactaaaga ggaaaagata gcattgcatc ctcgcatctg 120
cagtgcatta caggggtgca tttagacatt ctttctccca gtagattgtg agctccgtga 180
tggtgaagac catataccat gtgtctctta ttcaactctc aacacgcatt tgttgagcac 240
ctactatctt cttggcaccc agtaggggtt gagcaacaca atagaagtgc tctgtaaata 300
tttatggttg gaagataggt agatgcccca ggagaaaaga catgggagtt tctaggcagg 360
gccttgggtt ttaaattgcc aaaaaatttt ctctcctctg ttgatttgaa tatggtccgg 420
tccctagtaa aagcttgata ttagcctagt gatgtggtgg aaagaacttt ggattaagat 480
tgggaaaacc aggttctagt accaactgtg ctgagaactt acataaagct ggccaagtgg 540
cttccctagt cttgggctca gtttacctac tgtaaatttt taaatgattg ggttaagtgg 600
ncctaactct taacttaaga gncttacctg cacttctgtt gtgtganttt ttgagg 656

<210> 4603
<211> 810
<212> DNA
<213> Homo sapiens

<400> 4603
actatatttt ttaaggtttt attaaaaagc cttagaaagt tacatattgg tttagaggct 60
aaaattgtgt tgatgctgtt tactcaccta attacatagt tttaatcatt tgtacataat 120
tttaaaaact tactttgtat tgattttgaa tacagtgaaa atcttattgc aataaactat 180
tttagtaaaa tattattttg ttgagttaat atttttcagc tattaattta cttatcccat 240
agcatttttg ttattatttc ggaagagaga gcatgctagt ttaagtttca ttttaattgg 300
tcgtgtactt ggtgcttttt tgttgttgtt aacttgttca tttagtaaaa agcaaatagc 360
tttactttct gaaaaagaaa taattcatta tctctagtaa tacatctgta attcttcatt 420
tagaagggta attagggcaa aagtaaataa atcattatat atcattagta tgttgacata 480
tattttcagt aacattgttt tatgttcctc cagcgtaaca tgtagctgaa cagtagaagg 540
tagaaaataa attatgacat ctcttctaag gcctggctag gcctgaagct cactgccagg 600
gagtttgtgt ctagaatgtt tttaaaaata ggtagtggag ccatagccct caccatagac 660
acctctgagc ccactggcan tgtctctgag cagaagatgg ctgtgccact cacatatgct 720
aatcctgggn aatctgccaa gcatgtcntc acaagggata gggatttggc ttaataaaac 780
ctgatttgna aacaaaatcc tgagaatggg 810

0956450.0702000

0030250950 2007-09-05

<210> 4604
<211> 718
<212> DNA
<213> Homo sapiens

<400> 4604
tttatctaca tgtgacagtt ttctatcatt gggtttttta aaaaatctgt gtattcaact 60
agaacttgag ctccacggag gcaggaactt ttgttttgtt tttcttcact gctcttttcc 120
tcgcacctgt ctgaagcagt gattttagcc agaatctaga tttcctgatt ctggtccagt 180
gctctttcca tggttctgtg tgacctcata catcaacctt atttcacaaa cgaggttttt 240
aagttccttg agcacagtcg attgtgtttt ttactgcttc tgctccgtcc ctgcataaga 300
caggactgtg tcatgtaccc agtgatggac tcctggtaaa taccatggct tgactaaatg 360
acctccagtg ctccctgtgg tcttcaccaa cacgcatcag acgacaggct cagccacggg 420
atacttcgct ttctgtagga gtaagagaca agttgctatc actgaacaga tacacagtgg 480
catttggaaa ctgcatgcag tttgaaaaaa tcgtgataca gcaggagtct agttttcaat 540
aaatagctta ttcatattct ggattttgaa cangttcatg taactgtaac tttgggggta 600
ntgggataat gagactgaaa attaatgggn tcctctgctg ggtttcccgt ccggtttttt 660
tttttttcc tccccaagna gggttgggaa tttccggcaa ctttaaccca ncctggaa 718

<210> 4605
<211> 733
<212> DNA
<213> Homo sapiens

<400> 4605
gacagactga cgtgtgagct gcatcgcggg aggcgcatgg cggggatggc gctggcgcgg 60
gcctggaagc agatgtcctg gttctactac cagtacctgc tggtcacggc gctctacatg 120
ctggagccct gggagcggac ggtgttcaat tccatgctgg tttccattgt ggggatggca 180
ctatacacag gatacgtctt catgccccag cacatcatgg cgatattgca ctactttgaa 240
atcggacaat gaccaagatg cgaccaggat cagaggttcc ttggggaaga cccaccctac 300
gaagttggaa tgagaccatc agatgtgata agaaactctt ctagatgtca acataaccaa 360
ccttataaag actaaaattc atgagtagaa caggaaaatc atcctgactc atgtgttgtg 420
ttctttattt ttaattttca aagaggctct tgtatagcag tttttgtcta ttttaacatt 480
gtagtcattt gtactttgat atcagtattt tcttaacctt tgtgactgtt tcaatattac 540
ccccgtgaaa gcttttctta atgtaacttt gagtacattt taattgcctt ctatttttaa 600
aactcaaaat cattagttgg gctttactgg tcctgctatt gtatggcata atacatcctg 660
cctgggntaa atttccnact ccttggacca aaaggttttg gtaaaaggaa ccaaatnata 720
aggattttcg ggg 733

<210> 4606
<211> 744
<212> DNA
<213> Homo sapiens

<400> 4606
ttgcataaaa tggttaagaa aatgtgccaa ngattacctc agtagttctg gtctgtgttc 60
ccaggagacc ctggaaataa acaatgataa ggttgctgag tcattaggaa tcacagaatt 120

cctacggaag aaagaaatac acccagacaa ccttggaccc aagcacctca gccgagacat 180
ggatggggag cagctagagg gagctagcag cgagaagagg gaacgtgagg ctgcggagga 240
gggactggcc tcagtgaaaa ggcccagaag agaagccctg tccaacgata ccactgaatc 300
tcttgctgcc aacagcagag gccgggagaa gcccaggccc ttgcatgctt tggccgctgg 360
tttttcccct ccagtaaatg tgactgtctc tccccgttct gaagaaagcc atacaacgac 420
ggtttctggt ggcaatggga gcgtgttcca ggcgggcccg cagcttcagg cactggctaa 480
cttagaagcc aggagggggt ctataggtgc tgctctctca tcccgggatg tcagtgggct 540
gcctgtttgt gctcagtcag gagagcctan gaggctgacc cangcacaag tggcaacgtt 600
tcctggagag aatgctttgg aacactcctc agaccaggac acctgggaca acctgaggag 660
cccggggttt ctgcanccct ttggtcatcc gggtggnggg agcnaaagtc ccttgccgcc 720
ctgggggggc cttggacaat gcaa 744

<210> 4607
<211> 561
<212> DNA
<213> Homo sapiens

<400> 4607
tttcagattt taccatggaa gatttaggtc aggtattatt tcctgacaac aagagttgtt 60
aaatcaatac ctacatacat taccaagaga attatctttt ccaaaggtct ttaaaaatgt 120
agtacatttt tttttctctg taattgttta ggaagcagtg cttcctgaaa gaccaaacca 180
agatttttgc attatgtggc tttgcacact agatgagcat ttaataagtt caagcttaat 240
ttaaaaccat gatgacacag gtgtgaatgt catttctctg aggagttaaa aatacaggca 300
ttgtcatact atcatacact ctggaaaatg gtattacata tcataaaatg ttatggcttg 360
ggtagaaatt gtagtttgct cttttaaaag ctttagttaa attttgctca tttgttttgc 420
aaatgattct ttttaattga gtgaatcaga tgcttttcag ttcattgaaa atccccctttt 480
gacaaatcat gttttgatga gcttacgttc tgtttccggg ttcancttct caatttagnt 540
gncatacaaa gcgttggctt a 561

<210> 4608
<211> 722
<212> DNA
<213> Homo sapiens

<400> 4608
aacaagagtt atttttaaac agaactcctc ttaccccca aaacagataa acctcagtgt 60
acaattttga aagaagtttt gccttgtaat gagtaataat ttagaaagta gacagtggtt 120
gtgtttggct ctcgttttat tccttttaca tttgttgctt ctgggattta aaaaattact 180
aaattcataa gatagttagg tattaaacac ttcagaatat caatgtaaaa ttggaaaata 240
aggaactggg ggcatttgtt taggccatga cttctacaag cagatttctt ttcttttagt 300
ttagaagaca aaaaatttca atacagatac ttcttttaga agtaaatttt tagattttat 360
tgtcagtaga aaaaagttaa actcctacta atttaaacta agacagttta aaaaggaagc 420
ctgaaaaaga ctcatactac aaataattta attgatggca tataagaata tgcagtttga 480
aaaagccaaa ctcttctctc cacttagctt ttgatcccca ctgtttgctt atttgtataa 540
gtcatactgt gtagaaattt cnattttctt tttccccatt anaagaggac caaacaattc 600
tttatacaaa tggagtaagc aactagtttt gtagcactac atttaatggt aatgagatac 660
ctttgttcat ttttttaaat ttggnaatan actttacctg atccactttg atggtanacc 720
aa 722

0062702.630225.0

0020050250

<210> 4609
<211> 815
<212> DNA
<213> Homo sapiens

<400> 4609
cttcagtgaa attggaatat agttcattca aaacgaatca ggagaaagaa ttcaacaaac 60
tttccgaaag acacatgcat gtacagcttc aattagataa tctcaggtta gaaaacgaaa 120
agctgcttga gagcaaagcc tgcctacagg attcctatga caacttacga gaaataatga 180
aatttgagat tgaccaactt tcaagaaacc tccaaaactt caaaaaagaa aatgaaactc 240
tgaaatctga tctgaataat ttgatggagc ttcttgaggc agaaaaagaa cgcaataaca 300
aattatcatt acagtttgaa gaagataaag aaaacagttc taagccctgg tatacagtgg 360
tgaacgtaga gcttacatcc agttgagaga caagcaattg acatttactc atttattcaa 420
acatttattg atatccaaca agccaggcac tgatctggtg aattccagaa catttagagt 480
tgaaacagtg aacaaaacat ccctgtcctc gtgggatttt aacttctagc acagggagac 540
agagaaatct taaaagttct tgaggctgta cgtcaggaga ancaggaaga gacggccaag 600
tgtgagcagc agatggcaaa agtacagaan ctagaagaga gcttgcttgc tactggaaaa 660
agtgatcagt tccctggaaa agtctaagag atctgataag aaagttgtag cctgaccctc 720
atggnccaag ntccaaggag gctaggaaca tcggtcctgt gagaaaacca ggaacctatt 780
gacaaccctn gaaacaaaga actgaaggga cataa 815

<210> 4610
<211> 713
<212> DNA
<213> Homo sapiens

<400> 4610
gaacatacat tttattcgac catcctcact ggttagggat tcagaggaag gatgagccgg 60
gcaactgtcc agaagtaaca atgccctgac gtcctcgtca tgaaatctta gaacattaag 120
ttgaaaatgt cggacctcag gaacaaagtt ttgaaaaaac cattctgaaa acaattctct 180
ggtgaaccaa acatctttac tgggtttata tatcacaggc aatgtacttg tgtcctcttt 240
cacacttttg ggcagttttg attttccaat aatgattgac tttaatttat gagttccgtc 300
tgcatttgca cataaaaagg cagacaacct ttctttgttt attttcttcc ctggtaggca 360
gatatctttc ctacttgcct gagaattttc tggcattgac ttccaaaaga ggtctgtttc 420
atccccactg tatagctgag ctagacacag tttctcctct ttgattatca tggacagttt 480
ttgtccaaat ggctcaacat tttcagaaac tgaacttagg acttgttccc cacatccttt 540
tcggttccca attgcatgcc gatttccaaa tctaaaaagc aaccagtgct anctttgaaa 600
tctgttcgcc caaaacaccg tgcaaatctc tctgcagcaa nctgaagctc cacgcctctt 660
aacggnacaa cggggtgaag cgtttctgtt gggaccacat gtttnaccgc aat 713

<210> 4611
<211> 737
<212> DNA
<213> Homo sapiens

<400> 4611
tttcccangt tccctttgct catgcttact tagaggaaga aagaaagggg ggtacctctt 60

ccaagtacct tctaaatgaa acactcaaga gagtgctact caggaaactt tgcttggatc 120
ctaaaatgga ctggtcttgg gtgtgtaacc ccggtgaagt tatagcctcc ccaaattgag 180
gtgacagaag gaagacaaga ggtgtaagct ggagagggaa gggaagaaat cagtggcttt 240
ggccagcctc tgtgccaccc agtacgacag aggagtggga actggccctc tggggctctg 300
cttggccata ggcactgcac attgtgccac ctgctcatca cctcctctag tctcacactg 360
agcatcggag tacctgttgt gcagacagga aaactgagga gctctgagag gctgagcatg 420
gagctcaccc catgccatag ggtgtgggaa gagggcacag gaggcctcat ccatggggga 480
aagggttgag gatggacatg ggtggggaga gggcatagac atcccttcct aatctctgtt 540
cccaccacat ttcatangag atgagttagg anatgacagc taactctctt aaggacattt 600
tgaccccagt ttatgttggg gatggccata aaggaaaatg tctanagata ggaaggtaaa 660
tcaantctgc caacccctac catcaggtct ggggccaccc caaactttgg gctgcctccc 720
cttanacata gggttac 737

<210> 4612
<211> 706
<212> DNA
<213> Homo sapiens

<400> 4612
atggcttcca gcttttcgaa tctgaggctc caaaggagga aatgaccatt cagggatctt 60
actccagctt gattacggag actgaacctt catagggtgc gcacttacca aggacaggaa 120
ggtttctctg tttgaagggc tttaaactta taacaaagaa aataaaaatg acgacttcgt 180
ctatcagacg gcagatgaaa aacatcgtga acaattactc agaggcagaa atcaaagtcc 240
gggaagccac ctccaatgac ccgtggggcc cgtccagttc tctgatgacc gagattgccg 300
acctgaccta caacgtggtg gccttctcgg agatcatgag catggtgtgg aagcggctga 360
atgaccatgg caagaactgg cggcatgtgt acaaggcgct gaccctgctg gactacctca 420
tcaagacagg ctccgaacgt gtggcccagc agtgccggga gaacatcttc gccatccaga 480
ccctgaagga cttccagtac attgaccgag atggcaagga ccagggcatc aatgtgcgtg 540
agaagtcaaa gcaactggtg gctctcctca aggacgagga acggttgaag gctgagaggg 600
cccaagctct caaaaccaaa gagcgcatgg gccaagtttc cactgggcat gggcagcaac 660
cagatnacct ttgggcgaag ntccaancaa gcccaaactc tccaac 706

<210> 4613
<211> 771
<212> DNA
<213> Homo sapiens

<400> 4613
aacaaaatat gcacaagatt tatgtgagaa aaactataaa actctgctga aagaaatcaa 60
ataactaaat aaaatggaga tatattccat agtcattcat aggaagatcc gatattgtca 120
atatattggt tcttgctaac ttgatctata atttcaatgc aatcccaatg gtataagttg 180
gatgtttgtc tcctttaaat ctcatgctaa aatactattc ccagtgttgg aggtggggcc 240
tgggaggtga ttggattgtg ggggcggatg tctcaagaat gttttatcac tttcccattg 300
gtgagaattg aattcttgct caagatctgg ttgcttaaaa atctaggccc tcccccactg 360
gctcacttgc tgttactcta gtcatgttac atgcctgctc ccacttcgcc ttatgccatg 420
attgtaagct tcctgaagtc ctcaccagaa gccaagcaga tgttggtgcc atgcttttat 480
agcctgcaga actgtgagcc aattaaacct cttttcttca taaattactc agtctgaggt 540
attcctttac accaaagcaa gaatggccaa gtacacccaa ccaatatccc agcaagttat 600

0050245-0050246

tttctgcata ttgccaaact gattctaaaa tttatatgga gaggcaagag acaggatagc 660
caacacaata ttgaagggag ggagaacata gttggaanac tgacattacc caacttcaag 720
nactaattat taaagctaca ctaaatcaag acagntatgg tattggtgaa a 771

<210> 4614
<211> 549
<212> DNA
<213> Homo sapiens

<400> 4614
tcaaggaacg aaggggccac tgactcagag cggcaagtac agcgagtagt ccgagagcgc 60
ccaccggcgg gcggggcggc tggtacggcc gatcatgggc agtttctgca cgtagcgcga 120
ggccgggcta ggcccgtacg gcgcggggaa ggcagtctgg aaaaggcgcc cgcggcagcg 180
cctcccagcc tgccgcccgg ctatgatgaa acgaaagtgc ggggcgccgc gcggggcgaa 240
acggctcttc tggaaaacgt cgcgggtgcc ggtcccgggg ccctgctgcc ggggtgcccc 300
gcgcgcccga tgcacgcgcg gcaagggcct gctctcagag gcggcgggcc cagaggccgg 360
cgcggggccg cctccgccgc tgccccgggg gctctcgtcn ccgtgcgggc tgactatggc 420
gcttgccgtc agctgcggca tcttccgcac cgagtccggg gcttgccgcc ggctccttct 480
tgtccccggg cggtcgcgga gccgtgggtg caggctggnc ggtgcaaanc gtgtggccaa 540
nctgtcacc 549

<210> 4615
<211> 732
<212> DNA
<213> Homo sapiens

<400> 4615
gtgagggggc ttgggggccc tcgcctgaga gagtgaggac aggctgcggg aggagctgca 60
ggactgaggt acagaggcca ggggcccagg gcaggaccca gcctggactt gactccctgg 120
gatcccagga agggcacacc ctttcctcac cacccgagtg agcgctgccc cctcacagag 180
acctctttgc cccctgggcc aggcagagca ggcgctgcgg tccgggaggc cccatggagg 240
tggcggtgcc cgtgaagcag gaggccgagg gcctggcgct ggactccccg tggcaccgct 300
tccgccgctt ccacctgggc gacgcgccgg gcccgcggga ggcgctgggg ctgctccgcg 360
ccctgtgccg ggactggccg cggcccgagg tgcacaccaa ggagcanatg ttggagctgc 420
tggtgctgga acagttcctg agcgcgctgc ccgccgacac gcaggcctgg gtgtgcagcc 480
ggcagccgca gagcggggag gaggcggtgg ccctgctgga ggagctctgg gggccagcag 540
cctcccccga tgggtcntca gcaacgangg tgcctcaaga tgtgacgcaa ggccctgggg 600
ccacaggtgg aaaggaggac aattgggatg attcccttaa ggaacgcccc ttggggctga 660
aggggnccgg cgcctggggg aatcccaagg ctgtgcgccc ctacaagcaa ggagncccaa 720
ncaaaccccc cg 732

<210> 4616
<211> 748
<212> DNA
<213> Homo sapiens

<400> 4616
aacaactttt tgcatgagat acatgatcct cagcatttag aaactgcaga tgcttcattg 60

0562305.0720001

tcaaagcata gttctgtttt tcattggact gatttgtctc ttgagaagaa atcgtgtcct 120
tactgcccag caacatttga aacaggtgtt gggttatcaa atcatgtcag ggggcatctt 180
cacagagcag gattaagcta tgaagccagt catgttgtat caccagaaca aatagccaca 240
agtgacaaaa tgcagcattt caaaagaact ggcacaggaa cacctgttaa acgagttaga 300
aaagctatag agaagtctga aaccacttct gaacacactt gtcagctctg tggtggttgg 360
tttgatacta aaattggatt atcaaatcat gttagaggcc acttgaaaag acttggaaag 420
acgaaatggg atgctcacaa atctccaatc tgtgttctga atgagatgat gcaaaatgaa 480
gaaaaatatg aaaaaatctt aaaggcattg aacagtcgtc gtattattcc cagaccattt 540
gtagctcaaa aacttgcatc aagtgatgac tttatatctc aaaatgttat acctcctgga 600
agcataccgt aatgggctaa agactgaagc tctgtcagtg tccgcatcag aaagaaagaa 660
nggctgaatt tcctaaatgg aatatgatga aaccaaaacc agaactgcca atggggaaaa 720
agaatcagtc nccttaaact catngaac 748

<210> 4617
<211> 788
<212> DNA
<213> Homo sapiens

<400> 4617
tcccaatgct ggtcggtact gggagacagt agagaggttg aagatcaatc agttctatgg 60
cgccccaacg gctgtccggc tgttgctgaa atacggtgat gcctgggtga agaagtatga 120
tcgctcctcc ctgcggaccc tggggtcagt gggagagccc atcaactgtg aggcctggga 180
gtggcttcac agggtggtgg gggacagcag gtgcacgctg gtggacacct ggtggcagac 240
agaaacaggt ggcatctgca tcgcaccacg gccctcggaa gaaggggcgg aaatcctccc 300
tgccatggcg atgaggccct tctttggcat cgtccccgtc ctcatggatg agaagggcag 360
cgtcgtggag ggcagcaacg tctccggggc cctgtgcatc tcccaggcct ggccgggcat 420
ggccaggacc atctatggcg accaccagcg atttgtggac gcctacttca aggcctaccc 480
aggctattac ttcactggag acggggctta ccgaactgag ggcggctatt accaagatca 540
cagggcggat ggatgatgtc atcaacatca gtggccaccg gctggggacc gcagagattg 600
aggacgccat cgccgaccaa cctgcagtac cagaaagtgc tgtcattggc taaccccacg 660
acatcaaagg agaagctgcc tttgccttca atggtggtga aaagataatg gcggggtgac 720
tcaaaatgtt ggtggtgcaa ggagctcaaa ttccatgggn gggncaacca aagatttncc 780
aaattatt 788

<210> 4618
<211> 744
<212> DNA
<213> Homo sapiens

<400> 4618
ccctccaata acaagcccct ctgtggctct ctgcctgtgg tccaccttcc cactgtgaac 60
catgctggca aggagctggg gttatgaagg gaaagagcag ggcacaaggc aagtagggct 120
cgtgactttt ccccttttcat tatgtgtgtc caccgagctg tcctgcttct gttttgtaat 180
gggttcttcc atggcaagct gacctttcgg ctgaataggt caaactccca ctgagcgtta 240
accctcagcc ctcctcacgt gagtgcctcc cctgaggtga ggagcactgg ttaggaatat 300
gactgggagg gcctggtgta ttccccaaag aagggttgcc ttttactgca ctgaattaat 360
tctcagagac caccgtgtga ggttatgctg aaggatccag attagaactt tcctgctgac 420
attgtggagg ggcaaaacta attcttcaga tacatgtttt agactgtggt tcccctgtgt 480

0052448-0052880

atcttcccct ttttaatgag agaaaggcca aatgcacagt cttagtgatt catcggatca 540
ttttggattt ctgagacaat cagaattttc ctagatgatt ttttaaaaaa ccaataaacc 600
cttctccctg tatttctctt ccatttaaaa gtctcttaaa actccaaggt gtttttaatt 660
ttaanccctt gtaaaaacaa tgaaaataag taanaagttt gtgggtggtg gtggtttgaa 720
taaattaata ttaccnggga accc 744

<210> 4619
<211> 615
<212> DNA
<213> Homo sapiens

<400> 4619
agtaattccg gggagctcgc cttacaactc cgcgcggcct cggtcccctg cgccgcccgc 60
cccacaacaa aactcagcgc agcgctcccg ggcgcccggt tcagagcgac ctgcggctca 120
gagcggaggg gagactgacc ggagcgcgga tcgggacagc ggccgggaca gcggcgagac 180
gcgcgtgtgt gagcgcgccg gaccaagcgg gcccagaagc gggtctgcag cccagagggc 240
accttctgca aacatgtctg tggatcccct atccagcaaa gctctaaaga tcaagcgaga 300
gctgagcgag aacacgccgc acctgtcgga cgaggcgctg atggggctgt cggtgcgcga 360
gctgaaccgg catctgcgcg ggctctccgc cgaggaggtg acacggctca agcagcggcg 420
ccgcacactc aaaaaccgtg gctacgccgc cagctgccgc gtgaagcgcg tgtgccagaa 480
ggaggagctg canaagcaga agtcggagct ggagcgcgan gtggacaagc tggcgcgcga 540
gaacgccgcc atgcgcctgg agctcgacgc gctgcgcggn aagtgcgagg cgctncaggg 600
cttcgcgcgc tccgt 615

<210> 4620
<211> 559
<212> DNA
<213> Homo sapiens

<400> 4620
ccctatcccg tcttgctctg cggcgcaggg gcaagatggc tgctgagaag caggtcccag 60
gcggcggcgg cggcggcggc attggcggcg gcggtggcag tggcggcggc ggtagcggcg 120
gtggacgtgg tgccggaggg gaagaaaata aagaaaacga acgcccttcg gccggatcga 180
aggcaaacaa agaatttggg gatagcctga gtttggagat tcttcagatt attaaggaat 240
cccagcagca gcatggttta cggcatggag attttcagag gtacaggggc tactgttccc 300
gtagacaaag acgtcttcga aaaacactca acttcaagat gggtaacaga cacaaattca 360
cagggaagaa agtgactgaa gagcttctga ccgataatag atacttgctt ctggttctga 420
tggatgctga aagagcctgg agctacgcca tgcagctgaa acaggaagcc aacactgaac 480
cccgaaaacg gtttcacttg ttatctcgcc tacgcaaagc cgtgnagcat gcagaggaan 540
tggaacgctt gtgtganag 559

<210> 4621
<211> 734
<212> DNA
<213> Homo sapiens

<400> 4621
aagtctaact acatggattg gtttctgttt tgtgcaggtt actgtttttg tatctcaaag 60

0052045 0072800

ccaaaagcca caggcatggc cacagttact gttcatctca gggatgtgaa agagtcaaga 120
tccaagcagc cacagactca aaggacatca gtaactgcat ggccaaagca tacccacagt 180
actacagaaa gccgtcagtg gtcaagcgga tgccggccat gctcactgga ctctgtcaag 240
gctgtggcac tcggcaggtg gtgtttacta gtgatcctca taaaagttac ctccctgtgc 300
aattccagtc acctgataaa gcagaaaccc agcgtggaga cccgtctgtt atttctgtca 360
atggcactga ctttaccttc cgaagtgcag gcgtcctcct ccttgttgtg gatccgtgca 420
gcgttccatt ccgcttgacg gaaaaaacgg tttttcctct tgctgatgtc agtcgcattg 480
aagagtattt aaaaacaggc atccctccaa ggtccattgt tctgttgagc acaagaggag 540
aaataaagca gttaaacatt tcacacttac tagtacctct gggattancc aaaccagctc 600
atctttatga caaagggagt accatatttt tgggattcag tggaaacttt aaaccatcat 660
ggnctaagct atttaccant cctgcttgga cagggccttg gggtgcttga anaattcaaa 720
cctttgcaag ctgg 734

<210> 4622
<211> 670
<212> DNA
<213> Homo sapiens

<400> 4622
caagaaaatt gttttgtgtg atgtagaaaa acctgagagc ttacactctt tttctgtgga 60
ggctccagtt tcctgtatgc attggatgga agtgacagta gaaagcagtg ttctcacatc 120
attttataat gctgaggatg aatcaaatct tctcttacct aaactaccta cactgccaaa 180
aaactatagc aacacctcaa aaatatttag tgaagaaaat tctgatgaaa ttattaagct 240
cttgggagac gtcaggctta atattctcgt ccttggagga agctctggat ttattgagct 300
ttatgcttat ggaatgttta aaattgctcg agtcacaggg attgctggta cttgtcttgc 360
attatgttta tcaagtgatt tgaaatcatt atcagtggnc acagaagtct ctaccaatgg 420
tgcttcagaa gtttcatact ttcaagcttg aaactaatct gttgtactct ttcttacctg 480
aagtaactcg gatggccaga aagtttactc atatttcagc tctgttacag gtatataaat 540
ttgtcactaa catgtatgtg tgaagcatgg gaagaaatac taatgcagat ggattctcgt 600
ctcaccangt ttgtgcagga aaagaacaca accacatcan tgcaaggatn agttcatgca 660
cttgctatta 670

<210> 4623
<211> 638
<212> DNA
<213> Homo sapiens

<400> 4623
ttgatgtttt aaaatgggca gttttgagca ataatctgtc ctaacagaac agtagcaata 60
agttttagga taccatcttg aatgtctagt tggtgtgcaa tagcttttct ttctaagatg 120
gcaataatga ttcatttcta ctacattttg caaaagtgtt tttgttgctt atacacattt 180
tcaataacca aggtagcctt catatgtagc cttaaagcat tacctcttga ttgtatcttt 240
agattgatat aaagtacttg catatagagt atttgaagtg atagattatt agatttgctc 300
tatgtctgaa aagagagcta ttctgcagtg cctaaatatc atttaaacag taaatattaa 360
taggaaatat tgctatatct gaatatataa tacaaaagtt tgatcatggt gacacaaatg 420
ttggacattt ttttccttat aaaaggctct ttttttatat attgtacaat atatttggag 480
attcagagca tagtgactat agtcgaaaac tgagattgca cttccaaaat tgggcacaag 540
taaataatct tatgaaggga ttcnttatca tgtttcaaac aagtgggtta caagcagact 600

0062045 - 0062800

ttgngacact tttccacagn aacaatacta agaattgg 638

<210> 4624
<211> 642
<212> DNA
<213> Homo sapiens

<400> 4624
gctacaagtc cacccgtttc aagcctaccc gcatcatctt ctaccgagat ggggtgcctg 60
aaggccagct accccagata ctccactatg agctactggc cattcgtgat gcctgcatca 120
aactggaaaa ggactaccag cctgggatca cttatattgt ggtgcagaaa cgccatcaca 180
cccgcctttt ctgtgctgac aagaatgagc gaattgggaa gagtggtaac atcccagctg 240
ggaccacagt ggacaccaac atcacccacc catttgagtt tgacttctat ctgtgcagcc 300
acgcaggcat ccagggcacc agccgaccat cccattacta tgttctttgg gatgacaacc 360
gtttcacagc agatgagctc cagatcctga cgtaccagct gtgccacact tacgtacggt 420
gcacacgctc tgtctctatc ccagcacctg cctactatgc ccgcctggtg gctttccggg 480
cacgatacca cctggtggac aaggagcatg acagtggaga ggggagccac atatcggggc 540
aagagcaatg ggcgggaccc ccaggccctg gccaaagccg tgcaagttca ccaaggatac 600
tctgcgcacc aatgtncttc gcttgaangn aaaacgctgt tt 642

<210> 4625
<211> 809
<212> DNA
<213> Homo sapiens

<400> 4625
gtagcactgc ttttttgagg ccagtagcaa catccagaga ccattcttcc atactttact 60
ccctcctttt tcagacttgt ttgtaaagta cagaatctga atttagcctt tatgattgta 120
tatgatccac agaagacctg atttatgaaa ttttgtacta aaatcatttg gaaatgattg 180
tattgtaaac tgaggctaaa tttttttta aacctgtttc atgtgttata aaggccagct 240
tgtaaaagaa gctgcaacag actttctctg ctcatgattt gcactcttag ggttttgtta 300
gccctttgt actactttct ttttaaattg agaacatggt tctttacata taaatctgct 360
tcaaccttag gatgttttca gaccagaggc aacttattca tgaattttta tgaaaactat 420
ctactaggac agataagctg aacagtgatg atctgtagac atttaaggac tgaatgtaat 480
ggttgatata tgtacattct gatattttta aatctttaac tttttaangt taaaaaccta 540
cagctgctta ggtccagctt cttaactctt tttgagacac ttcctgtcct atctccactg 600
ggcctgccta aatttgttct caccaagcac tgcctgtgca tgcagagaaa atctgtgcat 660
cctcttttaa aantttaaa aatactgttt aacatttgtg agaattttaa gaaaaaaggc 720
ttttgtanga actgtggctt ttcccattgt gaagcattga ntatcacaat tttgggacat 780
gttaataggg gggagtcccc nggatcttt 809

<210> 4626
<211> 607
<212> DNA
<213> Homo sapiens

<400> 4626
atattaactt gagtttcctt gagagctctg tttctctgag gttcacactg acttcaaagg 60

0060504 "0420000

aacttgcaca attgtttcta aggtaagctt cttcataccc aaattctttt tagaaatatg 120
ggctgttcac cctaattatt tctaactaat aggggctttt accctatatt ttctataggg 180
ttcgtgaagc atagtattct ggcaacctta aatccatcca agaagaaata agcaatgtgt 240
taatttgttg tttttgcatc gtgtagagat agattaatga agagcagctg ttgttatagc 300
cctgccacct tatttttaat gtaaacactt gatccttttc agagcacttt cacatttgat 360
tgtcccacta gcctgtgaag tacacaagcc aaatactgtt gtcacctgtt gtcaggtaag 420
aaactgactc agggtcaggt ggctcattca gcttgcctat ggttacaaca agcaaggtat 480
tcggccttac aggtatttga cacctgtgtt gttggnccat ccacagctct attancagca 540
gnaggatctt atttggaggt tgaagtaggg aatggaagat cttatttgtg tcgaaagagc 600
cctttta 607

<210> 4627
<211> 829
<212> DNA
<213> Homo sapiens

<400> 4627
tcgatgcaga actccgtctc cttagacatc agaaactaaa actagatact cagatgaaat 60
tatctgacct gcaccatgtc accttatttc aagaaatact tctcctgaag aattttgaaa 120
aacaggagaa catacttcaa gaacgtgtta attccttaga caaagaggaa cagtacatgc 180
aatggaaaat aaatgaaact cttaaagaga tggaagagaa aaagaatgaa atcaccaaac 240
tccaggagca agaaaaggca ctctatgctg gttttcaagc agccattgga gaaaacaata 300
aatttgcaaa cttcctcatg aaggtcctaa agaagaggat taaacgggta aagaaaaaag 360
aagttgaagg agatgctgat gaagatgagg agagtgagga atcaagtgaa gaagaatcta 420
gcttggagag tgatgaagat gagtctgaat cagaagatga ggtttttgat gattctattt 480
gcccaacaaa ttgtgatgtg gctcttttg agctggccct tcaccttcga gagaaaaggc 540
tggacattga ggaggcttta gttgaagaaa agaaaattgt tgataacctc aaaaaggaat 600
atgatacatt gtcaaaaaaa gtgaaaattg tggcaactaa tctgaatgca gcagaggagg 660
ncctggaggc ttatcagcga gagaagcagc agcggctgaa tgaactgcta nttgtgattc 720
cgctcaagct ccaccaagat agagtatgtg ggaatttggn gaaataccta gcgatctttc 780
tggnacttgg gcctccccaa acatgccttg anacggtgca agaacgaat 829

<210> 4628
<211> 838
<212> DNA
<213> Homo sapiens

<400> 4628
cctcaatgtg cctgaataaa tgcttgttca gacactggat gtgaagtccg attctccact 60
ggatacccaa actgcaggag gtaggtggtt cccatctgga cccgagttgc ctaccagacc 120
attgtcagaa acacagctgg acgtgagtta aagtggtgaa aaaacagatt ttattcagta 180
actactgaaa gtagggaagg agctgagctt attccgattt cggcagaggt gatttgggtg 240
ttttaaagaa agaatgaggg agacgggaat aaaggagctc cgaagtgtcg gggaagtgaa 300
aaagtgcaaa ggggagcttc cggatagcga agcacgtgga ggttcctgga gggtgtcctc 360
ccagagagga cgtggaacct tcccgctccc accgcgcact tgccctgtgt atctcttccc 420
tttggctgtt catctacata cgtggtagtt tcctttatag taaactaata aacggaaatt 480
tgcagcagct gtgaaaaact tcaattttct gaatccactt ttgattttta gtggcgattg 540
cttaaatgcc tcagttttaa gtatcataac gaaaggaaag catacgattc ctatattaat 600

09823.0045.2560

gaatcggaag tacctttgc agtttttgtt ttgctttttc agacaaggtc ttattctgtc 660
atccaaggct ggagtgcatt ggtgggaaca cagctcgctg cctactcagc ctcctgggct 720
caagcgattc tccgcctcag cctcctcaag tggctaggac cacaaggcaa ccacgcacta 780
aaacggccta aactaaaggt ttttggttta aaataanatt aattttaatt ttanaana 838

<210> 4629
<211> 782
<212> DNA
<213> Homo sapiens

<400> 4629
aactcctcgc tagctctccc tctcacacac gctcacaccc ggctcgagat ggcggcggcg 60
gcggcggcgg cgggggactc ggactcctgg gacgccgacg ctttctccgt ggaagaccca 120
gtgcggaagg tgggggggcgg cggcactgcc ggcggggacc gctgggaagg cgaggacgag 180
gacgaggacg tcaaggataa ctgggatgac gatgatgatg aaaaaaagag gaagcagaag 240
taaaaccaga ggtaaaaatt tcagaaaaga aaaaaatagc agagaagata aaagagaaag 300
aacggcaaca gaagaaaagg caagaagaaa ttaaaaagag gttagaagaa cccgaagaac 360
ctaaagtgct aacaccagaa gaacaattag cagataaact gcggctaaag aaattacagg 420
aagagtcaga cctcgaatta gcaaaggaaa cttttggtgt taataatgca gtttatggaa 480
tagatgctat gaacccatct tcaagagatg actttacaga gtttggaaag ttactaaaag 540
ataaaattac acaatatgaa aagtcactat attatgccag ttttttggaa gtcttagttc 600
gagatgtgtg tatttcattg gaaattgatg acttgaaaaa aattaccaat tcactgactg 660
tgctttgcag tgaaaaacag aagcaagaaa agcaaagcaa agccaaaaag aagaagaaan 720
gtgtggntcc tggaaggggg attaaaagcc accatgaaaa gatgatctgg caanattatg 780
gg 782

<210> 4630
<211> 791
<212> DNA
<213> Homo sapiens

<400> 4630
catgggaatt tgtttggttt tatttttat gcttgttttt gtttttaaaa taatacataa 60
atgtagtttg ccttaagaaa ctgttatttt tgctgagaat ataaattata tacaaataaa 120
accataaagt ccagtgaaaa tacaagaata caatgctgca ttacagaact ccaaatctga 180
aagtacctcc ctttatcatt cagttctcag atcaaaggtc atttctttaa aggtaatttt 240
ctgagttccc tagctaaaat atcacatcac taaccaattc agttcactct attttctgta 300
ttatcttttt catatcattt tatttctaca tgaaatcatc tgatttattt ttaaaatttt 360
tattgtctat cttatttcac ttaaaagaga ggagcaagaa ccatatctgt cctgtttatt 420
agtgaaacac ctaaaagaat acctggaaca tattaggcaa tcagtgaatt tttattgatt 480
gaaaccatag aatcaaaata gcttgatttc tagctttgtt gtttcatagt ctaactttag 540
acaaattatg ttctctgagc ttcattatct gctctgtaaa atatcttaag gcttgattga 600
agattaaata agctaataaa tgaaaataac tgacacaata ccggacanac aaggagcatt 660
caataaaata tgtattttaa gatgggatac cgcaattaat caagggaagt ctgtttacaa 720
agaaagnaaa tcaacggggg aaaccgggtg tccaaggcct ataatcccaa gcantttggg 780
gagggcanag g 791

<210> 4631

09529360 - 07-12-2010

0050150-040000

<211> 713
<212> DNA
<213> Homo sapiens

<400> 4631
gaagcaaaaa ggtcagcaac tgtaatctgt atcgccttgg aaaaaagaag ggactaccca 60
gccgcatggt ggtgtcaata tttgatcccc ctgtgaattg gcttcctcct ggttatgtag 120
taaatcaaga caaaagcaac acagataaat gggaaaaaga tgaaatgaca aaagactgca 180
tgctggcgaa tggcaaactg gatgaggatt acgaggagga ggatgaggag gaggagagcc 240
tgatgtggag ggctccgaag gaagaggctg actatgaaga tgatttcctg gagtatgatc 300
aggaacacat cagatttata gataatatgt taatggggtc aggagctttt gtaaagaaaa 360
tctctctttc tccttttca accactgatt ctgcatatga atggaaaatg cccaaaaaat 420
cctccttagg tagtatgcca ttttcatcaa gattttgagg attttgacta cagctcttgg 480
gatgcaatgt gctatctgga tcctagcaaa gctgttgaag aagatgactt tgtggtgggg 540
ttctggaatc catcaagaag aaaactgtgg tgttgacacg ggaaagcagt ccatttctta 600
cgacttgcac actgagcagt gtattgctga caaaagcata acggactgtg tggaaaccct 660
gctgggctgc tatttaacca nctgttggga aaangggctg ctcancttt ccc 713

<210> 4632
<211> 667
<212> DNA
<213> Homo sapiens

<400> 4632
atatatattc acttaaaaat ctggctaatt aatgactgtc atactcttat gcaatcaaac 60
tgaatttatt aggttctgtt agattcagtt aaattggaag gttaggaaaa gtaacataca 120
gtgggtgaac actgtgtatg tgaaaacact attatcttat gtagtcacaa gttagtcaat 180
gtcaacacac acatttcaca ttccattctt gtatgtacgt acttaaatag ctgaggtaag 240
ggtttatctt tctttgtatc ttttataaag attctgattg ggcaacttcc caggtctcct 300
agattttgtt gctgttgttg gccttatagg taaatccttt caattcttcc tacaatgaat 360
ggcttgtacc ttatgtagaa aaattgtgaa agagaaatag aatatacctc tgaagtttta 420
tgtatcttgg agtaactttg tttcacagtt aactcttgtt tgaaagtatg agtgttaaaa 480
atggggaaaa aattccacaa aatccttgga ttgagagcca gaaaaatgct tccatttaaa 540
aatgttgttt gacagacaaa aaaaaaaata ggtttttccc catgtccaag tttaacacca 600
tgtttctatc ccccttcccc agacaactgg gcagatgtgt tancatatan agtcngtttt 660
gggttgc 667

<210> 4633
<211> 643
<212> DNA
<213> Homo sapiens

<400> 4633
agtcagtcta ttttgataaa atcaactgaa aaaacatttg cataaagact caatgtaggg 60
gaaagattct tgacacaaat cttacattaa aagtctgtta atatttttat taacttttac 120
aagatcctgt tgtttttcat ttactataag tcctaagtca aatatgcctc acaccaagca 180
tctgaaaagt taagtacagt ttagtgtcac atttgcttga gcacatttga gtttcagact 240
catttaccat tgtggaatct gcttttggat attagagatg tttgttcaaa taccagaaga 300

cagaataata ctatcttcta ggctaaaact aattaattac tttcatataa tggacaggag 360
aaattcacat cagatagata ttttaccagt taatggtgca gcagaatatc aaactatttt 420
cttaaaatga atcagataag aacattgctc ataaaaaata actttttgt ttgatcaaaa 480
ttatttatag ttttatatgt ataatcctag tttatcctga gatgtatttg cttttgcttt 540
ttaaacttat aatttaaaaa naaagagaga gagtcagaag gttgtttaga tggggaccat 600
aacaaacttc tgtttcccta aactcaaatt gttacncnag gcc 643

<210> 4634
<211> 717
<212> DNA
<213> Homo sapiens

<400> 4634
aaacgcggaa ccatggccgc tgtggttgct gtttgcggtg gtctagggag gaagaagttg 60
acacacttgg taacggctgc tgtcagcctt acacatcccg ggactcacac ggtgctttgg 120
agaagaggtt gttcacaaca ggtatccagc aatgaggacc tggtaagaat ttttttttct 180
attagtaagg cctttgcaaa tatgaccaaa atgtttttct ttttaaaacg agatctggta 240
ttagactcta acatctttta ttttagctac ttgaatagag ttctgccgta ggacaaaaca 300
atttgataat tactctgagt tcagaaatga tgatgaattg attgtagtca tgtagtcagt 360
tgagttttga agtaggggaa ttcctagatt agaagcaaag ctgctataat accatatttt 420
tcttcctaga tcttaaattt aaggatatgt gatttgggaa ttgtttttt ttttttaca 480
tagccctttg taagcaaatg atatgggaat tttaaaaggt aatttgggtg agcagaattt 540
tagataactg aaaagagact gtacaaagct tagctatang ttggctatag tattaacatg 600
gactttctga aagcacaggt tcctgctaca tgcaaaggna ttttgacact aattagacca 660
tacaaagcac ttggcacana nctgaagagt agttacctga gcctgaatgt aaattgg 717

<210> 4635
<211> 832
<212> DNA
<213> Homo sapiens

<400> 4635
ttattatgga aagtctccaa aagcagtagc caagaaaaaa atggaaaagg ggaagtaata 60
atacccaaag agaagttctg gaagatatct acccctcccg aggcatactg gaaccgagag 120
caagagaagc tgaaccggca gtacaacccc atcctgagca tgctgaccaa ccagacgggg 180
gaggcgggca ggctctccaa tataagccat ctgaactact gcgaacctga cctgagggtc 240
acgtcggtgg ttacgggttt taacaacttg ccggacagat ttaaagactt tctgctgtat 300
ttgagatgcc gcaattattc actgcttata gatcagccgg ataagtgtgc aaagaaacct 360
ttcttgttgc tggcgattaa gtccctcact ccacattttg ccagaaggca agcaatccgg 420
gaatcctggg gccaagaaag caacgcaggg aaccaaacgg tggtgcgagt cttcctgctg 480
ggccagacac ccccagagga caaccacccc gacctttcag atatgctgaa atttgagagt 540
gagaagcacc aagacattct tatgtggaac tacagagaca ctttcttcaa cttgtctctg 600
aaggaagtgc tgtttctcaa gtgggtaagt acttcctgcc cagacactga gtttgttttc 660
aagggcgatg acgatgtttt tgtgaacacc atcacatcct ggaattactt tgaatagttt 720
tatccaagac caaagccaaa agatttcttc aaangttgat gtgatccaca atgctgggac 780
ctcatcggga taagaagctg aagttactac atcccanaaa gttgtttacn cc 832

<210> 4636

09/15/2005 09:56:03

0050250-000800

<211> 784
<212> DNA
<213> Homo sapiens

<400> 4636
tagactgtct ctttctgaaa tattaagcaa tatcangatc atgtcgacta cagtgtttcc 60
agccaaggct actaaattta caggacagtg atagtgaaga atgtacctca agaaaaccag 120
ggcagactgt gaacaataaa agagtttctg cagcatctgt agctttattg aacaccagca 180
agaatggcat atcagtaaca gggggtatca cagaagagca gtttcagaca catcagcagc 240
agttagttca gatgcaaagg cagcaacttg cccagcttca gcagaaacag caatctcagc 300
attcctcgca acagacacat ccaaaagcac agggctcaag cacctctgac tgtatgtcta 360
aaacacttga ctcagccagc gcccactttg ctgcatctgc agtggtcagt gcacctgttc 420
caagtcgcag tgaggtagcc aaggaacaga acactggcca caacaacata aacggcgttg 480
tccagccttc aggaacctct aaaacattat actccaccaa tatggcttta tcatccagcc 540
cagggatttc agctgtacag cttgtaagga cagttggcca caccactaca aaccacttaa 600
tcccagcatt gtgcacaagc agtcctcaga cacttcccat gaacaattcc tgcctggaca 660
aatgcagtgc acctcaataa tgtcagtgtt gtttctccaa gtcaatgtgc atatcaatac 720
acggggcttc ancancatcg ccaacaagnc tttaaaactt gccaaaagtt gctgccagtt 780
tggg 784

<210> 4637
<211> 665
<212> DNA
<213> Homo sapiens

<400> 4637
aagggagcgc acgccggcgg cgcggaggcc ggctctgcgc ttcgggccgc cccctccccc 60
caccccgctc acactcggca cttacttcgg ctgtctccgc tgccctccag cggagacgca 120
gctcctcagg cgcccggcgg tatttgttgg gtcggcggcg tcagggattc gcagtggcct 180
gtggtcggcg tcgtccggcc actggtgcgc ccccgcggca ggcagagctc acgctcctgt 240
cccccggctg gtccggggtc tgggcgccgc gtcgacggcg gccccgcagg acgcgcagac 300
cgggccgcag cccatgcccc gagcggactg cattatgagg cacctgcctt acttctgccg 360
gggtcaagtg gtgcggggct tcggccgcgg ctccaagcag ctgggcatcc ccacagctaa 420
ttttcctgag caagtggtag ataatcttcc agctgatata tccactggta tttactatgg 480
ttgggccagt gttggaagtg gagatgtcca taagatggtg gtgagcatag gatggaaccc 540
atattacaag aatacgaaga agtctatgga aacacatatc atgcatacct tcaaagagga 600
cttctatggg gaaatcctca ntgtggccat ttgttgggct acctgagacc aagaaaagan 660
nttgg 665

<210> 4638
<211> 714
<212> DNA
<213> Homo sapiens

<400> 4638
agagcagaac ttggactgag tcctgcagga cacaggttcc gccgagcccg tcccttggcg 60
gtggtgtcac tggatgctgg gaagagatgg tgggaagagc ctccatccat tggcgcgtca 120
ctaattagac aaggaggcct tgggctccct tgagagagtc acggtctctc ctccgttgac 180

ccgcccttca ttgaactcct ttacttggat attcagagcg ctggacagag atcacttggc 240
gctaacaccc tcggaggtcc tcacggcgct ccgtcggaat gacacagtcg gattcccaag 300
ctgcgaaggg tgagggaggg actgcagcgc aggaactgag gaggagaggc ccgcgcgccc 360
actggagccg agcggtgagg aataaccgga ccgacccccg acggtgcgtg cctcactttt 420
aactttctgg aacgcaccca ccactgcctg gctctttatt gcatcagcgc cctttgaagt 480
tgctgaaggg gagaatgttc atctctctgt ggtttatctg cccgagaatc tttacagcta 540
tggctggtac aaagggaaaa cggtggagcc caaccagcta atcgcagcat atgtgataga 600
cactcacgtt agggctccag gggcctgcaa tacagcggtc gagagacaaa tatnacccag 660
tgggagatct gcatttccan gaacgtcacc ctangaggac accgggatac taca 714

<210> 4639
<211> 543
<212> DNA
<213> Homo sapiens

<400> 4639
atctggctta ccactctcca gggcctcctg gggagcctgt cctgtgttca ctttgtttca 60
ggctggtctg tgccccgtga gccacatggc ctagggtgat gccaggttgt cccgtcactg 120
gggtcccatc tgtagattct ttgcgccctt cccggctgct gcctggggcc ctttcctgct 180
ctcccgtccg ctgtgggtgg tccccagctc tcctctgtgg gttttaccgg aaaggtggcc 240
ccagctgttg acttccagtc actgtcccag acggcacaag gttttctgta ggaaagctgc 300
cattgccccg gccccttttc ttcctttgtc ccgttgtcga ggtttttttca aatagcgtgt 360
tgttcagtat gcaaatcaat tattttaaga atcgcttttg taaatatctt tgtgaatatt 420
ttagtatcgt ctttgataat attcaacatt ttcatgacct ggttatagcc tttgctggtg 480
tttttaaaat acctggactc aatgacaaag accgagtcnt ctttttttttt aaacagaaac 540
ann 543

<210> 4640
<211> 847
<212> DNA
<213> Homo sapiens

<400> 4640
gttgtgtgaa tgtttcaagc agaaattaat ttaaatgtgt gtttaggaag tacttaactt 60
ggaagatgta tcatttttct taaaatgcat gtttaaattt tatttttta agtaattttt 120
aaaaagttta ttaatgttaa atttatgatg cagaatgata gcatcagatg tctgcagctg 180
aaaaaaattt actactatga acccccaaaa tattcagttg caagaaaatt tgattctaaa 240
attattcatg gtaggatacg taacacaccc cttcaaaact tttaagaaat acatttagca 300
catgtgctat gaaagcatac gtacaaagag aaaggggaaa gtgatttata attcctacaa 360
cagaggccaa gaaatagatt aaaatatttt caagacccca aaataatgta ttatggttgg 420
gaagtcagta gaacactgga ataggtgaag acctgacagt aatttttgtc ttaagaatgc 480
tttctttagg acagaccctt taacctcacc tctgtgcatc tgtttttaaa atgattatat 540
ttgcctctga tatttgaaag cacttttgta agttttgatg atgaaaaata tattaaacgt 600
gcatattacc attatttagg aaataattcc ttatatactg tgataaatca ttgctgttac 660
atacagtaac atgccttaat tacatttaat gccttactgc tttaagttag gtaaatccaa 720
gtttcagaat taaaaataag cattatttca tatgggccaa tcagattcgt tacataggcn 780
atataaattt gtccccantt tcaccaataa gcacaaanta attggggcaa aactgccttt 840
gagggcc 847

0503463.0702800

<210> 4641
<211> 855
<212> DNA
<213> Homo sapiens

<400> 4641
acactggaaa ttccaacatg cctgggggc tcccaaggca agcttacacc cagaaaacaa 60
cacagctgga gcacaagtca caaatgtacc aagttgaaat gaatcaaggg cagtcccaag 120
gtacagtgga ccaacatctc cagttccaaa aaccctcaca ccaggtgcac ttctccaaaa 180
cagaccattt accaaaagct catgtgcagt cactgtgtgg cactagattt cattttcaac 240
aaagagcaga ttcccaaact gaaaaactta tgtccccagt gttgaaacag cacttgaatc 300
aacaggcttc agagactgag ccattttcaa actcacacct tttgcaacat aagcctcata 360
aacaggcagc acaaacacaa ccatcccaga gttcacatct ccctcaaaac cagcaacagc 420
agcaaaaatt acaaataaag aataaagagg aaatactcca gacttttcct caccccaaa 480
gcaacaatga tcagcaaaga gaaggatcat tctttggcca agactaaagt ggaagaatgt 540
tttcatggtg aaaatcagta ttcaaaatca agcgagttcg agactcataa tgtccaaatg 600
ggactggagg aagtacagaa tataaatcgt agaaattccc cttatagtca gaccatgaaa 660
tcaagtgcat gcaaaataca ggtttcttgt tcaaacaata cacacctagt ttcagagaat 720
aaangaacag actacacatc ctgaactttt tgcagggaac aaggacccaa anactttgca 780
tcacatgcaa tattttccaa aattaatggt gattccaaaa gcaaggattn ttccttcaca 840
nggggggcttt tcaag 855

<210> 4642
<211> 714
<212> DNA
<213> Homo sapiens

<400> 4642
attgatgtta caccatcaag ggtctttgaa tactcgattc ttttttgatt ttttttgtct 60
ttactcctgt accaatgtat ccttttttaaa gaataataaa atttgagaaa ttaaactcat 120
tgttattagt acctttctat ccacttcttt tttttttcc aggatagtga aaaaaaaaaa 180
aaagaggagt gagggctgaa cttgttacga tttagaaatt aaggcccatt ttccttctta 240
agaacccagt ttctctatat gaagcagatc cagaccgcag gtccctgtcc caccacgcct 300
ttcacttccc tgtgcctcgt ttccccatct gtagaagaga gtcagtcatg ataataactc 360
ctacttcttg gtagtgttgc aaggattaag cagcttaata cttgtatgtg ctttgaacag 420
taacgtgctg tagtgtacaa aagatgtaaa ttgcagacca ggcatgctgg cagctgcctg 480
tantttcagc ttctcgggaa gccaaagcaa aggatctctt gagcctcagt atctgaggtc 540
agcctgggca acctggcaaa atacctcatc tcataataag taacaacaat aataataang 600
ttagctgtta ngggctgtta ttggttactt atcccaagtc acagtcttct tatttaattt 660
acccccanat ctcaattgtt tttttgaagt aatcaattat cttcccntga ntgg 714

<210> 4643
<211> 715
<212> DNA
<213> Homo sapiens

<400> 4643

0560204.0560204

tgcttctgga cggaagtggt ggctgtggaa ggcgtagcat catcctgcag acagacaata 60
attctggaga tactggtgga agttccaagt ccaataagac actcaaatat gagtacaaat 120
gccttaaaat ggaattgaaa aactctttat tttcccctat catttattgg atgggtgggt 180
ggggtatttt tttgtaattg ctttttttaaa tattagttaa tggattaaat ttaattcttc 240
agcgtaaaat ggtgaagaac tagcatatag ccattgatca taaactgact atcataaaat 300
caaaacaagt gaaataacaa aatggacatg gtggctttgt ttaggtagag ccacaaaaga 360
aaagacttgt aatattttta tatacagagg aaatctgtaa caggtatttt gtttctttta 420
aagcaagcaa cacagaggaa tttatacctc aaactatctg gccatattta ctaccttatc 480
actgcattat tctcttttat ctgtttaaag catatagaga tgaagtttgt agttgtttta 540
agtactacac atttttaaat tgttagcttc cttaagtata tcatgtaaag aaatgtctta 600
atttttgaaa aaagtacata tttattttcn tttgaattgt ttttantgtt ttctatttat 660
gccttgatga tttaatatgg ntttgttaca gccaagtgcc aaatgctctc tcaaa 715

<210> 4644
<211> 618
<212> DNA
<213> Homo sapiens

<400> 4644
ctgtaacatt agagcacaat ataattgtag acattctaag catctgtccg tgtagtctac 60
caattgcaca aggaaggcat gttagccctc cagattgaaa atgtatgtga cctcttgaac 120
tgaagttaga ttcccaacca ttcaaaatgt tggcagctga tcacatttac ttctgataaa 180
agtaatgtgt aagtaaggtt aatcttcttt cataatgcct tatgacaagc aggtgctgct 240
tcatgaaacg tcattgtata gcccatttca tgtatcatta cattgttgct gttatttaat 300
gagtgcatta tttctctttt taagttggcc ttaggtatat gtcattgtgg catgcagagg 360
gttatgacga ttttaaatat taggattttt agagcacata acattagcta ttttatggat 420
ttcaaaagtc tcaaaacagt tgtagattaa aactgttagt tacctttcac atttccaaac 480
tatgtgcata aaatagaata aatgcagtat agaactatgc taaccaaaat taatangtta 540
aggggtattt tattttaaat cctgtagtaa ttggggaaat tgagaagatt ataattttan 600
acatgngttc attaagat 618

<210> 4645
<211> 734
<212> DNA
<213> Homo sapiens

<400> 4645
ttttctcttt gcataaattt tggctccatt ctttccataa caatctaatc aaaactggga 60
gttctcaagt gaatgcaaaa ggagcaggcc ataactttat ttgttagata cactgtcaga 120
aacttgagat cttttggcct atgataatac cattaatttt tgcattgctt cagtttgcca 180
agtgttttta catcatctca tttgatctca aaacagcttg acagagcaac tgttattgaa 240
atattacaga tggaaagaat gaggctcagg gaagttaaag acttggccaa gatctgctca 300
tcgtcactgt ctgtacagta tttttttta gaggttgtaa tgtctcagat ttagtccttt 360
accatctatg ttgatttgct tttgtctatt tcctcattaa ttgaatatac tttaaatata 420
tatattaaag tatcaaaata tagagagaca tttgaactgt attcaggtaa tatgtttaaa 480
gatatttata tattgccata caaaaactta acatttaaaa ctgataatat ctgtaatgac 540
atcagaatga aagaaaaaaa attgtacagt gtatattcct ttgttttgaa tccaaatctt 600
tttcataagg taatgacaga tgccttaatg tgaagcttat ttataatagc aataaaccta 660

0356045-0356800

actggatttg gatgaanaag tcttaatact gacatactgg ntttttaatg cactgggttg 720
ttaattgggn attc 734

<210> 4646
<211> 610
<212> DNA
<213> Homo sapiens

<400> 4646
tgacaaaaaa gaaagacacc tgttggggtg gcctgccaga cccaggagtg gagggctctg 60
tgagggcccg ggaattcgga ctcaggacag ggattctcca tggctaggcc cagaaacaca 120
gggtccaacc actctccagc agggagacct gggggtgaag gggtgagccc tgcgcaggtc 180
tctgttcctt ggtcttcact gggcagtgtg gagaggtgtg gccaggagga gcccgcgttt 240
gtccagacca gggtctactc tggcaccaga gtgaccacct ctgacctctc ctttcctcgt 300
cctgggccgg gaacgacacc aaatgaggga catggaaagg ggtgagaagc ataaatgtgc 360
gtgtgtttct gcagaggagg gggcatgggc ccctgccggg ctgcgcaggg gagggtgggg 420
tgggactttt ccagagaggg agccaggcct ggcccgggcc ccgggagctc acgtcacccc 480
caccctcac ttctccaggg aactgccaaa gccaaaccca gctcgggatg ggattatgtg 540
tactgggtag acccgtggag aggggctgcg anaaagagat ctcggtgggc agaganaanc 600
aaaggcagaa 610

<210> 4647
<211> 705
<212> DNA
<213> Homo sapiens

<400> 4647
acaagcagag agacaaatca tgagtgaact cccattcaca actgctacaa agataataaa 60
atacccagga atacaactca caagggatgt gaagaactac aaacaactgc tcaaggaaat 120
aagagagtac acaaacaaat ggaaaaacat tccatgctca tggataggaa aaatcaatat 180
catgaaaatg gccatactgc ccaaagttat ttatagattc aatgctatcc ccatcaagcc 240
atgattgaca ttcctcacag gattagaaaa aactacttta aatttcatat ggaaccaaaa 300
aagagtccaa atagccaaga caatcctaag caaaaggaac aaaactggag gcatcatgct 360
acctgacttc aaactatacc acaaggctac agtaaccaaa acagcatggt actggtacca 420
aaacagatat atagaccaat ggaacagaac agatgcatca gaaataatgc tgcacatcca 480
caaccatctg atctttgata aatctgacaa aaacaagaaa tggggaaagg attccctatt 540
taataaatgg tgttgggaaa actggctagc catatgcaga aaactgaaac tggacccctt 600
tcctacaact tatacaaaaa ttaactcaag atgggttaaa gacntaaatt taagactaaa 660
actataaaac ctagaagaaa acctangnaa tgccattcag gcata 705

<210> 4648
<211> 631
<212> DNA
<213> Homo sapiens

<400> 4648
gcggtcatcg ccgcctcggc ccgggagctc agcattgcag ccgcaccgga ggcctgaaac 60
cgtctcctcc gctaccgccg ccgccgccgc cgccgccgga ccgagggata cgacggttcc 120

09529450.090200

cgagacagcg gaacctgcgg cccggggcgg ccgtcagata taaagtcatg aagaactggg 180
gagttatagg tggaattgct gctgctcttg cagcaggaat atatgttatt tggggtccca 240
ttacagaaag aaagaagcgt agaaaagggc ttgtgcctgg ccttgttaat ttagggaaca 300
cctgcttcat gaactccctg ctacaaggcc tgtctgcctg tcctgctttc atcaggtggc 360
tggaagagtt cacctcccag tactccaggg atcagaagga gcccccctca caccagtatt 420
tatccttaac actcttgcac cttctgaaag ccttgtcctg ccaagaagtt actgatgatg 480
aggtcttaga tgcaagctgc ttgttggatg tcttaagaat gtacagatgg caaatctcaa 540
cattttgaag aacaagatgc tcacgaatta ttccatgtca ttacctcctc attgggaaat 600
tgagcggaga ncgccannct ccgggtcaca a 631

<210> 4649
<211> 877
<212> DNA
<213> Homo sapiens

<400> 4649
ttatgttaac atttgaaaac tcaagtactt gcaagggact atctagatag ggataatttg 60
tcctaggtgt cttaactgtg aagcagctta aatgccccac aaaaattgct ctagttctgc 120
catcagtgtt tctgtgagca ttcttaaagc ttctttttag ccacaagaaa taactgaaag 180
ctgatgtttt taactataag catttttgt tgtttttaac taaaaataga agtgatagaa 240
ctgttctctg aacatctggg gacagcagag ttcttaattg tcttgagtac ttaagaatat 300
atcttgaatt gtttcacaaa attgactagg acataatgct aaaaattcag actgttttag 360
aatcttgtgt tcatatgagt taaagaaaaa ttcaaatagt aactgtcttt gaatacataa 420
gggaaatttt acaataaaaa ttttcaaaat tattattcaa gatttatact tagatatatt 480
acgttgagtt tattttctgg aatcagcttg ccaaaagagg aaaagtttat ttttaagtga 540
aggtaaaaat tgattttaat tatttggtag caacccttac tagtagaata agagctgaag 600
taccaatatt aagtgatttt cactgttctg aaccaagcct ggttgcatgg tggttttang 660
acaacagtga agagctttaa ttttttaagt tttggggaaa tagcttgtga gagggaagaa 720
nggattgcaa agtttttcca aaatatttta tgaagttagt gaagtcagtt gaaaggtgta 780
tttaaacata tgaagggata cagttacatt tttttaatga gaggaaacaa ttgccgtagt 840
canaaataag ntggagtggt ttacctantt aggggta 877

<210> 4650
<211> 687
<212> DNA
<213> Homo sapiens

<400> 4650
taaacaagta aactattatg gtttccattg cttacaaaat gattttcctt tacattctta 60
tcatgaacac tattttaagc atcaaatgca atcatctaaa atataaaggt caatcattta 120
taatagaaac accttgacca caagcccttg attgaacatt ttataatatt tcatctactt 180
attaaaacaa ataatttccc ttgggttgga ggggaagtga tttcataaat taattagaaa 240
gccatcttta gcatattgct tatgtctgga tccatgtttc tgaggaaaaa gacattctca 300
ggtgatgtat ttttttcatg cattagtatg catttttaaa aaataatgca tgtttcttta 360
ataattaatt ttcatcttct ataagatgcc atgtgaagaa gttgtggaaa tgtagaataa 420
aaagctaaag ctgccaaatt tctgttgaac tcttaaaaac agctcatgtt tgtttgtcct 480
ctcgggttgt ggcctagcct atttgcaatg taatgaagct gcanggttct tgtatagcta 540
aagcgttcaa tgcatttcac gtgctgtggt ggatgtgggg tgctgtagac agggcttcct 600

09529469 .072800

ctcttccctg ctctcaaaat ancctccggc tttgacaatt tgggncaaga ttcctggtca 660
attgggttta aagcctggaa gcaaaan 687

<210> 4651
<211> 606
<212> DNA
<213> Homo sapiens

<400> 4651
aagaaaggta agggccctgg gcgaggaaag cgcggccctt tccgagtttg gtgttttgca 60
gcgaaaggaa atctcgctct tccgaaagtc ctccagggcg agagaggaaa gggcctaggt 120
actgtgctgg ggtcgcacag ccggccgaga cagtgccggg acggggagcc aggcttccga 180
gtgcgcccgg tcactgactc ctccgcgctt tcctcgtgcg cctgcagccc ttggttcttg 240
gaaacgccgg cgccttgttc agggctggtg gggctggggc gcaaggtgca gctgacaatg 300
cccgagagga gccgcagcct ctggtggagt tcggtcgggt gtgggggtag tcaaggaaag 360
aagcaaaggg aatacctcct ctgaaaaatg gcagaagcag ttttccatgc cccaaagagg 420
aaaagaagag tgtatgagac ttacgagtct ccattgccaa tccctttgg tcaggaccat 480
ggtcctctga aagaattcaa gatattccgt gctgaaatga ntaacaacaa tgtgattgtg 540
aggaatgcng aggacattga gcanctctat gggaaaggtt attttggaaa agggtattct 600
ttcaag 606

<210> 4652
<211> 675
<212> DNA
<213> Homo sapiens

<400> 4652
aaaaaagcgg gacaggtcca agcggttgtt ctgtgtgaag tcgcgcggct tccacccacg 60
cagtgttcta agtgaaggcc agaaactcgc tcgccatgtc ggctgcagag gcgggggggtg 120
ttttccacag agccaggggc aggaccctgg acgcgtttcc cgcagaaaag gaaagcgaat 180
ggaaaggccc attctacttc atcctgggcg cagacccaca gtttgggctg atcaaggcct 240
ggtccactgg ggactgtgac aatggcggcg acgaatggga acaggagatc cgtctaactg 300
agcaagccgt ccaggccatc aacgagctga accccaaacc caaattcttc gttctgtgcg 360
gcgacctcat ccacgccatg ccagggaagc cgtggcggac ggagcagacg gaggacctga 420
agcgagtgct tagggcagtg gacagggcca tcccactggt ccttgtcagc ggcaaccatg 480
acattggcaa caccccacg ggcgagaccg tcgaggagtt ctgccggact tggggagatg 540
actacttcag cttctgggtc cgggggcgtc ctgttcctgg tcctcaactc ccagttctac 600
gagaacccct ccaaatgccc cagnctgaag caagctcaag accaatggct ggacgagcaa 660
ctgagcatcn cnagg 675

<210> 4653
<211> 744
<212> DNA
<213> Homo sapiens

<400> 4653
attcacgcgc gccgcagcgg ggcaccggaa gttatggagg tattaatagg ggaccctatt 60
accacatgtc tttctccctc agtgtatgat ataatttgta atcttgggtt tcaactcaga 120

0503920.0320

gaaaattgtg atatcaatag cattgtaact cagaatggtg aagtatgctg gaaaacaatc 180
acagactgtg tgagctacac agagtcagag cagggtctgg attactgggg aagcgtgagg 240
ctgctgggcc ctgtgtgtga ggctgtccat tcacatttct tatctctgac caaggggcaa 300
tttgaaattc gatatgcacc gtggttccag tggacaagtt ttccagagtt atttcctgaa 360
atatttgatg ccttggaaag tctacaatct cctgctattt ctcttanctt aatgaaactg 420
acatcgtgtc tagaacgagc cttgggtgat gtatttttac tgattgggaa ggaatgcccc 480
tttcttttaa gagatctgct ttcatctgan gagcttgctc aagtcttcag tcagtctgtg 540
atgaacgtgc taaaagtctt cgttggctct ccgtgtggtc tcaacctgcg taacgtctta 600
tggcatgggt ttgcgtcacc tgaagaaaat tcctccaaaa tactgttcaa tgatgatact 660
gttgacngca nggattgggt cagttactga agagttacct tcaaaacact aaaacttaca 720
ttgggcacat cgctccttca natc 744

<210> 4654
<211> 581
<212> DNA
<213> Homo sapiens

<400> 4654
aaaacttttt ctgaattcat aacaatcatc atagagttag actagacctt tagaaaagca 60
acctgtttac aaaatggaga tctatatgga aattatggaa atggaattgc tttcttctgt 120
ttgcccattt atttctatga aagtagacta aatactccac ttatttcata gcacattcaa 180
aggagaagcc taagttttat gagcatcttt cactgtttcc ccaggtttcc acatacaaga 240
ttagaacacg aattgggcta tcagtgaaaa gaactcaggg catatgcaga gttttatgtc 300
cagggttgac taatgattca ttcactgctg gaagtcattc acagacaccc tttcctccaa 360
tggcttttca taatatcttc ctgttttcag taagcggcta cagaaagtct ggactactga 420
gagacttgtt tcaacaacag tttcaggatg atccttaatt ctacaaaact ctgtacctct 480
agggattaag tggcagcaat catcactgag ctccagctgg tctggttgaa gccagccttt 540
ctaatctatc agatgctgta acgtttcttg nntgtantcc a 581

<210> 4655
<211> 666
<212> DNA
<213> Homo sapiens

<400> 4655
cagtgggtgc gtcggccacg acctttggc caggttaggg agggggcgac gctgagatgg 60
gggcggcggc ggcggaagcg gatcgcactc tctttgtggg caaccttgaa acgaaagtga 120
ccgaggagct ccttttcgag cttttccacc aggctgggcc agtaataaag gtgaaaattc 180
caaaagataa ggatggtaaa ccaaagcagt ttgcgtttgt gaatttcaaa catgaagtgt 240
ctgttcctta tgcaatgaat ctacttaatg gaatcaaact ttatggaagg cctatcaaaa 300
ttcaatttag atcaggaagt agtcatgccc cacaagatgt cagtttgtca tatccccaat 360
atcatgttgg aaattcaagc cctacctcca catctcctag cagcaggtac gaaaggacta 420
tggataacat gacttcatca gcacagataa ttcagagatc tttctcttct ccagaaaatt 480
ttcaagagac aagcagtgat gaacagtgct ttgagacaaa tgtcatatgg tggaaaattt 540
ggntcttcac ctctggatca atcaggattt tcaccatcag ttcaatcaca cagtcataag 600
nttcaatcag tcttcaagct cccagtggcg ccaaggnaca ccatcatcac aagcgttaaa 660
gtcaga 666

0050-0050-0050-0050

<210> 4656
<211> 667
<212> DNA
<213> Homo sapiens

<400> 4656
ctacaatttt tggactcaag caaaaagcca gatttttgg aaccaactga ggaattctgt 60
acacaaagct tcagcaaaca cttagagaaa acaaacaaac aaacaaactg ggtccttgga 120
aacagttctg gcacacaggc agaacactgg aggccacctc aaaggacaga ggccatgctt 180
tcgcatttgg aatgtggctc tgccacacag ctcactccta tggtggggtc agaggtcaga 240
acacaaacca cccatgtggg ctctgctccc tcccaacact ctgtgttccc acagggcttc 300
tctgcgggca gccaggcacc tgtcaggctt gggcaggggc ctgctgagaa tctgtgaatg 360
cagaggggag ggctcatggc caaggattcc agccagagat gaatttccat gctctgggcc 420
aagggctctg tgccggcccc tcatgangtg gctggctgca ttatggggag atgctgccca 480
cggcggagat ggtggcagtg gctgtgaaga acagaggtac ctgaattctg tgtcctcagc 540
tgtcactttc cggtgagaca agtggagcag ggcctttgat cactgnggtc acaanacctg 600
gtactggggt tttgcccttg tgtgctcaaa catttctaaa ggtgtcccca aagcccctgg 660
nggaaaa 667

<210> 4657
<211> 659
<212> DNA
<213> Homo sapiens

<400> 4657
ttgttggcct actggtcgaa atgcacctca tgcactctaa ttagcacgtc aaattagtct 60
ctccgtttca gaggtgtagg gcctttgtgg agccttctca ataaaataat ttgccactct 120
tgaaggttag acattctctt ctatcaatgt acacataaag gttttgtttt gctttgcttg 180
ttgtgaatta aaatggggag aaaatgatgt gttagctatt acccagtcat gtgtcttttt 240
agtcataggt tagcttttca agacacttcc tgcatctctg acctgttgca cctctgttat 300
cttggcacct ctgttatctt agcagcaagc acctgcctca gctgaccctt gagccataac 360
ccataagctc ctgaaaagta catcaagtct aaagtgaacc agctaactca ttaagactgg 420
aatcatgagc aacaatggag cagacctaac ctttggttac atctcctgtt ttgtagctat 480
ccttttgttt ggctcaaatt ttgtgccact taaaaaattt gatactggtg atggaatgtt 540
tctccagtgg gttctttgtg ctgccatatg gttggttgcc ttggttgtca atctgatatt 600
acattgtcca aagttttggc cttttgcaat gcttgggggc tgcatttgng ggcaacang 659

<210> 4658
<211> 662
<212> DNA
<213> Homo sapiens

<400> 4658
atagagccct cagtgggatg aggatgaaac tgctattgcc ggcggctcct gttttaccgc 60
gtcagcatgc tggtgcattt atttcgggtc gggattcggg gtggcccatt cccaggcagg 120
ctgctaccgc ccctccgctt ccagacattc tcagctgtca gaaacacatg gcgtaatggg 180
aaaactggac agttacacaa ggcagaagga gagtactctg atggctaccg cagctcctcc 240
ctcctccggg ccgtggccca cctgcggtcc cagctctggg cccacctccc tcgagccccc 300

0052-0504-0205-2450

ctagctccca gatggagccc ctctgcctgg tgctgggttg ggggagccct gctaggcccc 360
atggtactga gtaagcatcc ccacctctgc cttgtggccc tgtgtgaggc agaagaggcc 420
cctcctgcca gctccacacc ccatgtcgtg gggtctcgct ttaactggaa gctcttctgg 480
cagtttctgc acccccacct gctggtcctg ggggtagccg tcgtgctggc cttgggtgcg 540
gcactcgtga atgtacagat ccccctgctc ctgggccagc tggtagaggt cgtggccaag 600
tacacaaggg accacgtang gagtttcatg actgaagtcc cangaatctc aagcacccac 660
ct 662

<210> 4659
<211> 660
<212> DNA
<213> Homo sapiens

<400> 4659
agtagggaaa gacccaggct gcgggacgcg gtgcaggctg cggcgctgac ggcctctgct 60
ccttccgcgg gtttccgact ccctgcccta gattttctgc ttagcgactt ggggtccccc 120
ctcgtttgct tctggtagga gtcgcaatcc cagcagcaat agcccagaag aggacacggt 180
tcccgtaccg aagggttcag taccagcagc ccgaccatca cgcggcggga tgtctgtggt 240
tggcattgac ctcggctttc tcaactgcta cattgctgtc gcgagaagtg gcggcatcga 300
gaccatcgcc aatgagtaca gcgacaggtg taccccggcc tgtatatcat tgggatcaag 360
aactcgagcc attggaaatg cagcaaagag ccagatagtc acgaacgtaa gaaatacaat 420
tcatggcttc aaagagcttc atgggcgatc atttgatgat cccattgtgc aaactgaaag 480
gatcaggctt ccctatgaac tgcagaaaat gcctaatgga agtgcaggag ttaaggtccg 540
gtacttagag gaagagagac cttttgcaat tgagcaagtt actggaatgc tgttagccaa 600
gcttaaagag acttcagaaa atgctttgaa gaaaccagtg gctgactgtg gtgatttcaa 660

<210> 4660
<211> 732
<212> DNA
<213> Homo sapiens

<400> 4660
gaatacatga tcttgaacag ctcctgtact tgctctttgt aaaaaaaata aaattatttt 60
gaattattct acctttgtaa acaattggct aaaagaatca tctttaagaa attaagccat 120
ttacatgttt gtgtttttct atagcagagc attatatttt gcattatatg tttcaaccta 180
gtctaagtgg gtctttttta catttttcaa gaacggattt cctggaatac agcgatataa 240
ttttggttgt caaattccta atgcaaccat ttagtctaaa cttagtcatt tatttgtgac 300
aataagatgt gttcaggggc tccctgtttt taagagactc ttttaaaaaa aaaaaaacct 360
aatgttttta tcttgagtca atatgattag gtattttgga tttactttta atcttaaaat 420
actgcatttt tatagcttct cagagcatgt ggatgggatg ggattttcgt tattttgctg 480
ggtcagctta tctttaatat atggactatt cctataaacc aaagtctctg acaagtgcac 540
ctaatttata ttgtatttta actacagtgt aagtttccat taacaaaacc atcctaaagc 600
gttaactgct cataatttta atcagctaca gttatgaaaa aggaagaatt ttgctccaaa 660
agattattaa taagcttaga aaatcctgct tttacctaac agaatgaant ggggttgagg 720
ggccggtaag nn 732

<210> 4661
<211> 735

D08270-0950250

<212> DNA
<213> Homo sapiens

<400> 4661
aactttatgg acttcccaaa acataaccag atcataactg aagaaacagg ctctgcagtt 60
gaaccaagtg atgaaataaa gagagccagt ggagatgtcc aaactatgaa aatttcatct 120
gtgcctaata gtttatcaaa gcgaaatgtg tctttgactc gaagtcacag tgttggaggc 180
ccattgcaga atattgactt tacccagcga ccgtttcatg gcatctcaac agttagtctt 240
ccaaatagtc tgcaggaagt tgtggatcct ttaggaaaaa gacccaatcc tccccctgtt 300
tctgtgccct acttgagtcc tctagtactc cgtaaagaac ttgaatcatt gctagaaaat 360
gaaggtgatc aggtgattca tacatcttct ttcatcaatc aacatccaat cattttctgg 420
aacctcgttt ggtatttcag acgtttggac cttcctagta acttgccagg acttatcctc 480
acatctgaac attgtaatga angtgtacag cttcctctgt catctctgtc ccaggatagc 540
aaacttgtgt atattcacct gttatgggat aatatcaacc ttcatcagga accaagagaa 600
cctctgtatg tctcatggag gaattttaat tctgaaaaga aacatctctc ctgtcagang 660
gaacaacaag aaacaagcac tttagtagaa accatcaggc aggagtattc aagcacaata 720
atgtccntta aaana 735

<210> 4662
<211> 754
<212> DNA
<213> Homo sapiens

<400> 4662
gctttgcggc tgtcgtcgga gaggcatctg ggttcggact ggggccgcca tggggaaagt 60
gaatgtggcc aagttgcgtt acatgagccg agatgacttc agggtcttga ccgcggttga 120
aatgggcatg aagaaccatg aaattgttcc cggcagtttg attgcttcta tagccagcct 180
taaacatggt ggctgtaata aagttttaag agaattagtg aaacataaac tcatagcttg 240
ggagcgtacc aaaactgtcc agggctatcg gttgacaaat gcaggatatg attacctagc 300
tttgaaaaca ctttcttcta ggcaagtagt tgagtctgtt ggaaaccaga tgggtgttgg 360
caaagaatca gatatttaca ttgttgcaaa tgaagaagga caacaatttg cattaaagct 420
tcacagacta ggaagaacct cgtttcgaaa tttgaaaaac aaacgcgatt atcataaaca 480
taggcacaat gtgtcttggc tttatttatc tcgtctctct gccatgaagg aatttgccta 540
tatgaaggca ttgtatgaga ggaaatttcc agttccaaag ccaattggtt acaatcgtca 600
tgcagtggtc atgggactca taaatggtta tccactatgt cagatacacc aagttgaaga 660
ttctgcatca gtatatgatg aagcctatgg aactaaattg gcaaaccttg ccaaatcatg 720
ggcctgatca agggggggngg tanaaagtna aaaa 754

<210> 4663
<211> 757
<212> DNA
<213> Homo sapiens

<400> 4663
acagatgagt aacgtgaatt tgtccgtctc cgacttctgg agagtgatga tgcgggtgtg 60
ctggttggtg agacaggaca gccggcacca gcgaatcaga cttccacatt tggaagcagt 120
tgtgattggg cgtggcccag agaccaagat cactgataag aaatgttctc gacagcaagt 180
tgaaagcaga gtgtaacaag ggatatgtca aggtaaagca ggtaggagtc aatcccacca 240

0095245-0076000

gcattgactc agtcgtaatt gggaaggacc aagaggtgaa gctgcagcct ggccaggttc 300
tccacatggt gaatgaactt tatccatata ttgtagagtt tgaggaagag gcaaagaacc 360
ctggcctgga aacacacagg aagagaaaga gatcaggcaa cagtgattct atagaaaggg 420
atgctgctca ggaagctgag gctgggacag ggctggaacc tgggagcaac tctggccaat 480
gctctgtgcc cctaaagaag ggaaaagatg cacctatcaa aaaggaatcc ctgggccact 540
ggagtcaagg cttgaagatt tctatgcagg accccaaaat gcangtttac aaagatgagc 600
aagtggtggt gataaaggat aaatacccaa aggcccgtta ccattggctg gtcctaccgt 660
ggacctccat ttccagtccg aaggctgtgg gcaaggaaca ccntngaact ccttaagcat 720
atgcacactg ttgggggggg gnaaaaaaaa aaaaaaa 757

<210> 4664
<211> 727
<212> DNA
<213> Homo sapiens

<400> 4664
ctactgccat ggaacttctt tatcactgcc aaggagtact ggatgttcaa actccgcaac 60
tcctccagcc cagccaccgg ggaggaccct gagggctcag acatcctgaa ctactttgag 120
agctaccttg ccgttgcctc cgccgtgccc tccatgctgt gcctggtggc caacttcctg 180
cttgtcaaca gggttgcagt ccacatccgt gtcctggcct cactgacggt catcctggcc 240
atcttcatgg tgataactgc actggtgaag gtggacactt cctcctggac ccgtggcttt 300
tttgcggtca ccattgtctg catggtgatc ctcagcggtg cctccactgt cttcagcagc 360
agcatctacg gcatgaccgg ctcctttcct atgaggaact cccaggcact gatatcagga 420
ggagccatgg gcgggacggt cagcgccgtg gcctcattgg tggacttggc tgcatccagt 480
gatgtgagga acagcgccct ggccttcttc ctgacggcca ccatcttcct cgtgctctgc 540
atgggactct acctgctgct gtccaggctg gagtatgcca ggtactacat gaggcctgtt 600
cttgcgggcc atgtgttttc tggtgaagan gagcttcccc aggactccct cagtgccct 660
tcggtgggcc tcccaaaatt caattgattc canaaaaccc cctctccggc cccatccttg 720
aangaaa 727

<210> 4665
<211> 789
<212> DNA
<213> Homo sapiens

<400> 4665
aatgccttgc gcgccgcggg cccagagacg tgaggctgtc ggcgtcctgg tggccccgcc 60
tcgtgtcccc ccccggaccc cacgccgcgg gagcttgggg gctgcggtct tctcttcctc 120
cgacctcacc ttcgatgcgg aagcgcaggg gcaggtgcgc cgccctcggc ccgcgcaggc 180
ggtgggcccg tctggggcaa ggcgcccgga agcgcctggt tggttcagaa aatcggaccg 240
cagcgggagg gcgggcaccg gcgcgtggtc tcagtggccc caggcgaacc ctgatgagca 300
gcagccgcaa gtggcttact aaaggagcca ctttctacgt ttgtctggaa tttacgtgaa 360
ttaagctggc gggcgggcgg ccaggcctgt agtctcagca ctttgggagg ctcagcactt 420
cgggaggctg tggcgggcgg atcacctgag cctgggagtt ggagaccagc ctgcgcaacg 480
tancaagacc ctatctctaa aacagattca ttaatactta gccaggcgcg gtggctgagg 540
tcccagctac tcggcaggcc caagctggcc tgagccagac cgctctggac tgttttaatt 600
ttttcagcct taatacctgc cagaattttt tttttactat gtatctttgt ccttacgtat 660
ataaatttta tgtacaattg agattatcct gtatttgctt ttccccccctc acttttatat 720

0962946.02800

ggtgactttt ctcaagttag gctgaatact nacaatttgg naaactgtcg ggcctgaaaa 780
acgaancgg 789

<210> 4666
<211> 776
<212> DNA
<213> Homo sapiens

<400> 4666
ctagaataac cactttagna gaagaacata aatgatctga tggagctgaa aaacacagca 60
cgagaccttc gtgaagcata cagaagtatc aatagctgaa tcgatcaagc agaagaaagg 120
atatcagaga ttgaagatca acttaatgac ataaagtgtg acgtcaagat tagagaaaaa 180
aagaatgaaa aggaacgaac aaagcctcca agaaatatgg gactatgtga aaagaccaaa 240
cctatgttta attgatgtac ctgaaagtgc tggggagaat agaaccaagt ttgaaaacac 300
tcttaggata ttatccagga gaacttcccc aacctagcaa gacaggccaa tattcaaatc 360
agtaaataca gagaacacca caaagatact cctcgagaag agcaacccca agacacataa 420
tcatcagatt caccaaggat gaaatgaaga aaaaaatgtt aagggcagcc agagagaaag 480
gtcggtttac tcacaaaggg aagcccatta aactaatagc agatttgtct gctgaaaccc 540
tacaagccag aatagagtgg ggggccaata tttaacattc ttaaagaaaa gaattttcag 600
cccagaattt catatccagc caaactaagc ttcattagca aagaagaaat aaaatcctga 660
gagacaagca aatgctgagc gattttgtca acaacaggcc tggcntacaa gagctccaga 720
agggaacact taacaccttt aagggaaaac caattncaag ncactggaaa aacctt 776

<210> 4667
<211> 675
<212> DNA
<213> Homo sapiens

<400> 4667
tactttctaa cagtagtatt tttagaatgg cagctataaa gttaactcct ggacacaagt 60
atatactgtg cactgaaaaa atatccatct acacagcacc caaggggagg gctgggggca 120
ccggcacggg ggcagcgtgc agccctgccc tgtcaggctg tcagacaagc cccggggggc 180
agcaggtggg ctcgggacgg gctgggggag ggacggccat ggcacttggg ggctccaggg 240
tgactcccat gaggcctccc ttcaaccagg ctttttggcc ccacaaatac tttaagcaaa 300
tcattaaaat tataacagtt aatggtttgg gggtgtttag gctgtaactg ctaactccta 360
ggaaacagcc ttttccctgg acacagatgg tccatacgct gagccacgtg aaactgctga 420
tgttttgttt agatgcacac acatggcagc gtttcataca ggtcagcagg ttagaccggc 480
ttttgaccat attcatcgct atttaaaacc tgtggcaaaa tgaacgctta ttttacagac 540
tttctaattt gaccagattt cttaatgaat agacacagaa ttaactaaaa acagtctcac 600
cccatgtagt gcgccgtgtc ctgagagaag tgccctccct acnangaggg aagaacangc 660
cctggggtgc aaagg 675

<210> 4668
<211> 657
<212> DNA
<213> Homo sapiens

<400> 4668

09/25/2003 09:36 PM

tttctccagc ggcccggtcg tgaagggcgg tcggcgccgc agcggctccg atgcccgccc 60
ggaagagagc gctctggccc cggcctcgca gctgcgggac agccgggagc ggagcagagg 120
gcagccgcgg ccagttgtct ccccagcgga ctgggaaggg aactttatct cggcctggac 180
tcccgctgta cctttgttgg gggttagtgg tgaggctgcg gtcgtccgag ctcctgggtg 240
tcgcgggcgc cgcgatcccc tcttcccgta gaagggccca gggcgctgct cgaggcgcgg 300
gaacccctgg ccagaggcgg gcactggcgc atccccgcgg ctgctgctgg ccaagccgac 360
tgcagggatg agaaattcct tgtaagagtg gctggaacgc tccgcggaga gggaataaac 420
tcttcccaaa ncgagctcgc actgctcctt gggaatggtg cactttccag ttccagttgg 480
accctctggg attgtcacag gaagcgctgc cattgtatga ggagccctct ncaaactaca 540
gaaggatgga tgctcttaag ttataaataa gattttgacg ccctggntgg tttgatgact 600
tgtgtcatga ngagtagggg tgttgcgctg aatccaaaat tcttccaacg cgggnat 657

<210> 4669
<211> 769
<212> DNA
<213> Homo sapiens

<400> 4669
tgtgaaattg agaatcatga taaaatcctc atacctcctc ctcttttgac caaatctttc 60
taaaatgcac aattataatt tcttatcttt aggaaaaagt aattatgtta tatgtgttat 120
atacactatg taaatatagt tcattaaatc attctttggt gtttgaagac tttctaattc 180
attacttcat tccagacatc aatgacaaca gcacataccg agcaggtaca catatgagct 240
acctactaat atgccctgat tttgattgta ttttgtgaaa accttggtat gggttatttt 300
taaatgaatg ttttcccaaa ttttaagctg aaactaggat gcatcaaaat tatcttggtc 360
ataatcttgt caatgatgtc atctaaaggc caccaggaac acacctgtag cccagcaaag 420
ttgaggccat cgactggctc atcacaacaa ggaaggctgt gcaccactgg gacccagcag 480
cagctcagca gcagcagtga gagggccttg ggaaagactt ggagggtttg gcttatacaa 540
ggtgatcttg gggagggtca aggaaacagg ctgtgatggt taatattgag tgtcaacttg 600
attggattga angatgcaaa ggattgttcc tgggtgtata tgtgagagtg tggccaaagg 660
agattaacat tttagtcagt ggactgggaa aagnacaccc aacctcaatc cggggtgggc 720
atcatccaaa caagcttgcc aanagcaagc tnaaattaaa gcaaggcaa 769

<210> 4670
<211> 688
<212> DNA
<213> Homo sapiens

<400> 4670
aagatggcgg ctggcggagc tgtcgctgcg gcgcccgagt gccggcttct cccctacgcg 60
ctacacaagt ggagctcctt ttcctccacc taccttcccg agaacatttt agtggacaaa 120
ccaaatgacc aatcttcaag atggtcttca gagagcaact atcctcccca gtacttgatt 180
ctaaagctcg aaaggcctgc tatagttcag aatatcacat ttggaaaata tgagaaaact 240
catgtttgca atttgaagaa atttaaagtc tttggtggaa tgaatgaaga aaatatgaca 300
gagctgttgt ccagtggctt aaagaatgat tataacaaag aaacattcac cttgaagcat 360
aaaattgatg aacagatgtt cccttgtcga ttcattaaaa tagttccact cttgtcctgg 420
ggacccagct ttaactttag catctggtat gttgaactta gtggcattga tgatcctgat 480
atagtacaac cttgtctcaa ctggtatagc aagtagtacc gtgaacagga agctattcgc 540
ctttgcctaa aacacttcag acaacacaac tatacagaag cttttgagtc actgcaaaag 600

0562694-070200

aaaaccaaga ttgcactggg acatcccatg ttaacaagat attcaagaca aagctggtgt 660
ttgaangggg attttgangc cntgcgaa 688

<210> 4671
<211> 765
<212> DNA
<213> Homo sapiens

<400> 4671
tgtatgagag aataaacaaa cttactcaga ctgaagagta tgttttcaaa aattaaagaa 60
gtagcaatta tatgggagct gttatttatt aaagcaatta tctgagccct taaagggctg 120
tttgttttta caatgttgta taatggcctt gcaggaaaat tagatttctt attctctctt 180
ccagtgtaca ttgtcttgag tattgtcaca tttagagacc atagggagat atgggactcc 240
tagtattcag tcgacactct gaacagattt tctgtgtgat acatttttc attttaattg 300
agtcccctct tcctcccctc caactgatag ctttttataa ctgtgtgaaa tatctagaga 360
agaatgaagt aggctgagct acattttcaa gcttaacatt ctttagaaaa ctaagaaaat 420
gcccaatatt tcaacattaa ggtgtcaata ggggctaaat gatcacttta agatgttttc 480
agtttggaac ttgaatgtgt gtttaatttt ttgtgaacag attgatgact cttccgcgtc 540
tatttctctg gcccagctta caaaggtata tatatatata tattcctgaa aatataagtt 600
tttttctaac atcatatttt tttatgtgga acggtttttt aagaggggtt gggggaggac 660
atattttgca aaagcattgt acatattatt actaaccctg gtaaagagta anttgctgtt 720
ttggngaaga taggggggaat actttgtcag cctcaanggt atggg 765

<210> 4672
<211> 681
<212> DNA
<213> Homo sapiens

<400> 4672
gaggggggcgg ggtcacgagc cgccagccgc cgggtggagg gtcccggccg ggagccgcgg 60
aaagagtagg gctccccaga caacggggtc cgacgagcag ttgggcacgg gctgagtccg 120
cctgccggca gaatgtccct ggctgcttat tgcgtcatct gttgcagaag aataggaacc 180
tctacttccc caccaaaaag tggcacacac tggagagata tcagaaatat aataaagttt 240
actggatcac ttattttagg aggttcttta tttcttacat atgaagttct ggccctgaag 300
aaggctgtga cattagatac tcaagtggta gaacgagaaa aaatgaagtc atatatatat 360
gtgcacacag tttctttaga caaaggagaa aatcatggta ttgcctggca ggcaagaaaa 420
gaacttcaca aagcagtaag aaaagtattg gcaacatcag ccaagatact gcggaatcca 480
tttgctgatc cttttagtac agttgatata gaagatcatg agtgtgctgt gtggctgctc 540
ctacggaaga ncaagtcaga tgacaaaacc acgcgactcg aggctgtgcg ggaaatgtcg 600
ganacccatc actgggcatg attaccagta tnggataatt gcccaagcct gtgatcccga 660
aaactcttat tggnttggca c 681

<210> 4673
<211> 774
<212> DNA
<213> Homo sapiens

<400> 4673

0050050-0050050

tgttcaagca ctttaggtag ccaaggtgag aggattgctt gaggccagga gtttgagact 60
agcctgggca acttggtaaa accccatctc tacaaaagaa aaaaaaaaat tagtgtggca 120
tggtggcatg catctgtgct cccagctcct cacgaggctg aggtggaagg atcaagtgag 180
cgcaagaggt tgaggctcca gtgagccacg atcaccccac tgtgctgtag cctgggtgac 240
agtgtgagat tctgtctcag aaaaaacaaa gtataacatt gctttgcttc tgagtatact 300
gttggctttc caaatcagtg ggtctgactt gaggtctgtg atgtgaccct tttcctcacc 360
tgctcaacca ttattcacat ggactccatc atattcattt gtagtcattc ccagagtggc 420
ccagtgaggg tctcgctgta tgagagtcgg ctacggaatt taggagaaac agaagtttct 480
tggctttcat gctgagcttg ttggtctaag cttatgaagt cactggatta gcatcatatg 540
ggaagggaaa ttaacatgga gtcatttata cagggactaa attgaatcct acctaccgga 600
ggcaagaaca tgatttatct tccataagcc ttatcctctt cctccttatt cctcagtcca 660
tatggatttt gcttatgtat gacaactcca aggaatcttg gnanagtaaa tttgctaaac 720
gtttccacaa attgtcaaag taaaatcctg gagggcanta aacacctttt tagg 774

<210> 4674
<211> 726
<212> DNA
<213> Homo sapiens

<400> 4674
aaaagcttat tgtcatatag cccattcatt gggagatgaa gacaaacaaa aaattgagag 60
taacacagtg gaagatatca agagctcagt gaaaggtcat cctcaagaaa atgaagagaa 120
ttcaaaaaac atctctacta tggaatctga tctgcccaca gtagaggagc tgatgaaacc 180
tatcagaata gattcctttg ggatcagtgg ttttgattta caacctgtca gctctgagaa 240
agtggccgaa agaaaagaaa ctgaattttt tagctcttta cccctgaaga tgaacccaaa 300
tattttgtct caagactcac aacatgtgaa cctttttttt gacaaaaatg atgagaatgt 360
gattttacaa aagaccacaa atgagagtat ggaaaacagc tgtccacaag taactgaagt 420
aactgccaca gaagaacatg ttgataaaat gtaccttaat attttgagga aaaaaataac 480
tgttaattct tcatcattat ctcaggatga canaattaat aaaacttaca gatctcaact 540
tagttctgaa gaagaagggg ctgtaatggg taaacaggta ccatacaaga agggcagaag 600
tgcacctcct ttacttaaaa ggaaacccca gagtggatta tatgcgtcag ttaggagctc 660
angctatggc aaacccagtt caacactcaa ggatgttttc cacncctgaa angaaaactt 720
cagagg 726

<210> 4675
<211> 793
<212> DNA
<213> Homo sapiens

<400> 4675
ctcatcgatg acctgcaaca ctgtctggtc aacaagatgt gccccaatta tttcatccct 60
cagtgcaaca tgctggaaca tctgtctgag gagacagtca tgcttcacgc ccggaagctg 120
tcctctgtgc gctcagaccc ggcagagcac ttgcgcaccg ccattgagca tgtcaaggca 180
gccaaccggc tgacactgga gctccagagg cgaggtagca ccaccagcat cccctctcca 240
cagtctgacg gaggggaccc caaccagcct gatgaccgtt tggcaaaaaa actgcagcag 300
ctagtgactg agaacccggg aaagtcaatc tctgtcttta tcaatcctga cgatgtcaca 360
aggccccatt tcagaattga tgacaaattt ttctgagtgt tagctgactt ttttttttcc 420
tgattcttaa actctgataa tgtgtcgtgt ggtttgtgat gctatctttc tgtttttttac 480

US 2005/0260664 A1

atatccagcc tagattggat ttgttaagaa caaattttaa gtttcctggt tctgcaggat 540
ggtgcaggct ctgaaacagt atattactat ttcatattct gcctctgatt tcgttgttta 600
ctttttgtag ntattgtcat gctctttagt ttgttggagt ttttttttcct tttaaggaga 660
tcttaagcca tanatgaaaa tgccatgaat cctcctgctt tttctgtttc aaacttggtg 720
caaatttgtt caagggtatg gggaaacaaa tctctttcng atgcttaacg attccaaccc 780
cnagtatttt aan 793

<210> 4676
<211> 547
<212> DNA
<213> Homo sapiens

<400> 4676
gtgatccctg cgcgcgtctc ctgctcgggt cagtgcgccg cgctgcgctg ggcgccatgg 60
cgctccccgg agcccgggct cgcggctggg cggcagcagc cagagcggcc cagaggcgcc 120
gccgcgtgga gaacgcagga gggtccccga gtcctgagcc tgcgggccgg cgcgcggcgc 180
tttacgtaca ctggccttac tgcgagaagc gctgcagtta ctgcaacttc aacaagtaca 240
tccctcgccg cctggaggag gctgccatgc agaagtgtct ggtgaccgaa gctcagacgc 300
tgctgcggct cagcggggtg caacgggtgg agtctgtgtt ctttggtggg gggacccccа 360
gtctagccag tccccacacg gtggctgctg tcctggaggc tgtggcacag gcagcccacc 420
tgcctgcaga cttggaagtc acattggagg ctaatcctac ttcagctccg ggctccagac 480
tggcanagtt cggggcanca agggttaaca ngttgtctat aggcctccag tccctagatg 540
acactga 547

<210> 4677
<211> 688
<212> DNA
<213> Homo sapiens

<400> 4677
gagcaggtct ccaggggagc gatggcagcc gggggtctga gccgctccga gcgcaaagcg 60
gcggagcggg tccggaggtt gcgggaggag cagcagaggg agcgcctccg ccaggtgtcg 120
cgcatcctga ggaaggcggc ggcggagcgc agcgccgagg agggccggct gctggccgag 180
agcgcggacc tggtaacgga gctgcagggc cggagccggc ggcgcgaggg cctgaagcgg 240
cggcaggagg aggtgtgcga cgacccggag gagctgcggg ggaaggtccg ggagctggcc 300
agcgccgtcc ggaacgccaa atacttggtc gtctacacag gcgcgggaat cagcacggca 360
gcgtctatcc cagactaccg gggccctaat ggagtgtgga cactgcttca gaaagggaga 420
agcgttagtg ctgccgacct gagcgaggcc gagccaaccc tcacccacat gagcatcacc 480
cgtctgcatg agcagaagct ggtaagagcc ctgggtggct ggtacacttg ccagggacca 540
aggcagagca ccttggtgcc cagtgggcaa ctaactgcac ccgccctctg tctgccagtt 600
gactcccatt natgagcacc cancaagcgg gtttaggccg cgggtttgat cctcctgtgc 660
ttgactctcc aagacanaag gggagctc 688

<210> 4678
<211> 779
<212> DNA
<213> Homo sapiens

0056304650 - 02-02-2000

<400> 4678
agggtttaac cgaaaccgaa cattaaccgt agccctaacg cggctgaggg atccaggcct 60
tgcctctggg ccgggtgaga gacagacact cgccaaccag tccgcagtgg ctccccgtgt 120
gtgcgaggct cccgcctgcg tgtgtgcgtg tgcatgtgtg cctgcgcaca ggggagggaa 180
agttcttcag ctgccgaggg cgggagtagg ggctggagca gcaccttgcg gggaggcccc 240
acaggagaat cgatggttct gatgctgtca gcctctgggt gcaaattctg agggcccggg 300
agcgtctggc ggccctgagc agcttgctgg ggaagctccg tggaggagga agtccggagg 360
catgtgatgt gaatcagctg acatcatctt gacgggagcc ctgtgaggcg gacacttaac 420
tccagtttca caggagggag ccatggattt gctgcgggag ctgaaggcca tgcctatcac 480
gctgcacctg ctccagtcca cccgagtcgg gatgtctgtc aacacccttc ggaagcagag 540
ctcggatgag gaggtcattg cactggccaa gtctctcatc aagtcctgga agaagctcct 600
ggatgcttcc gatgccaaag ccagggancg ggggaagggc atgcctctgc ccacgtcctc 660
gaagggatgc ctcaaaaggg cccggnttcc aaccgcaaga ggccgggagc tgcccaangg 720
caaccgtcta ctcccgangg atttaccaaa ttttccctcc gggggcctgg tcaacctgt 779

<210> 4679
<211> 727
<212> DNA
<213> Homo sapiens

<400> 4679
cattgcaaat gtccttaatg ccactgaact gtacacttaa aaatggctaa gttgggctgg 60
gcgtgagcca ccacacccag ccagatctgc ctcttagaac aatgctatgg aagttgattt 120
tggggaatgg gtggaagagg cagaggtcag gcagagtgtt caataaagag gatcagacag 180
gccaggtagg agaagctgat gcctagccta ggacagggca ggtagctcag caagtgtgag 240
cacctctcag tgtaagagct gaggtgggag aggggcagat gggctgtgga gctggccaca 300
ctaaaggcag ctgtgtgttt gcagggctca ggaccaaagg gaggctgagt caggaaggca 360
ctcctgggct tctggcttga gcaggctcaa agtcaacaga tgcagctgca tctgtgtcta 420
gcgattggga aggtccacag caggactcca gctcatacct gggagtcagg gcaaagtcca 480
gcctagggaa gagcccccaa gagccaggct gggtgtcagg tggggccctt gtcctgaagg 540
gagaagagac tacaaggtag agcaccaagc acacctggct ctggcacctt tacgtctctg 600
gccacttctc tcttatggct ccctgtaaca atganatacg gacacctgna ggcacctggg 660
gctaatttct tcctcaaacc tgccccgctc cgatgangct ccctccaagg ctccgcatct 720
tgactta 727

<210> 4680
<211> 721
<212> DNA
<213> Homo sapiens

<400> 4680
gataattgag ggaagaaggc cagcggaagg aacaggaaga aggaacagca aatatttatt 60
gagtgtctac tgtgtgccag gcactatatc tatgtgcata gaaaaaccct ggaaggccat 120
acaacaatat atatagagtg atcgtctctg cttgctgagc taacaggggt gtcaagcttc 180
cattttggta tctacttcta aatacactca gaacaggaga aatttggact aattttcaaa 240
ctacagacac tttctaatca tgatgcattt caaaagtgga ctcgaattaa ctgagttgca 300
aaacatgaca gtgcccgagg atgataacat tagcaatgac tccaatgatt tcaccgaagt 360
agaaaatggt cagataaata gcaagtttat ttctgatcgt gaaagtagaa gaagtctcac 420

0356030.0015000

aaacagccat ttggaaaaaa agaagtgtga tgagtatatt ccaggtacaa cctccttang 480
catgtctgtt tttaacctaa gcaacgccat tatgggcagt gggattttgg gactcgcctt 540
tgccctggca aacactggaa tcctactttt tctgggacct ttgacntcag tgacattgct 600
gtctatatat tcaataaacc tcctattgat ctgttcaaaa gaaacangct gcatggggta 660
tgaaaaagct ggggggaaca agtcttttgg caacacaagg gaaannttcg taatcctttg 720
g 721

<210> 4681
<211> 677
<212> DNA
<213> Homo sapiens

<400> 4681
tattataaaa taattgagga atgtgtttca cagatagtgc tacactgcag tggtatggat 60
ccagacttca aatacaggca aagattagac atcgatttaa ctcatctgat agattcttgt 120
gtgaacaagg cgaaagttga agaaagtgaa caaaaagctg cagagttttc aaagaagttc 180
gatgaagaat tcacagctcg acaggaagct caagcagagc ttcaaaaaag agatgagaaa 240
atcaaagaac ttgaagcaga aatccagcaa cttcgaaccc aggcacaagt actctcaagt 300
tcatcaggaa ttccaggtcc tcctgcagca cctccattgc caggtgtagg gccgcctcca 360
ccaccacccg cgccacctct acccggagga gctcctcttc ctcctccacc acctccttta 420
cctggaatga tggggatacc accaccaccc ccaccaccac ttttatttgg gggacctcct 480
ccaccaccac cccttggagg agttcctcct cccccaggaa tatcacttaa tctaccttat 540
ggaatgaagc anaaaaaaat gtataaacct gaagtgtcca tgaagagaat caattggnca 600
aaagattgaa nccacagaat tatctgagaa ctgtttctgg gtaagagtca aaggaagaca 660
agtttgngaa tccaaat 677

<210> 4682
<211> 742
<212> DNA
<213> Homo sapiens

<400> 4682
attgctctcc tgccacggag gggagcgctt ggtggcagtc cgcgggcccg gacggaaggc 60
tgaggcgacg cctcgacgac agcggaccgg agctgcaggg gcaacacatt cagggcgggg 120
tgccccattt aggcctggct caccggagta agaaactaca acccccgaag tgccttgcgc 180
ctcaaggtta cggaggcagt gaccacccac cctggagcca tggtccacgc cttcctcatt 240
cacaccttga gggccccgaa tactgaggac acgggccttt gccgagtgct gtactcctgc 300
gtcttcggtg ctgagaagtc acctgatgac ccacggccgc atggtgccga gagggacagg 360
cttctccgga aggaacagat tttagctgtg gccaggcagg tagagtcaat gtgtcggctg 420
cagcagcagg catctggccg gccccccatg gacctgcagc cgcaatcctc agatgagcaa 480
gtgccgctgc acgaggcccc acgtggggct ttccgcctgg cagcanagaa ccctttccag 540
gagccacgga cggtggtgtg gctgggcgtg ctctcgttan gctttgccct ggtgctggat 600
gccatgagaa cctgctactg gctgagggca cgctccggct gctgacacnc ctcctccttg 660
acaactccgg ctgctggcgc ccagcaacaa ccttctgctg cgggctgacc gcattgangg 720
gnatcctcaa ccgcttcctg ca 742

<210> 4683
<211> 779

09/25/2006 09:45:56 PM

<212> DNA
<213> Homo sapiens

<400> 4683
atgctttgtc ttcaacaagt aaatatgaaa ctaatcaggt actggattca cattggggta 60
acttgagaac gtatattgag cagaatcatc agattcttaa atccaaccac ctaggggaga 120
cagtttaatt cacttaatgt gatttccttt ccttattgat aagcagactc cattgtagcc 180
agctgatatt tttgcatcag agatactctt gttccaccca gaggggccac tgaagattta 240
gaaaagtact catgatttga gatcaagtgt atctttgcct taaaaacaga atcacagata 300
ctgtgggcat cagctattcc tatttttgtc tgttctcctt ttagtggaaa aaggaattga 360
aaataatgct tgcagttcag aattttgatt taccatacta gattagctag aatcttattt 420
aataatttaa cttccttctc ctgtcatggt gctttgttat ataaaacact acttacttga 480
ggcaatagtc tcccagggag acaaatagaa atatagcttg ttgaatatct ttgatttctt 540
tcctaccgtc atagtttgcc aagatttctc agcagctgag gcagcggcac tgtggtgcgg 600
taaggtgttc tgatgctata agcagacacg tttgcaacat ccatctggag gagccctggg 660
ggcaaggatg tgggttgacc acccaggcaa nggatgccct gaatganang gccaacaagc 720
ctcaacaagt cccccaagca attttcaacc atccaagccc ctccaaaaca agtctcact 779

<210> 4684
<211> 704
<212> DNA
<213> Homo sapiens

<400> 4684
agcaatgggg ttcctgcagc tgctggtcgt agcggtgctg gcatccgaac accgggtggc 60
tggtgcagcc gaggtcttcg ggaattccag cgagggtctt attgaatttt ctgtggggaa 120
atttagatac ttcgagctca ataggccctt tccagaggaa gctattttgc atgatatttc 180
aagcaatgtg acttttctta ttttccaaat acactcacag tatcagaata caactgtttc 240
cttttctccg actctccttt ccaattcctc ggaaacaggc actgccagtg gactggtttt 300
catccttaga ccagagcaga gtacatgcac ttggtacttg gggacttcag gcatacagcc 360
tgtccagaat atggctatcc tactctccta ctcagaaaga gatcctgtcc ctggaggctg 420
taatttggag ttcgatttag atattgatcc caacatttac ttggagtata atttctttga 480
aacgactatc aagtttgccc cagcaaacct aggctatgcg agaggcgtag atcccccacc 540
atgtgacgct gggacagacc aggactccag gtggaggttg caatacgatg tctatcagta 600
ttttctgcct gagaatgact cactgaggag atgttgccgg aagcatctgc anaaggatgg 660
tcagtgtgcc ccaagtgaag ggcantgctc tcaanggtgg gtta 704

<210> 4685
<211> 771
<212> DNA
<213> Homo sapiens

<400> 4685
aagaaatcaa aacattaaaa tatttcaagt ttggtaacag ctttgagtgt gaaaggggat 60
ctcattataa agctgtactg gatgtcttag tctgggctgc tgtaacaaaa tactataaag 120
tgggtggttg attgataaac aatagaaact tatttctcac cattctggag actagaagtt 180
tgagatcagg gtgcccgcag gtcaggtcct ggtgaggatc tgcttctggg ttgcagaatg 240
ctgacttctt actgtgtcct catgtggtga aagggtgagg gggtctctct ctctccagcc 300

0082702.6346250

tttcttgtaa gggcactaat cccattcatg agggctccac cctaatcact tcccagagac 360
ccccaccttg tgatcccatc accttgaggg taggattcga acatatggat ttggagggga 420
ggagacacag acactcagtt cattgttctg gtgtgctctg accttctagg cttctctcca 480
ttcaccttag aacccctact ctcttgctca gctccgtagt aagtttatga ccagtcaaag 540
caattttgtg cagtgtatgc agaattttct gtgtaagctt tgcattcttt ttggagggct 600
ttacagaaaa gggaaattac tcanaacaac ttcaatcact tgctacagtt aaaaataatt 660
tcaccagaca tattaagaga agggtaaaaa ttagttccag aaggattttt tanattgcaa 720
taaatcaaga ggaanaagnt ataatttcct aatttaaaag ataagttttt a 771

<210> 4686
<211> 874
<212> DNA
<213> Homo sapiens

<400> 4686
tctatcattt atgagtacta tgtccatagg aaagccactt caactcactg tacttttttct 60
tacctgtaag agatcaaacc tgataaagta tcaggtttat tccagctcta acactctgaa 120
atgccacaaa atgcactccc caataaatta agattaaagg aatgcccaaa ccccaaacat 180
gatcattgtg atcatttctt atgaaacata agaatgagac ataagaattt tatatgagat 240
actggcagaa tttgctgagt cagtctcagg caacatttaa taagtaaata tgcagctaag 300
cagtggacta taatgctttt acacagccag aaaatagcaa tattcctaaa attaatgaaa 360
gcatacacaa atccactcag gatgctagga cacaggcagc tgaatgatat gagcttataa 420
tctattcttc ccagactatt tatcttatca cagcaacacc ctgaagccac atgcaaagga 480
tgaaccagac tccccagtgc tctatagaac catgagtgaa gcagctctgg tgagaaaaag 540
gatgaagcct ctgatgatgg acagaaanga aagacagaaa aatagagcct ctattaatgg 600
acacttctat aaccatgaag taagtgagtt acaattccat taatgtaata taaaataang 660
ttccctgttt cactaacaat accacccaat tcaattcaca anttaaagtc ataataataa 720
cagttncatg tccaacatct gggggcactc tccatgtgca gatattaaag taaatgggtt 780
taaatagatt ttactgaata tcttattaac actanacatc cntggaatag ggtaccatta 840
tttccttact tgacatataa gctaattgag ncta 874

<210> 4687
<211> 702
<212> DNA
<213> Homo sapiens

<400> 4687
gactttagcc ttcccatttt atggagtttg tcatgagtgt gatcgtattt gctgctcgtg 60
agatttcgct cactaataaa tttgattcat ttaattatgt gttttctctt cctagatttt 120
aatttgattt gaaaatgagt aagtgcagaa agacaccagt tcagcagcta gcaagtcccg 180
cgtcattcag cccagatatt cttgctgaca tttttgaact ctttgccaag aacttttctt 240
atggcaagcc acttaataat gagtggcagt taccagatcc cagtgagatt ttcacctgtg 300
accacactga atttaatgca tttcttgatt tgaagaactc cctaaatgaa gtaaaaaacc 360
tactgagtga taagaaactg gatgagtggc atgagcacac tgctttcact aataaagcag 420
ggaaaatcat ttctcatgtt agaaaatctg tgaatgctga actttgtact caagcatggt 480
gtaagttcca tgagattttg tgcagctttc cacttattcc acaggaagct tttcagaatg 540
ggaaactgaa ttctctacac ctttgggaag ctccaggagc ttttaaagct agtctcaanc 600
actacttaaa atcccatcng tttccctgtc aatgggagtt gggtaacgaa tactccgaat 660

0305304.0379803

ccataccatg aagcaaaatg acgacctcat gatgantaan gg 702

<210> 4688
<211> 696
<212> DNA
<213> Homo sapiens

<400> 4688
gttcgatgca ttgatgttga agtctcccac agtgaagggc ctgatggaag cgatatctga 60
gaaatatggg ctgcccgtgg agaagatagc aaagctttac aagaaaagca aaaaaggcat 120
cttggtgaac atggatgaca acatcatcga gcactactcg aacgaggaca ccttcatcct 180
caacatggag agcatggtgg agggcttcaa ggtcacgctc atggaaatct agccctgggt 240
ttggcatccg ctttggctgg agctctcagt gcgttcctcc ctgagagaga cagaagcccc 300
agccccagaa cctggagacc catctccccc atctcacaac tgctgttaca agaccgtgct 360
ggggagtggg gcaagggaca ggccccactg tcggtgtgct tggcccatcc actggcacct 420
accacggagc cgaagcctga gcccctcagg aaggtgcctt aggcctgttg gattcctatt 480
tattgcccac cttttcctgg agcccaggtc caggcccgcc aggactctgc angtcactgc 540
tagctccaga tgagaccgtc cagcgttccc ccttcaagag aaacactcat ccccgaacaa 600
cctaaaaaan tcccatccct tctttctcaa ccctccatat ctatatctcc ccganttggt 660
tggacaaaaa tgagctaacg tctgggggtg caanta 696

<210> 4689
<211> 567
<212> DNA
<213> Homo sapiens

<400> 4689
agcctaggag cagagcctcc cagatggctg agttggatct aatggctcca gggccactgc 60
ccagggccac tgctcagccc ccagccccтc tcagcccaga ctctgggtca cccagcccag 120
attctgggtc agccagccca gtggaagaag aggacgtggg ctcctcggag aagcttggca 180
gggagacgga ggaacaggac agcgactctg cagagcaggg ggatcctgct ggtgagggga 240
aagaggtcct gtgtgacttc tgccttgatg acaccagaag agtgaaggca gtgaagtcct 300
gtctaacctg catggtgaat tactgtgaag agcacttgca gccgcatcag gtgaacatca 360
aactgcaaag ccacctgctg accgatccag tgaaggacca caactggcga tactgccctg 420
cccaccacag cccactgtct gccttctgct gccctgatca gcagtgcatc tgccaggact 480
gttgccaagg agcacagtgg ccacaccata gtctccctgg atgcancccg cagggacaag 540
gaggctgaac tccantgcac ccantta 567

<210> 4690
<211> 773
<212> DNA
<213> Homo sapiens

<400> 4690
agcagtatat taagctctgg gtcttctcat gactaaaatg actattttta aacataagac 60
catattttat aaatgtacag ataattcaaa tctattatct aatgtattag gttaatttct 120
atttgttcta tacttttttt ttttttttt tttgagatgg agtcttgctc tgtcgcccag 180
gctggagtgc agtggtgcaa tcttggctca ctgcaagctc cgcctcctgg gttcatgcca 240

US 2003/0096245 A1

ttctcctgcc tcggccttcc aagtagctgg gactacaggt gcccgccccg acacctggct 300
aatttttaaa aaaatatttt tagtagagac agggtttcac cgtgttagcc aggatggtct 360
cgatctcctg acctcgtgat ccgcccgctt tggcctccca aagtgctggg attacaggcg 420
tgagccaccg cacccggcct attgacattt tttaaggttt cagattttct tttgtgtgtc 480
tagtaattcg tcttttattg tcaaagataa tttgcttatt tgacttaaga aaaatgattt 540
gagggcatac aatattgtat gtggtaccta aacgttgcca tttagttact cttacagaac 600
aactttcatt acactggata ttaatataaa ttacttcttg agtaatccca gaattgtaga 660
accaattggt agaatcagaa actgtccttg gacttgaggg tttcctccct taaggnaaaa 720
ttttanggtt tcccgggtta gtttccaang agtttggcgg ggcaaagttc ata 773

<210> 4691
<211> 695
<212> DNA
<213> Homo sapiens

<400> 4691
aagaatgtct caggaggaaa catgacagag atgtttgtcc agttaaaact gggagatcag 60
aggtataaaa gtaaggatgg gcattttgga cattgaagtg tggggaaagg acaacaaaaa 120
gcatgaggaa cgtctgggca cgtgtaaagt ggatatctcg gcactccctc tgaagcaagc 180
caactgcctg gagctgccac tggacagctg tctgggggct ctccttatgt tggtcacact 240
tacaccctgt gcgggggtct ccgtctctga tctgtgtgtc tgccccttag cagacctcag 300
cgaaagaaag cagattaccc agcgatattg cttacagaac tccctgaaag atgtgaaaga 360
cgtcggcatt ctacaagtga aggttttaaa ggcagcagat ctcttagcgg cagatttctc 420
agggaagagt gacccatttt gcttgttgga gttaggcaat gaccgacttc agacgcatac 480
cgtctacaaa aacctcaacc ctgaatggaa caaagttttt acatttccca ttaaagatat 540
ccatgatgtt ttggaagtga cagtgtttga tgaagatgga gataaacccc cagattttct 600
tggnaaagtt gccaatccct tgctgtccat tagagatgga caaccgaatt gttangtact 660
aaagaataaa gatttagaac aanctttaa aggag 695

<210> 4692
<211> 683
<212> DNA
<213> Homo sapiens

<400> 4692
cttaaagaag aggaaactga attgaaacag ctgaatttac acaaagatac tgagccaaaa 60
cccctggagg gaactcatct aatgggtgtg aaagactcta acatccatga gcttgaacat 120
gagcaagagc ctacttgtgc ctcccagatg gctgagccct tccgtacctt ccgagatgga 180
tgggtctcct actacaacca gcctgtgttt ctggctggca tgggtcttgc tttcctttat 240
atgactgtcc tgggctttga ctgcatcacc acagggtacg cctacactca gggactgagt 300
ggttccatcc tcagtatttt gatgggagca tcagctataa ctggaataat gggaactgta 360
gcttttactt ggctacgtcg aaaatgtggt ttggttcgga caggtctgat ctcaggattg 420
gcacagcttt cctgtttgat cttgtgtgtg atctctgtat tcatgcctgg aagccccctg 480
gacttgtccg tttctccttt tgaagatatc cgatcaaggg tcattcaagg agagtcaatt 540
acacctacca agatacctga aattacaact gaaatacatg tctaatgggt ctaattctgc 600
taatattgtc ccggagacaa ntcctgaatc tgtgcccata atctctgtca ntctgctgtt 660
tgcangcgtc atgctgctaa aaa 683

0050250950

<210> 4693
<211> 604
<212> DNA
<213> Homo sapiens

<400> 4693
ataggtatga attcatttaa gtcctgaaga aaaagaaaaa aaatacgaag tggatattac 60
ccttcccatt ttcaaataag gaaactgaag cacaaaaaga acaagtaact tgacaaggac 120
accccggtag taaatcatgg ggctggagct caaccccagg gtaggctggc tccagagctg 180
tgctctcctt gactcttctg atggtctcct agctggaagc ctcacatttc agtctcattc 240
ccccaagtgg cccatcagct actccatctc tggctcccca actaaacagt ttctctcata 300
gtgctggacc tccactcact agtttttttt ccagctgttc ttctctttc ttcaggtcac 360
tcttctcgac cgagtgcaaa aattatcccc tccataccag ctttgatgac cttccttcca 420
tactcctcac cagacacaac ataataggtc acacactcct ctgtgctttc tggcacgttt 480
taaacattag tattattgac ctttacctat agtatancat ggnctattta tgtatccatc 540
tcccctangc atttttcctc aaagacaaga accatgtctt acccatctct tgggtaagtg 600
ccta 604

<210> 4694
<211> 727
<212> DNA
<213> Homo sapiens

<400> 4694
ggatgttctg ataaatggag caccgcgacc tgccaatttc aaatgtaatt caggttacgt 60
ggtacaagat gatgttgtga tgggcactct gacggtgaga gaaaacttac agttctcagc 120
agctcttcgg cttgcaacaa ctatgacgaa tcatgaaaaa acgaacggat taacagggtc 180
attcaagagt taggtctgga taaagtggca gactccaagg ttggaactca gtttatccgt 240
ggtgtgtctg gaggagaaag aaaaaggact agtataggaa tggagcttat cactgatcct 300
tccatcttgt tcttggatga gcctacaact ggcttagact caagcacagc aaatgctgtc 360
cttttgctcc tgaaaaggat gtctaagcag ggacgaacaa tcatcttctc cattcatcag 420
cctcgatatt ccatcttcaa gttgtttgat agcctcacct tattggcctc aggaagactt 480
atgttccacg ggcctgctca ggaggccttg ggatactttg aatcagctgg ttatcactgt 540
gaggcctata ataaccctgc agacttcttc ttggacatca ttaatggaga ttccactgcn 600
gtggcattaa acagagaaga agactttaaa gagatcatag agccttccan gcaggataag 660
ccactcatag aaaaattanc ggagatttta tgtcaactcc tccttctaca nagagacaaa 720
agctgaa 727

<210> 4695
<211> 631
<212> DNA
<213> Homo sapiens

<400> 4695
tgtcccaaca tacggatgga tccaaaatta tgccctgctg atccagactg gattgctttt 60
atacatagca acgatatttg gatatctaac atcgtaacca gagaagaaag gagactcact 120
tatgtgcaca atgagctagc caacatggaa gaagatgcca gatcagctgg agtcgctacc 180
tttgttctcc aagaagaatt tgatagatat tctggctatt ggnggtgtcc aaaagctgaa 240

0052946.0020

acaactccca gtggtggtaa aattcttaga attctatatg aagaaaatga tgaatctgag 300
gtggaaatta ttcatgttac atcccctatg ttggaaacaa ggagggcaga ttcattccgt 360
tatcctaaaa caggtacagc aaatcctaaa gtcactttta agatgtcaga aataatgatt 420
gatgctgaag gaaggatcat agatgtcata gataaggaac taattcaacc ttttgagatt 480
ctatttgaag gagttgaata tattgccaga gctggatgga ctcctgaggg aaaatatgct 540
tggtccatcc tactagatcg ctcccagact cgcctacaga tagtgttgnt ctcacctgaa 600
attatttatc ccagtagaan gatgatgttn t 631

<210> 4696
<211> 798
<212> DNA
<213> Homo sapiens

<400> 4696
caacgctttt gacaagtcaa acttttctaa acatcaagaa aatcatgctg ctgagaaatc 60
ctagaaatgt gaagaatgtg acaaagcctc taaatgattg tcacacttga tcgtagggcc 120
cagacagaag agaagagtca catcatctag atgatgaatg aaaagatatg tcattattct 180
cctttgggca gtgcttctgc agaaaagttg caccttctag gtgttggact cagcaatata 240
tcacaatgtc tgcagtattt tggaaggaga ggagagtcac cattacttag gtgctaggcc 300
cagcaataca tctcaagcac ttcttgggca aagcccaagc agtaaaaaag agtcacatta 360
cctaggttct gggtatagca atatgtcaca aatgccccta agaagagggc ccaggaaaag 420
agagtcacct tggtgagaat gtcagagata ttccattttt gggtattcac aaaaaagaat 480
aaagtcccat aacctagaag gtgggctctg ctccatgaca caaatcaccc tagtgggcag 540
gtccattaaa gagaaggctg tcaaagcaca tagatgctgg gcaaagtgat atgtcataat 600
ccccatgatg ataggcccag agacatgtca caatgacctc tttaggcaag aggaccaggc 660
aagaagaatc acatcacttg tgtgctggcc ctagtgagaa agtcactccc aattctgtgg 720
acatgggncc angcaagaag agcaangtca catttcctaa gcgctgggtc caagagatat 780
gtcacaaacc ttttacaa 798

<210> 4697
<211> 793
<212> DNA
<213> Homo sapiens

<400> 4697
agtttcaaaa tattctgaca ggacacagac agccctggct gaaaggagca cagagagaat 60
acttcgagct catgctgaga gaaaaaggcg agtttgtctt ttcttacctg agactgggcc 120
tgaagggaga gtttcagttc ttcattgacg gttgctttca agatgtacct gggaattaca 180
ccaagtgtga cctgtaacaa ttcaagcaaa aatgaatttt ccctgattct agagaagaat 240
cccctggtgg agtttgtgga agagctccct gctgggcgat cttctctgtg ctactgcaac 300
ttgctctgtg ggattatcag aggtgccttg gaaatggttc atttggcggc tgatgttaca 360
ttcttgcaag acagactaaa aggtgacagt gtgacagaaa taggaataac atttctaaaa 420
aagcgagacg agaaaaaata tagagggaaa aaatgaagac tagcacggaa aatgccacgg 480
ggcggctagc tgagttaatg ttagctaaac atgtatagac atagaaattt tgaattgctt 540
catagcatga gctttgaaag gtttataaat cagccagaaa tttgaaatgc agggcatgaa 600
ggcttaaagg ttttttttttc cttttgctta aaaatcacgc attttcaatc tcatgtccac 660
aaaaatttca tatgcaaata gctccttaca agatagcagg cangaattcc acatcttaca 720
ctatccaacc tcagagaaac tgttcattcc attcacgttt ggtaaatggg gnaaaaaaag 780

09/25/2003 09:45:03

caacacaant tac 793

<210> 4698
<211> 827
<212> DNA
<213> Homo sapiens

<400> 4698
aatggctaat gatgttgagt atctttttgt gtgctaattt gccatctatg tatcctcttc 60
ggtgaaatgt cttcatgtct tttgtctatt ttctatttag gtcatttgtt ctttttacta 120
ttgagttttg agaggttttt tatatatcct agataaaatt cctctgttag atatgtggtt 180
gcttgaattt ttaacataac ttctaccaag gaaaaataag taaaatttcc aacccttgca 240
tggccagtca cttacttaat tcctgtcctt cagtgttcca tctagagaat taagagatat 300
gatgtataaa atagacatcg agggccatta agagagtaaa tacttaaaaa tacatgttat 360
gaaagcaaag ccaataatca ctgtaggagt atgagttgcc taagggccaa aactaatgta 420
aataagagaa agtgtggata taaatgacca ttgtttataa acagtcatga aaaatgctgt 480
gacttgaaat ctttcccaca tctcccaaga aagtaggtag gagtttatcc tttccgtaat 540
ctctttttaa ccctgctgac tattacaggg cttgtttaat cacagtggca agaattacat 600
gtatcttaca gtaaagaaac agaatactgg aatcgttaga naaccctgat gtgttgacct 660
ggataaagta caaaggtgga aganggaatg agttatgctg ttaaaatctc aggctaatcc 720
ggttaaaggt cccggctact aatgaaccca aacttttttt ttcccccttt tgactccttg 780
tgtcttccct cnncctgggg gcaataaaaa gttagttcct ggccgnt 827

<210> 4699
<211> 756
<212> DNA
<213> Homo sapiens

<400> 4699
ttagaacaat tgctccccaa taatttattt tacaaacagg aatatgaaaa ataaatggtg 60
gtaggaggaa ggacccacta agaacaccat ttttaaattt tgctaagtaa ggacattgag 120
ggaaaaaact caaactctga tctaccatca ttgtttaatg ttcggcaaac atgaagcatt 180
ttaataccaa aaaaagtgag gagaataaat ctcagcataa aggaacaact ttttaaactg 240
aatttagcac tatgaaaaat gtacctcatt ttctgtaatt ttagcgagtt tcccgcggat 300
gtacactggc cccatggatt ggcgctgggg atcaccagtt tagaggtgcc agtgccttct 360
gacaaaggcc catggatcca tatgactgcc tgtctgttct ttttagagac gggcccacac 420
tgcagagaag tgattgtgaa ggtctccaac cctgtcatgc ccccacctgc caccttgact 480
tgggagaggg acactcacaa aagcatgtca aatcgacatc catttctttc tctttccctc 540
aggtctcagg gagttttcct cttctcctcg gactctttct ctcaaggcct cttctacaaa 600
aacccctgcc cagagggtta ctgctaaaat gaaactcccg tgtctgtccc cttccctggc 660
ccccaactga cttgcctgcc tctgcttgct gctgtccctg cctattcccc ttcatgccng 720
gntcnagaaa gatgcaatct ttttcccaag gcccaa 756

<210> 4700
<211> 781
<212> DNA
<213> Homo sapiens

0020030.0020

<400> 4700
tggataaaga aaatgtggta cataaacacc atggaatact acacagccat aaaaaagaat 60
gaaatcatgt cctttgcagc aacatggatg ctactggagg ccactatcct aagcaaatta 120
atacagaaat ggaaaaccaa ataccacgtt ctcacttata agggaaagtg aaacactggg 180
tatacacgga cacaaagatg gaaacaataa actctgggaa ttccaaaagg ggagagatag 240
ggggtgaggg ttgaaaaact acctattggg tactatgttc actgcttagg tgacaggatc 300
attagaagcc taaacctcag tatcacacaa catacccatg taacaaacct gtacatgtac 360
ccctgaatct aaaataaatt ttttcaataa agaaagaaag gttcttggag gagatagatt 420
cgatgttaaa tcttctttca tcagcacatg tgtattgact gtcactctct accaggctgt 480
attctaggta atggatgtag gagagaacaa aaaggtctct gctgttctga agcttatagt 540
ctattgggga gagatagtaa ataagacgga aacaaataaa tacacagttt cagagagcaa 600
tgagttctac aaatgagcag tgagccctat aaacaaaatt tagattaaat taaattagga 660
taggtcagcc tctttgttat agcagatgat actttttata tggnttagca aaggagtcag 720
gaaggaagta attttaaaaa aggaaaacca gnaaaaaacc tcnttaccaa ccaactttta 780
a 781

<210> 4701
<211> 754
<212> DNA
<213> Homo sapiens

<400> 4701
gagcggggcc tctccgggcc gcgtctgtgg ggtcgagact gcgcggccgt tgggcgtgca 60
gcggcgccag tcggcggacg aggggccccc gggagttgct ggactgagac atgagcctcc 120
aactgtgtgg ttgggctcgg tagcacatcg tgggacttgg gtgtgcgccc acagatggtt 180
tggccctgca gtgaccagag cagcccaagc cgccaccatg gtgaaattgc tagtggccaa 240
aatcctgtgc atggtgggcg tgttcttctt catgctgctc ggctccctgc tccccgtgaa 300
gatcatcgag acagattttg agaaggccca tcgctcgaaa aagatcctct ctctctgcaa 360
caccttgga ggaggggtgt ttctggccac gtgcttcaac gctctgctgc ccgctgtgag 420
ggaaaaggta agggctccct gggcactagc agcagccctt ggcaccttat ggccaaggga 480
ctctgatgca ttttcaacac tgatgccaag ttcagtgaag gccttgatgc tgtaagggtg 540
acggaaagta aggaantgaa tttgctgtgt gattgtgaac tggttacttt ctgtctctgt 600
gctctaccgg ccaaacaagg ggtttggacc aaactgggat tcccaacagg tggacttgtc 660
ggttgtcacc tgataatcag nncaaactan ccacctaggt aagggaaaac tctgtcctga 720
agctggaaag catggcctcc cttccggttc ccaa 754

<210> 4702
<211> 665
<212> DNA
<213> Homo sapiens

<400> 4702
gaatttgaga tgagccctcg ctgtgctaat ctggccctca agcactacct gctcaagccg 60
gttcagagga tcccccagta caggctgttg ctgacagatt atttgaagaa tctcatagaa 120
gatgctggag attacagaga cactcaagat gcccttgctg ttgttataga ggtagccaac 180
cacgccaatg acaccatgaa gcaaggagac aactttcaga aacttatgca aattcagtac 240
agcttaaatg gacaccatga attgtgcag cctggtcggg tttttctcaa agaaggaatt 300
ctgatgaagc tgtctcggaa agtgatgcaa cctcgaatgt ttttcctgtt taatgatgcc 360

05/05/2005 10:47:00 AM

ctgctgtata caacaccagt gcagtctggg atgtataaac tgaacaacat gctctcactg 420
gctggaatga aggtcagaaa acctacccaa gaagcctatc agaatgaatt aaagattgaa 480
agtgtagaac gttccttcat tctctcagcc agttctgcca cagaaaggga tgaatggcta 540
gaagcgattt ccagggcaat agaagagtat gccaagaaaa gaatcacctt ctgtcctagt 600
aggagtcttg atgaggnaag actcagaaaa taaagaagaa agttagtcct cctggntnga 660
aaggt 665

<210> 4703
<211> 789
<212> DNA
<213> Homo sapiens

<400> 4703
aggcgccacg tgggattcgg cccgggtgct cttgtgagct gctgctcctg cggttggtga 60
gattacctgg gtctagagtg cggagctgct ccgtggccac gaggacgtca ccatgcccaa 120
agcaccaaag ggaaaaagtg caggacggga aaaaaaagtc atccatccat atagtagaaa 180
agcagctcaa attacgagag aggcccacaa acaagaaaaa aaggaaaaat tgaagaatga 240
aaaggccttg cgtctcaacc ttgttggtga aaaactgcaa tggtttcaaa atcatcctga 300
tcccccaaaa aagagatatt caaagaaaga tgcttgtgaa ctaattgaaa ggtacttaaa 360
tcgattcagc agtgagctgg agcagattga gttacataac agtatcaggg acaggcaggg 420
gaggcggcac tgttcccggg agaccgtcat caagcagacg atggagcggg agcgacagca 480
gtttgaggga tatggccttg agattccaga cattctaaat gcaagtaatc tgaaaacatt 540
tagggaatgg gactttgatc tgaagaaatt accaaacatt aaaatgagaa aaatttgcgc 600
taatgatgca attcccaaga cgtgcaagag gaaaactact ataactgtag accaagattt 660
gggggaattg gaactaaacg atgaatcaag tgattcagat tgaggaaatg actgcaatgg 720
cctaaattgt cctcacttga attgaaaata aataatttga gagcntcaaa ttatantcat 780
tgattangg 789

<210> 4704
<211> 693
<212> DNA
<213> Homo sapiens

<400> 4704
agttctgcgg tgccagggag tggagcagag ctcagccccg tcccaaacac agatgggacc 60
atgaactccg gacacagctt cagccagacc ccctcggcct ccttccatgg cgccggaggt 120
ggctggggcc ggcccaggag cttccccagg gctcccaccg tccatggcgg tgcgggggga 180
gcccgcatct ccctgtcctt caccacgcgg agctgcccac cccctggagg gtcttggggt 240
tctggaagaa gcagcccccc actaggcgga aatgggaagg ccaccatgca gaatctcaac 300
gaccgcctgg cctcctacct ggagaaggtt cgcgccctgg aggaggccaa catgaagctg 360
gaaagccgca tcctgaaatg gcaccagcag agagatcctg gcagtaagaa agattattcc 420
cagtatgagg aaaacatcac acacctgcag gagcagatag tggatggtaa gatgaccaat 480
gctcagatta ttcttctcat tgacaatgcc aggatggcag tggatgactt caacctcaag 540
tatgaaaatg aacactcctt taagaaagac ttggnaattg aagtcgaggg cctccgaagg 600
accttagaca acctgaccat tgtcacaaca gacctagaac angaggtgga aggaatgagg 660
aaagagctca atctcatgaa nggagcanca tga 693

<210> 4705

0052304500

<211> 795
<212> DNA
<213> Homo sapiens

<400> 4705
gttagagaac gtcgcggagg aggtaagcgt cgcttggcgc ctggccgccg cgggcaggat 60
acaccgtggg cctgaggcgc gagcccggcg gcgtgcggcc ctctctccgc gcggagccga 120
gccggaactg cggcagtctc tccctgccag gctcttcatc caaggtttct gtggatccct 180
tctgaagttc tatctgaaaa ttgcgcttaa gtgaattttc tgttagaaga acttggttgc 240
tactttcttg tcaagatgat tgcaacacct ttgaaacatt caagaattta cttacctcca 300
gaggcatctt ctcaaaggag aaatctaccc atggatgcaa tctttttga cagcattcct 360
tcaggcacac ttactcctgt aaaagatttg gtgaaatatc agaactcctc cttaaaattg 420
aatgaccata aaaagaatca gttcctaaaa atgacaactt ttaacaataa aaatatattt 480
caatcaacta tgctaacaga ggctactacc tctaacagtt ctcttgatat cagtgctata 540
aagcccaaca aggatggatt aaaaaataaa gcaaactatg aatcaccagg aaaaatattt 600
ctaagaatga aagaaaaagt actgcgtgac aagcaagaac agccatcaag aaacagtagt 660
ttgttgggan cacaagaaaa agtgggaata atgaaacctt cactcctaaa cangaggttg 720
aaaaaaaaaa attgcagcat acctaactaa tgtgaagaaa angggaaaca acaaatcaat 780
tccagncaag atgac 795

<210> 4706
<211> 742
<212> DNA
<213> Homo sapiens

<400> 4706
gttaaaattt gatggtctac agacaattta taatcctttt cttgttataa aatattgtca 60
aatttatagt agtatcagtt agaaagttta tggaaacatt gtttaaggtg gtttaaaata 120
gaagtaaatc tttaatttga atttgatgac acctgttttc attttgttcc cccggcaaca 180
ctgctagtac caaaattgcc catagaccac cctggttttt gaaaagaatg aaatcattct 240
gtttttaaa aattttatcc ttttactgac taaatattta aacagggtta taaaacatct 300
gtcagagttt gtgaactcat gttggagtaa aagagtttag gacacataat tggaagtttt 360
gcatgaaaat tcctgagtag ttttagtttg tctttcttag ttatgctgaa gtttttatta 420
gaattataat tagaaattag aaaagtaatt gacagcaaca atggaaaaaa tatctggact 480
cagttgtttt ggaaagctat gcttgctttc cttcagttat tgacaattga gatttttaa 540
aaagacaata tgatcctttt ctctggaagg ctctgggcag tcaagatata cgaattaagg 600
gttacactgt tgagactcct gtgagagaga ggtaaagctg acacaaatgt tatctttcct 660
agcantttc cacctgctgt angatgatca tgtgtttggg acattgnaaa atggtcatta 720
atccaacctt tttagttggg aa 742

<210> 4707
<211> 836
<212> DNA
<213> Homo sapiens

<400> 4707
agctggggtc cctttggaga cactccagga aaaggggggc acatacccc actgggcttt 60
tcctgatgct gacaggggct gctctggctg ttcctaagtg gaactcgtca aggtggcagt 120

09825-0020800

gacggtgctg atggggacct caggacttat ctgatcagtt tcccatcgtc cttgctgggt 180
ctgttgcttc accggcatct gtgctctgac accattaata accacagagt ctgagagtca 240
ggaggaagtg ctgctcacac tggaggaagt ggctgggaga gtgcaggggc tggtggcaga 300
gaccgcccag agcccatcct agcccaacat ggcgtgggtg tcctgggaat gaggcctgcc 360
tccagcctca ccttctccat ctgggaaatg ggactattga tgcagaagcc tccccaaaag 420
tggatctgag aggcatagac atcgtggttc tcacggactc tccaaggatg aggcctgcgg 480
acccccttgat aaaggccatc aaggatggcg atgaagaggc cttgaagacc atgatcaagg 540
aagggaagaa tctcgcagag cccaacaagg agggctggct gccgctgcac gangccgcat 600
actatggnca ggtgggctgc ctgaaagtcc tgcagcgagc gtacccaggg accatcgacc 660
agcgcaccct gcaagaggaa acagccgttt acttggcaac gtgcaagggg caacctggac 720
tgtctcctgt caatgctcca agcaaggggc aaaagccgga catctccaac aaatnccgag 780
aagacaccgc tctaaaaaag cctgtgancc gcaaagaaac gcccggaagg gccntt 836

<210> 4708
<211> 462
<212> DNA
<213> Homo sapiens

<400> 4708
tattgagcgc cgactgtcta cgggcggccg ggggagagga gaggcagcag catggcgagt 60
gtcctgtccc gacgccttgg aaagcggtcc ctcctgggag cccgggtgtt gggacccagt 120
gcctcggagg ggccctcggc tgccccaccc tcggagccac tgctagaagg ggccgctccc 180
cagcctttca ccacctctga tgacaccccc tgccaggagc agcccaagga agtccttaag 240
gctcccagca cctcgggcct tcagcaggtg gcctttcagc ctgggcagaa ggtttatgtg 300
tggtacgggg gtcaagagtg cacaggactg gtggagcagc acagctggat ggagggtcag 360
gtgaccgtct ggctgctgga gcanaagctg caggtctgct gcanggtgga ggaggtgtgg 420
ctggcanagc tgcagggccc ctgtccccag gcaccaaccc tg 462

<210> 4709
<211> 788
<212> DNA
<213> Homo sapiens

<400> 4709
gagagattct gctaaggata aagagaaagg caaacatgat gatggacgga aaaaggaagc 60
agaaattatc aaacaattga agattgaact caagaaggca caggagagcc aaaaggagat 120
gaaactattg ctggatatgt accgttctgc cccaaaggaa cagagagaca aagttcagct 180
gatggcagct gagaagaagt ctaaggcaga gttggaagat ctaaggcaaa gactcaagga 240
tctggaagat aaagagaaga aagagaacaa gaaaatggct gatgaggatg ccttgaggaa 300
gatccgggca gtggaggagc agatagaata cctacagaag aagctagcca tggccaagca 360
ggaagaagaa gcactcctct ctgaaatgga tgtcacaggc caggcctttg aagacatgca 420
ggagcaaaat atccgtttga tgcagcaatt gcgggagaag gatgatgcaa atttcaagct 480
catgtcagag cgtatcaagt ccaatcagat ccataagttg cttaaagaag agaangagga 540
gctggcagac caggtgttga ctctgaagac tcaggttgat gcccagctac aggtagtaag 600
gaaactggaa gagaaggagc atctgttaca gagcaacatt ggcacagggg gagaaagagc 660
tgggtcttan gacccaagcc ttagagatga ataaacgcaa ggcaatggag gcagcccanc 720
ttgcagatga cctcaaagca caactggagt tggctcaaaa naagctacat tgattttcan 780
gatgagat 788

0956204.0042000

0050-0050-0050

<210> 4710
<211> 771
<212> DNA
<213> Homo sapiens

<400> 4710
ttttttcaa attgtggaca tcaaaaatgc agcctcatca ttttcaaatg cctgtttaag 60
gaaacatgtt tattcagttt taaagcttca taacttgtag ccttagagtt tgcatctttc 120
ctggcatttc tccgcactgt ggtgtcaagg aaagagcatg gctttcatgt cagacacatc 180
tgcaatcaga tcctggctca gtcaacatgc attattagct cagtgtggct gtgtcagctt 240
acttggctgc tcttagccac aggttcttcc tcttctaaac ctcaggagat tggtgaattc 300
agtgaaaaaa tgcatgtcag gccaccagca cagcatatgg caaatgacac cctcactaaa 360
cagtgatttt tccttccctc ttattctgct tgatagaatt aaattatctt taaggtctgt 420
gagtaatgtc tgtttgtgta attaagatag gagtattttt ataagattgt aatgacatga 480
aagaaacttt ccccattccc atagtgtctt taatttgctt taaaacactt gaattagtga 540
aaaagccagt tatttattcg aatactataa ttttctcaaa gaatgatcac cattttaaga 600
ttaattccaa tgttcttttt catatctaaa taatgttggc atactactga caagagaaac 660
aagacaaatg tgagagatgt ctgcgtttct cctattaaat aatattacaa ttggnatgtt 720
aggggtgcaa ggttaaatag cttttccttt aaattannat tacaaattga a 771

<210> 4711
<211> 685
<212> DNA
<213> Homo sapiens

<400> 4711
gactgcagat gaaattagta actggtgggg tcgtggggtg tgaatggtgg gcgggagcag 60
ctatgtcagt tggtgtgttt ctgcttatgt tagggtaatt gggcacggcc tttgtgtaac 120
tggtgaatat ctctgaacct gggcatgaaa cagagagatg tcctaactct gggtgagagg 180
aatcctcatt tttctctgcc ctctcactgt ggcatcctaa gaaaaaagtt ttgggttcct 240
gcagcatgaa ggagagctct gctcccagaa tttgggagct ccagatttct tccagggtgt 300
ggaggcatca atatatcagt ctgggaaagg ggttcctggg ccactccagg agctgagttg 360
ggtggaaggt gctgagagtg tgggtggggg ccacttctga gcacccatgt ggcacccact 420
gctggtccct gtttgtggct gggcactcag gaaaatgttt ttggtgctaa gagtaaaaag 480
ccaaccaaca aacacatctc ttttttctgt ctattcactg ggaaagtaaa agcagtctgg 540
gcgcaggctg gggacccaga tggaattcaa acttatgcct gctctcaagg tgctcacggt 600
tgctgataaa cagctgggnt aaaatgaaga gtctatgant gagggatgca anagccaagg 660
gaaggctggt ggagtgattc cacca 685

<210> 4712
<211> 830
<212> DNA
<213> Homo sapiens

<400> 4712
aaacggatcg cgttgggtga aggtgacggc gtcgagccat tgacttccaa agactcctgg 60
cacatgagga agaaacccag aagaggagag caaaggagtc aggaatggct tttactcagt 120

tgacattcag ggacgtggcc atcgaattct ctcaagatga gtggaaatgc ctgaactcta 180
cacagaggac tttatacagg gatgtgatgt tggagaacta caggaacctg gtctccctgg 240
atctgtctcg taactgtgta atcaaggaac tagcaccaca acaggaaggt aacccaggag 300
aagtattcca cacagtgaca ttggaacaac atgaaaaaca tgacattgaa gagttttgct 360
tcagggaaat caagaaaaaa atacacgact ttgactgtca gtggagagat gatgaaagaa 420
attgcaacaa agtgactacg gccccaaaag aaaatcttac ttgtaggaga gaccaacgcg 480
atagaagagg tataggaaac aagtctatta aacatcagct tggattaagc tttctaccac 540
atccccatga actgcagcag tttcaagctg aagggaaaat ttatgaatgt aaccatgttg 600
agaagtctgt caaccatggt tcctcagttt caccacccca aatactttcc tctaccgtca 660
aaacccatgt ttctaataaa atatgggact ganttcatct gttcttcata ctcacacaag 720
gaacagaaat catgcattag gggaaaaacc ttacangtat atttgaggtg cgacaaagcc 780
cttgaatcan ggtcacacat gactggacgt caaggnaaag tcattctgga 830

<210> 4713
<211> 798
<212> DNA
<213> Homo sapiens

<400> 4713
attcaagtcc tggcttgaga gccgagcggc aagagcgcgg gccggggaag ggaagagtag 60
gagaggaagc cgcgagggag aacaggcgag ctactgtctc ctttggaaaa gaaccagtga 120
cgcgccgcct gggagctgga gcccgcgcag cgccccgcag ggcgatggac ggccgaaccc 180
cgcgcccgca ggacgcccca gccaggagaa aaccaaaagc caaggcacca cttcctccag 240
ctgagaccaa atatactgat gtctcttcag ctgctgattc tgtagaatcc actgctttca 300
tcatggaaca gaaagaaaac atgatagata aagacgttga actctcagtg gtcctacctg 360
gggatattat caaatctact actgttcatg gcagtaaacc tatgatggac ttgttgatat 420
tcctttgtgc acagtatcac ttaaatccat caagttacac aatcgatctg ttgtcagctg 480
aacagaacca cattaaattt aagccaaaca caccaatagg aatgttggag gtagagaagg 540
taattttaaa gccgaaaatg ttggataaga aaanacctac acctatnata ccagagaaaa 600
ctgtgagagt agtgattaat tttaagaaaa cacagnagac catagtgaga gtgagtccac 660
atgcatcgct tcaagagctt gcccctatta tatgttacca aatgtgagtt tgatccgttg 720
catacactat tggtgaagat ttcaatcgca ngagcctctt gacttgacaa naatctcctn 780
aatgacctgg gactaaga 798

<210> 4714
<211> 779
<212> DNA
<213> Homo sapiens

<400> 4714
aaaaaaaaaa aaaagcgctt ccgcccggag agagctggcc gggttgaggc gccggctttc 60
ccgggtcttc tccagctgcc accgctttac tgcaaaactg acgggcgcaa aaacatgagt 120
gactccgcgg gagggcgcgc tggtctccgg cgttacccca agctcccagt gtgggtggtg 180
gaggatcatc aggaggttct acccttata taccgggcca taggctcaaa gcatcttcct 240
gccagtaatg taagtttttt acatttcgac tcacatccag acctccttat tcctgtgaat 300
atgccagcag acaccgtgtt tgataaggaa acactctttg gagaattaag tattgaaaat 360
tggattatgc ctgcagttta tgctggccat ttttcacatg taatatggtt tcatcccacg 420
tgggctcagc agatcagaga gggcagacac cacttttag taggcaaaga cacttctacc 480

0502045302.SEQ

acaacaatca gggttacaag tacagatcat tatttcctaa gtgatggtct gtatgtacct 540
gaagaccagc tagagaacca aaaaccttta caattggatg tattatggta aaaccttata 600
agctctgtna caatcaagaa agaaaacgat gcagtgtcct ccggctaaga aacaaaagct 660
agccctggaa gattcggaaa acactggcct ctactaactg gtgactcctc tccaaaaagg 720
actgggaaaa ggncaacagc aaacacaagn ggaaagttga ccaanacttt gcctaagaa 779

<210> 4715
<211> 711
<212> DNA
<213> Homo sapiens

<400> 4715
aagaaaccta aaggctgcag gctgccaggt gtgcttggag agccccccttc ttccgccggg 60
cctcgcaagc agcgtaggac tgtggagaag ggcggtgggc aaggagggaa ctcgagagca 120
gcctccatgg gcacacagga gggctggtgc ctgctgctct gcctggctct atctggagca 180
gcagaaacca agccccaccc agcagagggg cagtggcggg cagtggacgt ggtcctagac 240
tgtttcctgg tgaaggacgg tgcgcaccgt ggagctctcg ccagcagtga ggacagggca 300
agggcctccc ttgtgctgaa gcaggtgcca gtgctggacg atggctccct ggaggacttc 360
accgatttcc aaggggcac actggcccaa gatgacccac ctattatctt tgaggcctca 420
gtggacctgg tccagattcc ccaggccgag gccttgctcc atgctgactg cagtgggaag 480
gaggtgacct gtgagatctc ccgctacttt ctccagatga cagagaccac tgttaagaca 540
gcagcttggt tcatgggcaa cgtgcangtc tctggagggg gacctagcat ctccttggtg 600
atgaagactc ccagggtcgc caagaatgan gtgctctggc aaccaacgct gaacttgcca 660
ctgaaccccc aagggactgt tccnaactgc anttggagtt ccaagttgat g 711

<210> 4716
<211> 711
<212> DNA
<213> Homo sapiens

<400> 4716
tcatcaacag caaaaacttc gaccgagaga ttggccacaa taaccccagt gccatggcag 60
tggagtcatt cacggcaaca gccccctttg tccaaattgg caggtttttc ctctcgtcag 120
gcctcatcga caaagtcgac aacttcaagt ccctgagcct atccaagctg gaggaccctc 180
atgtggacat cattcgccgt ggagactttt tctaccacag cgaaaatccc aagtatccag 240
aggtgggaga cttgcgtgtc tccttttcct atgctggact gagcggcgat gaccctgacc 300
tgggcccagc tcacgtggtc actgtgattg cccggcagcg gggtgaccag ctagtcccat 360
tctccaccaa gtctggggat accttactgc tcctgcacca cggggacttc tcagcagagg 420
aggtgtttca tagagaacta aggagcaact ccatgaagac ctggggcctg cgggcagctg 480
gctggatggc catgttcatg ggcctcaacc ttatgacacg gatcctctac accttggtgg 540
actggtttcc tgttttccga gacctggtca acattggcct gaaagccttt gccttctgtg 600
tggccacctc gctgaccctg ctgaccgtgg cggctggctg gntcttctac cgancctgt 660
gggncctcct caatgccggc ctggcccttg tgcccaatcc ttgttgctcg g 711

<210> 4717
<211> 815
<212> DNA
<213> Homo sapiens

<400> 4717
aaaatttaaa tctcgggctt caaatgccca ggccaaaccc agctcttttt ttttgcagat 60
gcagaagaga gtatcgggtc actatgtgac atctgcagct gccaagagtg tccatgctgc 120
ccctaatcct gctccaaaag aactgacaaa taaagaggca gaaagggata tgctgccttc 180
tccggagcag actctttctc ccttaagtaa aatgcctcac tctgttccac aaccccttgt 240
tgaaaaaact gatgatgatg tcatcggtca ggctcctgct gaagcctccc ctcctcccat 300
agctccaaaa cctgtgacaa ttcctgctag tcaggtatcc acacaaaatc tgaagacttt 360
gaaaactttt ggtgccccac gaccatactc aagttctggt ccttcaccgt ttgctcttgc 420
tgtagtgaaa aggtcacagt ctttcagtaa agagcgcacc gagtcaccta gtgccagtgc 480
attggtccaa cctccagcca acacagagga agggaagact cattctgtaa ataaatttgt 540
ggacatccca cagcttggtg tgtctgataa ggaaaataac tctgcacata atgaacagaa 600
ttcccaaata ccaactccaa ctgatggccc atcattcact gttatgagac aaagttcttt 660
aacattccaa agctctgacc cagaacagat gcgacagagt ttgctgactg caatccgttc 720
gggaagaggc tgctgncaaa ttgaaaangg ttaccaatcc atcaaantac aatatcctgg 780
tgaatgggaa gggcaaagac tcaaggcaat tccaa 815

<210> 4718
<211> 846
<212> DNA
<213> Homo sapiens

<400> 4718
ctaaggacat attttgataa agtattattt gtaatgaaca caagcctctc ttgagtagaa 60
gtctaaatca cattatgatt attttatact agttctgcta tcatgctgtt ttatgctaat 120
tctgcttatt ttagagtatt tttcattaaa aggtgagcaa agtgaaagat acttggtatt 180
ttacccagat ttctaagtgg caacattttt attcttcaga gtcaggtaaa tgactataat 240
agtttggttt ctaatgaaaa gtcaatagca ttagcagtta taattctgtt tataatttcc 300
tttcagcatt tacagtgaaa agtgagaatt ttaaaattta tgaaatctat attccaggta 360
ttgtttttag tctgaaaaac aaactccccc atgtggtatt aatatacctt caatttatgt 420
tgagtcttaa acataattag gagatatttt tctctatttg ctagatttgt tttgagtcaa 480
aactgattta gtgttcttcc aaacaacatt tatgtgttgg cctacagagt ttatttcatg 540
tgttttttt aatatttaat attatattac attcattgaa atctgttcaa aaacagatta 600
agacaaacat ttatgatggt ctgtatcaat cagcaggatt ttattgcttt tcattanttt 660
actggtaagg caaagaatgc aatangtgat ggttggttga aaaggaattg ntaatgctgt 720
ttttaatttt tacttttttt gagacagagt ctcactccgt tgccagcctg gagtgcaatg 780
tgtcacctgg gntcactgaa cctccggctc ccggggtcaa ggaatctcct gnctcagcct 840
caanta 846

<210> 4719
<211> 691
<212> DNA
<213> Homo sapiens

<400> 4719
gcagtcactg ccgaccggct ggctgggcct tgcggcgtga ggaccccggc ggcgccgcag 60
tcccgcgagc catggcccag tccggcgggg aggctcggcc cgggcccaag acggcggtgc 120
agatccgcgt cgccatccag gaggccgagg acgtggacga gttggaggac gaggaggagg 180

US 2003/0224385 A1

gggcggagac tcggggcgcc ggggacccgg cccggtacct cagccccggc tggggcagcg 240
cgagcgagga ggagccgagc cgcgggcaca gtggcaccac tgcaagtgga ggtgagaatg 300
agcgtgagga cctggagcag gagtggaagc ccccggatga ggagttgatc aagaaactgg 360
tggatcagat cgaattctgc ttttctgatg aaaacctgga gaaggacgcc tttttgctaa 420
aacacgtgag gaggaacaag ctgggatatg tgagcgttaa gctactcaca tccttcaaaa 480
aggtgaaaca tcttacacgg gactggagaa ccacagcaca tgctttgaag tattcagtgg 540
tccttgagtt gaatgaggac caccggaagg tgangaggac acccccgtcc cactgttccc 600
caacgagaac tccccagcaa gatgctcctg gtctatgatc tctactttgt ctcctaanct 660
gtgggctctg ggcaaccccc aanaanaatg g 691

<210> 4720
<211> 762
<212> DNA
<213> Homo sapiens

<400> 4720
aaacggcggc ggcggcggca ccggaggctc cgaggctcct gcgctcccgc gccgcgctcc 60
cctcgtccgc ccgggccgcc aggagaagaa actgaggcct ggaatttgat taactcattc 120
aaggttaccc agttggtaat tcatttgcac acctgttagc aagaaacaga agttgaagga 180
ctggaacaag tgaactagga aagagggaac gccaatccaa ggatagaagg acaaggacag 240
aatcaccagc actggctgaa ggcctcctgt ttcctgcgct ttctcctttt cctgtgaaat 300
ctccgaggag aagaaagaat gatggacagt ttatcctttc actgccacaa ggcctgttta 360
cttggcagta ccttaacatg gggaatcttc ttaaagtttt gacatgcaca gaccttgagc 420
aggggccaaa ttttttcctt gattttgaaa atgcccagcc tacagagtct gagaaggaaa 480
tttataatca ggtgaatgta gtattaaaag atgcagaagg catcttggag gacttgcagt 540
catacagagg agctggccac gaaatacgag aggaatccag catccancag atgagaagtt 600
gcaagagaag catggggtgc aattgttcca ctagtaggca aattaaagaa attttacgaa 660
ttttctcaan aaggttagaa agcagcattt aaggaaggtc ttctgggaag ccttaacaaa 720
gttaccccaa tnattcctcc caancccaaa gcaatctaag aa 762

<210> 4721
<211> 750
<212> DNA
<213> Homo sapiens

<400> 4721
accgctacac atgcgccttg caaggaaggg cgaagatttc gggggcgggg cgggggcgg 60
gcctaggccg gggtctcaca gcgactgcgc ggacgggttc ctgagtggaa catggcgact 120
tgcgccgaaa tcctgcggag cgagttcccc gaaattgacg gacaggtctt cgactacgtg 180
accggcgtct tgcacagcgg cagcgcggac ttcgagtctg tggatgacct ggtggaagct 240
gtaggggaac tattgcaaga ggtgtccggg gacagcaagg atgacgcggg catcagggcc 300
gtgtgccagc gcatgtacaa cactctgcgt ctggctgagc cacaaagcca gggaaatagc 360
caggtgctac tggacgcccc tatccagttg tcaaagataa cggagaacta cgactgtgga 420
accaaacttc caggactgct aaagagggaa cagtcctcga cagtgaatgc aaagaagtta 480
gagaaggccg aggctcgact taaggcaaag caggagaanc gctcagagaa ggacacgctc 540
aagaccagca accctctagt cttagaaaga ggcatcagcc agccaggcan gcagcagaaa 600
ggagagtccg ttggnatcat ctggcaagaa caaatcctat gatgtgcgaa ttgagaactt 660
tgatgtgtct tttggcgata gagtactgct ggctggaagc ngatgtnaaa cctgggattn 720

0962030.0970000

gggccgccgt ttacggggct ggttggggcg 750

<210> 4722
<211> 722
<212> DNA
<213> Homo sapiens

<400> 4722
gctgctgcac tgacggcggg tgcccgcgcc tcagagttac tgatttattc ttgagattcc 60
tctactctcg ttatctgacc tcatggatga acttcaggat gttcagctca cagagatcaa 120
accacttcta aatgataaga atggtacaag aaacttccag gactttgact gtcaggaaca 180
tgatatagaa acaactcatg gtgtggtcca cgtcactata agaggcttac ccaaaggaaa 240
cagaccagtt atactaacat atcatgacat tggcctcaac cataaatcct gtttcaatgc 300
attctttaac tttgaggata tgcaagagat cacccagcac tttgctgtct gtcatgtgga 360
tgccccaggc cagcaggaag gtgcaccctc tttcccaaca gggtatcagt accccacaat 420
ggatgagctg gntgaaatgc tgcctcctgt tcttacccac ctaagcctga aaagcatcat 480
tggaattgga gttggngctg gagcttacat cctcagcaga tttgcactca accatccaga 540
gcttgtggaa ggccttgtgc tcattaatgt tgacccttgc gctaaaggct ggattgactg 600
ggcagcttcc aaactctctg gcctgacaac caatgttggt ggacattatt ttggctcatc 660
actttgggca agaagagtta cangccantc tggacctgat caaacctaca gattgnatat 720
tg 722

<210> 4723
<211> 734
<212> DNA
<213> Homo sapiens

<400> 4723
gaggggttcc tcgccagcca ggtgctcgtc atgcgcaatg tggcgctgcg gcgggcggca 60
gggcctgtgt gtgctgaggc ggctgagcgg cggacatgca caccacagag cgtggcgatg 120
gaacagtaac cgggcttgtg agagggctct gcagtataaa ctaggagaca agatccatgg 180
attcaccgta aaccaggtga catctgttcc cgagctgttc ctgactgcag tgaagctcac 240
ccatgatgac acaggagcca ggtatttaca cctggccaga gaagacacga ataatctgtt 300
cagcgtgcag ttccgtacca ctcccatgga cagtactggt gttcctcaca ttcttgagca 360
taccgtcctt tgtgggtctc agaaatatcc gtgcagagac cctttcttca aaatgttgaa 420
ccggtccctc tccacgttca tgaacgcctt cacagctagt gattatactc tgtatccatt 480
ttccacacaa aatcccaagg actttcagaa tctcctctcg gtgtatttgg ntgccacctt 540
tttcccatgt ttacgcgagc tggatttctg gcangaanga tggcggctgg aacatgagaa 600
tccgagcgac ccccagacgc ccttggtctt taaaggagtc ctctttaatg agatnaaggg 660
agcgtttaca gacaantgag aggatattct cccagcanct tcagaacaag actttcttcc 720
cggaccaaaa cgtt 734

<210> 4724
<211> 899
<212> DNA
<213> Homo sapiens

<400> 4724

WO 2005/003360 PCT/US2004/020900

0030040.0030450

actttttgggc aggtgtcagc gcccgtgtca ccgccacgtc gcggacatgg tgatttcaga 60
aagtatggat atactcttca gaataagagg aggccttgat ttggcttttc agctagctac 120
tcctaatgaa atttttctca agaaggcact gaaacatgtg ttgagtgacc tgtcaactaa 180
gctgtcttca aacgcccttg tgttcagaat ttgccacagt tcagtgtata tatggcctag 240
cagtgacata aacaccattc ctggagaact gactgatgct tctgcttgta agaacatact 300
gcgctttgtt caatttgagc cagaagaaga tataaaaaga aaattcatga gaaagaagga 360
caaaaagtta tcagacatgc atcaaatagt aaatatagat cttatgctgg aaatgtcaac 420
ctccctggca gctgtaacgc ccatcattga aagggaaagc ggaggacacc attatgttaa 480
tatgacttta cctgtcgatg cagttatatc tgttgctcca gaagaaacat ggggaaaagt 540
tcgtaaactc ctggttgatg caattcataa tcaactaact gacatggaaa aatgtatttt 600
gaaatatatg aaaggaacat ctattgtggt ccctgaacca ctgcactttt tattaccagg 660
gaaaaaaaat cttgtaacaa tttcatatcc ttcangaata ccaagatggc cagctgcang 720
cctataggaa aggagttaca tgggcctttt caatctgcct cacgacagac ccaattcaaa 780
anggctaatg cctaacactt tccaagatga gccatacaaa gatgggtaca ttagaaaatc 840
cacatactta ccttaaacca cctaacatgg ggaacnggga ngatttaggt ggccaaagg 899

<210> 4725
<211> 805
<212> DNA
<213> Homo sapiens

<400> 4725
gatgcaggaa ctgagcttca tcgctcttca atgttagctg aagcaatggc taatttagta 60
gttgacaaat ctaaaaggag ccaagggtca agctctaaaa tgggaaaatg ttataattgt 120
ggaaaaactg gacatttaaa aaaggaatgc caccagatct caggacagaa aggatcttac 180
aatgcagttc ccccatcagc ggaaaaaacg ccaggacttt gtcctcgctg taacaaagga 240
aatcactggg ctaatcactg ctgctcaaaa tttcatcgga atggcacccc gttttaggca 300
tgggttcctg gaggcacatt gattccatca ccccaggaac accaggaagt gcaggattag 360
atctacctgc cagagaaaga atcacattag ttgggggaga caaacccatc aaagttccca 420
ctggtatttg gggaacttca ccagcaggat acatgggact aattttaggc aaaagccgcc 480
ttaacttgca aggcatgact gtagtcccag gagctgttga ctctgattat gaaggagaaa 540
ctcaagtagt tttaatgtca caagatcttt gggtttttga actgggagaa tatattgctc 600
aattattgct tattccctgc aaattacacc cttctccatg aaaggagaaa cgaggaaata 660
aagggtttgg gagcacaact acatgggaaa tctatctatc ccgacccata gcctctaata 720
gaccacctgt gtantacaaa tttaaggaaa gaaatttatg ggcttatggn tacgggaact 780
gaangtatca agttaatatc ctaaa 805

<210> 4726
<211> 728
<212> DNA
<213> Homo sapiens

<400> 4726
tgctggaaac caggcgggtt gggacagagg gcttggtgga ctccttttct cagggactgg 60
aaaggtcata cgctgtcagc agcagcgtac tacacggcat cgagcctcgg ctgaaggact 120
tccaccagct cctgctcaac ccgcccaaga agaaagcgat cctgaccacc attggtgtgc 180
tggaggagcc cctggggaat gcccgtctgc atggcgcccg cctcatggca gcactgctgc 240
acacaaacac acccagcatc aaccaggagc tctgccggct caacacgatg gacttactgc 300

tggacttgtt ctttaagtac acctggaata acttttgca cttccaagtg gaactatgca 360
tagccgctat tctctcccac gctgcccgtg aggagaggac agaagccagc ggatccgaga 420
gcagggtgga gcctccgcat gagaacggga accggagcct ggagactccc cagccggccg 480
ccaagcctcc ctgacaacac aatggtgacc cacctgttcc agaagtgctg cctggtgcag 540
aggatcctgg aggcctggga agccaacgac cacacgcagg cagcgggtgg catgagacgt 600
gggaacatgg gccacctcac acggattgcc aacgcggtgg tgcagaacct ggagcggggc 660
cctgtgcaga cgcacatcat ccnaggtcat ccnganggct ccctgcggac tgccgttggc 720
cgctggga 728

<210> 4727
<211> 814
<212> DNA
<213> Homo sapiens

<400> 4727
gaaattattt gaaagcataa cttcacaatt tgaaggcttg aatcttatgc ctgctagtca 60
tgaagttaaa aacatagctt tgaaaaatta aagtaagtgc tggaaatttg aagagaagtt 120
actggctcgt agtagatttt acagatccct cttggaaatc aggtaaaaaa tgggaggtat 180
aggtaatcag aatgtcataa ttaagcttga tttaatagat aacgcaagat tatatgtaat 240
aaacagagga tatatgttct tttcaaatac ccgtctattt taaaattggt tatgagacca 300
cacatacata cacacacgtg ctaaaaacca aaaacatgca aaactcaaga agttaacaaa 360
agtagggaat tgtacagcct acattccatt ctctggcaac caggcagtaa gactataaat 420
taaaaaagaa agctccccaa aatgtagcta tgcagaaatt taatatcact cttctaaaaa 480
gtctttaaaa aggaaacata taaattactt agcaacaagt cacactgaaa gcaatacatt 540
atcaaaaatc agaatataac caaagcaata tttgattgan atattcaaag cataattaaa 600
attgtttgta taataactct ttaagaaatg tgtttgttat aagacaacca aatagaaatg 660
aaccaagcat taatcttaaa acactagagg aggctgggca cgggtggcgc acgcctgtca 720
tcccagcact ttggggaagg cgaggcgggc anatnacgag gtcaggagat cgagaccaac 780
ctgggctnaa acggggaaaa ccggtatccg gtcc 814

<210> 4728
<211> 757
<212> DNA
<213> Homo sapiens

<400> 4728
agtttgtaaa gtatggtaag ctggcctgtt atttgtttag tatcttctgg atttttttt 60
tttaattata gagctagctt accgtgtgta tcatgtaaaa aaaattcata agattaacaa 120
tttccatgag aatatcataa actcagggca cacattctgg ccattcctga ctaaaaaact 180
tcaagcagaa taagcagcta taaaatagaa aagaaaaatt aaggataaac ggcattgtga 240
aaaaaaaccg agccacacag atgagaatta aaaattaaca gccagcaaac tcaaaagaac 300
ctttgtcctc cttgagatat ggtgatgatc aaaaagttag caaggaatat taatcaagga 360
attaaagggc attaggaatg ctatagtatt ggaagaaatt acatcttaac atttcaaagc 420
cccatttcac ttaagagtaa aatctaatct gatgtttttt actctgaatt ttattcagta 480
atttttattc ataattcatg ataattggta atgtagtata attgttagta aatgcagtac 540
aaattgttct actgttttaa aaagttttcc gcagaacagt gcatttatgg caatgctatg 600
tttaatgagt tagggacatc aaatatatag tagttcctta ntttcagttg tgaaaatgaa 660
atggctaaag cagaagagac gtctanttta gtcttttaaa aatgtgtgtg gggtggtctt 720

09/05/2003 09:40 PM

ttttcctcaa gaagcccaaa gcacatgtng antttgg 757

<210> 4729
<211> 862
<212> DNA
<213> Homo sapiens

<400> 4729
acaaaacccg agagaggcgt gagcagcgct gtgtttgcga gcgggagcga ggggcgccgg 60
ctggggtgtg tgctcctgag ctcttcagaa accaggctgc tttcaggaac attgctgtgg 120
attcccaggg cctattccac tagaagcaag atggctgaac tcaatactca tgtgaatgtc 180
aaggaaaaga tctatgcagt tagatcagtt gttcccaaca aaagcaataa tgaaatagtc 240
ctggtgctcc aacagtttga ttttaatgtg gataaagccg tgcaagcctt tgtggatggc 300
agtgcaattc aagttctaaa agaatggaat atgacaggaa aaaagaagaa caataaaaga 360
aaaagaagca agtccaagca gcatcaaggc aacaaagatg ctaaagacaa ggtggagagg 420
cctgaggcag ggcccctgca gccgcagcca ccacagattc aaaacggccc catgaatggc 480
tgcgagaagg acagctcgtc cacagattct gctaacgaaa aaccagccct tatccctcgt 540
gagaaaaaga tctcgatact tgaggaacct tcaaaggcac ttcgtggggt cacagaaggc 600
aacaagacta ctgcaacaga aactatcctt agatgggaac cccaaaccta tacatggaac 660
aacagagagg tcagatggcc tacagtggtc agctgancaa gccttgtaac ccaagcaagc 720
ctaaggcaaa aaacatctcc cgttaagtcc aataccccctg cagctcatct tgaaataaag 780
ccagatgaat ttggcaaagg aaaaggaggc ccaaatattg gggaaatcaa ntgnanggtt 840
ttcaacgctg caccgttttc tc 862

<210> 4730
<211> 723
<212> DNA
<213> Homo sapiens

<400> 4730
aaataacact tcacttctaa caaacaaacc aagcacttct tagatccctt ttcaccgttg 60
gagcactatg tcggcatttt gattttgatc tggaagattt taaaggcaac agcaaggtta 120
acataaaaga taaagtactt gaactattga tgtattttac aaaacactca gatgaagaag 180
tacaaacaaa agctatcatt ggtctaggat ttgcctttat tcagcatcca agtctaatgt 240
tcgagcaaga agtgaagaat ctatataata atattttatc tgataagaac tcctcagtca 300
atttaaaaat acaagtgtta aaaaacctcc agacctacct acaagaagaa gatacacgta 360
tgcagcaggc agatagagac tggaagaaag ttgcaaaaca ggaagactta aaagaaatgg 420
gtgatgtttc ctcagggatg tgtagttcca tcatgcagct ttatctcaaa caggtgcttg 480
aggcattttt tcacacccag tcaagtgtac gccactttgc cctaaatgtc attgcattga 540
ctccaaatca aggncctaat catccagttc agtgtgtgnc anatttaatt gctatgggca 600
caagacccag aacctgctat gcggaacaag ggtgatcagc aacttgtggg aatagacaaa 660
aaatatgctg gnttcaatca aatgaaagca tggctggnat gaanatgtct taccgggtca 720
aca 723

<210> 4731
<211> 743
<212> DNA
<213> Homo sapiens

US 2003/0224360 A1

<400> 4731
ggagatcaac gcagaaggag ataatttctg catttccaac taaagtaccc agctcatctc 60
attgggactg gttagacagt gggtgcagcc cacagaaggc aagcagaagc agggtggggt 120
gtcgcctcac ccgggaagcg caaggggtca gggaactccc tcccctagcc aagggaagct 180
gtgagggact gtgccgtgag gaacggggca ttccggcaca gatactatgc tttccccacg 240
gtctttgcaa cccacagacc aggagattcc cttgggtgcc tgcaccacca gggccctggg 300
tttcaagcaa aaaactgggc agccatttgg gcagacactg agctagcagc aggagttttt 360
ttcataccct agtagcccct agaatgccag cgagacagaa ctgttcactc ccctggaaag 420
gggcactgaa gccagggagc caagtggtct agctcagcag atcccacccc cacggagccc 480
aacaagctaa gacccactgg gttgaaattc tcgctgccag cacagcagtc tgatgtccac 540
ctggaatgct tgagcttggt gcagggaggg gcgtctgcca ttactgaggc ttgattaggc 600
agtttccccc tcacaagtgt aaacaaagct gctgggaagt ttgaactggg tggagcccac 660
tgcanctcgg caaaagttgc tgtagcaaga tgtctctcta gattcccctc tctgagcaag 720
gcatctctga aacnaaggna aca 743

<210> 4732
<211> 740
<212> DNA
<213> Homo sapiens

<400> 4732
ccttcggatg gcgtttctga gtggacgtcc tttttgttga tattgatgct atacctttct 60
gtttgttagt tttccttcta acagtcaggt ccctctgctg caggtctgct agagtttgct 120
ggaggtccac tccagaccct gtttgcctga gtatcaccag cagaggctac agaacagcaa 180
agattgctgc ctgttccttc ctggaagcat tgtccctgag gggcacccgc cagatgccag 240
ccagagctct cttgtatggg gtatcttttg gcccctgctg gggggtgtct cctggtcagg 300
agacacaggg gtcacggacc cacttgagga ggcagtctga cccttagcag agctcgagca 360
ctgtgctagg agatccactg ctctcttcag agctggcagg cagggacctt tgagactgct 420
gaagctgcac ccacagccag catttgcccc aggtgatctg tcccagggag atggcttcat 480
ctataagccc ctgactgggg ctgctgcctt tttttcagag atgccctgcc cagagaagag 540
gaatctagag aggcagtcta gctacagtag ctttgctgag ctgcggaggg ctccagccag 600
ttgccatttc cctgtggctt tgtttacact atgaagggga aaaccacctg ctcaagcctc 660
aagtaatggn nggatgcccc tccccccggg gcaaagcttt gagcatccca aggtcgattt 720
taanactggt tgttgctggg 740

<210> 4733
<211> 751
<212> DNA
<213> Homo sapiens

<400> 4733
cagttaaata acatcttctt gtttctatag ttgtgctgtg agttttctgt tcatatttgc 60
gcagtgtatt ttaatacggc ccatgtcatt atagttgatt ttatcccttt aaacaattac 120
tgtatttgtt tttgacgtag aggtttcaat tttttcacct tgggggcaaa tgaaaaactt 180
ggcatttttc atttgggaac atataatagc ttgtaaactt ttcagacagc agtaaatgtc 240
tgaaaaaata tcaaaaacag cataaagaca agattatgta gctctaatta tacgtatata 300
attataaaaa acaatgtgca agggttatat tttaaggtct tttaaaatct gattttgatc 360

Docket No. 50468-5015

ataccaaatg acataatatt ttttatggta gccttttact ttcaagactt aattttcaga 420
cttgtacaag ttccttctta cattctttcc ctctcacacc atcctactgg agaaagcata 480
cttttatgct aagatcttac tttaagcttt ttatgtgaac aaaagatgta catatagtaa 540
gtattacttc cgtagtcctc aaatttacta taacttttgt acttagtata tgttttatat 600
ttggaaaaca gcactacgct tagttttcct gtagttcctg agtgatgtct gtgtgttcct 660
tgcctgccct tttttgtgag cacagattan tcngttatcc atggctggca cttcacttat 720
gatcctttct ctgctaaaat ttangcagct c 751

<210> 4734
<211> 875
<212> DNA
<213> Homo sapiens

<400> 4734
tattggacat tcgttgggca atttaataat tcgttcagtg cttacaaggc caaggtttaa 60
atattacctc aacaaacttc atacctttct gtctctttct ggacctcacc ttggtacact 120
ctacaacagc agtgctcttg ttaatacagg tctctggttt atgcagaaat ggaaaaaatc 180
aggttcgctt ttgcagctga catgtcgaga tcactcagac cctcgccaaa ctttttata 240
taagcttagt aacaaagcag ggcttcatta tttcaaaaat gttgtgctag tgggatccct 300
acaggatcgc tatgttcctt atcactctgc ccgcattgaa atgtgtaaaa cagctttaaa 360
ggacaaacag tcaggacaga tctattcaga aatgatccac aacttgcttc gacctgttct 420
gcaaagcaag gactgtaatt tggttcgcta taatgtcatc aatgcattgc ccaatacagc 480
tgattcactc attgggagag ctgcacatat agctgttctt gattcggaaa tatttttaga 540
gaaattcttt ctggttgctg ccctcaaata tttccaatag tataaaaaca ttgttagcga 600
ctggacaatt acctcattca acaatgtttc aaataatgta ttatattaaa atgtagatgc 660
tgataagttc taagaaatat ttatacctt ttatatggaa gataatttat atcatccatg 720
tttagtgctt tttaaacatc aactttactt tccaggtaat gtggctgtgc aataattttt 780
taatttacc tttttacttt tccaataacn ttttcaaaaa attttggcna cctaaggtaa 840
tttcagtnga aaacttttaa agccccatac cctgg 875

<210> 4735
<211> 846
<212> DNA
<213> Homo sapiens

<400> 4735
tttaacgaat ttaaaaagct aatgacaatt ttgagaaaag gtttgggatg tatattgcta 60
tgtaatttaa taaactgatt ttatggatat aaatatgact gctttcctta gagaataatt 120
attacctgaa gcgcatccag acaacgtggc tacctttatc atttcattca accctgagtg 180
gcccaaacaa aggcctcagg ccggccactt ccttccactt cttggtctga cctctccatg 240
atctgttact aggcaaaact cagatgtttg gctaccttgg gctgcaactg tcccactctt 300
gcccaggctt gctggagttg gggttatcca cagtcagagg ttcagagttg tcaaattctc 360
caattagagc aagagatgag gaaaggaaag ggagacgaaa gaaagaggct gtgcctcaga 420
aataataacg ccgcatatct acaactatct gatctttgac aaacctgaga aaaacaagca 480
atggggaaag gattccctat ttaataaatg gtgctgggaa aactggccaa ccaatgtaga 540
aagctgaaac tggatccctt ccttgcacct tatacaaaaa tcagttcaag atggattaaa 600
gacttaaacg ttagacctaa aaccataacc taggcattac cattcaggac ataggcatgg 660
gcaaggactt catgtctaaa acaccaaaac caatggcaac caaaggcaaa attgacaaat 720

0 0 8 2 7 0 5 6 4 3 0

gggatctaat taaactaaaa gagcttctgc acagcaaaaa gaaactacca tcagnagtgg 780
acaaggcaac ctacaaaatg gggagaaaat tttcgcaacc tacnccatcn gacaaaaggg 840
ctaaat 846

<210> 4736
<211> 890
<212> DNA
<213> Homo sapiens

<400> 4736
attgactaaa cctaactaga agccangagg ccaaaggaat ctgtcgatat acaagctagc 60
ttcccagtgg atggagcagg atggagaaga ggaagaacgg gcctggaggg acaaacaaag 120
ggttaaaaga aaaggtccat ccacatcgtg gcgctgggga acgaggggga cacattccac 180
caggacaacc ggccgtcggg gcttatccgc acttacctgg ggagaagccc tctggtctcc 240
ggggacgaga gcagcttgtt gctgaacgcg gccagcacgg tcgcgcgtcc ggtgttcacc 300
gagtatcagg ccagtgcgtt tgggaatgtc aagctggtgg tccacgactg tcccgtctgg 360
gacatatttg acagtgattg gtacacttct cgaaatctaa ttgggggcgc tgacatcatt 420
gtgatcaaat acaacgttaa tgacaagttt tcattccatg aagtaaagga taattatatt 480
ccagtgataa aaagagcatt aaattcagtt ccagtaatta ttgctgctgt tggtaccaga 540
caaaatgaag agttaccttg tacatgccca ctatgtacct cagacagagg gagctgtgtt 600
agtacaactg aagggatcca acttgcaaaa gaactaggag caacctatct tgaactccac 660
agccttgatg acttctacat aggaaagtat tttggaggag tgttggagta ttttatgatt 720
caagccttaa atcagaagac aagtgaaaaa atgaagaaaa gaaaaatgag caactccttt 780
catgggaatt agaccacctc aacttgaaca ancangaaaa aatgcctgtc ctaaaggctg 840
aagcgtcaca attataactc tgacntaaat aacttgctgt tctgctgcca 890

<210> 4737
<211> 894
<212> DNA
<213> Homo sapiens

<400> 4737
ttactaacgg aatctgaatc agagcatggt gaaagggtta atggacgatg tctgaacaat 60
tggcttagga gagggaaaac tttaaaacta atattctctc taagaaaaga aatggaagcg 120
ttcttggttt cagtaggggc aacaacagtc cacttctcag acaaacaatg gctttgtgac 180
tttggcttct tggtggacat tatggaacac cttcgagaac tcagtgaaga attacgagtt 240
agtaaagtct ttgctgctgc tgcctttgac catatttgta ctttcgaagt taagctgaat 300
ttatttcaaa gacatattga ggaaaaaaat ctaacagact ttcctgccct cagagaagtt 360
gttgatgagc taaaacagca aaataaggaa gatgaaaaaa tatttgatcc cgataggtat 420
caaatggtga tctgtcgtct ccaaaaagaa tttgagagac attttaagga cctcaggttc 480
attaaaaagg acttaggact tttttcaaat ccatttaact ttaaacctga atatgcacct 540
atttcagtga gggtggagct aacaaaactt caggcaaaca ctaatctttg gaatgaatac 600
agaatcaaag acttggggca gttttatgct ggattgtctg ctgaatccta cccaattatc 660
aaaggggttg cctgtaangt ggcatccttg tttgatagta accaaatctg tgaaaaggct 720
tttcatattt gactcgaaac caacacactt tgagtcagcc attaacagat gagcatctcc 780
naagccctgt ttccgggttg ccacaactga aaatggagcc ccggttggga tgaccttgtg 840
agangaaaga aatgaatcca atccataagg gctttgtngt anaaagattg aaaa 894

0052046.0072800

<210> 4738
<211> 743
<212> DNA
<213> Homo sapiens

<400> 4738
gacagagtaa taagtagaag aaggaaatca gatttttcta aagcctactc cttcctcact 60
ttgaaggcct tctgggaaag acagcaaagt tgagctcata taaaccaaaa gctctggtcc 120
cagttctccc tgtatggtgg ggagaattgc ccattctttc ttacttctga caactggctc 180
ttcaagtaca cttcaaatac ctgagaacct attcatatcc attctctgaa tgggaagaaa 240
attgctcctc cttggcaaac atctttggcc tgggcaaaac tttccacttt tttcattttt 300
gtggtcactg ttctcttcta tatcctttta tgtattagtc cataagcact aagttttgaa 360
agcactaaga cattctagag tccttgattg ttcacccata cttccatttc tttattcaat 420
aaacatgtat taagttccta ttatgtcaga tgtgcaaatt cttatggtaa taaaaagatg 480
tatgagacat agacacttta tttagtcaaa cactcaacaa tatttgaaca tctactgtgt 540
acaaggtgct aaggatcaat aaaggagtag tgcagtttaa gacaacacaa caaaaacaaa 600
ctcttcactc cactggctgt aacacatttc tactctgaga tcttcatggc acaacttctt 660
gaacaagtgt tttcaatagt cactcncttc anatttttc ttccanttcc tcaaacatac 720
aggaagaaaa cgttgtggtt ggg 743

<210> 4739
<211> 805
<212> DNA
<213> Homo sapiens

<400> 4739
aaccacaaaa cccgccaggc cggtgcggga gctgcggagc atccgctgcg gtcctcgccg 60
agacccccgc gcggattcgc cggtccttcc cgcgggcgcg acagagctgt cctcgcacct 120
ggatggcagc aggggcgccg gggtcctctc gacgccagag agaaatctca tcatctgtgc 180
agccttctta aagcaaacta agaccagagg gaggattatc cttgaccttt gaagaccaaa 240
actaaactga aatttaaaat gttcttcggg ggagaaggga gcttgactta cactttggta 300
ataatttgct tcctgacact aaggctgtct gctagtcaga attgcctcaa aaagagtcta 360
gaagatgttg tcattgacat ccagtcatct ctttctaagg gaatcagagg caatgagccc 420
gtatatactt caactcaaga agactgcatt aattcttgct gttcaacaaa aaacatatca 480
ggggacaaag catgtaactt gatgatcttc gacactcgaa aaacagctag acaacccaac 540
tgctacctat ttttctgtcc caacgangaa gcctgtccat tgaaaccagc aaaaggactt 600
atgagttaca ggataattac agattttcca tcnttgacca aaaatttgcc aaagccaaag 660
agttanccca agaagattct ctcctacatg ggcaattttc acaagcagtc actccccta 720
acccatcatc acacaagatt tattcaaaag nccaaccgat tatctcaatg gngaagaaca 780
acaacttttc ccaaaaaagt ttngg 805

<210> 4740
<211> 793
<212> DNA
<213> Homo sapiens

<400> 4740
tagtgaagat gccttacttg aggaagagga tgcatctgag caagatattc atttagctct 60

0962950 - 070200

ggagtctgat aattcaagca gtaaatcaag ttgttcttct tcctggacaa gccgatctgt 120
tgctccaggc tttcagtacc accctaatct acctatgcat gccgtcataa tggaaaagtc 180
caatgatcat ttcattgtga aaatacgacg tgcaacacca tctacctctt ctggccttaa 240
acagagtatg atgcctgatg aattattgac atctttgccc agacatggaa aggaagctga 300
tgaaggacca gagaaagaat atatttcatg tcagaacaca gtttttaaat ctgtggagga 360
attggaaaac tccaacaaaa atgttgatgg cagcaagtca actcatgaag aacagagctc 420
tatgatacaa acacaggttc ctgatatata tgaatttctt aaagatgctt cagataagat 480
gggtcatagt gatgaagtgg ctgatgaatg tttcaaattg catcaagtat gggaaacaaa 540
agtgcctgaa agcattgaag aattgccttc aatggaagaa atctcacact ctgttgggga 600
acatcttcca aacacatacg tagatctaac gaaagattca agtcactgaa accaaaaact 660
tgggggggaan tcatagaagt aacagtttta catattgatc aagttgggat gtcctggagg 720
naatttaaat cagagtgctc aatatagaca ttccttgcaa gctgatacgg taggngcttt 780
atggatttnc aca 793

<210> 4741
<211> 755
<212> DNA
<213> Homo sapiens

<400> 4741
cttaaaatgt attcaagtta tttaagtggc ccccacagga gtggagtctt gaaatctaat 60
tctaaatgcc agtcagtgat gatcgcatca cagttgagtg aaatggcctt cctgttcagc 120
tgttagagac tgaagattgt tagggcacct tagaatgtct catcttttct aggttgtcaa 180
caggtactat ttgtcacata actaactttc gaggcactgg aacatacctg aactaagaat 240
taaatctttt actttatact cacttaaaat caagaatccc atctaaaaca cataggtacc 300
ttatctgaaa ctcttgcact tccccaacca gggcagaaat gaggtgggag aagtttgact 360
aaaatgaggg atgggggaaa gtaaaagatg ttttttttt tttgagactc gctttgtcac 420
ccaggctgga gtgcaatggc acaatctcaa ctcaccgcaa cctccgcctc ccgggttcaa 480
gcgattctcc tgcctcagcc tcccgagtan ttgggattac aggcgcctgc ctccatgcct 540
ggctaatttt gtatttttaa gtaanagaca gggtttcttc atgttggtca ggctggtccc 600
aaactcctaa cctcgngatc cgcctgcctc gacctcccaa agtgctggga ttacaggcat 660
gagccaccat gcccagccaa agntcatttt ttaaatagac ttcaaccctt tgtaaatact 720
ggtactgggg gaagtataga agtanaaana aaagt 755

<210> 4742
<211> 710
<212> DNA
<213> Homo sapiens

<400> 4742
gagattctgt gccccttgtc gggccgcttg tttggctgct gccgtcacct catggcgacg 60
cgggtagagg aggcagcgcg gggaagaggc ggcggcgccg aagaggcgac tgaggccgga 120
cggggcggac ggcgacgcag cccgcggcag aagtttgaaa ttggcacaat ggaagaagct 180
ggaatttgtg ggctaggggt gaaagcagat atgttgtgta actctcaatc aaatgatatt 240
cttcaacatc aaggctcaaa ttgtggtggc acaagtaaca agcattcatt ggaagaggat 300
gaaggcagtg actttataac agagaacagg aatttggtga gcccagcata ctgcacgcaa 360
gaatcaagag aggaaatccc tgggggagaa gctcgaacag atccccctga tggtcagcaa 420
gattcagagt gcaacaggaa caaagaaaaa actttaggaa aagaagtttt attactgatg 480

US 2003/0190600 A1

caagccctaa acacccttтc aaccccagag gagaagctgg cagctctctg taagaaatat 540
gctgatcttc tggaggagaa caagagtgtt cagaagcaaa tgaagatcct gcagaagaag 600
caagcccaga ttgtgaaaga gaaagttcac ttcagaagtg aacatagcaa ggctatcttg 660
gcaagaagca agctagaatc tcnttgcana gaacttcanc gtcacaataa 710

<210> 4743
<211> 704
<212> DNA
<213> Homo sapiens

<400> 4743
acgtactcca tgcgctacct gctgcccagc gtcgtgctcc tgggcacggc gcccacctac 60
gtgttggcct ggggggtctg gcggctgctc tccgccttcc tgcccgcccg cttctaccaa 120
gcgctggacg accggctcta ctgcgtctac cagagcatgg tgctcttctt cttcgagaat 180
tacaccgggg tccagatatt gctatatgga gatttgccaa aaaataaaga aaatataata 240
tatttagcaa atcatcaaag cacagttgac tggattgttg ctgacatctt ggccatcagg 300
cagaatgcgc taggacatgt gcgctacgtg ctgaaagaag ggttaaaatg gctgccattg 360
tatgggtgtt actttgctca gcatggagga atctatgtaa agcgcagtgc caaatttaac 420
gagaaagaga tgcgaaacaa ggtgcagagc tacgtggacg caggaactcc aatgtatctt 480
gtgatttttc caagaaggta caaggtataa tccagagcaa acaaaagtcc tttcagctag 540
tcaggcattt gctgcccaac gtggccttgc agtattaaaa catgtgctaa caccacgaat 600
aaaggcaact cacgttgctt ttgattgcat gaagaattat ttagatgcaa tttatgatgt 660
tacnggtggg ttatgaaggg aaaagacnat ggaggggcaa cgan 704

<210> 4744
<211> 813
<212> DNA
<213> Homo sapiens

<400> 4744
cttaaacagt tacatgagaa ccaaaaaaac aacccaacgc ttttggagaa taaatcagga 60
tctggagttc caaacagtaa taccaattcc agtgtgcagc atgttcagat aagagttgcc 120
cgcttggaag ataatacagc catctcttct agccccatgg cagcattgca gattccagtc 180
cagatcaccc atgtttcttc agcagactct cctgctaccg ttgactcaga aacaataaca 240
ctaaacagtg gaacactaca gacatttgag attcttccct ctttccatct acagcccact 300
ggcactccag gcacctacct acttcaaaca agctcaagcc aaggccttcc cctaactctg 360
actgctagtc ccacagtaac cctgacagct gctgctcctg cttctcctga acagattatt 420
gttcatgctt tatccccaga acatttgttg aacacaagtg ataatgttac agtgcagtgt 480
cacacaccaa gagtcatcat tcagactgtt gccacagagg acatcacttc ttccatatcc 540
caagcagaac tgacagtcga tagtgatatt cagtcatctg attttcctga gcctccagac 600
gccctagaag cagacacttt cccagatgaa attcatcacc ctaagatgac tgtggagcca 660
tcatttaatg atgctcatgt atccaaattc agtgaccaaa atagcacaga actgatnaat 720
agtgttatgg tcagaacaag aagnaagaaa tctctggaca ccggacctta aacaaagagg 780
gaatcancct ccggatttag ccagttgctt aag 813

<210> 4745
<211> 732
<212> DNA

0502750.3450

<213> Homo sapiens

<400> 4745
gacagagcct cattcattca agatataaga acaggaggaa agagtccatt gacgtgaaat 60
cgatatcatc tcgaggcagt gatgcaccaa gcctgcagaa tcgtcgctat ccgtccatgg 120
cgaggatcca ctccatgacc atcgaggctc ccatcacaaa ggttataaat ataatcaatg 180
cagcccaaga aaacagccca gtcacagtag cggaagcctt ggacagagtt ctagagattt 240
tacggaccac agaactgtac tcccctcagc tgggtaccaa agatgaagat ccccacacca 300
gtgatcttgt tggaggcctg atgactgacg gcttgagaag actgtcagga aacgagtatg 360
tgtttactaa gaatgtgcac cagagtcaca gtcaccttgc aatgccaata accatcaatg 420
atgttccccc ttgtatctct caattacttg ataatgagga gagttgggac ttcaacatct 480
ttgaattgga agccattacg cataaaaggc cattggttta tctgggctta aaggtcttct 540
ctcggtttgg agtatgtgag tttttaaact gttctgaaac cactcttcgg gcctggttcc 600
aagtgatcga agccaactac cactcttcca atgcctacca caactccacc catgctgccg 660
acgtcctgca cgccaacgct ttcnttcctg ggaanggaaa ggagtaaagg ggaagcctcc 720
gatnaatttg gg 732

<210> 4746
<211> 798
<212> DNA
<213> Homo sapiens

<400> 4746
atgaatagaa ttggaggagg tatgtataaa gatttgtttt tttgtatgta cccatcacca 60
tttttaataa actagaaact gtgttgagaa ttccatgaaa aaaaagtcat ggtttattgt 120
tggctcatgt tctaaaggct gctagcagaa attgagcctg gtacatactt aaaggaaggt 180
gatgtgttaa gaagtagctg cacaaggtag ggtggatgaa gagcttactg gtgagattta 240
acatttacaa aacgtacctt tcagctacat gactgacagt tggatctcaa aattaatctt 300
tattccatag gaatagggtt tggtggtctg gaagcaatga atagcatggg aggatttgga 360
ggagttggcc gaatgggaga gctgtaccgt ggtgcgatga ctagtagcat ggagcgagat 420
tttggacgtg gtgatattgg aataaatcga ggctttggag attcctttgg tagacttggt 480
ggtggaatgg gtagcatgaa cagtgtgact ggaggaatgg ggatgggact ggaccggatg 540
agttccagct ttgatagaat gggaccaggt ataggagcta tactgggaaa ggagcatcga 600
tatggatcga ggatttttat cgggtccaat gggaagcgga atgagagang agaataggct 660
ccaaaggcaa ccagatattt gtcaagaaat ctacctttt gaccttgacc ttggcaagaa 720
aactnaaaag gagaaaattc aagtccagtg gtgggccaaa ggtaaatggt tttgccaana 780
aaantaaaaa aatggggg 798

<210> 4747
<211> 635
<212> DNA
<213> Homo sapiens

<400> 4747
gttctcttcg cccggtccct gccgcgcaca ggcctcgggg tcggcgggag cacgatggcg 60
gccgctagga gactcatggc gctggccgcc ggcatctctc cgcgcctgca gccgctgggt 120
ccccgcgctg ctgggcgaca gggtcgctcg cgcggcttct cttcaagctg cgcccacccc 180
gaccacacca aggaagccgc cgaggccgag tcagggatgg cccccggcgg gcctggggaa 240

0950250.0030

ggcgacggaa gcttggtgaa cgcttctagg gacctattaa aagagttccc acagcccaaa 300
aatcttctca acagtgtgat tggaagagcc ctcggcatct cacatgcaaa agacaaacta 360
gtctacgtgc acacaaatgg accgaagaaa aagaaagtca cactgcacat aaaatggccc 420
aagagcgtgg aggtagaagg ctatggcagc aagaagatcg atgctgagcg gcaggctgca 480
gctgcancct gccagctgtt caagggttgg ggtctgctag gtccccggaa tgagttgttt 540
gacgcagcca aataccgagt gctagctgat cgctttggnt cccctgccga nagctggtgg 600
cgtccggaac ccatnatgcc cctacttcct ggcgg 635

<210> 4748
<211> 849
<212> DNA
<213> Homo sapiens

<400> 4748
gtctgtaggt taagggagaa gatggcggcg ctaggggaac ccgtgcggct ggagagagat 60
atttgtagag caattgaatt attggaaaaa ctacaaagga gtggagaagt accaccacag 120
aaacttcagg ctttgcaaag agtccttcaa agtgaattct gcaatgctgt gagagaggta 180
tatgaacatg tctatgagac tgtggacatc agtagcagtc ctgaagtgag agcgaacgct 240
actgcaaagg ctactgttgc tgcatttgct gccagtgaag gacattctca tcctcgagtt 300
gttgagctac caaaaacaga agagggcctt ggattcaata ttatgggagg caaagaacaa 360
aactctccaa tctatatatc ccgaataatt ccaggtggaa ttgctgatag acatgggggc 420
ctcaaacgtg gagatcaact cctctctgtt aatggagtga gtgttgaagg agaacatcat 480
gaaaaagctg tagaactgct gaaagccgca caaggaaagg ttaaattagt ggtacgatac 540
acacccaaag tcttagaaga aatggagtcg cgctttgaaa aaatgagatn agcaanacgc 600
aggcaacaga cctaatacat ttcaaaactt gatatttcat tttgcgttta nctagagaag 660
ttttccttgt gacttactaa tgggctgcaa tgccaatgat tgttaagaaa acaaacaaat 720
ttatcatgaa attccccctt gtcaatttta taaaatgcct aattttaaca atccantttt 780
aaggggttcc caagangaat gccattacac ctttttttc ccngaacaaa ggaaaaaaaa 840
gttaaaaaa 849

<210> 4749
<211> 787
<212> DNA
<213> Homo sapiens

<400> 4749
attacaatga aaaattttgt gttccaaggc aactgtatca taggtgtaaa cataaagcat 60
ataaattatg acaatccttt tagaggtagg gtcaatatag tggataaacc tgtctatcag 120
acgtattgat tatagcagta ctatagttat tctgctgtca ttattaaaga tgattatatt 180
cattcaaagc tttagatgtg tcccatgtgg caagaaagga gacagtgaat tttgtcaaac 240
aataaaaatg tgtcaggaac acaaggatga aggggatgtc atttgcctgg taagaactgg 300
gttatttcca ctgaaatttg ttatgtttaa ggaaattaag attttaagct tgaaattata 360
caagcagaat ctaatttaat tttgattgac tgaagaacca gggtcttttg ctctcctttg 420
gtatttcact ctcctttggt attcaatcat gtgtctttta gtgcttttta aaattttacc 480
cattctttaa ttcagcatct ccctatgtat gtgtcataga atacttagtt ctgctagata 540
ttctgcaaat atatttggga attacttcct gctgtttcgc cttcttaggt tcatagtaca 600
catcagcata tgagaatctc tgagaggtcc tccaaaaagg agagaaaaag cacctctttt 660
gggctcaatg ttttccaaaa ccttatttga ccccaaaaac ctttttcata tacccaataa 720

taagctacag nanctaatat tccgcaaatg gtcccttggg aacacactgc cttaaacagn 780
taattcc 787

<210> 4750
<211> 625
<212> DNA
<213> Homo sapiens

<400> 4750
tacgttggaa gtgttcgtcc gcttgtcact gaattggacc ctgatgctcc cataagacag 60
aaaatgcccc ttgatgatct ggatagagaa gatgaagtta gattactcaa atatctcttt 120
actctaatcc gtgctggaat gacagaagag gcacaacgac tctgtaaacg ctgtggtcaa 180
gcatggagag ctgcaacact tgaaggctgg aaactgtacc atgaccctaa tgttaatgga 240
ggaacagaat tagaacctgt tgaagggaat ccatatagac gcatttggaa aataagttgc 300
tggagaatgg cagaagatga gctttttaat agatacgaga gagcaattta tgcagcttta 360
agtgggaatc ttaagcagcc gcttcctgtc tgtgacacct gggaagacac agtttgggcc 420
tacttccggg tgatggtgga cagtctggta gaacaggaga tccagacatc agtagcaact 480
ctggatgaaa ctgaagaact ccctagagaa tatctgggag caaactggac gttagaaaag 540
gtttttgagg aacttcaagc tactgacaaa aagagagttc tggaanagaa tcaagancat 600
tancatatag ttcaaaagtt tctta 625

<210> 4751
<211> 707
<212> DNA
<213> Homo sapiens

<400> 4751
attgtgtatg attcgttgtt gactgcagca tcactaggtg ggacatcact gcgttttcct 60
tgaacttccg cgggttctcc taaagttact tggtgacttt ttatgattgc tttctgctcg 120
tctgaataaa ggatgagccc agggcctgct gcccactgtc tgctctgatg accctctctc 180
ccctgcagat ccgagtgatg gtggacctgt gcaacagcac caagggcatc tgcctcacag 240
gaccttctgg accaccagga cctccgggag ccggcgggtt gccaggacac aacggagtgg 300
atggacagcc tggtcctcag ggcccaaaag gagaaaaagg agcaaatgga aaaagaggaa 360
aaatgggtat ttttggcaac tcttctaatt aatttccctg ttatttatct ccatgattgc 420
atttgggtcg actaaaactg tgtgcagcag gggtaaggtg tttcatctct gcacagttta 480
aggccggttt aactcttacc tagaagccgt tgcgttccgg gataccaagg gtatacttct 540
tggtcccacc ttgacagatg tttatttcaa actggagaag ccgtctcctg ggaactgact 600
ccgcaccctt ctgctgcaga tgggaggtgg aagggagcan gagcccacag ccctgggaag 660
gggcaatcct gtgggccgtg tnacaactgg gggcctnggt gcaatgg 707

<210> 4752
<211> 431
<212> DNA
<213> Homo sapiens

<400> 4752
agcagttgga agttggcagg tggagaggca ggttgggagg gaaagtcggg ggaggacgcg 60
gaagaggagc tgtgggaagg gggaggaggg agggaggaaa agaggacgag gcggcggaga 120

0050250.00000

actgagcaga gcagagcatc tagccaaagg ggagatgagt ttgtctgtcc tctgctgagg 180
ctacggccgg gcctagggaa ctgggagctt gggtggaagc gacacccgtg gaagtgggag 240
gaggtggcgc cgggacttta acccccttgtg ggctctgcgg caagggattt aacccctttgt 300
ggatctggcc cctcggtggc agcgtcatcg gtagttttaa ccccttcgng gctggntttc 360
acgcactgga cttaccctca tcaccttgct caccaactcc tttattgggg tgctccgctt 420
ggaggtttgn c 431

<210> 4753
<211> 765
<212> DNA
<213> Homo sapiens

<400> 4753
aaaagcccgg gccgaacggc cccgccgcag agactcagcg cggatcgctg ctccctctcg 60
ccatggcgca ggtgctgatc gtgggcgccg ggatgacagg aagcttgtgc gctgcgctgc 120
tgaggaggca gacgtccggt cccttgtacc ttgctgtgtg ggacaaggct gaggactcag 180
ggggaagaat gactacagcc tgcagtcctc ataatcctca gtgcacagct gacttgggtg 240
ctcagtacat cacctgcact cctcattatg ccaaaaaaca ccaacgtttt tatgatgaac 300
tgttagccta tggcgttttg aggcctctaa gctcgcctat tgaaggaatg gtgatgaaag 360
aaggagactg taactttgtg gcacctcaag gaatttcttc aattattaag cattacttga 420
aagaatcagg tgcagaagtc tacttcagac atcgtgtgac acagatcaac ctaagagatg 480
acaaatggga agtatccaaa caaacaggct cccctgagca gtttgatctt attgttctca 540
caatgccagt tcctgagatt ctgcagcttc aaggtgacat caccacctta attagtgaat 600
gccaaaggca gcaactggga ggctgtgagc tactcctctc gatatgctct ggggcctctt 660
ttatgaagct ggtacgaaga ttgatgtccc ttggggctgg ggcantacat caccaagtta 720
atccctggaa taaggctttc gtnctccaat ttgatnatta agaaa 765

<210> 4754
<211> 771
<212> DNA
<213> Homo sapiens

<400> 4754
tcatcttcag atctgatctt attttgctac ttaggagttc tgatactggg caagtcacct 60
agcctgtgag cttcatttgc ttatacagtt gttggaatta gatgtggtga catgcgaaaa 120
gcacaaaacc tggctcctat caagcttctg catctatttt tttttctatt tttctctcaa 180
ttattggaag ctcatagaag cattttggga tagaatttta gtagtttgca agtattttta 240
aacattttat cataggtaca cttataattt tgatatgatc tcagtattaa cctgataact 300
cccaaattga tattttccta gttcaactga aattaaaggg agaaatatgg gattgtagga 360
gtgccttgtc ctcaaattga ctgtatttct gttttgagaa agatcttggt actgatcacg 420
tagtcaactt tctaatgcaa tgttaaagtt tatatatttg taaatgttat tgttataaaa 480
gcataaaacc agaaattaag tcttagattt agtttctaca tcttttattg gaagatgact 540
gtagataaat atctttctgt atatcatttt aataaatgag aaaagagagc tgttgaatga 600
aagatcatga acatcagtat ttatctgagg aacatcctgc ggaggaatcc ctttccccat 660
ttattaaaca caaaattgcc antgtttcaa gtagttcccc ggatcgatan gaccaacaac 720
tgaaattaaa tgcctttaag tcccaagtgc ccaattttaa ntaaaaatgg t 771

<210> 4755

09/15/2005 15:03:04

<211> 697
<212> DNA
<213> Homo sapiens

<400> 4755
agaattatgg cgacctccgc gacgtcgccg cacgcgcctg gttttccagc tgagggtaga 60
tgcggttact atgtggaaaa gaagaaacgg ttctgcagga tggtggtggc cgcagggaaa 120
agattttgtg gtgaacacgc tggagccatg gaggaagaag atgctcggaa aagaatcctg 180
tgtcctttag atccaaaaca cacagtatat gaagatcaac tagcaaagca tttgaaaaaa 240
tgtaactcaa gagagaaacc aaaacctgat ttctatattc aagatattaa tgcaggctta 300
agagatgaaa cagaaatacc tgaacaatta gttccaattt cttctctatc tgaagagcag 360
ttggaaaagt taattaagaa attgagaaaa gcaagtgaag gcttgaattc tacacttaaa 420
gatcatatta tgtcccatcc agcattacac gatgcactta atgaccctaa aaatggcgat 480
tctgcaacca agcacctgaa acagcaggct tctattttag gtaacattga aaatttaaag 540
ttacttggtc caagaagatg ctttgttgag tttggagcgg gaaagggaaa attatctcan 600
tggggttgat antgccttaa aagatgctga aaaagttcac ttcatcctag tgggaaaagg 660
tgaccacaag attcaagggg ggatgggaaa cncagaa 697

<210> 4756
<211> 670
<212> DNA
<213> Homo sapiens

<400> 4756
aaaaatgtgt gtttgtgggt gaaatggctg cgcaggtcgg agcggtgcgc gtagtacggg 60
cggtggcggc gcaggaggag ccggacaaag aggggaagga gaaacctcat gctggggtct 120
ccccgcgggg agttaaacgg cagcgccgat ctagcagtgg ggggtctcag gagaagcggg 180
ggcggccgag ccaggagccc cctctcgctc cccctcaccg gcggcgtcgc agccgccgac 240
atcctgggcc gctgccgccg acgaatgcag ccccaactgt cccaggccct gttgagcctc 300
ttctcctgcc gcctccgccg ccaccttcgc tggcacccgc cgggcccgct gtcgctgccc 360
ctctcccggc cccaagcacc tcggccctct tcaccttctc gcctctgacg gtgagcgcgg 420
ccgggcccaa gcataagggc cacaaggagc ggcacaagca ccatcaccac cgcggccccg 480
atggtgatcc cagctcctgc ggaaccgatc tcaagcacaa ggacaagcag gaaaacggcg 540
anaggactgg aggggtgcct ctgatcaaag ccccaagaga gaaacaccag atgaaaatgg 600
taaaacccag agagccgatg attttgtcct gaagaaaata aagaagaana ngaaaaagaa 660
acaccganaa 670

<210> 4757
<211> 809
<212> DNA
<213> Homo sapiens

<400> 4757
aaatcgctcg cctctcaagc aacacggaag catggcactg atctgtggct tgatagttgt 60
gtggttccac ctttgtcccc tccaccaaag gaggaagatt tttttgcctc tcacgtttct 120
cctgaggtga gtgacacagc gtgggcatca gcaatagcag aaccatcttc tttaacatca 180
aggcctgtgg aaaccacttt ggaaaataat gaaggtggac aagagcaagg accaagtgtg 240
gaaggtctta atgtaccaac aaaggctact ttagaggtat cctctatcat aaaaaagaaa 300

0050204950

ccaaatcaag ctaaaaaagg ccttggggcc aaaaaaggaa gtttgggagc tcagaaactg 360
gcaaacacat gctttaatga aattgaaaaa caagctcaag ctgcggataa aatgaangag 420
caagaagacc tgnccaaggt ggtatctaaa gaagaatcaa ttgtttcatc attacgatta 480
ncctataagg atcttgaaat tcaaatgaag aaagacgaan agatgaacat tagtggcaaa 540
aaaaatgttg actcagacag actcggcatg ggatttggaa attgcanaag tgttatttca 600
cattcagtga cttcagatat gcagaccata nagcangaat cacccattat ggcaaaacca 660
agaagaaagt ataatgatga cagtgacgat tcatatttta cttccagctc aaggtacttt 720
gacgagccac tgggagttaa nggagcaatt ctttcnccaa cctgggatga cagttcagat 780
tcccnattgg gaaaaaagag acccagcaa 809

<210> 4758
<211> 898
<212> DNA
<213> Homo sapiens

<400> 4758
actttggtc gagcggaggg cgcgcagctc caccgttgcc aagacgccgc gtaaacaccc 60
gagcgcgcgc agccaggtgc gctccttggg gctgctggct gctgcgtttg cggcgggagg 120
tggtggccgc ggtcccacga gaaggggtat ttttcgtcag ccaagatggg ttccaaaagg 180
agaaatttga gctgtagtga aaggcatcag aaattagtag atgaaaacta ctgcaaaaaa 240
ttacatgtcc aagctctaaa aaacgtcaac agtcaaatca ggaatcaaat ggtgcagaat 300
gaaaatgata accgtgttca gcgcaagcaa tttctcagat tattacaaaa tgaacaattt 360
gagttggata tggaagaggc cattcaaaag gcagaagaaa acaagagatt gaaagaactc 420
cagctcaaac aagaagaaaa actggctatg gaattggcaa aactgaaaca tgaaagtcta 480
aaggacgaaa agatgaggca acaagtaaga gaaaacagca ttgagcttag agaattggag 540
aagaaattaa aagcagctta catgaataaa gaaagggcag ctcagattgc tgaaaaggat 600
gccattaaat atgaacaaat gaaacgtgat gctgaaatag ccaaaaccat gatggaagaa 660
cacaagagaa taataaagga agagaatgct gcagaagaca aacgaaacaa agcgaaagca 720
cagtactatc ntgacttaga gaaacaactt gaggaacaag aaaaaaaaaa gcaggaagct 780
tatgagcaac tgcctaaaag agaactcatg attgatgaaa ttgttaggaa gantctatga 840
agaagatnaa gttgggaaaa acaacaaaaa gtttgaaaaa atggaatgca atgcnaaa 898

<210> 4759
<211> 828
<212> DNA
<213> Homo sapiens

<400> 4759
tactgccatt taaaaatagg tttttaaaat ttagctaagt cttaagtaat ttgccgttgc 60
taataatttt atctccttga gtcggttgtt ggggagagat gttatattca ataattttta 120
gttattttgt aatgcagagt gtttattcat ttcacagttc tgcaatggat gtagtatttt 180
gggattgccc tgtccagaaa attttcagct acacaccttt aaaggaaaat gtttctatct 240
cagatgaaac atgtaatttg ggatggttct tcctttgtca cttaaaggaa gagataggaa 300
aagtctctta cccactttaa acatgagggt aaaggtttag gtcaaactta ctggctttgt 360
cattcaagca tatctgaatc ctcacttttt tctctttgct ttttagggtc agaactgaga 420
tattaccaag aaaaggcaca atgccataat attatggtgt tatggtattt tgacttaaag 480
gggaaaaggt acttaatttt ggtgggatgt tgattgtacc ttgttaaaaa gactctcatt 540
ttctcatatg ttttctccta ataagatgga atatggagta tactgtaata atataagcgt 600

0 5 5 2 3 6 5 0 2 0 0 0

tcattataag ctatctggat taagaactat tgcagagttg taagcttgtt atcaaattaa 660
tgcaagacat ttaaactant tttttgcaaa accatttant tttaaaacaa cttaaagtat 720
atcctagggt gagttaaaag tccctggtgc atccaataat taanatgggc aaggttttgg 780
tcacaanagt cactggggta attaataata aaatggtttg naaatggg 828

<210> 4760
<211> 626
<212> DNA
<213> Homo sapiens

<400> 4760
aacaagtggc tgcggccgtc gcccaggagt catcggacgc cagaatctgg ccgggttctg 60
agcttgttcc gcctccctcc cccgggaatg gcgctatccg ggtcgacccc ggccccgtgc 120
tgggaggagg atgagtgcct ggactactac gggatgctgt cgcttcaccg tatgttcgag 180
gtggtgggcg ggcaactgac cgagtgcgag ctggagctcc tggcctttct gctggatgag 240
gctcctggcg ccgccggagg cttagcccgg gcccgcagcg gcctagagct cctgctggag 300
ctggagcgcc gcgggcagtg cgacgagagc aacctgcggc tgctggggca actcctgcgc 360
gtgctggccc gccacgacct gctgccgcac ctggcgcgca agcggcgccg gccagtgtct 420
ccagaacgct atagctatgg cacctccagc tcttcaaaga ggacagaggg taactgccgt 480
cgccgtcggc agtcaagcag ttctgcaaat tctcagcaag gtcagtggga gacaggctcc 540
cccccaacca agcggcancg gcggagtccg ggccggccca ntggtggtgc cagacngcgg 600
cggagagggg ccccaaccgc acccca 626

<210> 4761
<211> 825
<212> DNA
<213> Homo sapiens

<400> 4761
acagatgaaa tgtaaagctg gttttaatag ttacgccgag cttttaaccc accgaaagga 60
gcatcaagtc tttagagcaa aatgtatgtt tcctaaatgt ggaagaattt tttcggaagc 120
ttatttacta tatgatcatg aagcacaaca ttataatacg tacacttgta agttcacagg 180
ttgtggtaaa gtttatcgtt ctcagggtga gctggaaaag catctggatg atcacagtac 240
tcctcctgaa aaagtgctgc ctcctgaagc ccaacttaat tcatctggag attccattca 300
gccttctgaa gtgaatcaga acacagcaga gaatattgag aaagaaagat ctatgcttcc 360
ttcagaaaat aacattgaaa acagcttact agcagataga agtgatgctt gggataaaag 420
caaagcagta tcagctgtga ccaaacaaga ccagatttct gcctctgagc tcaggcaagc 480
taatggacca ttgtcaaatg gtttggaaaa ccctgctact actcctctac ttcaatccag 540
tgaagtagct gtgtccatta aggtgtctct caatcagggg attgaggata actttggnaa 600
gcaagaaaac tcaactgtgg aaggcagtgg tgaagcactg gtcacagact tacatacgcc 660
aattgaagat acttggnatg atttgtgtca tccaggtttc caggagagga aaagaacaag 720
aattgcttta atgangccca tggttactca aggattcctt aagtaaattc aggaaaccnc 780
tcaaaaataa ggtgaccctt taccccaaca aaaaaccttt anaaa 825

<210> 4762
<211> 710
<212> DNA
<213> Homo sapiens

0050950 0.0420000

<400> 4762
tttggcctta tagcagttat ccatggccgt actgtagtaa agttccttag aactttgcca 60
ggagtgaact agaaaaaagt gcttactagg gcctaagagt tgctttgtgc cgtgtagtct 120
ggcctttgca ctagtagatc attgctgaca taggtcagtt tagagacctt tctgtgttaa 180
tgcctcctgg tactgtctta agatacgtac agtgtctgtt tttagatcta tgcatatgtc 240
atgaagctcc ttgtgggctc tgcatgaagc tgctgctttg tttttgggtt aacagatgtg 300
cctgtcaact agcatgtgta ttgtccaaat tccataaact taaggttttt aagggctgtg 360
tggtttctga gctctatgtg tctttcctat ccttgtacct tcaaagggtg agaaatgaga 420
tttatacatc caaagttagt ctgataaata tggctttttg tttctccatg taacctagac 480
tgtcaaaaat aagtgatggt gataagtagg cctggagcct cagcttctgt aaatctcatt 540
cctaaaattt tgctaagact cgtgttggca aaaacaaata cctgtggatt gtccttaagg 600
cttttaatca agatacctgt gttgctgtta nctgaactgt agtgaagcat cgatccaaat 660
ccggtcctct gaagtatcaa gttatgcntt tgaggtttag aaaatacnta 710

<210> 4763
<211> 677
<212> DNA
<213> Homo sapiens

<400> 4763
gagacttccg ccctcgcggg actggctagg gcgtttgacc gccggcggtg aaggggaggc 60
ggtgggcgtc ttggagaaca gagcgagatg gagaagcgag gccgaggcgt gaagtcgagc 120
cccatccaga ccccgaacca gacccctcag caggctccgg tgacgcctag gaaagaaagg 180
aggcctagca tgttcgagaa ggaggcagtg agtgcggaga ctgctagggg cccgagacgg 240
ctatgtccga ccgtttaagt gaaatcgctc cccagtgggc cccgctcccg tcaccacccc 300
cagagccaag gaggcagcat ctccctttg tgtttctttt ttccccagat gcgaaattga 360
agcctgagac tgagttgggc agtcccctt ggacttgagt gctaaagttt tcttgttttt 420
taattagggc catagaaccc tacataagtc gattggaagg gtggttacaa gatcttcttt 480
tcaaatttac tcaagcttgc ggatttcctg agagtactct gagtattatt gctttgtact 540
aaaacacagt atgttantgt atttaagtgc cattataagc agttttgcta agcgaaaaat 600
gagtgtgttg tattaaaaaa ataatttgat aaaccaggca anaatagtgn catgtttttg 660
ggtttttgaa acnatca 677

<210> 4764
<211> 789
<212> DNA
<213> Homo sapiens

<400> 4764
ctgggtacgc tgtgccaaat tttcacccga tgaaagacta attgtgtcat gtagtgagga 60
taaaactatt gaaatttggg ataccacaaa taagcaatgt gttaataact tctcagattc 120
cgttggattt gcaaattttg tggactttaa ccctagtggt acatgcatag cttcagcagg 180
ttctgatcaa actgtgaaag tctgggatgt aagagtgaac aaattactac agcattacca 240
agttcacagc ggtggagtta attgcatatc attccatcct tcgggtaact atctcatcac 300
agcttcttca gatggtaccc ttaagattct ggacctctta gaaggaaggc tcatctatac 360
acttcaagga catacgggac ctgtctttac tgtttcattt tcaaaaggtg gagagctatt 420
tgcatcagga ggtgcagaca cacaggtctt attatggagg gctaactttg atgaattgca 480

0952963-070200

ttgtaaaggt cttaccaaaa gaaatctcaa aagattacat tttgattcac caccacatct 540
tcttgatatc tacccaagaa caccacatcc ccatgaggaa aaagttgaga ctgtagaaat 600
taatccaaag cttgaggtaa tcgatttgca gatctctact ccccctggta agggataacc 660
ctttcttttt gattcctacc aacaacaaac aagaaaccca gtgggtaagg actcctggcc 720
aanacaaagg ggttgaaana aagggcctgg tggggataaa tttccttgga aanccccttt 780
ccctttaaa 789

<210> 4765
<211> 711
<212> DNA
<213> Homo sapiens

<400> 4765
tagaaagaat gatcgacttg ctgtttccaa tgatgttgaa taagtttact aaatctggtc 60
tcaagtcaca gtttgcttac tgcatgctga tccgaattgc cagtcgctta ctaaaagaaa 120
ctgaggatgg ccatgaaagt ccactgtttg atttcattga gagctgcttg cgaaataaac 180
atgaaatggt tatttatgaa gctgcttcag ctatcatcca tcttcctaac tgcactgcaa 240
gagagttggc acctgctgtt tcagttcttc aacttttctg tagttctcct aagccagcct 300
tgagatatgc agctgtgagg accttgaaca aggtggcaat gaagcacccc tctgctgtta 360
ctgcctgcaa tctggactta gaaaacttaa tcacagactc aaacagaagc attgctacct 420
tagccattac tacactcctc aaaacaggaa gtgagagcag tgtggaccgg ctcatgaagc 480
agatatcttc ttttgtgtct gaaatctcag atgagttcaa ggtggtggtt gtacaggcaa 540
ttagtgctct ctgtcagaaa taccctcgaa agcacagtgt catgatgact ttcctctcca 600
acatgctccg agatgatgga ggctttgagt acaagcgggc cattgtggac tgtataatca 660
gcantgtgga anagaaccct gagagtaaag aagcaggcta gcccancttt g 711

<210> 4766
<211> 783
<212> DNA
<213> Homo sapiens

<400> 4766
ttattgcctt gccttatggt ttatgtttat gaggtcatca ttatgttctg gtcactagca 60
cagaataagg tccatttatt tatttagttt ttaaaatttt ttttttcaa aaaaggggg 120
agaaaatgta acctttgtga ttggtttacc ttttctttaa ttctagggtg ggtatatggc 180
tgccaaggtc cagaaattgg aggaacagtt tcgatcagat gctgctatgc agaaggatgg 240
gacttcatct acaattttta gtggagttgc catctatgtt aatggataca cagatccttc 300
cgctgaggaa ttgagaaaac taatgatgtt gcatggaggt caataccatg tatattattc 360
cagatctaaa acaacacata ttattgccac aaatcttccc aatgccaaaa ttaaagaatt 420
aaaggggaa aaagtaattc gaccagaatg gattgtggaa agcatcaaag ctggacgact 480
cctctcctac attccatatc agctgtacac caagcagtcc agtgtgcaga aaggtctcag 540
ctttaatcct gtatgcagac ctgaggatcc tctgccaggt ccaagcaata tagccaaaca 600
gctcaacaac agggtaaatc acatcgttaa gaagattgaa acngnaaatg aagtcaaagt 660
caatgggcat gaacagttgg aatgaagaag atgaaaataa tggattttaa gtttttgggg 720
atctgggagc aaaacctcct ccggggaaag ggaaacaaga atgggnantc ccgcatccca 780
ana 783

<210> 4767

09/25/2006 15:56:56

WO 2004/050883 PCT/US2003/038000

<211> 651
<212> DNA
<213> Homo sapiens

<400> 4767
gttttgtgtg gacataagtt ttcaagttca tttgagtaaa tacccaggag tgtgattact 60
ggatcttatg gtaagatatg tttatgtttg taacaagatt gccaaactgt cttccaaagt 120
ggacatccag atgcataaaa atgaatctag atattttgca tttcctgtac cattttgtat 180
tctccactag caatggatga gagttcctgt tactccacat tttcttcagc atttgttgtt 240
ggtgttttgg atttgggcca ttctaatagg tgtgtagtgg catgcctttc ttgttttaac 300
ttgaaattcc ctaatgacat gagtttgaac agtttttcat acgcttactt gccatctgtt 360
tatctttggt gtgaggtatc tgttcaggta tttcacccat tttataatca ggttgttcat 420
tttctttagt tttaatggtt catcgtatat ttttgataac agttctttat caggtacatc 480
ttttgcaaat attttctcca aggctgttgc ctgccttgtt ctcttgacat tgtcttgcag 540
agcaaaaaaa atcctaggct gcaagttaca gatttgggaa agttaangag catattggtg 600
ctaattggga agccgtaaaa ctgcataaga taaccaanac cagtatangt t 651

<210> 4768
<211> 891
<212> DNA
<213> Homo sapiens

<400> 4768
gcatcagagc taaacagcag cagtcgtgca gtatcatcca cagcctgaga gagagtcagc 60
agcaagagct gagccggttt ctgaacccgc ccagcatcga gaccacccag cccagtgagg 120
acacgaatgc caacagtcag gacaacagca tgcaacctga gacaagcagc cagcagcagc 180
tcctgagccc cacgctgtcg gatcgaggag gaagtcggca agatgcagcc gacgcaggga 240
aaccccagag gaaatttggg cagtggcgtc tgccctcagc cccaaaacca ataagccatt 300
cagtgtcctc agtcaactta cggtttggag gaaggacaac catgaaatct gtcgtgtgca 360
aaatgaaccc catgactgac gcggcttcct gcggttctga agttaagaag tggtggaccc 420
ggcagctgac tgtggagagc gacgaaagtg gggatgacct tctggatatt taggtggatg 480
tcaatgtaga tgaatttcta gtggtggaaa ccgttttcta ataatgtcct tgattgtcca 540
gtgagcaatc tgtaattgat ctataactga attccagctt gtcacaagat gtttataaat 600
tgattttcat cctgccacag aaaggcataa gctgcatgta tgatgggtta ctatcaatca 660
ttgctcaaaa aaatttttgt ataatgacag tactgataat attagaaatg ataccgcaag 720
caaatgtata tcacttaaaa atgtcatata ttctgtctgc gtaaactaag gtatataatt 780
catatgtgct ctaaatgcag tattatcacc ggccccgcaa aangagtgct taagnccaaa 840
aggtggctng atattttagg gtacaagggg gttaaagctt tagttcaaaa t 891

<210> 4769
<211> 783
<212> DNA
<213> Homo sapiens

<400> 4769
aacaaatcat cgtagtaaaa tggcggcaga gagctagtaa tgtgtctgga attggtgggt 60
tcttggtcgc actgacttca agaatgaagc cgcggaccct cacggtatga cagctcctct 120
cccaacagct ctactttcta catctactct ctaccaccgc aaaacttctt tcagttccat 180

gaaagggcca tgtttttctg gtctcttggc ctaggagcat gttgttcttc tgccagcaac 240
cttcttcaac catccccaca ggatgactcc tctattggat acttccatga aaagtccagg 300
cctgggttat gtacccttcc caaagtgcac cccagacacc caacagtttt tccagcccag 360
actcaccaca ctgtgtggta atttcctgat cactcagttg tgctccccac agactataag 420
ctctatgagg gcaggggcca cagtttgctt gttcactact atatgctcag tacctggtaa 480
atattagttg actgaagaat gactatgtgg taatctattc cattggtggc ctccagtgaa 540
ccatgtcttc tggtatttac atcttgtgtg gtcccctcca ttaaatttgg gctttaacca 600
acagaatgct gcagaagcga caccctgcca cttgtgcttt tgtgatccta gccaccagta 660
agaagccctg tgaccttgct gagacctgaa gagacacata gaganggcac ttgaanggca 720
aggggtcctg actctacatg gagagagaag ccaagcatcc ctgtttccca actgaagtcc 780
tna 783

<210> 4770
<211> 671
<212> DNA
<213> Homo sapiens

<400> 4770
atgataggca aaaatgggaa aataacttga ggccaggagt ataagggcag cctgggcaaa 60
atagtgagac accgtcttta caaaaacttt aagtgtcaga caggcaactt ggtgggcatt 120
tttttttga gatggagtca ctctgtcacc taggctggat tgcaatggtg caatcttttc 180
ttactgcaac cttcgcctcc cgagttcaag tgattctcct gcctcagcct cctgagtacc 240
tgggattaca ggtgcacacc accacgcttg gctaattttt gtatttttag tagagacggg 300
atttcaccat gttggtcagg ctggtctcga gctcctgacc tcgtgatcga ccttccttgg 360
cctcccaaag tgctgggatt acaggcatga gccactgcac ccagccttgg cgggcatctt 420
tcaccaaagc tactcangaa gccaaggtgt gaggacccct gcagcacang agttcaaggc 480
ttcagtgagc tatgggtgca ccactacaca tcagcctggg tgagagagtg agaccatgtc 540
tcagaaagga agaaaaatta tccacttgta ggttgtctct aattacttcc ctgacccgca 600
ctcttcattt gtccaantgc tgcagctgtg ctctcaacaa nttttacaac ttctgggaaa 660
natgcccatg g 671

<210> 4771
<211> 780
<212> DNA
<213> Homo sapiens

<400> 4771
gcttcgcgtc ccgcctctcg cctgggctgg ccgtgggggg cctggacgca gtggcctccc 60
gaatctccca ggaccctaat atcgcccgag gatgctggga ggaacgctga gccgacctct 120
ccgttaggct gaagattgca caaaccatgc taatggccag catggatgga gggagcgtgt 180
gagatgtgtg gggcagcgtg ctgcatctca gccaactcca ggagccagtt gatgtgatgg 240
actaccttaa ttgatttttg aatgttgagc cagccttatg catgtgggat aaacccctgt 300
tgatcatggc tggctggagt gcagtggtgc aatcatggct cactgcaacc tcaaattcct 360
gggctcaagg gatcctcctg cctcagcctc ccgagtagct gggactacag ttcctgctgg 420
aatcttgctg ttgcccattc aagtctggtg gttcctgtgt gttggggtgg ccttgcttct 480
cctgctctta gctctggagg agccctcggc tggtgctgca gtgaatctgt cagagtcgtc 540
ctaaccagag tgcccccatc ctgaatagag gctggataaa gccaaacctg ctgggttata 600
gtcccagggg attgggcaat cctggtcaca agatatttaa gggttaaggg aataaagtta 660

09582946.072800

atgntgctaa gtaaataaag ancctgaaat ccttcccgtg agaanattca aagaaatcaa 720
ctcctgggaa tctgggaata aagacccttt ttcccggtaa aaaaaacccc tngccctggg 780

<210> 4772
<211> 666
<212> DNA
<213> Homo sapiens

<400> 4772
tgcacacagt gggagctaaa gcaagtgtag ttgatgggac tcctttagtt gcagcaccct 60
ctttaaatgc cacaaccgta gtaacaacag tttatcagga gcccattatg agccagggag 120
cagccttgag tggtgagcct actactctga ccaaggaaga agaaaagaaa cagcctgatg 180
aagaacccat ggacatggtg gtggaaaaac aagaagaaac ggaccacaag aatgacaatc 240
aaatactgag tgaaattgtt gaagcgaaaa tggcagagga attgaaacca atggacactg 300
ataaagagag catagctgaa tcaaaatccc cagagatgtc catgcaagaa gattgtatta 360
gtgacattgc ccccatgcaa actgatgaac agacaaacaa ggagcagttt gtgccaggtc 420
caaatgaaaa gcctttgtac actgcggaac cagtgaccct ggaggatttg cagttacttg 480
ctgatctatt ctaccttcct tacgagcatg gacccaaagg agcacagatg ttacgggaat 540
ttcaatggct tcgagcaaat agtagtgttg tcagtgtcaa ttgcaaagga aaagactctg 600
aaaaaattga aagaatggcg ggtcacgaag cagccaaagt tttgaangan attgtgtggg 660
acctan 666

<210> 4773
<211> 720
<212> DNA
<213> Homo sapiens

<400> 4773
agacaatacc tgcgtgaatt tgcttttgga agctagcaat taccaaatga tgccatatat 60
gcagccagtg atgcagtcag atagaactgc cattcgatct gactccactc acttggttac 120
attaggagga gttttgaggc agcagctggt tgtcagtaaa gaattacgga tgtatgatga 180
aagggcacaa gaatggagat ctttagcccc aatggatgct ccccgttacc agcatggtat 240
tgctgtcatt ggaaactttc tttatgtagt tggtggtcag agtaattatg atacaaaagg 300
aaaaactgct gttgatacag ttttcagatt tgatcctcgg tataataaat ggatgcaggt 360
tgcatcatta aatgaaaagc gcacattctt tcacttgagt gccctcaaag gacatttgta 420
tgcagttggt gggcgcagtg cagctggtga actggccaca gtagaatgtt acaacccaag 480
aatgaatgag tggagctatg ttgcaaaaat gagtgaaccc cactatggtc atgctggaac 540
agtatatgga ggcttaatgt atatttcang aggaattacc catgacactt tccaaaatga 600
gctcatgtgt tttgacccag atacaagata aatggatgca aaaggctcca aatgactaca 660
gtcaanaggg cctgcaattg catgtgtaca gtttggggan aagcctccaa ggncattggg 720

<210> 4774
<211> 758
<212> DNA
<213> Homo sapiens

<400> 4774
attttatcag ttcgcaaatc tgaagtctca tactgttttc tgtctcttta aaacacattc 60

0302045.0002

ttctggtggc ttgggttcat tgtgcattca ttggccactc ttcttgcagc aaattttaaa 120
tcaatttaaa attaggtaaa ctttttatga tactataata tatatgacgt tgaaatgaca 180
ttggttctga gtctattaat ttaaattttg ggatcattac attcagaatg aaatgaaatt 240
gaccttgata ctaactttga gagccaaaaa aatgaatggg taaacaaagc ctaagggtca 300
tgttaattaa tttaacaaaa cacactattt tcagtccttt gggcttgtac attttataga 360
caaaattagt atttattgat ttggaagtgt tcaattgaga gtaaatgact ctgtgttttg 420
aaactaatac ctttgcattt aaaatactga agtattattt tgttagttga agtagatctt 480
ttcctgtgta gcatgattta atgcagagca gttattcact tatacttctg aaaagccata 540
atattgaaat ttaaaatgaa tagtcttact ttaaggncct ttactttaca ttttacttta 600
aagggccgtt tttaaacttt aagcactagt gggattgaaa cctaacctta atatttgact 660
aaaattgcct gtggaatttt gggaaactaa gttttaantt ttaaaaggca attggttaag 720
tgnaattaac ccttaccnaa aatttatcaa ctttaagg 758

<210> 4775
<211> 638
<212> DNA
<213> Homo sapiens

<400> 4775
attgcattta agttgtgccg aaatgaggga aagttttatt attttgatgc ccaaatatca 60
gtaggtacag tcatatggac ctcccaccat aattctttat ggagatttgt tgaagattat 120
ttatacttga ggtaacacat acctgagtgc taacctctag tctgcattaa aaaagaatca 180
atgatcttca taaaaataat tgagagccaa gcaatattag gtctaaattt atatcctaca 240
ctgtcactgt tttttttaa acttatactc aaacatacac aacagtaaag gaaattatat 300
gaaaagaatt ataggaagct agatgaattg tttatctaag ttgtcaatgc aaagcaaagt 360
ttgttttatc tgtatcctgt attattttgt aacaaaccct gaacattttg tttcattcat 420
aaatatttca ttaggtatct ttgaaagata aggatttttt aaaaatataa ctctaatgtc 480
atttatattt tcaaatatag ctagtcagtg ttcagatttt cctgttagtc tcaaaattct 540
ttcttatggt gtgtttattg taatcanggt ccaaataata tctatatatt gcaattggnt 600
gatatgtccc aagtgttttt tgatccatag nttatcca 638

<210> 4776
<211> 681
<212> DNA
<213> Homo sapiens

<400> 4776
agcagatctc agctatgtgt ctgaccaaaa tggaggtgtc ccagatccaa atcctcctcc 60
acctcagacc caccgaagat taagaaggtc tcattcggga ccagctggct cctttaacaa 120
gccagccata aggatatcca actgttgtat acacagagct tctcctaact ccgatgaaga 180
caaacctgag gttcccccca gagttcccat acctcctaga ccagtaaagc cagattatag 240
aagatggtca gcagaagtta cttcgagcac ctatagtgat gaagacaggc ctcccaaagt 300
accgccaaga gaacctttgt caccgagtaa ctcgcgcaca ccgagtccca aaagccttcc 360
gtcttacctc aatggggtca tgcccccgac acagagcttt gcccctgatc ccaagtatgt 420
cagcagcaaa gcactgcaaa gacagaacag cgaaggatct gccagtaagg ttccttgcat 480
tctgcccatt attgaaaatg ggaagaaggt tagttcaaca cattattacc tactacctga 540
acgaccacca tacctggaca aatatgaaaa atttttagg gaagcagaag aaacaagtgg 600
aggcgcccaa atccagccat tacctgctgg actgcggtat atcttcagnc acaggaaagc 660

0550450 "0 2/0 2/0 2

cagnntcaaa aacaaaaatg g 681

<210> 4777
<211> 734
<212> DNA
<213> Homo sapiens

<400> 4777
aaaggcgtga gcgcgcgtgc gtgcgtgtgc gggtgcgtga gcgtgagcgc gcggaggccg 60
gaagcgagcg ctgcgcagtc gggtggtcgc gggccatgga gggtagcttc tcggatggcg 120
gagcgctgcc ggaggggctc gcggaagagg ccgagccgca gggcgccgcc tggagcgggg 180
acagtggcac tgtttcccag agccacagca gcgcctcggg gccgtgggag gacgagggcg 240
cggaggacgg cgcgccgggc cgcgacctgc cgctgcttcg ccgcgccgct gcgggctacg 300
ccgcctgcct gctgcccggg gccggggcgc ggcccgaggt cgaggccctg gacgcgagcc 360
tagaggacct gcttaccaga gtggacgagt tcgtgggcat gctggacatg cttcgcggcg 420
actcgtccca cgtcgtcagc gagggcgtgc cgcgcatcca cgcgaaggcc gccgagatgc 480
ggcgcatcta cagcaggatc gaccggctgg aggccttcgt gaggatggtg gggggccgcg 540
tggccaggat ggaggagcag tcaccaaggc cgaagccgag ctggggcacc ttccccaggg 600
cgttcaagaa gctcctgcac acgatgaacg tgccctcgct ctttagcaag tctgctccct 660
cgaaggccac agcaagccgg ctncgaagcc cccgttcctg tttcggaccg aaagnctacn 720
ttcccttggt tgca 734

<210> 4778
<211> 711
<212> DNA
<213> Homo sapiens

<400> 4778
tttagtcagt cctatgggtg tttcaagatt gatggactta ctagcggatt ccagggaagt 60
tatacgtaat gatggcgtct tactactgca ggcactaaca agaagcaatg gtgcaatcca 120
gaaaattgtt gcttttgaaa atgctttcga gagactactg gacattattt cagaggaggg 180
gaacagtgat ggaggtatag tagttgaaga ttgtttgatt ttgctccaaa acttattaaa 240
aaacaacaac tccaatcaaa attttttaa agaaggctca tatattcaac gtatgaaacc 300
ttggtttgaa gttggagatg aaaattctgg ctggtctgca cagagagtga ccaatctaca 360
tctaatgcta cagcttgttc gtgtattggt atctcccacc aaccctcctg gtgctaccag 420
tagctgccag aaggctatgt tccagtgtgg gttattgcag cagctttgta ctatcctaat 480
ggctactggg gttcctgctg atatcctgac tgagaccata aatactgtat cagaagttat 540
tcgaggctgc cgagtaaacc aagactactt tgcatctgta aatgcacctt caaacccacc 600
aagaccggca attgtagtac ttcccaatgt ccatggttaa tgaaaaggca gccatttgtt 660
ttgcgcctgt gctgttccnc naatgtttcc aagtggttcc ttgtanaaaa a 711

<210> 4779
<211> 834
<212> DNA
<213> Homo sapiens

<400> 4779
tataattatt ttattcataa atggtgatag tccccagatc tgtacacctt tatcactccc 60

09/25/2003 09:50 [ ]

tgccgtagat atactttagg ttagtatttc tacattcgtg gcaagcattt tggtaacacc 120
agtggttttc attgtgactt ttatcactat cactaagaat gcaatttaag ttgccttttg 180
gcatcataga tcatagaaac tttctctctg aatcataccc atgtgtgaat tttcatttta 240
tatgatagtg tagcatatta gaagcatatt ttaaaacaga gcctttgaat ttttttcact 300
atcaaaaata gtgcttttgt ttagttaaaa attgtagttt ttctttttt gtgtgtccaa 360
actaacataa aaggagtggt caaagaagga aagaagaaaa atgagggagg atgtccgaaa 420
ctgtatggca ttttactcct tctgaaagag aaatactgta cttgaatttt tgagctatgc 480
agacttatac ctagattgtt gtgtttcttt gattcttagg agaaaagctt tcttcctaat 540
aattcctgag aactttatat tttgtttgaa aacagtttct atgtacataa aaagggtatt 600
tacccatttg tgagcactta aaacactcca cagagtcaga cagtgggaaa ggtcaccctt 660
tttttaatcg gcaggtatca agttagaatg tatggaattg tgaataaaaa ttatatttta 720
ttttatgaaa atattttata taataaaatt taaaaggctg ggaaagccaa aaaaatagcc 780
tccttaancc caanggggtt tccccaattt agcccttten aaaaatttat ccgg 834

<210> 4780
<211> 737
<212> DNA
<213> Homo sapiens

<400> 4780
gtaattaata tgtgctactt tgggtggtgg ttttctcttg agagcttctc agttatttct 60
acaacactcc ctttctctgc cccatcccaa ccaagagttg atctctcagt atgcgtcttt 120
ttaacctagg agagcactta gaggatttgc tgccgtatct gtcactggta agggcctgaa 180
gacagggcac gaatagtact ctgtccttgt gtgtgtgtgt ccttggtgcc caacatgagg 240
gctggtacag agtcagtccc tgctgagtgt ttgcgaggcc actggaggag tggttcatct 300
ttgcaggtgg gcaccttccc ctccagccag accatacccc tgagggccca aacataggtg 360
gcgcacagtc gctggcactc aatgatggcc acagtgagat cacgtatatt tgcaatctag 420
caaacaccaa tatgacccca cagaatttac tttaaaaact cacaaagtgc tcttgtccct 480
ggcatactgg taagtgctct cttgtcctaa aaatgcctat ggatacacat gggaagttaa 540
gcagagaaag cangtagcta tcagatgact gtcaacagag gagttcttag aggcctgaga 600
gaaccatggg gttataaatc tcaagggact cctatcaact tcangtattt cagtgcttct 660
ttantaaaaa agtaagttcc ttaaatggat aatgactttt ggggaaaacc ttaactccgg 720
tgntagctga attaaaa 737

<210> 4781
<211> 830
<212> DNA
<213> Homo sapiens

<400> 4781
cacacagtcg aaaagagcag gcaaaagaat cctcgaagct tatgtatcca gccacagacg 60
gctcccgatg cgctgccccc tgagaaaaca cttgaattga cgcaatataa aacaaaatgt 120
gaaaaccaaa gtggatttat cctgcagctc aagcagcttc ttgcctgtgg taataccaag 180
tttgaggcat tgacagttgt gattcagcac ctgctgtctg agcgggagga agcactgaaa 240
caacacaaaa ccctatctca agaacttgtt aacctccggg gagagctagt cactgcttca 300
accacctgtg agaaattaga aaaagccagg aatgagttac aaacagtgta tgaagcattc 360
gtccagcagc accaggctga aaaaacagaa cgagagaatc ggcttaaaga gttttacacc 420
agggagtatg aaaagcttcg ggacacttac attgaagaag cagagaagta caaaatgcaa 480

US 2005/0260650 A1

ttgcaagagc agtttgacaa cttaaatgct gcgcatgaaa cctctaagtt ggaaattgaa 540
gctagccact cagagaaact tgaattgcta aagaaggcct atgaagcctc cctttcagaa 600
attaagaaag gccatgaaat agaaaagaaa tcgcttgaag gatttacttt ctgagaagca 660
ggaatcgcta gagaagcaaa tcaatgatct gaagagtgaa atgatgcttt aaatgaaaaa 720
ttgaatcagg agaacaanan aggaagagca aggggaaaaa gcaaatttga aaaatccnca 780
gattaggtat ccagaacaag gagttagaaa gcctgaaagc tgtgttagag 830

<210> 4782
<211> 634
<212> DNA
<213> Homo sapiens

<400> 4782
agaagattag catcacagag cgaagctgcg atggagcagc aggcctccca gaagttcctg 60
ccgaatcgtc ttcgtcaccc ccggggtccg aggtagcctc ccttacacag cctgagaaga 120
gcacaggccg agtgcccacc caggagccca cccacaggga gcccaccagg caagcagcct 180
cccaagagtc cgaggaggcc gggggcaccg gcgggccccc ggnaggcgtg cgatctatca 240
tgaaacggaa agaggaggtt gcagacccca cggnccaccg gaggagcctc cagttcgtgg 300
gggtcaacgg cgggtatgag tcgtcatccg aggactccag cacagcagag aacatctcag 360
acaacgacag cacagagaac gaggccccag agccgaggga gagggttccg agtgtggccg 420
aagcccccca gctcangcct gcagggacng cagcggccat gaccagccgg caggagtgtc 480
agctgtctcg agaatctcag cacataccca ctgctgaggg ggcatcagga tcaaacacgg 540
angaggagat caggattgga gctaagccct gacctcatct caanctgctt ggnccttgga 600
aaagtacctg gacaatccca acgccctcac agag 634

<210> 4783
<211> 690
<212> DNA
<213> Homo sapiens

<400> 4783
ttctgcaagt atgcacaagg tgcagacagt gtggagccta tgtttaaaca tctgaaaatg 60
acttatgtgg gcctacagct aatagtggtt atcctgcctg gaaagacacc agtatatgcg 120
gaggtgaaac gtgttggaga tacccttcta ggtatggcca cacagtgtgt ccaggtaaaa 180
aatgtagtga agacctcacc tcaaaccctt tccaatcttt gcctgaagat aaatgcaaaa 240
cttggaggaa ttaacaatgt gcttgtgcct catcaaaggc cctcggtgtt ccagcagcct 300
gtcatcttcc tgggagcgga tgtcacacac cccccagcag gggatgggaa gaaaccttcc 360
attgctgctg tggttggcag tatggatggc caccccagcc ggtactgtgc caccgttcgg 420
gtgcagactt cccggcagga gatctcccaa gagctcctct acagtcaaga ggtcatccag 480
gacctgacta acatggntcg agagctgctg attcagttct acaaaatcca cacgcttcaa 540
acccactcgg atcatctatt accggtggag ggggtatctg agggacaaaa tgaaacaggt 600
agcttgggca gaactaatac aattcgaaag gcatgtatta gcttgggaag angattaccg 660
ggncaaggaa taacttatat tgtgggngca 690

<210> 4784
<211> 775
<212> DNA
<213> Homo sapiens

0050343.0070.0000

<400> 4784
tttcctaagc attgaaatgg caagtgcaac caaaagtagg tatattcgtg acttcttgtt 60
taggtctctg ggccaggaaa ttcatactgt tacatggata aggttgggat tggggagagg 120
gaacagttgg gactagaagc aaaagtgatt ctgggactaa aataggaagc agatgtcctt 180
tcccaatgtg tgttgctgtc ttcacctgaa tgcatttgtg taaaaatagc ggagggacaa 240
tgtgaacatt tgtatttgga agctatgaat ttactctgaa gtttgcagtt gtttccaatt 300
tgtgagctct aagagtttct gcctgtaaga actactctcc ttttattttg atttttaaaa 360
acctgtctga atttcacact cttagagcct ggaagagccc tgaaaagaca caagtcttgc 420
ctggctactg ctttttaact ttgagggctc tatgttgaca gactgttatc tcctctgggt 480
gacctcaaac atctgaaaag aaagatgttg cctgtgccaa ttccactttt tccagctgcc 540
ccttgatgaa cactccctta tancagacca ctctaggact tctgactggt gtcatcaagt 600
cctcagaaaa tattttaagt tantttaagt tattaaggaa gggatgattt ggagacaagg 660
agtaatgaaa gatgggtaaa aactgggaaa agattctggn gccaagtact acccccttcaa 720
cttcaaggnt ggtcattacc ttcctgcctc cngtcatgac acacacacac acaca 775

<210> 4785
<211> 628
<212> DNA
<213> Homo sapiens

<400> 4785
agtaaaatgt gaatggagca gaggacacta agaggctgag aatggcaggg gaaggagagt 60
agggagacgt ttgttaaaag tacagagtta cagttctaga ggagggataa gttccattgt 120
tctacatcac tgtaagatga ctatcattaa caataataca gagttttcag tagctaggag 180
actatcgagt gttcccaaaa tgaagaaatg ataaatgccg gagatggtgg atatgctaat 240
taccctgatc tattcaccac acaccatcac tatgtaaaaa tgtgactaga gaactgatgc 300
ttggatttgg ccagtgagaa gttcctggtg gccaggcaag gtggctcatg cctgccatac 360
cagcactttg ggggtctgag attggaggat tgcttgaggc caggagtttg aggctgcagc 420
aaactaggac tgcactactg cactccagcc tggggaacag aacaagaccc ccatctctac 480
aaaaaataaa aatagctggg gatgatggca gatgcctgtg gtcccagcta cctgggagac 540
tgangtggga ggattgcttg aacccangtg ttggaggctg cagtgagtca nggactgcac 600
cactgcactc caacctgggt gacagagt 628

<210> 4786
<211> 649
<212> DNA
<213> Homo sapiens

<400> 4786
aaagcactag ccacttacag caaagacttt atttttgtac agaagatggt gaagtccaag 60
acggtggctc agtgcgtgga gtactactac acgtggaaaa agatcatgcg gctggggcgg 120
aaacaccgga cacgcttggc agaaatcatc gacgattgtg tgacaagtga agaagaagaa 180
gagttagagg aggaggagga ggaggacccg gaagaagata ggaaatccac aaaagaagaa 240
gagagtgagg tgccgaagtc cccggagcca ccacccgtcc ccgtcctggc tcccacggag 300
gggccgcccc tgcaggccct gggccagccc tcaggctcct tcatctgtga aatgcccaac 360
tgtggggctg tgttcagctc ccgacaggca ctgaatggcc atgcccgcat ccacgggggc 420
accaaccagg tgaccaaggc ccgaggtgcc atcccctctg ggaagcagaa gcctggtggc 480

0562945.0562955

acccagagtg ggtactgttc ggtaaagagc tcaccctctc acagcaccac cagcggcgag 540
acagacccca ccaccatctt cccctgcaag gagtgtggca aagtcttctt caagatnaaa 600
agccgaaatg cacacattaa aactcacagg cagcaaggng ggaacanca 649

<210> 4787
<211> 649
<212> DNA
<213> Homo sapiens

<400> 4787
tcagatccgc cgagtatgaa gcgctcggct tttcttttgt gtgaggagca cccacgacgc 60
cccgaccatg ggcgcagggg cagaggcgaa ggtcgtcgct ccgtccgcta ccccgtcccc 120
cagccgcaag cgccgaggag ccggaagaga ggcggaaagg gcagcaggct ccttacccag 180
accagcgagg ggaggtcagc tcgtcgcggg gtgtggctcc cgtccgggga ctcccgagct 240
cattacgggt ggccgtgtgt agccaagttc aagctctccc tccgggaatg cctgccgcgg 300
cggcggaata cggcttcttc aggacattca gcaaagcggg gaggcgggga cctgcgggcg 360
gaggagcgac gccccagctg ggaacgcggc ggacgggcga gcgggggggtg cgccctgggc 420
gcgccaggcc gcagaggctc cggggaaagt tctcttggcc gcgcgagtgg tggcgccccg 480
ggcgggagca gcccaggtgc atgtgggccc ggtccaggcg tctgcaaaaa gccctggaac 540
gaancggacc ccccagtcca gcgctggccg cggcagggga gccccttctg ggcggggtat 600
cagctggggg cggangggcg ggggcaaaag accgttggnc ccaancggc 649

<210> 4788
<211> 778
<212> DNA
<213> Homo sapiens

<400> 4788
gttttacctt acggtcgctg ggaatctaag caacaaagac tagaagcctc cgatatgcca 60
ttatcaacac acaagagaca aacagcccga ggaagcactc aatgatgaga gcagtagacc 120
tgccctggca gatgagagag gagaaactct ccacaatgaa ggaaaagcac tgacagtatt 180
tgatagcttt agtcaaactg tgcttgagtt tggcttagat ttatgccagt ggaacctgtc 240
cttaccaaat tcagagatga cccaagattc tactctgtgg tatgagggaa agacctctcg 300
atatttatct cacaccaacg gctttatcgt aggagcgtct tcgcctcccc cgtttccagt 360
agaaaagaca gctttgctcc tttgaaagcg cagaccgccg cacctccagc cccttctccc 420
cggggaagta ggccccgcta agaatgtggg aaggtggtgg ggcggcgact gaagtcgctt 480
ccgattggcg ttgtcccaag gaagcctgcg cggattgatc ggcggcaggc ctccaataga 540
gcctgctagg cggnttggct gctacgcggc tgggccctgt ttccggtacc taggcgggca 600
gccatggtga ccggcnagcg gcatgcgacg cccgcctctg tggcctgtgg aggcccgctt 660
ggcggcnctg cttcccgacc tactggtctt tcggaagcct cggggatggg aaccccgagc 720
tcgccacggc caanggggtc ctcccnaggc gtccatgtta ccggttnagg gcgaacgg 778

<210> 4789
<211> 627
<212> DNA
<213> Homo sapiens

<400> 4789

WO 2005/003375 PCT/US2004/020903

attcagtggc tggcaggaag cccgccctgc ccgcccgcca gtgtcagtgg tgttggcatc 60
agcttgggca ggtgtgcggg ctcaggatgg ggcggccgtg gtgaggaacc ctggactctc 120
agagatggaa tttcaccgtg ttgcctaggc tggtctggag ctcttgatct caagcgatcc 180
tccctgcctc ggcctcccaa cgtgctggga ttataggcgt gagccaccgc tcctggccag 240
ggtctgttcc tagttgcaac agttcttgga aacccactcg agagggccac gcctccattc 300
accaggccac gcatcacaag aggcaacacc aggagccaac atgagctcgg ggactgaact 360
gctgtggccc ggagcagcgc tgctggtgct gttgggggtg gcagccagtc tgtgtgtgcg 420
ctgctcacgc ccaggtgcaa agaggtcaga gaaaatctac cagcagagaa gtctgcgtga 480
agaccaacag agctttacgg ggtcccggac ctactccttg gtcgggcang catggccagg 540
acccctggcg gacatggcac ccacaaggaa ggacaagctg ttgcaattct accccancct 600
ggaggattca acatcttcca ngtacca 627

<210> 4790
<211> 748
<212> DNA
<213> Homo sapiens

<400> 4790
gcacagtgag cggagcgcct gggcggcggc ggcggcggcg tgatggctcc ggccgcggac 60
cgagagggct actggggccc cacgacctcc acgctggact ggtgcgagga gaactactcc 120
gtgacctggt acatcgccga gttctggaat acagtgagta acctgatcat gattatacct 180
ccaatgttcg gtgcaattca gagtgttaga gacggtctgg aaaaacggta cattgcttct 240
tatttagcac tcacagatgg agtctcactc tgtcgccgag gctgaagtgc agtggcacaa 300
tctcggctca ctgcaacctc catttcccgg gtttacgcga tccttctgcc tcagcctccc 360
aagtagctgg gactacagtg gtaggaatgg gatcctggtg cttccacatg actctgaaat 420
atgaaatgca gctattggat gaactcccaa tgatatacag ctgttgcata tttgtgtact 480
gcatgtttga atgtttcaag atcaagaact cagtaaacta ccatctgctt tttaccttag 540
ttctattcag tttaatagta accacagttt accttaaggt aaaagagcca atattccatc 600
angagtctca ctctgtcacc ccggctgaag tgcaatggca caatctcggn tcaattggna 660
cctccaactc ccaagtcatg tatggaatgt tggtctttac attaagaact tcgattcnat 720
ttatattgtt acatgggttt atccatgg 748

<210> 4791
<211> 659
<212> DNA
<213> Homo sapiens

<400> 4791
ttttttgcac tcctgcgccg ggcctccccg ctggcgcatc gccacctgcg gcggcagcgc 60
attgaccctg tgctctacat gacggagtgg ttcatgtgca tcttcgcccg caccctgccc 120
tgggcgtcgg tgctgcgtgt ctgggacatg tttttctgtg aaggcgttaa gatcatcttc 180
cgggtggccc tggtcctgct gcgccacacg ctgggctcag tggagaagct gcgctcctgc 240
caaggcatgt atgagaccat ggagcagctg cgtaacctgc cccagcagtg catgcaggaa 300
gacttcctgg tgcatgaggt gaccaatctg ccggtgacag aagcactgat tgagcgggag 360
aatgcagccc agctcaagaa gtggcgggaa acgcgggggg agctgcagta tcggccctca 420
cggcgactgc atgggtcccg ggccatccac gaggagcgcc ggcggcaaca gccacccctg 480
ggcccctcct ccagcctcct caagcctccc tgggcctcaa gagccgangc tcccgggcag 540
ctggaggggc cccgtccccg ccgnccccng tccgcagagc cagtgctggg cctgccccaa 600

0050750.0007

ggcctgtggt cactgctgan ggactgcatc catcccttcc ctcaaccant ggcaatagc 659

<210> 4792
<211> 583
<212> DNA
<213> Homo sapiens

<400> 4792
aggttggtct ggaccggaag cgaagatggc gacttctggc gcggcctcgg cggagctggt 60
gatcggctgg tgcatattcg gcctcttact actggctatt ttggcattct gctggatata 120
tgttcgtaaa taccaaagtc ggcgggaaag tgaagttgtc tccaccataa cagcaatttt 180
ttctctagca attgcactta tcacatcagc acttctacca gtggatatat ttttggtttc 240
ttacatgaaa aatcaaaatg gtacatttaa ggactgggct aatgctaatg tcagcagaca 300
gattgaggac actgtattat acggttacta tactttatat tcngttatat tgttctgtgt 360
gttcttctgg atccctttg tctacntcta ttatgaagaa aaggatgatg atgatactaa 420
gtaaatgtac tcaaattaaa acggcactca agtatacttt gggatttgtt gtgatttgtg 480
cactgcttcc tttanttggt gcctttgttc cattgaatgt tcccaataac aaaaattcta 540
cagantggga aaaagtgaag tccctatttg aagaanttgg gaa 583

<210> 4793
<211> 789
<212> DNA
<213> Homo sapiens

<400> 4793
agctataaag gacattcttg ggacaattga cgtttagata tggattgtgg ggttcgatca 60
tagtatcata tcaatgcaaa ttgtcctagc tctgataagc atatgtgttt atgtaagaga 120
gtgtccttgt ttttagggaa caaacactga aatatacaat agtagagagg catcatgtct 180
ccaccatact ctcagatggt tcaggagaaa tatgcgtgtg tctccgtaca tattaatata 240
gagagaatgg tacagccagt gggacaagtt gtaagcaatt ggtgaatcta ggtaaagggt 300
atatgggaaa ttgcatcaaa attaaaagtt atgaaaatgg gggagaaaac ccagttcttc 360
tataaaaaca gcctccagcc tctccctcca gcacaacctg tccccacacg tggggcaccc 420
ggcacccatg ctctggctct tgtctctctg ggtcttagtc ccacttagca ccccacaccc 480
aaaggtcatg ttttcacaga tgtgtaccct caagactaaa cacacacttg aggcattcat 540
gtgactatac atatttatgg aaaaagaaaa ttcttgggct cacaaaactg aacgctccag 600
ggtggactgt ctcaagtggc cttaatcggg gtgctgacaa catccagacg agcacgcagg 660
cttctctccc tgccacagcg gtgccattct ccaacggact ctgccgccgt ggctgcaaga 720
tggtggcaac agctccaacc cctgcaccct tttgtggnca agtccaatgg ggaaanaatg 780
tnaagggcc 789

<210> 4794
<211> 812
<212> DNA
<213> Homo sapiens

<400> 4794
gaaaaaagat cctcaaggtc ttgggcttca tttctataaa catggagaac cagaagaaga 60
catagttgga cttcaggcct tccaagaaag attaaacagt tacaaatgca ttacagacac 120

Document: 0370030.0001

acttcaagaa ctggtaaatc aaagtaaggc cgctcctcag tctcccagtg tacccaaaaa 180
acctggtcct ccagtgttgt catctgatcc aaatatgctg agtaatgaag aagcaggaca 240
tcattttgaa caaatgctta aattgtcaca gcgatccaag gatgagctct ttagtattgc 300
cctttataat tggctaatac aagtcgacct tgcagataag ctgctacagg ttgcttctcc 360
atttctggag ccacatctag tccgaatggc caaagttgat caaaacagag ttcgttatat 420
ggatttactc tggcggtatt acgagaagaa cagaagtttc agtaatgctg ctcgtgtact 480
gtccagactg gctgacatgc atagcacaga aatttcactt cagcagcgac tagagtacat 540
tgctcgagcc attcttagtg ccaaaagttc cactgccatt tcatcaatag ctgccgatgg 600
tgaatttctt catgaattag aagaaaaaat ggaggttgct aggatccaac ttcagataca 660
ggagacacta caaanggcag tattcccatc attcctccgg tcaggatgca gtttctcanc 720
tggattctga gctgatggnc ataactaagc tttatggggg aatttgctga cccatttaaa 780
cttgcanagt gcaaacttgc aataattcaa tg 812

<210> 4795
<211> 695
<212> DNA
<213> Homo sapiens

<400> 4795
ttcttcagtt catgggattt tatttcagga gaattcaaac attcacgtat tggagaagat 60
gacacatttc ttgaatgtct ttggctttga gctgaatgca ctaactagaa gggacttcag 120
attgtcctcc ttcgggggag gtaagtatat tcttcatata caggtaagag tgaaatgata 180
gaagaatgtt cctcctctcc ttttcttcct ggacaacaga tcaaatattt ctcagatctt 240
ttacagctga attggagtca catggacagg tatgatctta aaatataaaa aattatttta 300
aaattacatg ctaaaatttt ataaaaataa atgctaaaac taacttaaac ggaagcattt 360
gattaaaaaa tttatccaaa aaagtttgaa ttttatatga aacaggatag aagatgaaaa 420
agctaaagaa ataaaatata aataaattat ggctggggac agtggctcac acctgtaatc 480
ccagcacttt gggaggctga ggtgggagga ctgattgagg ctaggagttt gagacctgtt 540
atttgaggca catgggaagg ggaagttttc tttgagatat tccacatttt ataatantcc 600
tcaagagatt tacagagttc cttgagtgaa ttgttgggtt gttcctaata ctgaatttcc 660
taatccaaat ttaattagaa ngttcaattc ntaca 695

<210> 4796
<211> 769
<212> DNA
<213> Homo sapiens

<400> 4796
ctaacatttg ngatcagaga tcccctcact aaaacagcct gagagcctgg ctccttccag 60
gacgagtgcc ccaacctgtt ctctagctgc tggaaaagac ccctctgttt cttaaaagcc 120
tgttaagttc cttcaggcta gtagctacac cttgttgcat acttccttgg aaatagagag 180
tgctttcaaa ttaatttctc acttattgct attagtggtc ccaagaaaaa gagatgaaat 240
tgcagcatct tgtaatggtg agtttttag gtctaggaga gaggtactgt catctttgtt 300
tacttgctga gagacgacag aaatgtgtag ttgtggggta tgaaggtaaa gtcagtgatt 360
atagctaaaa agcaaacgtc atttaaggtc actggtattt ttggatgttg gaatgcaggt 420
tttgttttac atagaaattt tccctctaat tattttacca tcttatgttc tggaaaatga 480
ttccatgttg ctttaaattc atctttcagt gaagttctta tttcttacca aaaaatgaca 540
gctttgtcat ttcttacatc gtttttttcct ttctgttgcc aaatgccctc cagactttcc 600

0082760-6746250

atgttggtgc ggtaagctag acatttttag tttgtagtga ttgttttcgt ttgtgtttgt 660
atgtttttgt gcccaaagtc acttctgtaa tgttcgtttc cgagtttcct ttgggggga 720
ataacctgcc actgaagtgt cagcttccct gncangggac tgtncttgg 769

<210> 4797
<211> 842
<212> DNA
<213> Homo sapiens

<400> 4797
agtaaatgaa gaggaaaatg ctaacatgcc atattggaca ccacttgtct ttcgatgcca 60
ggtccctttt cagccgaata tgtcagaatt ttctaggctc catcttttct tttattcctc 120
ttgcagcaac cataggcttt gatggcttct cacaggacag aaaacctgga tcatcccaaa 180
cctgctctgt gaaccctcta cttcatgtat gggtttcctc ccatgctgca cactgtgagg 240
gtcatgcatc accacagcat gcacagctga gaaatgtgga gagtgaagga cccaggccac 300
attgactgtg gggatgtaag ccagtggaga cacacttcct gaagtaagat gcatttcaca 360
aagctcccag tttccaagaa ggatggagca ccagtcaccc ttggtcatgg ccaaaccctc 420
tttgtccttg ccctttcctg ctctctggga tcacagaaca tgtgcactgg acacagcttc 480
tgccttggna acacccagac taaggtaatt tctcacacac cagtttatct tccagcttct 540
gtcaagaact ttaggtcaag tattatgagc cagatagagt aaaaaatata aactttaaaa 600
attataatca ccctcaacat ggcaaggctt ctcatggtaa gaaaagaaat gcaagaattc 660
agaaactaac ccagggaata gcaggctcaa gatttcctgg caaataaatt cacttaatag 720
atcacagata ttttcccatc tcaacacatg ctgtgcacan gtatatttca aacctaatca 780
accgtgggga atttcncaat tttcaatagt tacaaacaaa gctnacaata agttcaaggt 840
gt 842

<210> 4798
<211> 736
<212> DNA
<213> Homo sapiens

<400> 4798
atcggctgtc agcctccctg gctgttagta ccttctttcc cggagtcctg gtccacgagt 60
tggatttact gctgtcgcgg gtgggcctca cgccattccc tgtccctcgg ccccctgagt 120
gagtccggtc tcccggcgaa agtgagcgag gtttgcccgg agcgcgcacg aggggaaaat 180
gcctaaaaaa aagactggtg cgaggaagaa ggctgagaac cgccgagaac gtgaaaaaca 240
actaagagca tcaagaagca ctatagattt agctaaacat ccatgtaatg cctcaatgga 300
atgtgacaag tgtcagaggc ggcagaagaa tagagcattt tgctactttt gtaattctgt 360
acagaagtta ccaatttgtg cacagtgtgg gaaaacaaag tgcatgatga agtcttcaga 420
ctgtgtcata aagcatgctg gtgtatacag tactggcctt gcaatggtgg gtgcaatatg 480
tgacttctgt gaagcttggg tttgccatgg tangaaatgt ctcagtacac atgcttgtgc 540
ctgccctctt accgatgctg agtgtgttga atgtgaacga ngcgtgtggg accatggagg 600
cagaatattc aagttgttct ttttgccata actttctctg tgaagatgat caatttgagc 660
atcaaagcca gctgccaagt tttagaggca gaaacattta aatgtgtttc atgcaatcgg 720
ntttggncan cactca 736

<210> 4799
<211> 713

09529850.030200

<212> DNA
<213> Homo sapiens

<400> 4799
atctgcaagg gggaaacagg attttggcaa gcaatccttt cattactaaa gcttcctttc 60
ttttcgggta cagtgaaaag agccaaggct gtgtgacccc ctcatcactt agccaggcgt 120
atggtcctgg tttctgaggc tgccagaaag catcttagca atttgtgttt ggaaggtcca 180
tgcctgacta ttctaggctg gaggttccta aagagtaaca agaggaagag aaacaagaat 240
ctctgacact tgttgagaat agagcacagt cccatttgtt tgaaaagaga caccaggcag 300
ccatgtttat gtgccagaaa tgcattccac ctcaaggagg acttaattta tggacccgtg 360
tgtgccaggc tgagctgggc aagatctttc tcaggacaaa ctctgccatg cagctaaaag 420
cctggaaact aaaggatttc atgtagtaaa ctatcttcca acccctgtag gcatcaagac 480
cacaggatga ggtttcagaa ngtcataagg cagaatagtt aagcctacag ggcttacagt 540
ctgacagacc tgggttcagt tcttgggtcc tcatcactag ttttgtgact tcgggaagat 600
gactcccgga gcctcagtga gcctcaatta cttcatatgt aaatgaagta atactatcna 660
cttcacaaag gtgttgaaag gnttaaatgg agaatgggtg gtaaaancct taa 713

<210> 4800
<211> 738
<212> DNA
<213> Homo sapiens

<400> 4800
tgctttgctg tctcagtcag gtttctgttt ttctgtcctc cttgcctttc ttcccgtttt 60
gcttcctgtt ttccttcttc cttcccgttt tccttcttcc ttccctgcct cccttccttt 120
gactgtggat ggaagaaagt gtgcagtttt tagggatttt acttaggttc gtctttagtt 180
ttcctcagta agatagttgt tttttgatac ctgagtttgg gattaattca tatcaaattc 240
aggtatttgt atattactct tgatttttgt ctgaaattca ctttgctatg acagcctagt 300
agttgggtct tcactcctta agtatatgtt tttcccatgg tgaaaataca tgaactttag 360
ttctagtagt gagcattcaa aggtccgtga tagggcttgt cacagagaga gagaaatcat 420
ttatccctat tgtgctggtt atcataagaa gagactgcct caccacttta tagaaccaat 480
ttgcaaacta aaacactgtt tggagaaggt acaaactacc tttcaaaaag gctacaggaa 540
acattttatg aagcagcaaa tattaggaag agagcggata cagaatttag tgcctttgag 600
aagaatataa ttaaagtgga attaanaggg ggttagaaaa aaggcaattt agaaaantat 660
tcctggaaaa ctttaatgtt ccaaaaggtg aaacangaag attagacaaa ttccctaacc 720
cttaagtant ttttttaa 738

<210> 4801
<211> 700
<212> DNA
<213> Homo sapiens

<400> 4801
aggaataaaa ccacagaaga aaatggagag aaggggactg aaatattcag agcttctgca 60
gtgattccca gcaaggacaa agccgccttt ttcctgagtt atgaggagct tctgcagagg 120
cgcctgggca agtacgagca cagcatcagc gtgcggcccc agcagctgtc cgggaggctg 180
agcgtggacg tgaatatcct ggagagcgcg ggcatcgcat ccctggaggt gctgccgctt 240
cacaacagca ggcagagggg cagtgggcgc ggggaagatg attctgggcc tcccccatct 300

0062045.0062045

actgtcatta accaaaatga aacatttgcc aacataattt ttaaacctac tgtagtacaa 360
caagccagga ttgcccagaa tggaattttg ggagacttta tcattagata tgacgtcaat 420
agagaacaga gcattgggga catccaggtt ctaaatggct attttgtgca ctactttgct 480
cctaaagacc ttcctccttt acccaagaat gtggtattcg tgcttgacag cagtgcttct 540
atggtgggaa ccaaactccg gcaagaccaa ggatgccctc ttcacaattc tccatgaccc 600
tccgacccca aggaccgttt cagtatcatt gggttttcca aaccggatna aagtatggga 660
aggccacntg atatcagtca ctccagacag natcagggat 700

<210> 4802
<211> 722
<212> DNA
<213> Homo sapiens

<400> 4802
gggcgcccaa ttccggaagg tgctgcacag ctgtggcggc gggtactgcg ttagtgatta 60
gagtttcttc cctgccggag gtgggataca cggtagcatc atggtcgagg aggtacagaa 120
acattctgta cacacccttg tgttcaggtc gttgaagagg acccatgaca tgtttgtagc 180
tgataatgga aaacctgtgc ctttagatga agagagtcac aaacgaaaaa tggcaatcaa 240
gcttcgtaat gagtatggtc ctgtgttgca tatgcctact tcaaaagaaa atcttaaaga 300
gaagggtcct cagaatgcaa cggattcata tgttcataaa cagtaccctg ccaatcaagg 360
acaagaagtt gaatactttg tggcaggtac acatccatac ccaccaggac ctggggttgc 420
tttgacagca gatactaaga tccagagaat gccaagtgaa tcagctgcac agtccttagc 480
ggtggcatta cctttgcaga ccaaggctga tgcaaatcgt actgccccta gtggaagtga 540
ataccgacat cctggggctt ctgaccgtcc acagcctaca gcgatgaatt caattgtcat 600
ggagactggc aataccaaga actctgcact gatggctaaa aaagccccta caatgccaaa 660
accccagtgg cacccancgt ggaaactcta cagggntatc agtgggcatc ntggctgggt 720
tc 722

<210> 4803
<211> 690
<212> DNA
<213> Homo sapiens

<400> 4803
tgcttgaacc caggaggcag aagttgcagt gagccacctg tgaagagaga gcgagcattc 60
tgctgggtgt ataagtggat tgtgtgcaat ggtgcttcag tctagatatt catgccttaa 120
tcttactgtg ttcgtctctc ccttttcag gggaagcctg agctttgctt agtgatgatg 180
gccctagtgt gaggactggg gcttgtggag tagcctcttg tttgctctag ccaccccact 240
gcctctgtcc tctgcagtta ctaggacctt ccctagcaag tttgcgtcct ttccaccaca 300
ggcatgacct gcctctctct gctctcttcc agcccgtcct ctctctgcct agtccttttc 360
agacacttgc ttcttggcac ctttgacttt tctcactgcc gggctgcccc tactaaggat 420
gattgccctg ttttcgtagc tctaagaagc agccaaaatc cactccacct ccctcccacc 480
ctccgtcact ccaaacaagn ctggttttgt tccagtcagg aaaagggttc tttcttcctc 540
atatttttt gaacaaaata ntttgcatac ggaagcccgg agctcctgca aaagtgattt 600
tggacctaan tatttaagat tatnaggttt accccaactt gcaagttttt ttcaagccaa 660
gagatacaat cttaatgaag ggtggctnga 690

<210> 4804

09/09/2005 09:50 FAX 003

<211> 494
<212> DNA
<213> Homo sapiens

<400> 4804
aagtagcggc ggcgcttcaa gatgcgctgc ctgaccacgc ctatgctgct gcgggccctg 60
gcccaggctg cacgtgcagg acctcctggt ggccggagcc tccacagcag tgcagtggca 120
gccacctaca gtgagtacct gggtggcctc tggcctcagg tgttcctgac tggtcctgct 180
ggagtagggg aagagacctg agttccagtc ctggctttgt caggggcgtt cttctctggg 240
cctgtttcca cttttaaaat gattatggtg atggagactg actctgattc acaggggcag 300
ggtccatcat tgccgaggtt agcatgtgtg atctcagagc tccctgggtg tgatggggag 360
ggggttgcca agtgtgancc atgggtacct gtgcctattg ccagtccctg gtgaaggcaa 420
aggctcaagc cccccaccta tnccccttga ntcctctttc aagccctgtt gggcagggaa 480
gtncgtctgg gctc 494

<210> 4805
<211> 570
<212> DNA
<213> Homo sapiens

<400> 4805
tgcagaagac tttcagtcgt ttttgctgga atgattgagc ttacattttt tattctttcc 60
gcattcaaac ttagagacac tcacctctgg tattttgtaa tacctggctt ttccattttt 120
ggaattttct ggatgatttg tcatattatt tttcttttaa ctctttgggg attccatacc 180
aaattaaatg actgccataa agtatatttt actcccagga cagattacaa tagccttgat 240
agaatcatgg catccaaagg gatgcgccat ttttgcttga tttcagagca gttggtgttc 300
tttagtcttc ttgcaacagc gattttggga gcagtttcct ggcagccaac aaatggaatt 360
ttcttgagca tgtttctaat cgttttgcca ttggaatcca tggctcatgg gctcttccat 420
gaattgggta actgtttagg aggaacatct gttggatatg ctattgtgat tcccaccaac 480
ttctgcagtc ctgatggnca gccaacactg cttcccccag aacatgtaca aggagttaaa 540
atttgaggtc cnacnggcat gctcaaatgg 570

<210> 4806
<211> 543
<212> DNA
<213> Homo sapiens

<400> 4806
tgaacttgga caatgaaact gtagcaatac attccttaaa ttcaagcatt aaagaccctt 60
tacaatttgt tttttcagat gaagagactt ccagtgatgt gaaaagtagt tgcagctcca 120
aacctaactt ggatactatg tgtaaaggct tccagagtcc tgataaatct aataactcta 180
cagggacagc aattacatta aattcaaaac tgatttgttt aggcactcct tgtgtcattt 240
caggttccat ttctagtaat acagatgtta gtgaagatag aactatgaaa aaaaatagtg 300
atgtattaaa tctcacacag atgtattcag aaatccctac agttgaaagt gaaactcatc 360
tgggtacaag tgatcctttt tcagccagta ctgatatagt aaagcaaggg cttgtggaaa 420
attattttgg gtctcaaagc agtacgggta tttctgacac atgtgctgtt agctacagca 480
atgcacttag ccctcagaag gaaacttctg aaaaagngat tagtaanctt cagcaggaan 540
agg 543

09/22/2005 15:56:56 D:\Data\Seq\10989-13211.ST25

<210> 4807
<211> 637
<212> DNA
<213> Homo sapiens

<400> 4807
gatgttataa agccatagta atcaaaactg tggtattgga gaaaggatac atagatcatc 60
agaacagagc agagcagagc atccataaat atgcacacat aaatatagtc taccaaaatt 120
tacaatagtg caaaggtaat tcatttgaga aagtagtctt ttcaacaaat ggtgatgaaa 180
cacttggata tccatatgca taaaatgaaa cttgatacac attttatgtc tcatacacaa 240
ataagtcatg aacctaaatg taaaacataa aactatacaa cttctagagc aatggtctca 300
agtggtagta acttttgtct ccaagaaaca aagtatagag acatttttga ctgtcagtac 360
ttgggggggag gagatcactg gcatctaatg ggtgcagacc agggatgtca ctaaatatcc 420
cacaatgcac agcacagtca ccatcacaca cacgaaaatg ccaatttcta gtctggataa 480
atataccatg gntatgtaac tatctcttat tagaggaaca gnaacttggt aaagagtgta 540
tgggaatgct ttttactccc tttgcaactc ttcagggcaa tagactatac ttcaaagtcn 600
aacatttaat aanttcccaa tccaattcng ggaaagg 637

<210> 4808
<211> 657
<212> DNA
<213> Homo sapiens

<400> 4808
atattgtcta ctgaaagctg ccgctgaagc tgccgccgtt gcctccgccg ccaagagtga 60
gcgagcggac ccgcgatgga gaccatggcg agcccaggga aagacaatta tcgaatgaag 120
agctataaga acaatgctct aaaccctgaa gaaatgagac gaagaagaga ggaagagggc 180
attcagctcc ggaagcagaa gcgagagcaa caacttttta aacggagaaa tgtggagctg 240
attaatgaag aagctgccat gttcgatagt cttctcatgg actcttatgt gagctctacc 300
actggggaga gtgtgatcac aagagagatg gtggagatgc tcttttctga tgattctgac 360
ctgcagttag caaccacaca gaaattccgg aaactgctct ccaaagagcc tagtcctcca 420
atagatgaag ttatcaacac tccaagagtg gtggatcggt tcgtggagtt tctgaagagg 480
aatgagaatt gtacattaca gtttggaaaa ngcccctgcc ctggggctct aaacgaaata 540
ttgcctcctg ggaacctctc agcggggacc aaaaattgtc attgaagcag gggctgtccc 600
cattttnata gangggcaga agtcagantt gggagggatg ttcaggagga ggcagtc 657

<210> 4809
<211> 635
<212> DNA
<213> Homo sapiens

<400> 4809
ctaaagaaat aatagctgaa aacgtcccaa atctgggaag tgatatcaat attcatgtac 60
aagaagttgt atgcaggttc ttttcacttt gagaaacaga aggtgaaact caaactggct 120
taagtaattt taaaaaaatg tattggttca agtgacttaa aaaccacact ggttccagga 180
gcaggttgat agtacctcaa agatgtcacc atctcttgga tgtgctttcc ctgttcattc 240
ctaagcttca tgcagtttca gggtggtgac cagaagttta catcttatct tccctctccc 300

ctgtgtttga ctggaacaga aaaaagagtg tcttattccc tagcactttg gacaaaagct 360
ctggacatga tggccatttg tgacagggaa gtagaatacc attatttgac cagtctggga 420
catctgaatt cagggctaga gaacacagac aggggctaat ggggtgcggg gtanggggaa 480
ggaaacccca aaataggaaa gctaaggaaa ttttgggcct ggttaacctg ggaaaagggg 540
ggaaaattgt ttgcaacctt ttcaagncaa aaggaatgga aaattccaag tttaattncc 600
aaaattttcc aaggcnttcc cccaacaatt aatgg 635

<210> 4810
<211> 657
<212> DNA
<213> Homo sapiens

<400> 4810
gctttttttc tttcattaca tgaagagtca agaccagtgg ttttgtggaa tgcatgataa 60
tctgggttct taaaaatcat ttcttcttga ttagatttcc cattgtcttg aattgactca 120
gtcagccttt cctcaccgct actccaggtt cactaatgat ctccctgttg cccaaccaat 180
ggttatttgt tagttcacat ttcagttacc ctctcagaag cctttggcac agctaatcac 240
ttctttcttg aagcactttc gtccctcagc ttctgggata tactttctct tctccatctg 300
ctccttctca gtctcctttg ttgcttcccc ttcatcatac agacctcagt aaattttccc 360
ctgggcaccg ctttagctgc atcctaggaa ttttgatgtg tggtgttttt gtttttctca 420
tactggggct tttttgattc cctgattggt aacccttgga gcaagcactc ctgtggccat 480
ggagactcta gataggatca aggttaacca agaaggggct tgcctggcaa gtcatttta 540
aaggggaaa tctctgccaa aaattaggtg ggctaaagga anctgggttt aaaaagaatt 600
gcacaaaaaa tctcaangta nggtggcaat aatgggggga aacttttttt tttaaaa 657

<210> 4811
<211> 741
<212> DNA
<213> Homo sapiens

<400> 4811
ggactctatg gttcggcggc tctaagcgct cagctccgcg gtcgtcctcc aggtctgtgc 60
cgcctccttc cggtctcggt ggcgcggcac gcgcggctct ctaggcctcc ttcagctctg 120
tggtgacggt ggccgaggtg gagggccggt ctgaagagtg gcgggactgg cttcacttcc 180
tccgcggttc ctcggagccg cctcgctcct cttcagggac tttgctgaga agggctctcg 240
ggcgtccaga ccccaccgca aaggtgtttg gcgatccgcc gagaagttgt tggccccagg 300
agcgtccctc ggggccgaat gcgcagtgga cgatgcccct tctgacccaa cagatncaag 360
acgaggatga tcagtacaag ccttgtggcc agccttgaca acgttaggaa tctctccact 420
atcttgaaag ctattcattt ccgagaacat gccacgtgtt tcgcaactaa aaatggtatc 480
aaagtaacag tggaaaatgc aaaaggttgg gtttgttgca aaagcaaaaa ttgcttttat 540
tcaagggctg ggaatatttc aagggaagtt taaaagttca ggaagagtct gttacttttc 600
gaattaattt aactgtcctt ttanactgtt tatctatttt tgggtcaagg tcctatgcca 660
nggaacttta actgcaactt cgaaatggtg gtttacccaa nggtttatgg gttaaccctt 720
tgaatggccn gttcctggga a 741

<210> 4812
<211> 621
<212> DNA

09829760.5-1909-050209

<213> Homo sapiens

<400> 4812
acaaagaaag aaacaagcaa gactggtatt gcaaccccag tcgaatatgc atgaaacagt 60
tgatggctat agaagatatt tcactcaaat tgtagggttc tttgtggtag aagatcacat 120
tttacatgtg acccaaggat tagtaaccag ggcatacact gatgaacttt ggaacatggc 180
cctctcaaag ataattgctg tccttagagc tcattcatcc tattgcactg atcctgatct 240
tgttctggag ctgaagaatc ttattgtaat atttgcagat actttacagg gttatggttt 300
tccagtgaac cgacttttg acctttttatt tgaaataaga gaccaataca atgaaacact 360
gcttaagaaa tgggctggag ttttcaggga cattttgaa gaagataatt acagccccat 420
ccctgttgtc aatgaagaag aatataaaat tgtcatcagc aaatttccct ttcaagatcc 480
agaccttgaa aagcaagtct ttccccccaa aaaaanggaa aaatttcccc caatgggtcc 540
tcaaggttcc aagtggcccc tccaanaant ttttacccaa ttttcaaaag ggtttttaaa 600
aaaagggaaa atttttaaaa n 621

<210> 4813
<211> 665
<212> DNA
<213> Homo sapiens

<400> 4813
atttttctgt ccaggaagga ccccagaatg ttctgagtca gaaagacagt gaatcctctc 60
ctctgggtca gtggggaggg agagagagag aattcagagg gaagaaagca gaaaaagatg 120
tcacaaaatt gcctaatcaa aagttaccat gatgcctgcc tcatctggaa ctgggctccc 180
agtctctagt gagggagaca tagtccagtc cagtcccagt ctccagtctg agccaaagca 240
gaacaaagct ggacactgca gcctggcatc caacgaacat tttgtcactt tccccagggt 300
gggagcattt gaactttgga tgtgaaggaa acatggtaac cactgcagta agaaaagcaa 360
ctgctggaga aaatggcact ttcttcccca aatttgtttt tacactcatg tctaaggaac 420
accttagaaa ccacattaac atctttcagc aaaaggaaat tctgcctgtt gatcttttgc 480
tgtgagacaa acttgaaaag ttcacagaca ctgcctttct ctgaaaactg cccttacctc 540
tttggntata attcacttca agatctgttg agtangaaca tcaaaaatgc aaataaaaag 600
tttcaagtat tatgaaagaa tgcaatanaa ctgcctttaa aaaaaatctc aanatggagg 660
gtggg 665

<210> 4814
<211> 720
<212> DNA
<213> Homo sapiens

<400> 4814
atcagcgctg gcgcggctgc gagccgctgc tgcctacgcg ccatggagca tcgcatcgtg 60
gggcccgggc cgtaccgagc taccaggctg tggaatgaga ccgtggagct ttttcgtgct 120
aagatgccgt tacggaaaca tcgctgtcgt ttcaagagct atgagcattg tttcacagcg 180
gccgaagctg tggattggct gcatgagctg ctgaggtgca gtcaaaactt cggccctgaa 240
gtgacccgca aacaaacggt ccagctgcta aaaaaattcc tgaagaatca cgttattgaa 300
gacatcaagg gaaaatgggg tgaggaagat tttgaagaca atcgtcactt atacagattt 360
cctccttctt cacccctgaa accatatcca aagaagcccc caaaccaaaa ggatgttatt 420
aaatttccag aatggaatga tctcccacca ggcacttcac aagagaacat cccagtgagg 480

0052045 .0052045

ccagttgtga tgaattctga gatgtggtac aagcgtcaca gtattgcaat tggagaggtg 540
ccagcttgcc gtcttgtcca ccgcagacag ctgacagagg ccaatgtana agagatatgg 600
aagtctatga cattatcata cttacagaaa attcttggcc tggattcctt anaagaagtt 660
ttanacgtca aacttgtcaa ttcgaagttc atcatccata atggtatata ntgttagcaa 720

<210> 4815
<211> 548
<212> DNA
<213> Homo sapiens

<400> 4815
ttggccctaa ttggctatgt ggatccaagt gaaagggaga ggaatccgaa ttctctcaat 60
tgatggtgga ggaacaaggg gcgtggttgc tctccagacc ctacgaaaat tagttgaact 120
tactcagaag ccagttcatc agctctttga ttatatttgt ggtgtaagca caggtgccat 180
attagctttc atgttggggt tgtttcatat gcccttggat gaatgtgagg aactttatcg 240
aaaattagga tcagatgtat tttcacaaaa tgtcattgtt ggaacagtaa aaatgagttg 300
gagccatgca ttttatgaca gtcaaacatg ggaaaacatt cttaaggata ggatgggatc 360
tgcactgatg attgaaacag caagaaaccc cacatgtcct aaggtagctg ctgtaagtac 420
catagtaaat agagggataa cacccaaagc ttttgtgttc agaaactatg gtcatttcc 480
tggaatcaac tctcattatt tgggaggctg tcagtataaa atgtggcang ccatnanagc 540
ctcatctg 548

<210> 4816
<211> 789
<212> DNA
<213> Homo sapiens

<400> 4816
tcaaaaagat aatccaccat gatcaagtgg gttttacacc aggggatgca gggatggttt 60
aacatccaca agttaataaa tgtgatacac cacacaaaca gaattaaaaa caaaaatcac 120
atgatcatct caatagattc agaaaaagca tttgacaaaa tctaacatcc tttatgatta 180
aaaccctcag caaaattagc acagaaggaa catatcttaa ggtaataaaa gctaactacg 240
acaaacccac agccaacatt atgctgaatg gggaaaagtt gaaagcattt tccctgagaa 300
ttggaacaag acaagacact ttcaccactt ttattcagca tagtactgga agtcctggcc 360
agagcactca aagagaaaga aataaagggc atccaaattg gtaaagagga agtcaaactg 420
ttgctgtttg ctgatgatat gatcatatac ctagaaaacc ctaaggattc atcttgaaag 480
ctcctagaac tggtaaacaa attcagcaaa gtttcaggat acaaaattaa tgtacgcaaa 540
tcagtagctc tgctatacac caacatcaac caatagctgc agaaataaaa taaaatactt 600
aggaatatac ctaacgaagg acatgaaaga cctctacaag gaaaactaca aatcactact 660
gaaagaaatc acagatgaca caaacaaatg ggnaacacat cccatgttca tgaatagggt 720
caatcaatat tgtgaaaatg accatacttt ggtagatttg caaaaagcaa tctacanngt 780
caatgcaat 789

<210> 4817
<211> 795
<212> DNA
<213> Homo sapiens

0 5 2 5 6 5 0 5 6 0 . 0 3 2 0 0 3

<400> 4817
tgctgtaatg caggctttga tctgtttcac catggcttct attcaagtcc agttaaaacc 60
tcccagctga cctcagacta ggcatatttc aggctttaaa ttattctact ttccaaactg 120
aattctcctg cagtgccaag tatcaaaggt gtccttaaat acttgtaggg atgaggttag 180
gaatattcag ttccaaaaca agatatcttc tgtccgcctt acatatagca gtgacacttg 240
ttgcctaact ttatggtgac ctcctatttt gtaagggctg ttagaagttc tatctaagaa 300
atggcattct gtaggtttat agaaggttta gccttcatat tttaattgct tgtatacaca 360
acagctgttt tgcttttaga tttctgtgtt tctgaaggta atgttcttcc tgttttcaag 420
tttacataag gatctttggt ctgatgctga tgaagagttc acaggtggta tgggagagca 480
aaangcaagc taatgctgtt taccgtgttt tggtcaaacg taacgagtga aatagaattt 540
gcctttctca tatttaatta tcatgtagtt taatgtacca tatgtgaaac attctggcca 600
tagcagcaac taaaaactgc aagcaacttg gtaacaagaa ctttctaaat aaacttaacc 660
tgttccanaa tgtcatgtat tttgactttt aagccctatc tcagttgggc cagtaaagac 720
caatccttac tgtaggaaat cattgttgga ncatcacaaa catncaacct tttggctgtc 780
ctgtccangt cccca 795

<210> 4818
<211> 753
<212> DNA
<213> Homo sapiens

<400> 4818
gaaattatct ttgttagcag tagtagtata gaataaaaga tccgtatgct ggttcgtaga 60
ttgatacgtg ttagtcctgt tatttggagg ctttttggca tagttgttcg atcaggagcc 120
tgtttactaa aagtcttcat acagagtaca agtgcagccg ccagaggaga aaattgagat 180
tcttgaccct ttcatactct tttctttggt attcaggaca ctaaggcagg aggaccacat 240
gagttctggt tggtaagtgt ccttgtcatg aaaacacttg ccttacaagg ctctaattat 300
gatttcccta gtcagtgctc tgaagatgtg tcacattata ttataaacaa tacggaaggg 360
gagataggtg agatgatatg aaaaacaaat tttctcactg tcataaaagg ctctaantat 420
ggttactttc cttgtgatga aaaacttggc cttacagggc tctagttatg gttactttcc 480
ctaagtcaat gctctaaaaa tgtgtcacat tataaacaat acagaaggag agatagatga 540
gagatcatga aaaccaaatt ttatctttta catggnccct ttgtcttcgt ttgaaacatc 600
cccaacattt cctacanatc agcgtagtta caaaggggtc aagtctttta aaataagtat 660
ttcctattaa actggatata tatacagtgc ctttttgggg ttgtgangtc agtgggacac 720
tgaaanacaa cggttgtgta ntttaaggag tgg 753

<210> 4819
<211> 786
<212> DNA
<213> Homo sapiens

<400> 4819
aaaacatgct gctcaatggg cttcagttcc ttcaaatctt ttcttaaatg tttcaaaaat 60
cttatatata tatgtatttt tttcatgctt tatattgaaa gttttaagct ttgattattg 120
ccatattcag ctagccaaaa acaactacat agaaccttca aagcgtatta attctggcta 180
ggttagccta ggttgagtag gaggttgaat agatgacttc tgaagttcct tcaactctaa 240
attttatgat tctgggaatt tataacatcc aagaatcaca gaatgttaga atgggaagga 300
actttaagat catctagtct aagccactca ttttacagat gagaaaggct acccagagtg 360

CD8220-5-3-2-3-0

tagagacaga agcagagctc tagggaggca gagagagggg aagtggcaga agggccagag 420
ctggggaggg tctgggcata acctcacagg actggtcaat ccatggcctg cagaggaaaa 480
agggagaaga gagaccacac aggagcttca gcatcactcc aggaaactga tcacaggttg 540
gatgggatgc gaatggggcc agtggcacca gctggtgtct gaacaggaat cagtaatggt 600
cactctgtct gaggtcacct ggcantcang gccggncaga cttttgtgct ttccacagct 660
agcatagctg cttctcatgg tttggcaaga acagcagcat ccagagctga attctggcct 720
tgctctcaag tgtccaacct gttggtaaat gaagctgggg taancccaan aactgnggcc 780
ccctgg 786

<210> 4820
<211> 668
<212> DNA
<213> Homo sapiens

<400> 4820
attcccaggc tggtctgaag ctccggggcc gtggtcccgc tgcctcctcc ggtcgtcgtg 60
cggaagctgc gacgcaggca gaccatggca gagttctccc agaaacgggg gaagcggcgt 120
agcgacgaag ggctgggcag catggtggac ttcctcctgg ccaatgcccg cctggtgctg 180
ggcgtgggcg gggctgctgt gctgggcatt gccaccctgg ccgtgaagcg gttcattgac 240
agggccacta gcccgcggga tgaggatgac accaaggcag acagctggaa ggaactgagc 300
ctgctcaagg ccacaccaca cctgcagccc cggcctccac ctgctgccct tagccagcca 360
gtgttgccct tggccccctc gtcgtctgcc ccagaagggc ctgcagaaac tgatcctgag 420
gtgacaccac agctcanctc cccagcaccg ctgtgtctga cactgcagga gaggctgctg 480
gccttcgagc gggaccgtgt gaccatccca gcagcccang tggctttggc caaacagctg 540
gctggcgaca tcgccctgga gctgcaggcc tactttcggn agcaagttcc cgggaactgn 600
cctttggggc attctgcctg ggggggcccg ctctacnatg ggctgcaagc cgggggcttc 660
cggaccat 668

<210> 4821
<211> 706
<212> DNA
<213> Homo sapiens

<400> 4821
gagctcggtt agggcctcac ttccctgctt ccacacctca gggaggcctc ggtgattttg 60
ccagagcctc agcctccatc gctctgtaac ctgcgggtat tggatgattc gtagctaaga 120
cttcgcgaca cccttgaagc tgagaaatgg aacccttaac attcagggat gtggccatag 180
aattctctcc agaagagtgg aaatgcctgg accctgccca gcagaatttg tatagagatg 240
tgatgttgga gaactacaga aacctggtct ccctaggtgt ctggaaatga agtatggaaa 300
tgaaatcatg aataaagacc cagttttcag aatctctcca cgaagtagag gaactcatac 360
caatccagaa gagcctgaag aagatgttca agctgaaaga gtccaagcag caaatgcact 420
cactactcca aacttggagg aggaaccagt cataactgca agctgtttac acaaggaata 480
ttatgagaca aagaaagttg cttttcaaca acaaggaaga aagcagccat cagaaatgtt 540
tcgttttgtg ttaaaaagtg aagttttggg attactagga cacaatggag ctggcaaaag 600
tacttccatt aaaatgataa ctgggtgcac agtgccaact gcaagagtgg tggtgttaca 660
aaggnaacag agcatccagt tagggaacag cgtgncnaca agcctc 706

<210> 4822

<211> 725
<212> DNA
<213> Homo sapiens

<400> 4822
tccaggcgca ggccgaggcc ttcgcgcgcc agatctacgg gcccgagtgc accttcaagg 60
ccagccacgg ctggttctgg cgctggcaga agcgccacgg catctccagc cagcgcttct 120
acggcgaggc cgggccccca gccccgagcc ccgcgcccgg cccgcccgtc aaggaggagc 180
ccgcgctgcc ctccggcgcc ggcccccctgc ccgaccgcgc cccggccccg ccgccccccgg 240
ccgagggcgg ctacggggac gagcagattt acagcgccag cgtcaccggc ctctactgga 300
agctgcttcc ggagcaggct gcgccccccgg gcgcagggga ccccgggggcg gggggctgtg 360
gccggcgctg gcggggcgac cgcgtaacgg tgctgctggc cgcaaacctg accggcagcc 420
acaagctgaa gccgctggtc atcgggcggc tgccggaccc gcccagcctg cgccaccaca 480
accaggacaa gttcccggcc tcctaccgct acagccccga cgcctggctc agccgcccgc 540
tgctgcgggg ctggttcttt gaaggaattt gtcccaggcg tcaaacncta cctgcgccga 600
agctgcctgc agcagaaggc cgtgctgctg gtggccaccc gccctgccca agcccagctg 660
ncagtattgc cggcctggga cagcgaggat gcccccgtnn cggttcaggc cggaagcccc 720
tcggt 725

<210> 4823
<211> 803
<212> DNA
<213> Homo sapiens

<400> 4823
acttccggtc ccgccgccgg gagccggtgc ggctgtgagg ggccgcgtct cgcagcagcc 60
gcccggaccg ggcatggtgt tgggcgccgg gcccgcctcg cctgtctcgg ggagcccagg 120
gtaaaggcag cagtaatgct aacgctagca agtaaactga agcgtgacga tggtctcaaa 180
gggtcccgga cggcagccac agcgtccgac tcgactcgga gggtttctgt gagagacaaa 240
ttgcttgtta aagaggttgc agaacttgaa gctaatttac cttgtacatg taaagtacat 300
tttcctgatc caaacaagct tcattgtttt cagctaacag taaccccagt ttattgagag 360
aacattcaat tgatggcact ggctgggctc ccacaagaac attaaaggat gtcgtttggg 420
gattaaactc tttgtttact gatcttttga attttgatga tccactgaat attgaagctg 480
cagaacatca tttgcgggac aaggtgagaa ttctatttgg tgcacgtgct attgtgtccg 540
gaattggtgg gttcttggtc tcactgactt caagaatgaa gccgcggacc ctcgcggaaa 600
gtttatatgg actataatgc aacgactccc ctggagccag aangttatcc aagccatgac 660
caagggcatg ttgggaagcc tggggaaatc ccaacagccc cgttattcaa caaggaagaa 720
aaggccaaag gatattatna attgcagctn cgggaaaaag cctccccaaa gatgataagg 780
ggggaaaacc tcaangatta taa 803

<210> 4824
<211> 757
<212> DNA
<213> Homo sapiens

<400> 4824
ttctcattac taggtcaata acctgaggga atcaatggct ttttgccgct ctacctcttg 60
tgtatctctt tgacttttct ttctctgtct agtttcctct gttctcagtt tatattctat 120

09/13211

gttatcagtc tctctttcca cagtacaaac atccatcctt tctcctgtgc aattctgtct 180
ctccctctta ttatctttat ttgtactttt tccttcctcc ctgtctaggc attgggcatg 240
tgcctcttct tagcctgtga ttttgccttg gggctgatga taaattattt ccagattcaa 300
tcagccctgg tcctacccca gtccaatcag aagtatgttg gtgggaatca acctgatcct 360
ggccctttct tcttctccat tttcattcgt aatccccctc agcagatctt tacaagcagt 420
tttcttatag ctcatgtatc tttaggtctt tgccttccaa gctctgtaca gaatactttg 480
tggttccttt ttagtctgac attttgtgga gcagtgaagc gtgctcagag acataatcag 540
ctgaagagaa aaaatccacc catggattta tatcaagcta aatactaata attgattttg 600
tttgatgtgc ccataaattt taaagctggc aatataatat aatgagggac cacaaggtaa 660
ttctcctgtc aattgtttgg tggatggggg tgggggagta attgctaagt ttacaataca 720
cattaaaccc cnataaaanc tggttggggc tgcnacg 757

<210> 4825
<211> 753
<212> DNA
<213> Homo sapiens

<400> 4825
acgattcgac agcgcatcct tcgacttttc catgtggcca cacacgcttc agagccctag 60
gtgtcagtga tcaaacttct tttccattca gagtcctctg attcagattt taatgttaac 120
attttggaag acagtattca gaaaaaaaat ttccttaata aaaatacaac tcagatcctt 180
caaatatgaa actggttggg gaatctccat tttttcaata ttatttttctt ctttgttttc 240
ttgctacata taattattaa taccctgact aggttgtggt tggagggtta ttacttttca 300
ttttaccatg cagtccaaat ctaaactgct tctactgatg gtttacagca ttctgagata 360
agaatggtac atctagagaa catttgccaa aggcctaagc acggcaaagg aaaataaaca 420
cagaatataa taaaatgaga taatctagct taaaactata acttcctctt cagaactccc 480
aaccacattg gatctcagaa aaatgctgtc ttcaaaatga cttctacaga gaagaaataa 540
tttttcctct ggacactagc acttaagggg aagattggaa agtaaagcct tgaaaagagt 600
acatttacct acgttaatga aagttgacac actgttctga gagttttcac agcatatgga 660
ccctgttttt cctaattaat tttcctaaca acccttaan taggcaaaag atattaatta 720
ggtaccctca ttgganccat ggggaaaaat tgn 753

<210> 4826
<211> 833
<212> DNA
<213> Homo sapiens

<400> 4826
gtacagaagc aaaatcaaac ctgctatttc aagcactcct gtttttaact tggtgtcttt 60
agtgcttgga ttggtgggat gtttcggaat gggcattgtc gccaattttc aggagttagc 120
tgtgccagtg gttcatgacg ggggcgctct tttggccttt gtctgtggtg tcgtgtacac 180
gctcctacag tccatcatct cttacaaatc atgtccccag tggaacagtc tctcgacatg 240
ccacatacgg atggtcatct ctgccgtttc ttgcgcagct gtcatcccca tgattgtctg 300
tgcttcacta atttccataa ccaagctgga gtggaatcca agagaaaagg attatgtata 360
tcacgtagtg agtgcgatct gtgaatggac agtggccttt ggttttattt tctacttcct 420
aactttcatc caagatttcc agagtgtcac cctaaggata tccacagaaa tcaatggtga 480
tatttgaaga aagaagaatt cagtctcact cagtgaatgt cgcaggccat ttctaaaagt 540
gctacagang acagacaggg ttttgaggcc accctgatta ttgggatgca tctgcagcac 600

0050/2050

atccaggact tgaatttcat tacgagttcc taatagttgt atttctaaag atgtgtttcc 660
tanaagaatg tacagcctta tgacactgta ntggatgttt ttaaaaattt ccaaagtaga 720
ttttttaaa atttaacaaa attcataata caaggaaaaa aattaaggtg tttacaaaaa 780
aatggagaag ctccttaatt tttgggacan nattccggtc gnttttttt taa 833

<210> 4827
<211> 747
<212> DNA
<213> Homo sapiens

<400> 4827
agttactgag aactcataag acgaagctaa aatccctctt cggatccaca gtcaaccgcc 60
ctgaacacat cctgcaaaaa gcccagagaa aggtaatatg aatgaaataa ttttgggggа 120
ctttaattga ggagtaaaat atttgagaat atgaggaaga ttccaaagtc tctgcatata 180
ccttaataag aactgagaca ggcttttact cattctcttt tcagcactta tgattgaatt 240
agaaggaagt ctgtaaaatt tggctgtgat catagggtaa gatgttatct aacagaagcc 300
agaaacccaa tgtctcctgc tgagatgctt gagtgcctgt caggatctaa aaattttcct 360
caagaattac tgtatgtcat tggaaagacg ttcttttgag tggcttccag gagccagaca 420
gagggcaagt agacattatg atattgtttt attatccatt tttaagtgat gtatagctat 480
atcttcaagc tggcccatga taaagtggtt cacttgttca gctgaatgac tatancttct 540
gattatcttt tgaatagatg ttctcatgca gacttgaata gtagcatgga atttcttgaa 600
cgtcgttgtt ttcatttttc ttctttaata aaatgctaca aaaatcaaag ttggtagtat 660
ttctctagct attaatcatg aatttgcaaa ganaagtcac ttgnccaagt ccaaattggn 720
taagtccaaa tgagttttct gggaaac 747

<210> 4828
<211> 726
<212> DNA
<213> Homo sapiens

<400> 4828
ccaatattga gctgtgtccc tctgaatatt tgccttagct atttcaaaat aggtatcttc 60
agaaccaaag caaagggtgg tttgttactg aaacattctt agaggcctac ttaacgggcg 120
gcagtatccg gtagtggtaa aacctcacag tttcctaatt gcaggtatgt aaataccaaa 180
aaagtcctgt tgtcagccct aggtttatct ttgaaagcag ttaaatgtgc accttggtct 240
tcctccgtgt gttcagattc cttctggtta aagttcttat tcagagtcat ctaaaagaaa 300
tttctaacat gatgtatggt ttcttgaatg tcatgagtgg ctgcgtanat tgctttgtan 360
caacagattg tattaataat agaataccta atttttttgg cctatcctct ttgaactaga 420
aatgactact tgagggctat ttcagagaac caatatgaaa tgtttttgtt agtacaaaat 480
accattgcct taaaaggttt caagcacatt ttcttttcta tttgagaact taaattgctg 540
acttgtattc gttaagcaac cttanaaata aaccactgct tatatctgca tgaatattat 600
gcatttcatg cgtacagtta gttgattaga tatttcaggg ttttgcattt tctanagnca 660
tggggacttt tttaacatgg taacgtctta ggaaaaccat tcccctcaag gtattncacc 720
atttcc 726

<210> 4829
<211> 725
<212> DNA

09/513,503 - 02/25/00

<213> Homo sapiens

<400> 4829
tgaaagatgc catcatagct aaattggcta atcaggctgc agattatttt ggtgatgctt 60
tcaaacagtg tcaatacaaa gatactctcc ccaaggaggt gttccctgtc ttggctgcaa 120
agcactgtat catgcaggcc aatgctgagt accatcagtc tatcctggca aaacagcaga 180
agaaatttgg agaagaaatt gcaaggttac agcatgcagc agaactgatt aaaacagtgg 240
catctcgcta tgatgaatat gttaatgtga aggatttttc tgacaaaatc aatcgtgccc 300
ttgctgcanc aaagaaggat aatgacttca tttatcatga tcgagttcca gaccttaaag 360
atctagatcc tattggcaaa gccacacttg tgaaatctac cccggtcaat gtacccatca 420
gtcagaaatt tactgatctg tttgagaaga tggttcccgt gtcagtacag cagtctttgg 480
ctgcctataa tcagaggaaa gccggatttg attaacaaga tcaattgctc agatgagaga 540
agccaccact ttggcaaatg gggtgctagc ttcccttaat cttccagcag caattgaaag 600
atgtgtccgg gagacactgt acctcaantc tatattgact aaatccagat ctgtgattga 660
acaaggaggn atccaaactg ntgatcagtt gattaaaaga actgcctgaa ttactgcaac 720
gaaat 725

<210> 4830
<211> 580
<212> DNA
<213> Homo sapiens

<400> 4830
taatcagagg ataacatgat caagagttgc attttagaag tagtactttg gttgtaattt 60
tgcaaactgg agatggggtg actatttatt ttgatggcat gttagtcatc cttaggagaa 120
atgacagtgg cccataataa agaggcatca gtgaggatac agagtaggta gattctagaa 180
aaatttatga gagagaattt ataggcattt gattggtatg gagagacaag aagaaagcca 240
gggattttgt ccaggattct ggcttgggca cttgagtgaa tggtgtaaaa ctgaggggac 300
gtataggatt tacttaccat ttcatttgct tgttttttg tgtgtgtttt gtttttctgg 360
gagggatgac agatatagct ggtgtattan tccattttca cactgctgat agagacatac 420
cagagactgg gcaatttaca aaagaaagag gtttaattag acttacagtt ccacgtggct 480
ggggaaggtc tcacaatcat catggcagag gggtgaaaga caattcttac atggcantgg 540
caagaaagaa tgaggaanaa gcaaaangca gaaaccctga 580

<210> 4831
<211> 837
<212> DNA
<213> Homo sapiens

<400> 4831
aaaaaaacat gaactcccag agaaggattg tgggagacac tttttctttc ctttgcaat 60
tactgaaagt ggctgcaaca gagaaaagac ttccataaag gacgacaaaa gaattggact 120
gatgggtcag agatgagaaa gcctccgatt tctctctgtt gggcttttta caacagaaat 180
caaaatctcc gctttgcctg caaaagtaac ccagttgcac cctgtgaagt gtctgacaaa 240
ggcagaatgc ttgtgagatt ataagcctaa tggtgtggag gttttgatgg tgtttacaat 300
acactgagac ctgttgtttt gtgtgctcat tgaaatattc atgatttaag agcagttttg 360
taaaaaattc attagcatga aaggcaagca tatttctcct catatgaatg agcctatcag 420
cagggctcta gtttctagga atgctaaaat atcagaaggc aggagaggag ataggcttat 480

09/13211

tatgatacta agtgagtaca ttaagtaaaa taaaatggac cagaaaagaa aagaaaccat 540
aaatatcgtg tcatattttc cccaagatta accaaaaata atctgcttan ctttttgggt 600
gtccttttaa ctgtctccgt ttttttcctt taattaaaaa tgcacttttt ttcccctggg 660
agttaaantc cgcttatcca aattaccaac tttgcaaagc cttacaagag agcacaaagt 720
tgggctaaaa ttttaaaatt ttttaaagga agatacnttt gngaatgcat tatganaaac 780
tttcaagttc aaaagcatca aatttgatgg ccataatcca aggggcatgg ccaaaat 837

<210> 4832
<211> 753
<212> DNA
<213> Homo sapiens

<400> 4832
tcagtgtcaa gcctctattt tgtaaccagg atgagactgt agtccgagtc cctggaaaat 60
gttgcccgca gtgctctgca agatcctgct ctgcagctgg ccaagtatac gagcatggtg 120
agcagtggag cgaaaatgcc tgcaccacgt gtatatgtga ccgggggtgag gtcaggtgtc 180
acaagcaggc ctgcctgccc ctgagatgcg gaaagggtca gagcagggct cggcgtcatg 240
ggcaatgctg tgaggaatgt gtgtctcctg ccgggagctg ctcctatgat ggagttgtgc 300
ggttccagga cgaaatgtgg aagggctcgg cctgtgagtt ctgcatgtgt gatcatggcc 360
aagtgacctg ccagactgga gagtgtgcca aagtggagtg tgcccgggat gaagaattaa 420
ttcacttaga tggaaagtgt tgtcctgaat gcatttcaag gaatggttat tgtgtttatg 480
aagaaactgg agaatttgtg tcatcaaatg ctagtgaagt taaacgtatt ccanagggag 540
agaagtggga aaatggccct tgcaaggtgt gtgagtgccg aagggctcaa gtaacttgct 600
acgagcccct cttgcccacc atgttcaant gggcacaact gggccttaaa agggtgaaag 660
gggacagtgc tgtcccaaga cttgcaacaa tcaatttcaa tttgccaatc ccaaaaattg 720
tttttgaaca angcctcctc aaggtnctnc caa 753

<210> 4833
<211> 742
<212> DNA
<213> Homo sapiens

<400> 4833
aaaaccatat gaatgcaata actgtggcaa atccttcatt tccaagtcac aacttcaggt 60
acatcaacgt gttcacacaa gagtgaagcc ctatatatgt accgaatatg ggaaggtctt 120
cagcaataat tccaacctca ttacacatga gaagattcaa agtagagaga aatcttccat 180
atgtactgag tgtgggaagg cctttaccta caggtcagag ttgattattc atcagagaat 240
tcacactgga gagaaacctt atgaatgcag tgactgtggg agagccttca ctcagaagtc 300
agcactcaca gtgcatcaga gaattcatac aggagaaaaa tcgtatatat gcatgaaatg 360
tggactggcc ttcatccgga aggcacactt gattacacat caaataattc atactggaga 420
gaaaccttat aaatgtggtc actgtgggaa attgtttact tccaagtcac aactccatgt 480
tcataaacga attcacacag gagaaaagcc ctatgtatgc aataaatgtg ggaaggcatt 540
caccaaccgg tcaaatctca ttacacatca gaaaactcat acaggagaga aatcttatat 600
atgttccaaa tgtggaaagg gcttcaacca gaggtcagac ttgattacac atcaganggg 660
ttcaatactg ggggagaagc cntatgaaat gcaatacctt gtgggaaaag ccctttactc 720
agaangtcaa aatccttaat at 742

<210> 4834

0080/0 6465950

<211> 555
<212> DNA
<213> Homo sapiens

<400> 4834
actggatggt gctactgctg tggaaccttg taaaaaccat gtggggtaaa ctgggaataa 60
catgaaaaga tttctgtggg ggtggggtgg gggagtggtg ggaatcattc ctgcttaatg 120
gtaactgaca agtgttaccc tgagccccgc aggccaaccc atccccagtt gagccttaca 180
gggtcagtag ctctccacat gaagtcctgt cactcaccac tgtgcatgag agggaggtgg 240
tcatagagtc agggatctat ggcccttggc ccaaccccac ccccttcccc ttaatcctgc 300
cactgtcata tgctaccttt cctatctctt ccctcatcat cttgttgcgg gcatgaggag 360
gtggtgatgt cagaagaaat ggntcgagct cagaagataa aagataacta gggtatgctg 420
atcctctttt aaaaacccaa gatacaatca aaatcccaga tgctggnctc tattcccatg 480
aaaaagtgct catgacatat tganaanacc tacttacaaa gtggcatata ttgcaattta 540
ttttaattaa aagat 555

<210> 4835
<211> 632
<212> DNA
<213> Homo sapiens

<400> 4835
aaacatgaat tcaaacggct catcttattt cgaccattcg gccccatcat gaaagtgaaa 60
aatgaaaagc tcaacatggc caacacgctt atcaatgtta tcgtgcctct agcaaaaagg 120
gtggacaagt tccggcagtt catgcagaat ttcaggcctg ctgatgaagt ttttagatgt 180
gtgcctttaa gcccttgatt gtgcggtgtt ggatcttaga agctgtgatg gctcagatgc 240
acatattggc tgaggataac cagctaagtg atttcaccag cttgttttaa acatagaaaa 300
tcctactgtc taattataaa tcttgaaaga tcaagctgat ttttttatttc ttttttttg 360
agatggagtc ttactctgtc acccaggctg gagtgcagtg gcacgaactc tgctcactgc 420
aaccttcacc tcccaggttc agggagatgt gcattgagca ggatgggaga gtccatctca 480
ctgttgttta ctttgggaaa gaagaaataa atgaagtcaa aggagtactt gaaaacactt 540
ccaaagctgc caacttcagg aactttacct tcatccaact gaatggagaa ttttctcggg 600
gaaanggacn tgatgttgga ncccgcttct gg 632

<210> 4836
<211> 717
<212> DNA
<213> Homo sapiens

<400> 4836
aggacggcgg gaagaggagt gcggaacccg cgggaggatg tgcacagagg gcccaggagg 60
agcctcagga gccggactgc cgttggccaa ccgagtcccc agggagacac ttaagggaaa 120
ttaaactgca gagtgcaaga gatgcctcag tcaagtcagc caaaaacacg cgggtcatcc 180
ccaagcccca gagagtgaca gagccccgat gacacggaca cctcggctgc tgtcacttcc 240
ctggttcggg cctcccacag gctttgaatt gaaggcgagt gcctcagaat ttgcatccat 300
tgttctgtct ttcctgggaa gttattcatc ctggtggcca gcccaccgac aaaatggatt 360
tggatctact ggacctgaat cccagaatta ttgctgcaat taagaaagcc aaactgaaat 420
cggtaaagga ggttttacac ttttctggac cagacttgaa gagactgacc aacctctcca 480

0082720 6th 5a 2a 66

gccccgaggt ctggcacttg ctgagaacgg cctccttaca cttgcgggga agcagcatcc 540
ttacagcact gcagctgcac cagcagaagg agcggttccc cacgcagcac cagcgcctga 600
gcctgggctg cccggtgctg gacgcgctgc tccgcggtgg cctgcccctg gacgggatca 660
ctgagcctgg gccggncnca anctccggaa gggaaagacc caaactgggg gctggaa 717

<210> 4837
<211> 722
<212> DNA
<213> Homo sapiens

<400> 4837
ttttcacatt actctagtcc ccaagaactg tgggccacca gatgacttca gatgtcccaa 60
tccgacaaag cagatctgga cagtgaatga agctctaatt cagaaatggc tgagctatcc 120
ttctggaagg tttcctgtgg agatagccaa tgagatagat ggaacgtttt cttcctctgg 180
ttgcctaaat ggaagttttt tagctgttag caatgatgat cactatagaa caggtaccag 240
attttcaggg gttgatatga atgctgctag gcttttattc cacaaactta tacaacctga 300
tcatccgcag atatctcagc aggtggcagc tagtttggaa aagaatctta ttcctaaact 360
gactagctcc ttacctgatg ttgaagcatt gaggttttat cttactctac cagaatgtcc 420
cctgatgagt gattccaaca atttcacanc aatagcaatt ccctttggta cagctcttgt 480
gaacctagaa aaggcaccac tgaaagtact tgaaaactgg tggtcagtac ttgaacctcc 540
actattcctc aagatagtag aacttttaa ggaagttgtg gtacatcttt tgaaactcta 600
caagatcggt attccccctt ctgaaagaag aattttcaac agttttcttc atactggcat 660
taaaggnttt agaaatacta catagggtaa atgggaaaat ggggacagnt tatncagtaa 720
gg 722

<210> 4838
<211> 684
<212> DNA
<213> Homo sapiens

<400> 4838
agatttttt aatgccgaga aaagtccatg ccacagaagt tattgtgtat gtctctaggg 60
agctttaaga atttcacgtt tgaactttac agctgtttac caattaaatg gcaagctgga 120
aaaatacatt ttgagagggg tagaaagaat aagaatataa ttaaaagtat gctaacaaaa 180
taagcagtac atatttttt agaaaatgca gtttaggcca ggcacggtag ctcgtgcctg 240
taatcccagc actttgggag gccgaggcag gtggatcacc tgaggtcagg agtttgagac 300
cagcctggac aacatggtga aaccccgtct ctactaaaaa tacaaaaaat tagccaacga 360
tggtgatgcc tgtctgtaat cccagctact ctggaggctg aggcaggaga atcgcttgaa 420
ccggggaggc agaggttgta gtgagccaag attgcaccac tgcactccag cctgggcaac 480
agagcaagac tccgtctcaa aaaaggaaag aaaatgcagt ttcattccag ccatccctag 540
atttcttttc cccttaaagt ggctgaatcc attggagatg tgatttattt tgcagattca 600
ccaattccaa acttcangaa tattcaagcg ggaagtcatg tgtaagtgac agcctttgca 660
aagaananac tgtggctggg gtgg 684

<210> 4839
<211> 826
<212> DNA
<213> Homo sapiens

09/02/2004 09:54:52 AM

<400> 4839
aaggaagaca gcaagagagg aacagatgga caaaagaatt ataagactaa cacaaaccaa 60
ttaataaggc tgggcatggt ggctcatgcc tgtaatccca acactttggg aggcgaaggt 120
aggcggatca cctgaggtcg ggagtttgat gccagccagg ccagcatggt gaaaccccat 180
ctctactaaa aatacaaaaa ttagccagac gtgctcactt gaacccatga ggcagaggtt 240
gcagtgagct gagatcgtgc caccgcgctc cagcctgggc gacagagcaa gactctgtct 300
caaaaaaaca aaagcaaaaa caaaaaacaa taaaatggct gtagtaaatt cttccctata 360
aataattact ttaaatgtaa attgattaaa ccccctaatc aaaagatata gaatggctga 420
gtggataaaa aaacaagact acatgctgtc tataagaaac tcactttaga tttaaggaca 480
cacatagagc aatgtgtgtc cttaaacata ttccatgcaa ctggtaaacg agtgcagaag 540
tggttatact tggatcagac aaaatagagt taaaatttaa aactgtcata agagacaagg 600
aaggacatta tataatgata aaacgggcaa ttcactagga agacataaca attataaata 660
ttcactcaac atcagaacac ctaaatatgt aaagcaaatg ctgatagaac taaagagaga 720
aaagcaatac gattaatatc tgagcctctg gctactttgt aaaaaaggaa aaaaaaagca 780
ttacaattac agttacaagc ctcaatancc cactttcaan nagggg 826

<210> 4840
<211> 681
<212> DNA
<213> Homo sapiens

<400> 4840
aaaaaggcgt cggccctctg gcaagatggc tgctgcggag gcgttggagc gcggaaatct 60
ggaaccggga tggcgacgtc tacactgagt cggaggcgaa ggagcttact ccacgggaac 120
agcctctaga taatctgagt tgttgaaaat acgaagcctg ttactcgtga acagtggctg 180
acaacagtgt tgttgtgagc ctggctgtct gcttggaccc agaggtttcg tctgccaggg 240
tttttggttg tatttaggat ttcagggaaa agtgtccaag ctttcagtgt tggagcaggt 300
atggacgaca aaggcgaccc gagcaatgag gaggcaccta aggccatcaa acccaccaag 360
caaagagttc aggaaaacat ggggttttcg aaggaccact atcgccaagc gagagggcgc 420
aggggacgcg gaggctgacc cactggagcc gccaccccca cagcagcagc tgggcctgtc 480
cctgcggcgc agtgggaggc agcccaagcg cactgagcgc gtggagcant tcctgaccat 540
tgcgcggcgc cgcggcaaga ggagcatgcc tgtctccctg gaggattctg ggtgagccca 600
cgtcctgccc cgccacagac gccgagacag cctccnaagg ggcaacnttg gnaaagcgct 660
tctgaagaac caaaaagcgg g 681

<210> 4841
<211> 570
<212> DNA
<213> Homo sapiens

<400> 4841
taaaccatga cctgggctgc agaccttgac tggcttattg gaacagatgc aggttcacag 60
agatgctgag tcacagctgg ttttgcagga gtggaaaaag gaaaggaagg agatgcgaga 120
aatgaccaag agtttcttca atgcccagtt tggaagcctg ttccgcacag accagaaccc 180
aacctacttc ctaaggcgcc tgtcgcgctt cgctgacatc tacatggcgt ctctgagctg 240
cctcctgaac tatgacgtca gccacacttt ctacccccgg aggactccac tgcagcacga 300
actgcccgcc tggtcagaaa ggccccccac cttcggaacc cctctcctgc aggaggccca 360

09/15/2003 15:03:00

ggccaagtag ccaagggcaa aaactagaaa ctgtaactgc ccctgattgg gcaggcatga 420
tggggttgac ttcatgtggg tctgagtgtt gcttttggaa aagatacaga taagcctttt 480
gatatttatt ttgcacctta cggagaataa ntctcccaat gantaagaca ggagctagca 540
gcccanccct ccagcctttc cccccatgca 570

<210> 4842
<211> 762
<212> DNA
<213> Homo sapiens

<400> 4842
ataggtaagt tctccagtgg tgattactga gattttgggg cacccatcac ccgagcagtg 60
tacactgtac ccaatgtgca gtcttttatc cctcgcccac ttcccaccct tccccctgag 120
tccccaaagt ccactgtatc attcttatgc cttcgcatgc tcatagctga gctcccactt 180
atatgtgaga atatacattt ggtttttcat ccctgagtta cttcacttag aataatgaaa 240
tccccataca cctaggttca gggctcctcc ccaggaaact tctgaggttt ggggagtccc 300
aggagagaag ttaggaaact ctggcctcca tcccctccct gtagcagcca aagttcttag 360
ggatttagag gcgattttct tttgtccttt ctaagaattg acatcattgg tctcatctag 420
acttgcttca agccctactg atggaccttt gacagagtct tccccccaat ctgactcttc 480
tccatttttc caagaaaagg gattagatag gaaagtcaca tacccagggg cctgcagcct 540
gtgacttcag aactgggaag tctaaaccct acagcccctt cttcttctga gccacctact 600
attgttgcag aattgtgtga ctgagtcctg tctccttaaa acgaccataa actcttgagt 660
gcaaaggatt gtattagtca agagtaaagc tatgctgcta nnaaaaaata gtccctacat 720
gcaaaggttc aatacagtag atgtttattt cccggcttan aa 762

<210> 4843
<211> 660
<212> DNA
<213> Homo sapiens

<400> 4843
aaaaatcaga ataagaagta cctgacatac tttctacatc tgtagttgcg gaagacattt 60
taataggtct tctcatagcc tttctttgct aaggacattg tgactctcca gagagcaaca 120
gtgatggctc tagaatgtct aggaaaaaga agggcttaat gtcaggagtc tgcttggggc 180
acacaacact agaagatgtc cttctgcaca ttgtttcata tcgagtatgg aacccttcag 240
atcaaagctt accaataaat tcagtatgta gaacagatta acgtagttga aatgaggaag 300
aatgagagtt atctcaacca gccagcaccc cctatcccca ttcccacact ttccctcatg 360
ggaggctgtc gggagcactt cgaaaaccac tggaaaggcc gggcacggtg gctcatgcct 420
gtaatcccag cactttggga ggccaaggca ggcagatcac ctgaggtcag gagttcgaaa 480
ccagcctggc caacatggcg aaaccccatc tttactaaaa atacgaaaat tagccaggta 540
ttagaattat ttctgaatta tcagtctctc atttgtgctt tggagaagca gaaaaggcan 600
aaggggtctt tggccatctt ctgctggagc ttccanggan gatgtgtctc caagagacca 660

<210> 4844
<211> 773
<212> DNA
<213> Homo sapiens

09/12/2005 09:56:59 PM

09/02/2005 08:50 FAX

<400> 4844
tatgaagaaa tgccattagt acttgtttca gagaagcaaa ataattgatc atgaaaaatc 60
accagcaatc ttctggtcta aaacaattgg caataggatg tctcattcca tttttaaggt 120
actcttggaa gaatttagtt tagttacata catttttaa aagataggct ttcatgctcc 180
tcagttcctt tagttttaa aaagtttcca atgtgtaaag aaacttccac ctgttaatct 240
taagaattgg tagctatttg ttaaactgat ggcatatgaa ggcaagagtc tatgagtcgt 300
ttctaaagta atagatcttt gaaaatttta aaaagtgaaa tttgtcaata acagagttaa 360
gagctgaatt cttttgtcta aaacttatcg aaattgatgc ttgtactcta ctggctccct 420
gatgatagta gaaaagcact agtaatgtac caaatgaaac tggttgtgta ccagatgatt 480
ttgttaactt cttaaatagc ctagaaatcg tcagcaggtc acatacaact gcagtgataa 540
tttcaagaac atagcaaaag gctgatttta ttctacttca cattttagaa gtgcattttc 600
tcaagttaca gggcatttca cttccctttt acatgaagag attttctttt gaatattttt 660
cctctccttt ggtagcagtg atagacatga ctaaataana tatgggtcct tttggtttgc 720
tttttancag ttaangaact gaagaggctg atcgtagttc cgggataagg tgg 773

<210> 4845
<211> 622
<212> DNA
<213> Homo sapiens

<400> 4845
gaagtggcgt acggcatgcg ccggtggcgt gatggagcgg cagcagcagc agcaacagca 60
actgcgaaac ctgcgtgact tcctgttggt ctacaatcgg atgacagaac tctgcttcca 120
gcgctgtgtg cccagcttgc accaccgagc tctggacgct gaggaggagg cctgtctgca 180
cagctgtgct gggaagctga tccattccaa ccaccgcctc atggccgctt acgtgcagct 240
catgcctgcc ctggtacagc gccgcatcgc agactacgag gctgcctcgg ctgtgccagg 300
cgttgctgct gaacagcctg gggtctctcc atcaggcagc tagccatacc caaccccagg 360
aaggaaggcc ttggatggac cctcagattg aaggacccgg tggaccttgg ggttggtgaa 420
tcctaaacag agagaattcg aggttgcctg aaaagctggg tgtccttgct ccttttcctg 480
gagccaatat acccagtttt tactcagttt gatntatatt ctgggcaagg aagctttgcc 540
tactttattg gcacaatccg ttgttctgtc gtttagtgca tatcngctgg cttcagccct 600
ggcagctgan gaaattgntt tc 622

<210> 4846
<211> 476
<212> DNA
<213> Homo sapiens

<400> 4846
tccaaagaat gttgctacag agacacaatt gaaaggtggt cagcattctc aagctgctcc 60
agtgaaatgg attttccaag ataatctaca gccttttacg ccatctcttg ttcctgttaa 120
gtcttcaaat aatgtggctt caaagatttt aaaaactttt gtagatagga aaaatttggg 180
agataatact ataaatatgc caccattgag taccatcgat cctagtggga cgcgatccaa 240
aaatatgcct attaaagata atgctttggt tatgtttaat gggaaagtct atctgttggc 300
taanaagggg acagatgttc tgccatcaca aattgaccaa cagaattctg tttctcctga 360
tactccagta agaaaagaca cgttacagac agtgagttca agtccagtca canaaatatc 420
caganaggtt gtaaatattg ttttggctaa angtaaatct tcccagatgg agacaa 476

<210> 4847
<211> 630
<212> DNA
<213> Homo sapiens

<400> 4847
gtgtcacaag caaaccctaa cctcactgcc aaacaaagat gctggcatta tgctaagaaa 60
taaggggaat ggccaggcgc ggtggctcat gcctgtaatc ctagcacttt gagaggccaa 120
gataggcaga tcacgaggtc aggagttcga aaccagcctg gccaacaggg cgaaactcca 180
tctctactaa aaatagaaaa attagccagg taaggtggcg ggtgcctgta aggtggcggg 240
tcccagctag ttgggaggct gaggcaggag aatcatttga acctgagagg aagaggttgc 300
aatgagccaa gatcatgcca ttgcactcca gcctgggcga caagagcaag actctgtctc 360
aaaaaaaaag aaggggggata aagaaaaaca ctggaaaaag gatgacctgt agttaagtgt 420
tggcataata caatgaaaga cttaacgttt ctagacactc tagttgaatt tggtcctttg 480
agactgtcgt gggctcattt cctcagcgtg ttgatttagt gactcctgaa ggagcagacc 540
cttggtttgg ncctcacttt tccataagac gttcaaatag atttaangcc tgagggtcct 600
gtcatctaaa tccattcagt anaccgtaca 630

<210> 4848
<211> 642
<212> DNA
<213> Homo sapiens

<400> 4848
gcagaaggag gaaggacagc acagctgaca gccgtgctca ggaagtttct ggatcctagg 60
ctcatctcca cagaggagaa cacacaggca gcagagacca tggggcccct ctcagcccct 120
ccctgcacag agcacatcaa atggaagggg ctcctgctca cagctactca ggaggctgcg 180
gcaggagaat cacgtgaacc caggaggcag aagttgcagc gtgccgagat agcgccactg 240
cataccagcc tgggcgacag tacgagactc cgtctcaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaagagaaa aaagaaataa aaggaaagaa ggctctgttg gagcctggat aggggaaaat 360
ataccagaga gggacagggg tcaaaacagg aaagtcacat tgaactggaa ttggtaagag 420
gtaggaaaat cttaagtgtt ctgttttcct gattaatcat caggggccac attttgaaaa 480
atgataataa taactatatc aagatgacac ttcaaataaa aatataaagc aggacgtgaa 540
acactgtcct cagcaaaaaa cctcaacaat tgggggggaga aaaaaanaac accaangggt 600
gttggagggc cctnaaaagt ctcacatcta caggggtctg ca 642

<210> 4849
<211> 571
<212> DNA
<213> Homo sapiens

<400> 4849
atgacaataa aatgcatgtt cttttatgtt gaggctctgt tttgagaagt aaaataaatt 60
atgtctttag tacaatatat gaattgtata tggaaaaaca tgctttttga aagtcccacc 120
aaaaaggttt ctttatggta tcattaaata taatttcagt ttttatatgt atacatcatc 180
cctgtctctc tttccaggcc gggcatttat atatgtatgg tcagtatatt ttctattatt 240
ggcacttggc atctcctttc ccctgctcca gaatggtctt ttctgataaa actcacaagc 300
tttgcattac cacaagctct gctgctagaa gagtgaatca caagaatgtt gtatgcttgg 360

0020020030-040206

ggtgttctgt gtgcctgtgt tgatgtgtct gtattctaat gagcaatcca gttttacact 420
agcatacaga tatttaactc tgaggtatgt gtccacaaag ctgcttttgt catttcacta 480
agtcagtggg ttttgcttgt gagagttagg gggttgattt gacccgangc ttcttagaan 540
gaatttttta acattccaag tttatcnaat a 571

<210> 4850
<211> 576
<212> DNA
<213> Homo sapiens

<400> 4850
aaagatttgg tagaaatgtg ccgtggtgtg caacatccct tgaggggtct gtttcttcga 60
aattaccttc ttcagtgtac cagaaatacc ttacctgatg aaggagagcc aacagatgaa 120
gaaacaactg gtgacatcag tgattccatg gattttgtac tgctcaactt tgcagaaatg 180
aacaagctct gggtgcgaat gcagcatcag ggacatagcc gagatagaga aaaaagagaa 240
cgagaaagac aagaactgag aattttagtg ggaacaaatt tggtgcgcct cagtcagttg 300
gaaggtgtaa atgtggaacg ttacaaacag attgttttga ctggcatatt ggagcaagtt 360
gtaaactgta gggatgcttt ggctcaagaa tatctcatgg agtgtattat tcaggttttc 420
cctgatgaat ttcacctcca gactttgaat ccttttcttc gggcctgtgc tgagttacac 480
cagaatgtaa aatggtgaag aacataanca ttgcttttaa ttgatagatt accttaattt 540
gcncaccctt aaaaatggnc ctggaatccc agcggg 576

<210> 4851
<211> 698
<212> DNA
<213> Homo sapiens

<400> 4851
gcagccttcc cagccccagc gggaccctgc tccagcatgt ggctcagtca cagaccgcaa 60
cacagacttc ggtggtggtg aagtccatcc cagcatcttc ccctggagca atcacccaca 120
ttatgcagca ggcattaagc agtcacactg cttttaccaa acacagcgag gaacttggaa 180
ctgaggaggg cgaggttgaa gagatggaca ctttagaccc tcagacaggt ctgttttacc 240
gatctgccct gactcagtca cagtcagcta aacagcagaa acttagccag cccccgctgg 300
aacagactca gctgcaagtg aaaactctgc agtgcttcca gactaaacag aagcagacca 360
tccacctgca ggcagaccag ctccagcaca aactcccgca aatgccccag ctttccatca 420
ggcatcaaaa actcacccct ctccagcaag aacaagcaca gcccaagcca gatgtncagc 480
acacacagca tcccatggtg gccaaagaca ggcagcttcc taccttaatg gcacagcccc 540
cgcaaactgt agtacaggtg cttgcagtga aaaaccacgc agcaagctcc ctaaaactgg 600
cagcagggtc cggaaccaaa ccaaaaaatc tacgntgtaa accccaaaac cccccangag 660
ccaaattgtc gctcccangc ttcttcaaga ggaaacaa 698

<210> 4852
<211> 761
<212> DNA
<213> Homo sapiens

<400> 4852
gggcgcagcg ccgagattga ttcaccttca cctgtgctgc actccagctg acccaagtag 60

US 2009/0042800 A1

gaagccagac gagctgtaaa acatgaacgg aagagtggat tatttggtca ctgaggaaga 120
gatcaatctt accagagggc cctcagggct gggcttcaac atcgtcggtg ggacagatca 180
gcagtatgtc tccaacgaca gtggcatcta cgtcagccgc atcaaagaaa atggggctgc 240
ggccctggat gggcggctcc aggagggtga taagatcctt tcggcaaatg gccaagacct 300
aaagaacctg ctgcaccagg atgctgtaga cctctttcgt aatgcaggct atgctgtgtc 360
tctgagagtg cagcacaggt tacaggtgca gaatggacct ataggacatc gaggtgaagg 420
ggacccaagt ggtattccca tatttatggt gctggtgcca gtgtttgccc tcaccatggt 480
agcagcctgg gctttcatga gataccggca acaactttga aaaacttgct ctctttcaat 540
actcccaatg aagatacatt tcactcaccc tccacccctg ctattctgcc atgtctttcc 600
ctctctctgc atagccagat ttgaagtgac tgatacccac cccaaacctt gctgttcaca 660
gtctccaatt cttcatattc taatggggaa aagttaaggt atttgtttga aaggaaaact 720
gaaagaaaag acntggntta naacaaatgg agggagttat a 761

<210> 4853
<211> 830
<212> DNA
<213> Homo sapiens

<400> 4853
caactaatgg gaaaaataac caagctagca tcataatgac agaatcaaat tcacgcataa 60
caatattaac cttaaatgta aacaggttaa atgccccaat taaaagacac tgactggcaa 120
attggataga gagtcaagac ccatcggtgt gctgtattca ggagactcat ctcacgtcca 180
aagacacaca taggctcaaa ataaagggat ggaggaatat ttatcaagca aatggaaagc 240
aaaaaaaaaa aaaaaaaagc aggggatgca atcctagtct ctgataaaac agactttaag 300
ccaacaaaga tcaaaaagac aaaaaagggc attacataat ggtaaaggga tcaatgcaac 360
acgaagagct aactatccta aatatatatg cacccaaaac aggagcaccc agattcataa 420
agcaagttct cagagaccta caaagagact tagactccca cacaataatg ggagacttta 480
acaccccact gtcaatagta gacagatcag caagacagaa aattaacaag gatattcagg 540
acttgaactc acctctggac caagtggacc tagtagacat ctacagaact ctccacccca 600
aatcaacaga atatacattc ttctcagcat cctgatccac ancatcacac ttttctaaaa 660
ctgaccacat antggaagta aaacagtcct cagcaaatgc aaaagaatgg aaatcataac 720
aaacagtctc tcagaccaca gtgcantcaa gttagngttc aagattaaag aaacttgccc 780
caaactttca actacatggg aaactgaata acctgctcca aaatgacnac 830

<210> 4854
<211> 676
<212> DNA
<213> Homo sapiens

<400> 4854
agcatgatgc aagggaggtt tgatgtcaaa atgaaatcta tttccttgtt tggccaaatg 60
ttctatggct ttcccaccac tcatggtgga gcactctgga tgttttatta aagaaagtct 120
tcttgccacc tatcaaagaa acatattttt tagagtcata aaattaaata ctgtgaaacg 180
aaaagatgca aaggaaataa attgaaaatt actaacaaaa caaaaaaccc ctgaatgaat 240
aaaacatgct atactttggc aaatatagac tatagctgat attcaggtaa gcagacaacc 300
ctgttcctta tgatgacccg aacaataaga ggccaatcac tgcccctgtc tatgtttgct 360
cttctattgg ttggaaaatg ggcttgaagt tgacaataac tgcttaatga tgaacgtcaa 420
taataagaac ttgtcctata cttcctatta tttcactgtg ggaagcagtg ttttgtttgt 480

0004-0950-0000-0

ttgtttgttt gttttcctat atatggcagt agcctctgta gtattctaaa acaaaggggg 540
gtgcgggggg accctgtctg tggtgtaagt aaatgtgtga tttaattctg tgcattgcat 600
ccttaatgtc cttatgttaa tccatatata ntcncctaat ttacctttt tgcantaagt 660
tagtttacga agcacg 676

<210> 4855
<211> 763
<212> DNA
<213> Homo sapiens

<400> 4855
ctacggcggc cgcgcgctcc aggccggtcg ctccaccccc cggctcccgg gactgtggac 60
tccacgaccc tgtcctcggc cctgtccgcg ccgaagcagc ccgggactgc gcagcgcccc 120
gcgtgccgac atgggaaagt ctctttctca tttgcctttg cattcaagca aagaagatgc 180
ttatgatgga gtcacatctg aaaacatgag gaatggactg gttaatagtg aagtccataa 240
tgaagatgga agaaatggag atgtctctca gtttccatat gtggaattta caggaagaga 300
tagtgtcacc tgccctactt gtcagggaac aggaagaatt cctagggggc aagaaaacca 360
actggtggca ttgattccat atagtgatca gagattaagg ccaagaagaa caaagctgta 420
tgtgatggct tctgtgtttg tctgtctact cctttctgga ttggctgtgt ttttcctttt 480
ccctcgctct atcgacgtga aatacattgg tgtaaaatca gcctatgtca gttatgatgt 540
tcaaaagcgt acaatttatt tanatatcac aaacacacta aatataacaa acaataacta 600
ttactctgtc gaagttgaaa acatcactgc caagttcaat tttcaaaaac agtttttggg 660
aaaggcacgc ttaaacaaac ataagcatta ttgggtccac ttgatnatga aaacaaattt 720
gattacacaa gtacctaccg tttataccaa nagggaaaan gag 763

<210> 4856
<211> 748
<212> DNA
<213> Homo sapiens

<400> 4856
gaagagatgc cacttggcgg ccatggcagc tgtagtatcg gcgactccgg gtcaaggccc 60
ggtcgagtgc agtaccatgg gcagcaccgg gtatagggca gagacagctt tgtgtcaact 120
ttgctgctga acccctagga cccatcgtta gagacctgca ggactccttt cctcatccca 180
ggctcggagg agagtttgct gggactggtg ggctggtttc ctgctctggg gggcggatca 240
ccttcggggc cgcctcttgg agacaggggc gcctagggaa cgaacaggtt cgcttgagtc 300
acttacccgc cgccgcctaa gacattgtgc caccctcaat ccgacaatcg aagaaatcga 360
tcattcgcac attttcccca ttgacttttc ccatctctgt taacccacga gaatctaatg 420
actggcatct gagaacccag agcctgggac cttagattgc tgtaagcttt ctctggtgct 480
aatatcagca aaaagggtct gttgccgggt acgttcaaga ggaangtgcc tcgtgaacac 540
atctgctggt gggaaggcct aaagaactgg aaaagcccac tctcttggaa ccaccacacc 600
tgtttaaaga acctaagcac catttaaagc cactgggaaa tttgttgtcc aantgggttg 660
tgggtgaata aaggagggca aaatgggatg attttcatct ccaattaacc ctgctgtcct 720
ctgggctaan gtttggtggg gaangtta 748

<210> 4857
<211> 675
<212> DNA

0088213.0154.2050

<213> Homo sapiens

<400> 4857
gagttcgcca gtggtccagg agccgctttt ttccactcgg gaagacttca gagaagtctc 60
acaaaggact cggctggctg cttttctcag tgccgaagcc gcgccatgct cgttctcaga 120
agcggcctga ccaaggcgct tgcctcacgg acgctcgcgc ctcaggtgtg ttcatctttt 180
gctacgggcc ctagacaata cgatggaacg ttctatgaat ttcgtactta ttaccttaaa 240
ccttcaaata tgaatgcgtt catggaaaat cttaagaaaa acattcatct tcggacctct 300
tactctgaat tggttggatt ctggagtgta gaatttggag gcagaacgaa taaagtgttt 360
catatttgga agtatgataa ttttcctcat cgagctgaag ttcggaaagc cttagccaac 420
tgtaaggaat ggcaagaaca atctatcatt ccaaatttgg ctcgcattga taaacaagag 480
acggaaatta cttacctgat accatggtcc aaattagaaa agcctccaaa agaaggagtc 540
tatgaactaa ctgtttttca aatgaaacct ggtgggccaa gtctgtgggg tgatgcaatt 600
gaaaaganca attaatgcca tgtcaattta ngntacacaa aagtagttgg ggttttccac 660
acaggatatt ggggg 675

<210> 4858
<211> 604
<212> DNA
<213> Homo sapiens

<400> 4858
tctctgaatg ctgagttctg ccttaaaaca gcacgggtca tgctagatga aagggatctc 60
tgttttatac tctcatctct tcgctattgc cgtgggatga aagacagcag aaggaaggcg 120
tctaagttca gaacaaagtg agcaagacca gctggctgct gttggtagca gaggcacagc 180
cagcctgtca tggcactggg gggccgaggt gagctgtgcc ccctcctcct gggcttgtga 240
ccctctgccc cccatgggag tttcactctg gctcctaggc tggaatgcgg tggcaccatc 300
tcagctctct gcaacctcca cttcccaggt tcaagcgatt ctcctgcctc accctcctga 360
gtagctggga ctacaggcga gcaccaccac agccggctaa tttttctatt tctagtagaa 420
atggggtttc accatgttgg caggctggtc tcgaactctg acctcaagtg atctgcctgc 480
ctcagcctct gaaagtgctg gattgcangc gtgagccacc gcaccaggcc taaacagatt 540
tctttacaat ctancaccat gaacagcaag cattancatt gctccgtcca accaacaacc 600
cgca 604

<210> 4859
<211> 781
<212> DNA
<213> Homo sapiens

<400> 4859
aattcataca ggagagaagt catatatatg cagtgattgt ggaaaaggct tcatcaagaa 60
gtctcggctc attaatcatc agagagttca tacaggagag aaaccacatg gatgcagcct 120
gtgtgggaag gccttctcca aaaggtccag gctcactgaa caccagagaa ctcatacagg 180
agagaagccc tatgaatgca ctgaatgtga caaagcattc cgctggaaat cacagctcaa 240
tgcacatcag aaagctcaca caggagagaa gtcatatata tgccgtgatt gtggaaaagg 300
cttcattcag aagggaaatc tcattgtaca tcagcgaatt catactggag aaaaacccta 360
tatatgcaat gaatgtggaa aaggcttcat ccaaaagggc aacctcctta ttcatcgacg 420
tactcacact ggagagaaac cctatgaatg caatgaatgt gggaaaggct tcagccagaa 480

0050205450 0050205450

gacatgttta atatcccatc agagatttca cacaggaaag acacccttg tatgtactga 540
gtgtggaaaa tcctgctcac acaagtcagg tctcattaac caccagagaa ttcacacagg 600
agagaaaccc tatacatgca gtgactgtgg gaaagctttc agagataaat catgtctcaa 660
cagacatcgg gggaactcat acaggggaa agaccgttat ggnttgctct gattgttggg 720
gaaagctttc ntcccanttg tcatgccttg gtttaaccaa aagggaaatg cctgcttgca 780
a 781

<210> 4860
<211> 715
<212> DNA
<213> Homo sapiens

<400> 4860
gaaaggacgc gccggagccg ggtgagtggc cccgcaactg cccctgcccc tgattcttcc 60
ttgcctcgcc gcgaaccccg gcgcccgcgc cgacccgcca ctgcctctgc ccttttccag 120
ataacagaaa gtaacgtgaa ggaattcagg tgactcagac atggaggaga gaagacctca 180
tctggatgcc aggcccagga attcccatac caaccacaga ggccctgtgg atggagagtt 240
accaccaaga gctagaaatc aggccaataa cccaccagcc aatgctctcc gaggaggagc 300
cagccaccct ggaaggcatc ctagggccaa caaccatcct gctgcttact ggcagaggga 360
agagagattt agggccatgg gcaggaaccc acatcaagga aggaggaacc aggaggggca 420
tgccagcgac gaagctagag accaaagaca tgaccaggag aatgacacca ggtggagaaa 480
tggcaaccag gactgtagga accgcagacc accatggtcc aatgacaact tccagcantg 540
gcggactccc caccaagaag cctacagaac agccacaagc aggcgaagaa actgggctac 600
aagttcttag aaagtcntct gcagaaaaga cccttctgan gtggtcatca cacttgccac 660
aaagtttagg gctgaaagag ctcctttctc antcttccat tgaaatctaa cttcc 715

<210> 4861
<211> 730
<212> DNA
<213> Homo sapiens

<400> 4861
cttatgcccc acctcccacc ccagctcctg caacacaaat gcccagcaca ccagggtttg 60
tgggatacaa tccatacagt catctcgcct acaacaacta caggctggga gggaacccgg 120
gcaccaacag ccgggtcacg gtaggagaat caactattac agcatccggc aaacaactgg 180
aattgaccag aaatgccttc agaattaggt ctttttgaat cataagcaca gccatttaaa 240
aaaaattttt taacctagct ttttgagtat tttcaacatt cgttgtagca tctcacactg 300
aaaaaataaa tagtgagatc tggaatgtat atagaagaaa agaaaaatcc attctgtttg 360
gtggttggta gggttaaagc cttgagcact tgatgcttat actgtatgta aacaaacaga 420
atttcttaag gtaaaaatat ccttttttgac ataaagagta tttttcattt ttataaggtg 480
attggcatta gtctcaagga ttgagtttct agtagaggct ggtctttcag acctggcttt 540
ttcagggctg gaaagctttt ggctggtaca ccagtttgaa tcgctaccca tagttatttg 600
tcttttggat ttagtagttg accttctaac taagactcat ttctctacag tgaaaaagag 660
aaaaacgttt taatgtcacc tcaaagaaat gcagagtgaa gggtgantga aattaanttg 720
aaggtatcan 730

<210> 4862
<211> 790

0035203.0035203

<212> DNA
<213> Homo sapiens

<400> 4862
agacaggagc agtcattccc ttgtagggac aactagaaga aattttatga ataagcatca 60
gaagccagtg ctaacaggcc agcggttcaa aactcggaaa agggatgaaa aaganaaatt 120
cgaacccaca gtcttcaggg atacacttgt ccaggggctt aatgaggctg gtgatgacct 180
tgaagctgta gccaaatttc tggactctac aggctcaaga ttagattatc gtcgctatgc 240
agacacactc ttcgatatcc tggtggctgg cagtatgctt gcccctggag gaacgcgcat 300
agatgatggt gacaagacca agatgaccaa ccactgtgtg ttttcagcaa atgaagatca 360
tgaaaccatc cgaaactatg ctcaggtctt caataaactc atcangagat ataagtattt 420
ggagaaggca tttgaagatg aaatgaaaaa gcttctcctc ttccttaaag ccttttccga 480
aacagagcaa gacaaagttg gcgatgctgt cggggattct gctgggcaat ggnaccctgc 540
ccgccaccat cctcaccagt ctcttcaccg acagcttagt caaagaaggt aacgaggctc 600
ctgttttctc gcctgtcaag acaacanang aaaaatanag tcacagatag ttagaaaaaa 660
tgccaggggc tctttttggg gtcctccaat actcattcct tcatttaaga gaatatcttt 720
gtatggggtg gtanattgcc ctttcaaatt agtaaaaggg agngggnctt gttaatttgt 780
agggaaaagg 790

<210> 4863
<211> 600
<212> DNA
<213> Homo sapiens

<400> 4863
gcttcccgtc cgctgtcctc tgctgccagt cccctgcccc gggcaaagcc catctggtcc 60
gccgagcagg ccggagctat tgggagtggc ggatcctccc accccagccg gatctgggcc 120
atggccgagc ctggagaggg actgccagag gaggtgctgg cactcatctt ccgccacctg 180
tccctgagag accgtgctgc cgccgccagg gtctgcaggg cctgggccgc cgctgctacc 240
tgcagcgccg tgtggcacga cacaaaaatc agttgcgaat gtgagctgga aggcatgctg 300
ccaccttatc tgtccgcctg cctcgaccac attcacaacc tacggctgga atttgagcca 360
tcgaggaagc cgagccgccg ggcggccatc gagctgctga tggttctggc gggccgtgcc 420
ccggggctgc gaggcctgcg cctggagtgc cgcggagaaa aaccgctctt cgacgcgggc 480
cgcgacgtcc tggaggctgt gcacgctgta tgcggggcgg ccaaccagct acgccaactc 540
gacctgcggc gcttgtccnt cacactggga cnaagcgctg gtgctgcaan gcggcgcgca 600

<210> 4864
<211> 684
<212> DNA
<213> Homo sapiens

<400> 4864
gaacccagga ggcagaggtt gcagtgagcc aagatcatgc cactgcactc cagcctggcg 60
acagagcgag actccattta aaaaaaaaaa caccagggca tctgtaagcc actttgggag 120
tcaaaagaat gtagagctgg gctggactcc ttagaagaaa gttaagttct gagtgtggga 180
ggaagtgcct gcacccccac atccagacag cccgtcactc ctgctgccga agactgactt 240
gctgattcgg gctctgcctc catagtgggg gcacagagcc agggagagtg cccacaggcc 300
cagggatcct gggtgtggga ccagggagaa tgcccacagg ccccagggcc tttttgagcc 360

0050205.0013000

cagggcgctc tctgcacagg cctgctacaa cttcatccga agcatggccg cctacagcct 420
cctgctgttc ctgctgcaga tcaaggacag acacaacggc aacattatgc tggacaagaa 480
gggccatatc atccacatcg gtcagccagc cacagcgcca ccctcctctc ccttcacccc 540
ggcacccagg ggtggatagg gatccccacc ccacagagag gagaatgccc aagaccaccc 600
tgccaggagt gtcanggtcc aactctgagg tccgaactgt cggncaccaa nctgttctgc 660
tgtaaaaggt gcctgggccc cggg 684

<210> 4865
<211> 777
<212> DNA
<213> Homo sapiens

<400> 4865
tgaaaaccag cttgtagtta gggcccggag cgcatgccat agactcggcg actcaggaat 60
cctgaagact ctctgagcga cctggagcac cttggctgtg tccctgcctg ccttcaccct 120
cctccagtgc ccccagtact gggcgtgagt ccggaagtgg ccacaaccca gcctggaccg 180
tcgcttataa agctgtgtaa acctgtataa gctcaggcgt tgacagctgg aaggcagctg 240
gcactggcag ccccccttcat tgcacctatc tcccccatct cattgccacg gctgaaccct 300
ccttctcaat cttggaacag caccccccttc tttaagtccc ccaggacccg acagcctgag 360
ccagatttct actgtgtcaa gtggatccct tggaaaggag aacagacacc catcatcacc 420
cagagcacta acggcccttg ccctctcctt gccatcatga acatcctctt tcttcagtgg 480
aaggtgaagc tccccccgca gaaggaagtg atcacatcgg atgagctcat ggcccatctt 540
ggaaactgcc tcctgtccat caagccccag gagaagtcag agggacttca gcttaatttt 600
cagcagaatg tggatgatgc aatgacagtg ctgcctaaac tggncacaag tctggatgtc 660
aatgtgcgat tcacaagcgt ctctgatttt gggtatacaa ccgaggtgca atgtccnttg 720
accctgctan ggaatacctc cgttacaaag gggntgggct tgtttgattc caaaaaa 777

<210> 4866
<211> 699
<212> DNA
<213> Homo sapiens

<400> 4866
gtgtcactcg gcccgctcgg cgcgcccctt cccagccgcc cttccgtacc ggctctcggg 60
ctcttccggt ctccggccgc cccttacctg caggctcttc tcccgccgcg gcccggcgct 120
ctccgagtcg cccctgcgga ctggtctcgc acagtgcctg ggcaccgggc gccagacaga 180
cactggccat gacgagcggc gcaaccaggt accggctgag ctgctcgctc cggggccacg 240
agctggacgt acggggcctg gtgtgctgcg cctatccgcc gggagccttt gtgtccgtgt 300
cccgagaccg caccacccgc ctctgggccc cagacagtcc aaacaggagc tttacagaaa 360
tgcactgtat gagtggccat tccaattttg tatcttgtgt atgcatcata ccctcaagtg 420
acatctaccc tcatggccta attgccaccg gtggaaatga ccacaatata tgcattttct 480
cactggacag tccaatgcca ctttatattc taaaangcca caaaaatact gtttgtagtc 540
tatcatctgg gaanaatttt gggacattac ttaatgggtt catgggacac caactgctaa 600
agtctggctg aatgncaagt gcatgatgan cttgcagggg tcatacagat gcggtgtggg 660
cgggtnaaga tcttacctga aacaagggct taaatgttt 699

<210> 4867
<211> 723

DOCID: 2013 05 29 13 50

<212> DNA
<213> Homo sapiens

<400> 4867
atcgccagcc tccagtcctg cctccacgac gcgcccttcc ccaaggctgg ccgggtctgg 60
atgtcgccat cccctattcg gagctacaga cctcgcagct gaactcttaa aaagaacctc 120
gcttcttcct cacggtgctc cagctccaca caccgtactg agcctcgcca gccaccgtac 180
gcgaggtcgc ggcgcgtccg tgacgtcact gatgtgcgct tctcccgcac taagggaaac 240
atggctctag cgcggccggt gcggctcttt tccctcgtga ctcggttgct cctggcgccg 300
cgacggggcc tcacggtccg cagtcccgac gaacccctgc cggtggtgcg catcccagtg 360
gctctacagc ggcagttgga acagcggcag agcaggcggc ggaacctccc gaggccggtg 420
ctggttcgac ccgggaccgc tgctggtttc ggcgcggcgg ncggagttga accagccggc 480
gcgcctcaca ctgggccgtt gggagcgcgc gccgctagcc tctcaaggct ggaagagtcg 540
acgcgcgcgt cgggacaact tctccatcga gcgcgcgcaa caaggaggcg ccagcggtgc 600
gaaagctctc gtctaagggc aactttgctg acctgggcct ggagccccgt gtgctgcacg 660
cactnaaagg gaaggnttgc gccttgaang tcgtttaagc ccaaaaaccg gtggcaattc 720
caa 723

<210> 4868
<211> 698
<212> DNA
<213> Homo sapiens

<400> 4868
ataacgagga cacagtgagt gagagggtac aataatgaga ggcaggaagc ggaagactgt 60
tgaagctaaa atcagaaatc attgtgatcg ttctctaggt cagtggatcc tgctgtgcca 120
tacgttggaa tcaccttgga atcagctggg gatctttaaa ggtgtttctg cctggctccc 180
caccccagac cttgtgattt aattcaccag gggtgtggca tggcattggg gtttccaaag 240
gcttcccatg tgatcctaat atgcagccac gtttgtgaac tcctgcacta ggcagtgaga 300
acgcttcctt ctgagttgag gctgcctgaa cctcaaaggc atctcaacgt tgtgtcaatg 360
cctaaatgca ctcttcggct catgtagcaa cttctagagc tgcgtccgaa tcacagagga 420
aattaactgt tgaaaataat gtttgattga gttaccatgg gcatgctaaa ttatgtttat 480
gtccctaaaa agtgtttttc atcgttctct aatgttanga tggttggatg tctgaaggaa 540
agtgttggna ttcttaaaag tactagaaat cttgaaacca agttatgttt ttaaatatgt 600
tttgaatttg ataacttaat aaattgtaat taattaaagt catgtttaac actgggaana 660
ggagccatcc aaagtttang aaaataaatc cttttgan 698

<210> 4869
<211> 777
<212> DNA
<213> Homo sapiens

<400> 4869
attaatctgg ccgtgccatg catctactcc atgttcaggc ttgtggagag gtacgagatg 60
ccacggcacg aagtctacgt tctcctgatc cgaaacatct ttttgaaaat atcaatcatt 120
ggcattcttt gttactattg gctcaacacc gtggccctgt ctggtgaaga gtgttgggaa 180
accctcattg gccaggacat ctaccggctc cttctgatgg attttgtgtt ctctttagtc 240
aattccttcc tgggggagtt tctgaggaga atcattggga tgcaactgat cacaagtctt 300

03052015 0030

ggccttcagg agtttgacat tgccaggaac gttctagaac tgatctatgc acaaactctg 360
gtgtggattg gcatcttctt ctgccccctg ctgccttta tccaaatgat tatgcttttc 420
atcatgttct actccaaaaa tatcagcctg atgatgaatt tccagcctcc gagcaaagcc 480
tggcgggcct cacagatgat gactttcttc atcttcttgc tcttttccc atccttcacc 540
ggggtcttgt gcaccctggg ccatcaccat ctggagattg aagccttcag ctgactgtgg 600
ccctttcga ggtctgcctc tcttcattca ctccatctac aagctggntc gacaccctaa 660
gtacaagggc ctgggctacc tgtggggttg tttggatcta accgggaacc tcaatgggaa 720
gttgtgcact tctttttcaa cctcaancct catttgnggc taaancatca accctaa 777

<210> 4870
<211> 526
<212> DNA
<213> Homo sapiens

<400> 4870
atttgccact cgatactgcc tctgcaaccc aggcgtcttc cagtccacag acacctgcta 60
cgtgttgtcc ttctccatca tcatgctcaa caccagcctc cacaatccca acgcccggga 120
caggccgcct ttcgagcgct ttgtgtccat gaaccgcggn atcaacaatg gtagcgacct 180
gcccgaggac cagctgcgga acctcttcga cagcatcaag agtgagccat tctccatccc 240
tgaggacgac ggcaatgacc tcactcacac cttcttcaat ccagaccggg agggttggct 300
gctcaagcta gggggccgcg tgaagacgtg gaaacggggc tggttcatcc tgaccgacaa 360
ctgcctctac tacttcgagt tcaccactga caaggagcca cggggaatta tacctcttga 420
gaacctctcg gtgcanaang tggatgaccc caagaagcca ttctgcctgg gagctctaca 480
accctagctg ccgaggccag aaaatcaang cctgcaagac cgatgg 526

<210> 4871
<211> 737
<212> DNA
<213> Homo sapiens

<400> 4871
cagcagattt aggcattgga gatctaattc ctgtggatgt taaccatttg aacatttgta 60
agccaaagaa aaaggatgct tttttgtacc agcgtacttt acaattcatt cgtgaagctt 120
tagccaaaga ccttgaaaac taacagttgt gctcttccag ttttcatatg tgaattcagt 180
gcaagaaact tggtgttctg tttcttcttt taagctctat gcaatcatgc aaacatagtg 240
atcatagcgt caacatggtc tggagtgtgt tgcagactac agaacattgt tctcccttca 300
agcgctgtaa agcaccaacc cggaagtggc aggcacagaa ggaagggctg gattgggccc 360
ctttggtgta aagaagtccc tgtgtgctgc tttatggttc gcagtgttgg gcttggtgac 420
tggagcaaag ctgctgtgag agagtgtcct ttcccatctg tgactttcct ggtgcatcca 480
ggaggggcac ggcaggttct gaggtaactc aacttaccat aaaaatgcca ttaagagagt 540
acctaaaatg gagagaagaa tgaactagaa cattcaagac tcttttactt ctgggtattg 600
atttgctgta catttttaaa gtttgagttt ttagctcagt tctacctttt atctgacaca 660
ttattactaa gtggttaact ttgttagact taantggcat gtccggggtc aagttccctt 720
gnatcnaatt ttccgta 737

<210> 4872
<211> 661
<212> DNA

0562045.00200

0062016050213

<213> Homo sapiens

<400> 4872
actcgatatt gcgaaaccaa acttggtata agagctccca acactgctaa actggtcatc 60
gctaaacctt taaaaaaaaa aaaaaagcat tcgctggtac ccagatttcc acaggagtta 120
aacatttcct gcgcagctaa agcaagtctt accagtagga aaccggaact tgctaggact 180
aagaaacttg aggctaggct gaccccatgg ttgttatgat tagaaatccg aggccactgg 240
aaacccggag ctgctgacca acgagtcaca gggtaacttc gccttcgcat ggggaaacgg 300
gctggtgcag tggtgtcatc ttggctcagt gcagcctcga cttcctggga tccagcgatc 360
ctcccgcttc agcctctaga gtanccgaga ccacaggtca cccctcgctg ccaggctctc 420
ttcccggtcc agagcccaca ggatcctaca ggaggggcca acaactgctt gcctttgaaa 480
cttgaaactc tcggtctaag gttccttagg agcgtaaaag gcacagcgtt ttctgatcgc 540
agcttcaggt ctcccgcccc tgtcccggta cctctcctgc aggacggaac tctgtgggaa 600
cgctcgttga ttctgatggn taactgtcag atatccttga tattgggcat angatttggn 660
a 661

<210> 4873
<211> 648
<212> DNA
<213> Homo sapiens

<400> 4873
attggctggg ttcggcgcag ctaacagacg gcggcagtgc gagaaagccg aagatggcgg 60
tccccgcggc gctgatccta cgggagagcc ccagcatgaa gaaagcagtg tcactgataa 120
atgcaataga tacaggaaga tttccacggt tgctcactcg gattcttcaa aaacttcacc 180
tgaaggctga gagcagtttc agtgaagaag aggaagaaaa acttcaagcg gcattttctc 240
tagagaaaca agatcttcac ctagttcttg aaacaatatc atttatttta gaacaggcag 300
tgtatcacaa tgtgaagcca gcagctttgc agcagcaatt agagaacatt catcttagac 360
aagacaaagc tgaagcattt gtcaatactt ggtcttctat gggtcaagaa acagttgaaa 420
agttccggca gagaattctg gctccctgta agctagagac tgttggatgg cagcttaacc 480
ttcagatggc tcactctgct caagcaaaac taaaatctcc tcaagctgtg ttacaactcg 540
gagtgaacaa tgaagattca aagagcctgg agaaaagttc tgtggnattc agtcacaagg 600
agttgtttga tttctatanc aagctagaga ctatacangc acagctgg 648

<210> 4874
<211> 490
<212> DNA
<213> Homo sapiens

<400> 4874
ccctgcgcgg ctgctggacc gacgggcgca cccaggtagg ggggcggctg agccgcgcag 60
tgcggaccct cgcggggaac tgcgccgccg ccaccatgtc tcaggaaggt gtggagctgg 120
agaagagcgt ccggcgcctc cgggagaagt ttcatgggaa ggtatcctcc aagaaggcgg 180
gggctctgat gaggaaattc ggcagcgacc acacgggagt ggggcgctcc atcgtgtacg 240
gggtaaagca aaaagatggc caagaactaa gtaacgatct ggatgcccag gatccaccag 300
aagatatgaa gcaggaccgg gacattcagg cagtggcgac ctccctcctg ccactgacag 360
aagccaacct acgcatgttt caacgtgccc aggacgacct tatccctgct gtggaccggc 420
agtttgcctg ctcctcctgc gaccacgtct ggtggcgccg cgtgncccan cggaangagg 480

tatcccggtg 490

<210> 4875
<211> 760
<212> DNA
<213> Homo sapiens

<400> 4875
taaaataaaa taaaataaaa ataaaagttt gcagtttaca caatcaatcc tggaagcatt 60
ttatttacac tgtgggtccc actgctgagc taacttgcat ttacaaagca cctctagata 120
ctgtcataat gtatccagaa attcaattag agagagtgtg tgtttctggg ccaacagagg 180
caaggttagg gggcagaggt aatataagtg agctggccca agccatgcaa cttagcctca 240
tagattgaag tcatcacatg aattaacccc aaactggtac ccagtgatgt cagagcatga 300
gtccagatgt gctctgtgcg tgcatgggat ggcttccaat aaagtcaaat gacacagtca 360
cgtgtcagtt taggtcctct aggaaacaga caccagagag aatgagaagt gcaagtgaca 420
tattggggga tgcctatgaa agacaaaggg gagagggagc aggatgaggt gggaaggctt 480
cagactgtga cacaggtgtg ccacctgtga aaagtgaagg ggaaagaagc agcattctca 540
gggagagcct cagaccacag tgccactctg agcaagtggc caggctgatg gagcctgaca 600
ctaaagggtg cccattanag aagtctcggg cctagtgtcc cagccacatg gagtgtccca 660
gagagcgcan ctttggtgtg agctctgagg gancaagtcc tccttgaggg tctctgaaag 720
gaagatntaa gctgtgcact tcttgggctg ccttaattta 760

<210> 4876
<211> 767
<212> DNA
<213> Homo sapiens

<400> 4876
cttctaacag tatttctcaa gtacttaaca aaaagatgaa aacttgaagt ccaagccgtg 60
ctgctgattc cgtctcacag tttaaagact gtccagaaac tttaagcttt caaaactgta 120
cattttaaaa tcctgtgcgt ttatcttcat tttgctgggc agaaagccaa agtactggac 180
tgcctggttc agggctgaac gcctagtaca cctgctaact tggagcttca gagccatggc 240
aaccaaggag tcaagagacg ccaaagcaca gttggccctc tcctcatcgg ccaatcagag 300
caaggaagtg cctgaaaacc caaactatgc tctcaaatgt actcttgtgg gacacacgga 360
agcagtgtca tcagttaagt ttagtcctaa tggagaatgg ctagcaagtt cttctgctga 420
taggctaatc ataatttggg gagcatatga tggaaaatat gagaaaacac tctatggtca 480
taatttggaa atatcggatg ttgcctggtc atcagattcc agtcgtcttg tttctgcctc 540
agatgataaa actctaaaat tatgggatgt gagatctgga aaatgtttga aaacactgaa 600
ggggcacaag taattatgtc ttttgttgta acttcaatcc gccatccaac cttataatct 660
cgggatcttt tgatgaagac tgtnaaaata tgggangtga aaacaggaaa gtgtctcaag 720
actttgtctg ctcantctga cccatttctg ctgttcattt taatgta 767

<210> 4877
<211> 785
<212> DNA
<213> Homo sapiens

<400> 4877

0856259.0756

gtgagagaat gcttgtctgt gaaagtcacc tgtaagatga gaacttaaaa atgattgagt 60
tggctgggca cggtggctaa tgcctataat cccagaactt tgggggctg aggtgggtga 120
atcactttga gctcaggagt ttgagaccag cctgggcaac atggggagac ccttcctcta 180
ctaaaaacac aaaaattaat caggcatggt ggctaacacc tgtaatccca gctactcagc 240
tggctgagtc tgaaggatca cttgagcctg ggaggcagag gttgcagtga gcggagactg 300
caccaccgca ctccagcctg ggagacagag tgagaccctg tctccaatat atatatatat 360
taaataaatg gttaagagct aaccaaagca tatagaggaa tagctttata gcaaataatg 420
taatgtggaa atgcataggg caggatagaa ctttgcaact tcaagaaaat agaacacagg 480
aggctaatgc ctgtaatccc agcattttgg gaggccaagg tgggagaatt ccttgagccc 540
aggagtttaa gtttaagacc aagcctggga aaagtagcaa gacctcatca ttatgaaaaa 600
attaaaaatc agccaagtgc agtggtgctt gcccaaagtc ctagctactc angaggctga 660
ggcaagagga cccagcatga ggcacaagga gttcaaggct aagggtgaag ctatgaataa 720
tgccctgcaa cttcancctt gggtgacaag accaagaant tccaanctca aatttttaa 780
acgaa 785

<210> 4878
<211> 722
<212> DNA
<213> Homo sapiens

<400> 4878
cagaagaaaa attattaaac aactcatttt aagattcaaa ttaactaatt cctgcatata 60
tgacattcct tacataagcg aacactaaac aaaaatggct agaaatgtct ttttctttct 120
tttctctctt tgttgtttaa ggtattaagc acgaattatt acatgagact ggcagatagc 180
tattaatcct cttacagatt tgagaaagtt gattctcaaa tatttatgca ccttctcctt 240
cattgttttc tttaaatctg tcctcttaaa aagcttctta agagctcagt taatgctttt 300
gacttaacta ggagaaaaag gcatgataat acaggcaaga tggcattgtt agcaattctg 360
gtagtggttt ggaatgaatc ctaagaggca gggatcttaa ggacaaggaa gagaagagag 420
agagggaggg atctttgatc tctttctctg gtaatcttaa tgcataattt tactaaaaca 480
tgttctcaat tcattcatat tattaagctc ttcctgcagt tgatatctga gcagagtaag 540
atttgtattt ccatttttac ttttttgaaa gagaatatat ggacagatta ttagtacaat 600
ttgggcactg tggttttaag aatatctgag taaaataaca atatgannta ataaacagaa 660
gctctaacgt caggtaacaa atagacagca agaaaggntt gcaccatcct cctaagggct 720
aa 722

<210> 4879
<211> 719
<212> DNA
<213> Homo sapiens

<400> 4879
aatttatatt ttacttatgc caaattattt atgataattt gccattgcta tactgtacca 60
gtgtcaaatg ctgcagcctg ccaagctgtg attttgtgag gcttgtccct atgtaggatg 120
caccgcaggc ccctggccac tgaaagagtg tgcagtggac tgtgggtctc ccatatgcgg 180
tgccgcccaa aggtggcttt gcctcaagca acctaccctg atgttttact cattggaatg 240
tttttccccg attgtggatg acttcttttc tgatggagag agtccaggag ggatggaaaa 300
ctcctggatt taagctcagc atcccccaca tgggcttttc gatcatcttc aggcctgaag 360
ctgcacgacc tgaagttcgc ctgcatttat cagccctctt tgtgctgctc cttgccacct 420

0026/20 5th 2018

tgaggttcct gctggggacc atgtgtggtt gtggcatgtg tgagcagaag ggaggatgag 480
gaaaaagaga agaaaccccg gtactgacaa gctgtttttg agtgccactg tttgccatca 540
tctaagccac tgaatcaagt gtatttcagg cttatttcaa cattccaatg ccctggtttt 600
cctgcttgaa tctgttcgtg ggcaaaggtt tgggggaatt tgtgaccctg gnacatcccc 660
agagtgaaag atggagctgg ggccacatca ngaataaggc cttggnccat cctcctcaa 719

<210> 4880
<211> 751
<212> DNA
<213> Homo sapiens

<400> 4880
agttctctgt agtgtttgcc aatgttggag ccgtctgcaa agtgtccccg gcaagaagag 60
gctgcctacc acaaggactt tagcttactt tttaaagatt gaagaaaaaa aagaagacag 120
aaaaagaaga actcaaagat acacaaagta atttgaacca aggctcagaa gtttttggag 180
ccgtgaggga tacagcagtt tggtcaatat tgtcttaaca tgcttcaaat aaatcagctt 240
ctctccaaga taaaatggca aacccaaaag agaaaactgc aatgtgtctg gtaaatgagt 300
tagcccgttt caatagagtc caaccccagt ataaacttct gaatgaaaga gggcctgctc 360
attcaaagat gttctcagtg cagctgagtc ttggtgagca gacatgggaa tccgaaggca 420
gcagtataaa gaaggctcag caggctgttg ccaataaagc tttgactgaa tctacgcttc 480
ccaaaccagt tcagaagcca cccaaaagta atgttaacaa taacccaggc agtataactc 540
caactgtggn actgaatggg cttgctatga aaaggggaga gcctgccatc tacagggcat 600
tagatccaaa gccattccca aattatagag ctaattacaa ctttcngggc aatgtacaat 660
cagaggtatc attgcccaat gcctaagatc ttttaagttc agcctcactg gtgggaaatt 720
aatggnantt ttttgggggа aaggaaagna c 751

<210> 4881
<211> 716
<212> DNA
<213> Homo sapiens

<400> 4881
atctttcgac agaatgacca ccctaaaaca aatactgaat gcctttaaaa aaaaaaaagt 60
tgtggttttt tgttttttтt ttttttttтt ttttggtcga gaactactaa tttcatgcta 120
tttctttctc tctcctttg ttgttatttg atttggggga agggagtgag gcttgtgcag 180
atttgagcta tctgaagaca tgaacagaag tcaaatacca gccatatcag tagagccttc 240
cattcaaaag tgaacacact tggtagctga accatatctg agcagcgtga ttctgttgtc 300
ttgcatatgt tattctctca ggctgtggat ctttgttaca gctctaggaa actgtagaaa 360
tacaatgcta tgtagctttt ccaccccatg gtctctagtg ctgcctatca acttgtcccc 420
ttttttccca ataacctgtc ttccaggtgg tacagttagc tgtcactcag ctgacaccat 480
gatgtggcag cagagaggga aacctacaag tggtttgcct cattgccttt gccacatctg 540
aagttctcan cagcactacc ttagacttca ggagctaata ggaaactttt tatggtgtaa 600
atgctgtaag actttgtaca tacttcagtt gttangaaat ccttanagaa aaaaagaaaa 660
agttacgcta ataaattgct gtggtgcaag gcactaatgg gggtgggttc nccttg 716

<210> 4882
<211> 818
<212> DNA

0353645.00800

0000-0000-0000-0000-0000-0000

<213> Homo sapiens

<400> 4882
taatttaaac caagtgtttg tgcggttctg attcatctgc tgtggttccc gaagcttgag 60
atctaaggag tacagggtct tttgtgatga caatatgact aatagtaaag gaagatctat 120
taccgataaa acaagtggtg gtccaagtag tggaggaggt tttgtagatt ggactttacg 180
tttaaacaca attcaatccg acaagttttt aaatttactc ttgagtatgg ttccagtgat 240
ttaccagaaa aaccaagaag acaggcacaa aaaagcaaac ggcatttggc aagatggata 300
tcaactgcag tacagacttt tagtaataga tctgagcaac acatggagta tcacagtttc 360
tcagagcagt cttttcatgc caataatggg cacgcatcat caagctgcag ccaaaagtat 420
gatgactatg ccaattgtaa ttactgtgat ggaagggaga cttcagaaac cactgccatg 480
ttacaagatg aagatatatc tagtgatggt gatgaagatg ctattgtaga agtgacccca 540
aaattaccaa aggaatccag tggcatcatg gcattgcaaa tacttgtgcc ctttttgcta 600
gctggttttg ggacagtttc agctggcatg gtactggata tagtacagca ctgggaggtg 660
ttcagaaaag ttacaggagt tttcatttta ggccctgcac ttcctgggct caaagggaac 720
nttggaaatt gcantgggat ccagattatc cactgcagta aattattggg aaaatggntt 780
cacccattga aaagtggacc taataattgg caacttgg 818

<210> 4883
<211> 816
<212> DNA
<213> Homo sapiens

<400> 4883
ctatgtccag aagagcgaca tcatattggg agatcgcagt ctttccttat gtaatatgtt 60
cctagatgaa atggccaaac aagctcgaaa tctcatcact gatatttgca cagaacagtg 120
taccttagt gaccagttgc tacccaagca ttgtgccaaa actatcagtc aagcagtgaa 180
taagaaatca aaaaagcaga ctggtaagaa aggggaacct gaaagggaga aaccaggtgt 240
tgagagcatg aggaaaaaca ggctggttgt gaccaacctt gataaattgc acactgcact 300
ttctgagtta tgcttctcta taaattatgt accaaacatg gtggtatggg aacatacctt 360
taccccacga gaatatttga cttctcatct ggaaatacgc tttaccaagt caattgttgg 420
gatgactatg tataatcaag ccacacagga aattgcaaaa ccttcagaac ttctaacaag 480
tgtaagagca tacatgaccg tactccagtc aatagaagac tatgtgcaga ttgatattac 540
aagagtattt aataatgtgc ttcttcaaca aacacaacat ttagacagtc atggagagcc 600
aaccattaca agtctataca caaattggna tttggaaact ttgttacgac aagtcagcaa 660
tgggcatata gcatattttc ctgcaatgaa aagcgtttgt gaacttacct acagaaaatg 720
aattaacatt catgcaagag ggaatattct gacatatcag aaatgaggtc attatcanga 780
actactaagg nccatatggn attgaagttt ccaagt 816

<210> 4884
<211> 643
<212> DNA
<213> Homo sapiens

<400> 4884
aatcttttta ttaatatgag aacataattg ttccangatc tggaggccat cctttaagct 60
tcttgcaaca gtctgggagc aaagagttta ctcgccactg ggtagtgggc catggacacc 120
ccagtctcca ccagaagttc gggattgcaa aatgggactc tggcagcaaa tttcaaactg 180

tatgccagac ctggcccttt gcagtgatat aaaatttttc ttgaggtgtc tggaaagatg 240
gctgaatagg aacagctctg ctctgcagct cccagcgaga tcaacgcaga aggagataat 300
ttctgcattt cctactaaag tacccagctc atctcattgg gactggttag acagtgggtg 360
cagcccacag aaggcaagca gaagcagggt ggggtgtcgc ctcacccggg aagcgcaagg 420
ggtcagggaa ctccctcccc tagccaaggg aagctgtgag ggactgtgcc gtgaggaacg 480
gggcattccg gcacagatac tatgctttcc ccacggtctt tgcaacccac agaccaagga 540
gattcccttg ggtgcctgca ccaccagggn cctgggtttc aagcaaaaaa ctgggcagcc 600
atttgggcan acactgangc tagcagcagg agtttttttc aaa 643

<210> 4885
<211> 701
<212> DNA
<213> Homo sapiens

<400> 4885
gacagtttcc angacacaga agctccagct acctctgaga ccagtaactc taggagttac 60
tctgaagttt caagaaatga aagccttgaa tctcctatgg gagaatgggg attccaaaaa 120
ggacaagaga tatctgctaa agcagctaca tgttttgcag agaagttgcc ttctagcaac 180
ctgctcaaga acagagctaa agaagaaatg agcctctctg atttgaacag tcaggaccgg 240
gttgaccacg aggagtggga aatggtgcct aggcactcat cttgggggga tgttggtgtg 300
ggtggcagtc ttaaggctcc agtgttaaac ctaaaccagg gaatggacaa tggaagaagc 360
actttggtgg aagcaagagg tcagcaagtg catgggaaaa tggaaagggt agcagtgatg 420
cctgcagggt ctcagcaagt tagtgtcagg ttccaggtcc attatgtcac aagcactgat 480
gtgcaattca ttgcagtaac tggagaccat gagtgtcttg ggagatggaa cacttacatc 540
ccactccact ataacangga tgggttctgg tctcattcca ttttcctgcc tgcagataca 600
gtggtggagt ggaagtttgt gttgggtana gaatgggggg agttacccgc tgggaaagaa 660
tgnagcaata gattcctana aaactggcca tgagggataa a 701

<210> 4886
<211> 790
<212> DNA
<213> Homo sapiens

<400> 4886
gttcggtggc ccatagggga agatggcggc tgctcctttg gaggagcggg attgagagga 60
tcggggtggg gagaccaaac aagagagaca tttctggctc tgaaggcgaa cgcttcgctg 120
gccatttagg agctctgctc aaagccagac gtatcctaga aggaaaacat caccatggct 180
acagaaattg gttctcctcc tcgttttttc catatgccaa ggttccagca ccaggcacct 240
cgacagctgt tttataagcg acctgatttt gcacaacagc aagcaatgca acagcttact 300
tttgatggaa aacgaatgag aaaagctgtg aaccgaaaaa ccatagacta caatccatct 360
gtaattaagt atttggagaa cagaatatgg caaagagacc agagagatat gcgggcaatt 420
cagcctgatg caggttatta caatgatctg gtcccaccta taggaatgtt gaataatcct 480
atgaatgcag taacaacaaa atttgttcgg acatcaacaa ataaagtaaa gtgtcctgta 540
tttgttgtta ggtggactcc agaaggaaga cgcttggtca ctggagcttc tagtggggag 600
tttaccctgt ggnatgggac tcactttcaa ttttgaaaca attattacag gctcacgaca 660
gcccagtgag ggcatgacg tggtcacata atgacatgtg gatgttgaca gcaagaccac 720
ggnggatatg ttgaaatatt ggcaagtcna acatggaaca acgtcaagat gttccaggca 780
cataangggg 790

2022213211 07 Jun 2022

<210> 4887
<211> 765
<212> DNA
<213> Homo sapiens

<400> 4887
agcctctgtg cctcgttgtc ccctggcgct acccggacat ctctcagggt gccggcacca 60
tgaagatctg gacttcggag cacgtctttg accacccgtg ggaaactgtt acaacagctg 120
caatgcagaa atacccaaac cctatgaacc caagtgtggt tggagttgat gtgttggaca 180
gacatataga tccctctgga aagttgcaca gccacagact tctcagcaca gagtggggac 240
tgccttccat tgtgaagtct cttattggtg cagcaagaac gaaaacatat gtgcaagaac 300
attctgtagt tgatcctgta gagaaaacaa tggaacttaa atctactaat atttcattta 360
caaacatggt ttcagtagat gagagactta tatacaaacc acatcctcag gatccagaaa 420
aaactgtttt gacacaagaa gccataatta ccgtgaaagg agttagcctc agcagttacc 480
ttgaaggact gatggcaagt acgatatcct caaatgctag taaaggccga gaagcaatgg 540
aatgggtaat acataaatta aatgctgaga ttgaagaact gacagcctca gcaagaggaa 600
ccataaggac tccaatggca gcagcagcgt ttgcagagaa gtgatcgtga cagttgggaa 660
acaacatcgg gtactccaag gtctctcccn aactggacta anataattta atttggtaat 720
tttaaaaaaa ttacaaacct aaaattttgg ggtaagtttt ttttn 765

<210> 4888
<211> 744
<212> DNA
<213> Homo sapiens

<400> 4888
gttcccaatc agtttccaag ccaacaccag ggtgtcctag tccgcagagg tgtgggggac 60
acactccata atctctactt ttctttttgt gcagctgagt catggagctt tcagccccag 120
cacatggctc ctccttaact gcgtctgctc aacctccctc agccctgtga acagcatccc 180
cgcacacaga cgcagagcag gactctctct gctgccactt caccttcctg agagaggacc 240
agcggccaga gcctcagtga ctgccaccct ggaggacagg gcacaacaac cgtttctgaa 300
gagaatggga ggattccaga ggggcaaata tggaactatg gctgaaggta gatcagaaga 360
taacttgtct gcaacaccac cggcattgag gattatccta gtgggcaaaa caggctgcgg 420
gaaaagtgcc acagggaaca gcatccttgg ccagcccgtg tttgagtcca agctgagggc 480
ccagtcagtg accaggacgt gccaggtgaa aacaggaaca tggaacggga ggaaagtcct 540
ggtggttgac acgccctcca tctttgagtc acangccgat acccaagagc tgtacaagaa 600
catcggggga ctgctacctg ctctctgccc cggggcccca cgtcctgctt ctggggatca 660
nctgggggcg ttcantgctc aaggacacaa tgggccatca ggaaaggtga aaagagggnc 720
ttttgggaac aaggggggcca atgg 744

<210> 4889
<211> 612
<212> DNA
<213> Homo sapiens

<400> 4889
gaacaatatg gcggatggcg aggagccaat ggctgttgat ggtgggtgtg gggacactgg 60

agactgggaa ggtcgctgga accatgtaaa gaagttcctc gagcgatctg gacccttcac 120
acaccctgat ttcgaaccga gcactgaatc tctccagttc ttgttagata catgtaaagt 180
tctagtcatt ggagctggcg gcttaggatg tgagctcctg aaaaatctgg ccttgtctgg 240
ttttagacag attcatgtta tagatatgga cactatagat gtttccaatc taaataggca 300
gtttttattt aggcctaaag atattggaag acctaaggct gaagttgctg cagaatttct 360
aaatgacaga gttcctaatt gcaatgtagt tccacatttc aacaagattc aagattttaa 420
cgacactttc tatcgacaat ttcatattat tgtatgtgga ctggactcta tcatcgccag 480
aagatggata aatggcatgc tgatatctct tctaaattat gaagatggtg tcctanatcc 540
aagctccatt gtccctttga tagatggggg gacagaangt tttaaaggga atgcccgggt 600
nattctgcct gg 612

<210> 4890
<211> 811
<212> DNA
<213> Homo sapiens

<400> 4890
tgtgtccagc gcctatctta aaagaagttg gcatgaaagc tgcactccag gtcagcatga 60
acgatggcct ctcttttatc tccagttctg tcatcatcac caccacacac tgtagcctcc 120
acaaaattgc atcaggcccc acaacagctg cttgcatgga atagcagaga ataccgcctg 180
ctccctccgg acagcacact cctgaaaacg gggagagagg agccaaacat gctcggttta 240
cactttcctt atttactgaa tgagtggagg gcagagacag gcctggagtt acgcacactg 300
agtgccccaa catggaagga aacatcagga gggacaggaa acgttccctc cttaaccaac 360
agttttcaag accttactgg aggcacttta ttggctacat aatcactcca tgcggtgggc 420
atcaggcaga atcctggtgc agacccaact ttgaggtgga ggatttcaca gtttctttat 480
tttgaacttc ccccaggctc ccactaattc ctctccattc tatcctcctc cctttcccac 540
aaaagaaaac agaaaggagc agcagtgttt gataccgtat catccagagg cctggttctc 600
tcccattata gggcaaacaa gccctggnaa ggatatttca ctcccgcccc atgccatgca 660
ttaaaaatcc aaaattgcct atattccacc tgccaagcaa gaagatgctt tcattaatga 720
agttccaaat gtatacctt gagnaacagt gccttctcgt cttaaaaaga aaggncccaa 780
ttttgtgaan ttgggaagca aagggaatta a 811

<210> 4891
<211> 838
<212> DNA
<213> Homo sapiens

<400> 4891
gaaaatgtga agccttctgg aagacaaatt gggaaagttg agccacagca atccaaccat 60
tttgtttgat tatatcttgt cacaaataca gaagtatgat aacttaataa cacctgtagt 120
agattcattg aaatacctca cttcactgaa ttatgatgtc ttggcctatt gtatcattga 180
agctttagct aatccagaaa aggaaagaat gaaacatgat gacacaacca tctcaagctg 240
gcttcagagt ctggctagtt tctgtggtgc agtttttcgt aaatatccaa ttgatcttgc 300
tggtcttctt cagtatgttg ccaatcagct aaaggcgggc aaaagttttg acctgcttat 360
attgaaagaa gtggtacaaa aaatggcagg aatagaaatt acagaggaaa tgacaatgga 420
gcaactagag gctatgactg gtggagagca gctaaaagct gagggtggtt attttggtca 480
gatcagaaac actaaaaaat cctctcagag attaaaggat gctctattgg accatgatct 540
tgcccttcct ctctgtctgc ttatggctca gcagagaaat ggggtaatct ttcaggaagg 600

0527050.5

tgggagaaga aacatttgaa acttgtggga aagctctatg accagtgtca tgataccctg 660
gtgcanttg ggtgggtttt tagcaatcct aaatcctgag cacaagaaga ttatataaag 720
cgaagtggcc ttcaatttga tgttcccccg gtaatgaatc ccaatacacc ccaatggagg 780
caagcaattt tccccggtcc aangggcaaa tggtttggcc caatcaaaaa ttttcngn 838

<210> 4892
<211> 729
<212> DNA
<213> Homo sapiens

<400> 4892
gaatgctggg agagtccgac gagcgctgca ctaacgcagg atccggctgc cgaaggtcct 60
cgccagcagg atgaagttaa aggaagtaga tcgtacagcc atgcaggcat ggagccctgc 120
ccagaatcac cccatttacc tagcaacagg aacatctgct cagcaattgg atgcaacatt 180
tagtacgaat gcttcccttg agatatttga attagacctc tctgatccat ccttggatat 240
gaaatcttgt gccacattct cctcttctca caggtaccac aagttgattt gggggcctta 300
taaaatggat tccaaaggag atgtctctgg agttctgatt gcaggtggtg aaaatggaaa 360
tattattctc tatgatcctt ctaaaattat agctggagac aaggaagttg tgattgccca 420
gaatgacaag catactggcc cagtgagagc cttggatgtg aacattttcc agactaatct 480
ggtagcttct ggtgctaatg aatctgaaat ctacatatgg gatctaaata attttgcaac 540
cccaatgaca ccaggagcca aaacacagcc gccagaagat atcagctgca ttgcatggna 600
cagacaagtt cagcatattt tagcatcagc cagtcccagt ggncggggcc actgtatggg 660
atcttagaaa aaatgagcca atcatcaaag tcagtgacca tagnaacaga atgcattgnt 720
ctgggttgg 729

<210> 4893
<211> 592
<212> DNA
<213> Homo sapiens

<400> 4893
tccattctct gggacacatg acgcctgtcc tgtcgcccca gaacctgctg tcttgtgaca 60
cccaccagca gcagggctgc cgcggtgggc gtctcgatgg tgcctggtgg ttcctgcgtc 120
gccgaggggt ggtgtctgac cactgctacc ccttctcggg ccgtgaacga gacgaggctg 180
gccctgcgcc cccctgtatg atgcacagcc gagccatggg tcggggcaag cgccaggcca 240
ctgcccactg ccccaacagc tatgttaata acaatgacat ctaccaggtc actcctgtct 300
accgcctcgg ctccaacgac aaggagatca tgaaggagct gatggagaat ggccctgtcc 360
aagccctcat ggaggtgcat gaggacttct tcctatacga gggaggcatc tacagccaca 420
cgccagtgag ccttgggagg ccagagagat ancgccggca tgggacccac tcagtcaaga 480
tnacaggatg gggagaggag acgctgccag aatggaanga cgctcaaata ctggactgcg 540
ggcaaactcc tgggggccan cctggggcga aaggggggcaa cttccgcatc nt 592

<210> 4894
<211> 756
<212> DNA
<213> Homo sapiens

<400> 4894

03523650.00726

ctttaaaatc cccttatcag catgcctaac aagatttttc taatttattc taaatctttc 60
acataaagaa ttcagtgagt tttaaattca tttattacat aagaatatta taacttttta 120
ttagtttata gaaaagttta gtgacatcag gataaattga tatttattat atgaaagtta 180
tgaaaacttt tgtatagttg ctaagtagga ttaaaaaatg agtatcagaa tttggtaaac 240
acagccagag atacatttca tttgcacaca aatgtttttg tgaggtttct ttttcagtta 300
ggaaaatcat taaaatcatg tactgatgta aactaaactt agtaccggac tttcaaatca 360
cttgattcca aagtttaaat caaggttttt aaaaataaag tattttcaat tataaaatga 420
ttaataattt tctagtgaga gtaaagatgt ttgaaatatt aggcttagtt tatttgatgt 480
atatatttaa tcctataaaa tttcttttgt aataactatc tgcagagtag catatttgtg 540
atttataaat attatatgct cagaatcctt gattgataag agcatatgat taaaaaatga 600
aaacacattg tagagttatt catagtcaca tatggtatgt aactgaatat atatgatata 660
tataatataa ataaatatat ttaaaataca tatttatata taaatatgta ttatatataa 720
atatatatca tatattanan antaatataa ccaaat 756

<210> 4895
<211> 716
<212> DNA
<213> Homo sapiens

<400> 4895
gtacgtctat gagagggaat aatgtggatg gatggaagtg gagtagaaac tacccctttg 60
cctgtgagcc ccctgtcccg tccttttca ctcacatacc agtcaccata ccttcagtat 120
ccatcctact tcctttatag ctgtttcact tggaaactaa tgtgtgggag cacctcctgc 180
agcaaactgc tcttgaatct taattcgatg agtcagtgac tcttaaatac cgattaagcc 240
ttcaccctct ccccctccc ccttttaaac ttatgacctg taagattctt gtaaaaaata 300
gggttaggga aacattttta gaatttaata ggattaagga cacctggagt gtgggcgatg 360
ttgagctaga gtttaccttt gtgaatattg gacgtgtctt caggaacgga gaagaatttt 420
gaatgctaat ttttaccttt cagctatgtg aaaacacatg atttacgttg atgtaaccga 480
atttacattg ctgaatatgt tggtgatttc attaactttt anagcattcc ggtttaagtt 540
ttagcttatt tgggctttct ccttgctttc caaacgaaat acttcgtctt ttaaatgttt 600
tgctttaacg tgacagctgc gtggaagaaa taatggttgg gcaaacactt ttctattgan 660
naaagggatt taaattccca agncaagaaa tattaagcaa tccggttttt ccctgg 716

<210> 4896
<211> 770
<212> DNA
<213> Homo sapiens

<400> 4896
gcttttgcta cattttggtg gcattttaac tagttatctg aatatttatt aatcgtactt 60
cctcttgtaa agttaactac ttacttttt gttgttgttt ttttaacatc aggttctgta 120
tctaatagga gatgtaacac tttatttcat ggcaggcttt tattgcagag acttgaagtc 180
ttagtttttt aaactggcac ataaaacact ttttgctgtt atttttattt atgtcaatac 240
tgcagagtat ctttatgcct tattcaagtg gattctgagc ctgtatgtca caatgtaaac 300
actggaggtt cactcaccta cgcactcacc caccacctct gaaagaaaca gaaactgcag 360
agaaagacag catcttagct cattttgttt ttaaatgagg ttttagacgc ttgccacttc 420
ctaagggaaa tcctaaaaca gagcaagtga tgctcccagg tatcactgtg aacttttttc 480
tttcaaagtg tgaattttta cactggcttt ttcatttttt taaagtaatt gaagcttgtg 540

0535035.000015

gctttacaac ttagtgtttt ttgctatcca gataacaagt ttcattgttt agaacccagt 600
gacacttaat aggtagataa attgtccttt aaaatatccc agatgatata cacaatatgg 660
tacatttgtg ctctctctct ctgtttttct cccttctctt tccaagttaa gatnaagata 720
acgatgacnt gtaccctccc tgaatccngt tacagtaggg gccggggcaa 770

<210> 4897
<211> 744
<212> DNA
<213> Homo sapiens

<400> 4897
aaactgcacg cgccgagccg ggaagcttcg tccagcggtc gtgttgccat gggccggagg 60
agagccccgg ccggtgggtc gctgggacgg gcccttatgc gccatcagac tcagcggagc 120
cgaagccatc gtcacactga ctcctggttg cacacaagtg aactcaatga tggctatgat 180
tggggtcgtc ttaatcttca gtcagtgact gaacagagct cccttgatga cttccttgct 240
actgcagaac ttgcaggaac agagtttgta gctgaaaaac ttaatattaa gtttgtgcct 300
gctgaggcta gaactggact actgtctttc gaggagagcc agagaattaa gaagctccat 360
gaagaaaaca aacagttctt gtgtataccg aggagaccaa actggaacca aaatactacc 420
ccagaagaac tcaaacaagc agagaaagat aactttctag aatggagacg tcagcttgtc 480
cggctagaag aggaacagaa gctgatattg actccatttg aacgaaattt ggacttttgg 540
cgccagctct ggagagtcat tgagagaagt gatattgtgg tccagatagt agatgctcga 600
aacccactcc tgtttaaatg tgaggatttg gaatgttatg tgaaagaaat ggatgcaata 660
aggagaacgt cattccgatc aacaagggaa gacctggctg aactgctgaa gcaaccggna 720
ntgcctgggg ccatgttcct tcna 744

<210> 4898
<211> 742
<212> DNA
<213> Homo sapiens

<400> 4898
tctgtaattc atggctaatc cgaagagttt gattgagttg atggcggcag ggaccagata 60
gacaccttgg tgattgtctt tggccataag aatagaccaa ggataggttt tccagagaca 120
ccttcatact gtaaacatgg tttagacacg gtcataggga aggctgctgg tccatcattt 180
gttctgaaca aatggcattt cctgctcctg accctggcag ttggccccag attccttgtc 240
gatgacttgg aaacgtccat tctgggtaag gtcagcactc cctgagagat gttaacaaag 300
tttacctatg agtcttactg tgtagacaat ctgaagtcaa ttttagttac acaatcagca 360
ttcccatgtg tcctcagtgt cttatcaatg aactatgtgt atcaagccat actaaactgg 420
agtttagcag gacagaggca aactaaatgt agaacataac atatcagctg aatatgtcta 480
tccaggactg tttttctaga acataaatca tggagctcct tgacagtgta tccactgttt 540
ttggggttta ataaaaccaa ctagaattta gacttaaaag aaattattat tccttttggt 600
tgtccacata aagtaagtcc aagggctatc atatggctaa aatcaagntt atttgggtca 660
acccctggta tgtatttata aagtcaactt atcagccatt taagatggng atttgcntta 720
aatttttgca atgtgtgtgg ca 742

<210> 4899
<211> 757
<212> DNA

0052076950

<213> Homo sapiens

<400> 4899
gattgcagca taatcgtggt tcagcagcct ccaagaccag ggctgatgtg ggcggctaca 60
gggagaaatt caagaggaag ttcttggtgg tgccctccat gagtacaaag aagcctcagt 120
ccccaggaca cccttccgtg catggtgtca ctgacatctt tatttctttt gtcacgttct 180
gtaaatcaca atgaatgggg tattcttctt ctattatata tttgttaagt ctttttggc 240
atctttaaaa aaaagtggta actttatcct atgtaatatc cctgttaagt cctaaaagtc 300
ttttctgatg tctattttgt ctgaaatttg cacagctact atagctttat ttcggttcat 360
attttcataa tccatgtttt ctcatccttt tatatttgtg aatgtgtaaa gtaactttct 420
tgtgcatagc taagagtttg gtcttgcttt tttaaatcga ctataagttc tatttttaaa 480
ctaatatttt ctcttatttt ttgtttaaga tagcatttca taatgatgtt tatttctcca 540
ttaacatatt acctaattca ctttttanaa atattatatt tgttaccata aggtttgcaa 600
aaggagcgat tcttcatttt ggnacccttt ccttattttc tgggtaccat gagaaattgt 660
agactttact cctanattcn ctttccaagc cctaaggatt aagccatttt tccaagaaaa 720
tggttgcata ccattctgcc aatgaaagga ancaaaa 757

<210> 4900
<211> 702
<212> DNA
<213> Homo sapiens

<400> 4900
tatctagatc agaaacttgg aggatcttca ggcccactgc cccaggtcat tgggctgact 60
gcctcggttg gtgttgggga tgccaaaaac acagatgaag ccttggatta tatctgcaag 120
ctgtgtgctt ctcttgatgc gtcagtgata gcaacagtca aacacaatct ggaggaactg 180
gagcaagttg tttataagcc ccagaagttt ttcaggaaag tggaatcacg gattagcgac 240
aaatttaaat acatcatagc tcagctgatg agggacacag agagtctggc aaagagaatc 300
tgcaaagacc tcgaaaactt atctcaaatt caaaataggg aatttggaac acagaaatat 360
gaacaatgga ttgttacagt tcagaaagca tgcatggtgt tccagatgcc agacaaagat 420
gaagagagca ggatttgtaa agccctgttt ttatacactt cacatttgcg gaaatataat 480
gatgccctca ttatcagtga gcatgcacga atgaaagatg ctctggatta cttgaaagac 540
ttcttcagca atgtccgagc agcaggattc gatgagattg agcaagatct tactcagaga 600
tttgaagaaa agctgcanga actagaaagt gtttccaagg gatcccaaca atgaggattc 660
taaacttnga agacctcctg nttcaaccct acaaggaaga gt 702

<210> 4901
<211> 783
<212> DNA
<213> Homo sapiens

<400> 4901
aatgaaccaa attcacaatc aaaatttcca atttttcggt ttccttcatc attctcttct 60
cccgttggaa tggtatttca tccccgaagc cacttttttgt atgcttatgg caatcaggaa 120
tgggaagata cagtgcagtc ggaagtgtta ctgagagaat tttcacatta tactatgatc 180
acttgggatt cctacataag ctgactctgg gtcgctttga agctagtgga ccacccacag 240
cctttggaaa ttctagaaat ctttttggac agcctccaga tatgggcttt gagactgcgc 300
ttgccccaca gcacacctcc ttagatgaaa ttatcttttt tgcatatgta cctgagaacg 360

US 2003/0232350 A1

aaccccagga aacgatctac agcaagaagt tcggcaatat acactatgga aaagtgatac 420
actctgggaa aactggaaga gcttacataa gaaaggtatt gcaacatacg actcctaaag 480
gatttttgtc ctcagttatt gcagaaatga aagagccctt tggattagaa gaagtgaatg 540
agagctcttg tttgtctagt tccctttga ttaataaagc tggaaatgtc tataaactca 600
ctcttgattc acaagttgtt caagccttgt ttgaagatac aagatataga gaagactgta 660
gtgcttcccg ggtacagcag cttcctcatc acaagcantt tagattaatn aggaatgcat 720
taggccattg ctaccaagcc tgaaagttgc acccaacaat atgacnttcc aaaagagcac 780
aat 783

<210> 4902
<211> 609
<212> DNA
<213> Homo sapiens

<400> 4902
gtgacttcgc gccgctgtgt gcgcctcccc gagcgccggc tgcgcccccc agcccggccc 60
ggggcctacc gcctgcccgg ccccctgcca ctgccaggag gacggcatca tgctgtctgc 120
cgactgctct tgagcttggg ctgtccgcca taccggggga cctggatccc ctgacggctt 180
acctattcca tgtcagtagt ggcaaacctt tacaggatta tgaatacaaa atgccactgg 240
tctcctgaag atacagcagc aaaatgaaac atccacaaat atgacttaaa ttgagaatat 300
gtgcatgtct ataactccac ccttcactgt gctgcggttg ttctctggac cactcctatt 360
tcatcagtgt tattgtcaac ctgaagaaca agcagaaaga ggctctctga aatgaaatgg 420
atgcttattt gggaagagag cattgcaacg ggaatacaca tgccatcgta aatgacaaga 480
atattcaggg aggaccccat cacatttggc tgccatatct ccttggactc ctcttggctg 540
tgacagggtc tcagacggcc cttgccgttg atgaccttga tggtttgaag agccctaaaa 600
aanttcccn 609

<210> 4903
<211> 620
<212> DNA
<213> Homo sapiens

<400> 4903
aagatctatg tcctgggggg ccgccagggc aagctcccgg tgactgcttt tgaagccttt 60
gatctggagg cccgtacatg gacccggcat ccaagcctac ccagccgtcg ggcctttgct 120
ggctgcgcca tggctgaagg cagcgtcttt agcctgggtg gcctgcagca gcctgggccc 180
cacaacttct actctcgccc acactttgtc aacactgtgg agatgtttga cctggagcat 240
ggtgagcagt ggctgttctg ggctgtcctc ccgctctctg tgggatggag gggcatagtg 300
tgtacatgac tagatctgac ctcccctctc ctgcagggtc ctggaccaaa ttgccccgca 360
gcctgcgcat gagggataag agggcagact ttgtggttgg gtcccttggg ggccacattg 420
tggccattgg gggccttggt aagtctctat ggggctgggg agaggaggga gtcccaagac 480
aggaaagact agcccccaac atgtgtgtca ccttctgccc atctccaggc actccanggg 540
tcagggcttt ggtgaagctc ttttccccta atccaatgaa agntagggca agggatggtg 600
ggtcctgccc tttnggggggg 620

<210> 4904
<211> 705
<212> DNA

09/25/2006 15:50:00

<213> Homo sapiens

<400> 4904
gaaaaaaaaa aaaaaaagta gacgctcggg caccaagccg cggcaaggat ggagctgggt 60
tgctggacgc agttggggct cacttttctt cagctccttc tcatctcgtc cttgccaaga 120
gagtacacag tcattaatga agcctgccct ggagcagagt ggaatatcat gtgtcgggag 180
tgctgtgaat atgatcagat tgagtgcgtc tgccccggaa agagggaagt cgtgggttat 240
accatccctt gctgcaggaa tgaggagaat gagtgtgact cctgcctgat ccacccaggt 300
tgtaccatct ttgaaaactg caagagctgc cgaaatggct catgggggg taccttggat 360
gacttctatg tgaaggggtt ctactgtgca gagtgccgag caggctggta cggaggagac 420
tgcatgcgat gtggccaggt tctgcgagcc ccaaagggtc agattttgtt ggaaagctat 480
cccctaaatg ctcactgtga atggaccatt catgctaaac ctgggtttgt catccaacta 540
agatttgtca tgttgagcct ggagtttgac tacatgtgcc aagtatgact atgttgaggt 600
tcgtgatgga gacaaccgcg atggccaaat natcaagcgt gtctgtggca acgagcggcc 660
agctcctatc nagagcatag gattctcant ccaagtcctc ctcca 705

<210> 4905
<211> 828
<212> DNA
<213> Homo sapiens

<400> 4905
aaaaaaaaaa aaaaagtgtg ttaagttccc ggtcacctga gctccgggtg acgcggctgc 60
ggtagctgcg gatacaagcc ttccgcgggt cctgcctggc gaccccgacc tcctcctgct 120
gtctctccgc tccgccaccc cgaacccgcc aaggtcctgt ccttttcctc ctgtcctttg 180
ccagcgttgg gccggaccgg gccgagccgg gccgcccggg cgcagtcttt aaccatggcg 240
tccctcttca agaagaaaac tgtggatgat gtaataaagg aacagaatcg agagttacga 300
ggtacacaga gggctataat cagagatcga gcagctttag agaaacaaga aaaacagctg 360
gaattagaaa ttaagaaaat ggccaagatt ggtaataagg aagcttgcaa agttttagcc 420
aaacaacttg tgcatctacg gaaacagaag acgagaactt ttgctgtaag ttcaaaagtt 480
acttctatgt ctacacaaac aaaagtgatg aattcccaaa tgaagatggc tggagcaatg 540
tctaccacag caaaaacaat gcangcaagt taacaagaag atggattcac aaaagacatt 600
acaaaccaag cagaatttcc anaaggaaaa catgaaaatg ggaatgactg gaagaaatga 660
tcaatgatac acttgatgac atccttgacg ggttctgatg acgaaanaag aaagccaaga 720
tattgtgaat caaagttcct ggatgaaaat tgggaattga aaatttctgg naaagatggg 780
caaaagctcc atcaagctgg ctcccaaagc tttacaancc tggcctcn 828

<210> 4906
<211> 702
<212> DNA
<213> Homo sapiens

<400> 4906
gactaaaaag ctcaagggag aattagccaa agagtttgca cctgctacac caccttctac 60
tccacacaac tcatctgttg gtagtttgtc tgagaatgaa caaaatacta tagaaaaaga 120
agagttcatg ttgaaactca tgcgatctct ttctgaagaa gttgagagta gtgaaagtgg 180
agagctccca gaagtggatg tgaagtcgga gcactcaggg aagaaggttc agtttgcaga 240
agcattagct acacacatcc tttctcttgc aactgaaatg gcagcttccc atttagataa 300

US 2005/0250005 A1

caaaataatt caagaaccca aggttaaaaa cccttgctta aatgtgcaaa gtcaaagaag 360
tgtgtcgcct acttttttaa acccctcaga cgaaaatttg aaaacattat gcaattttgc 420
gggtgatctg gcagcagaag tcattacaga agctgagaaa atagcaaaag tccgaaattg 480
tatgcttttc aagcaaaaga agaacagttg ttatgctgat ggtgacgaag attataaagt 540
agaagagagg ttggatatag aggctgtagt gcacccaaga gaagtggatc cgtttaatct 600
ttcattacca ncaagttctt gtatgtcang tctgatgtat aagtatccca gctgtgaaag 660
tgtgacagat gaatatgcaa gtcaccttat tcangatact aa 702

<210> 4907
<211> 759
<212> DNA
<213> Homo sapiens

<400> 4907
gtaggggtg gcgctctccg ttcggcggcg ctcccatggc gcacattacc attaaccagt 60
acctgcagca ggtgtacgaa gccatcgaca gcagagatgg agcatcttgt gcagagttgg 120
tgtcttttaa acatcctcat gttgcaaacc cacgacttca aatggcctct ccagaggaga 180
agtgtcaaca agtcttggaa ccccccttatg atgaaatgtt tgcagctcat ttaaggtgca 240
cttatgcagt ggggaatcat gacttcatag aggcatacaa gtgccagacc gtgatagtcc 300
aatatccttt gtcgttcatg gcagctgtcc cgcatagaac acatgcagtg gattacttgg 360
gacttgagac ccggaaacac tgggccagtt gctcatttct gcagttagaa aggaatgaca 420
gtgttttgga acagaagctc gtttcagctc tttcacttgg tacatcattc ttgcgagcat 480
tccaggccca caaagaagaa aactgggctc tgcctgtcat gtatgcagta gcgcttgacc 540
ttcgagtgtt tgccaataat gcagatcaac agttggtaaa gaaaggaaaa agcaaagttg 600
gggacatgtt ggaaaaagca gcagagttac tgatgagctg tttccgggtc tgtgccagcg 660
acacccgtgc tggtatagag gactctaaga agtggggcat gctgtttctg ggtgaaccag 720
ctgtttaaaa accacttcaa gatnnacaaa ctncattta 759

<210> 4908
<211> 752
<212> DNA
<213> Homo sapiens

<400> 4908
atggagttgg ggagttgcct ggagggcggg agggaggcgg cggaggaaga gggcgagcct 60
gaggtgaaaa agcggcgact tctgtgtgtg gagtttgcct cggtcgcaag ctgcgatgcc 120
gcggtggctc agtgcttcct ggccgagaac gactgggaga tggaaagggc tctgaactcc 180
tgcttcgagc ctccggtgga ggagagcgcc ttggaacgcc gacctgaaac catctctgag 240
cccaagacct atgttgacct aaccaatgaa gaaacaactg attccaccac ttctaaaatc 300
agcccatctg aagatactca gcaagaaaat ggcagcatgt tctctctcat tacctggaat 360
attgatggat tagatctaaa caatctgtca gagagggctc gaggggtgtg ctcctactta 420
gctttgtaca gcccagatgt gatatttcta caggaagtta ttcccccata ttatagctac 480
ctaaagaaga gatcaagtaa ttatgagatt attacaggtc atgaagaagg atatttcaca 540
gctataatgt tgaagaaatc aagagtgaaa ttaaaaagcc aagagattat tccttttcca 600
agtaccaaaa tgatgagaaa acctttttatg tgtgcatgtg aacgtgtcag gaaatgagct 660
ttgccttaag acatcccaat tgggngaaca ccanagggca tctgcgggaa cgaatgaatc 720
agtttaaaat gggtttaaan gaaaatgcaa ga 752

0000204750

<210> 4909
<211> 691
<212> DNA
<213> Homo sapiens

<400> 4909
tcgatgaaag atcctccgga cttattggac aggcagaaat gcccgaacgc cttggcgtct 60
cttcgacatg ccaaatggtt tcaggcaagg gcaaatggat taaaatcatg tgtaattgtc 120
ctccgcattc tgcgtgattt gtgcaacaga gtccccacat gggcaccatt gaaaggatgg 180
ccactagaac ttatatgtga aaagtctata ggtacttgta atagaccttt gggcgctggg 240
gaggccttga gacgagtaat ggagtgtttg gcatctggaa tactacttcc tgggggtcct 300
ggtcttcatg atccttgtga gcgagaccca acagatgctc tgagctatat gaccatccag 360
caaaaagaag atattaccca cagtgcacag catgcactca gactatcagc ctttggccag 420
atttacaaag tgctggagat ggaccccctt ccatctagta agccttttca gaagtattcc 480
tggtcagtta ctgataaaga aggtgctggg tcttcagctc taaagaggcc atttgaagat 540
ggattagggg atgataaaga ccccaacaag aagatgaaac gaaacttaag gaaaattctg 600
gatagtaaag caatagacct tatgaatgca ctaatgaggc taaaatcaga tnangcctgg 660
ggcttcagta taagctccta tctcantctg g 691

<210> 4910
<211> 831
<212> DNA
<213> Homo sapiens

<400> 4910
tttctatggg taataagagg anacctttat agtttcatga tgtggagacc aagatacata 60
agaaagcaag aatgagtctc cgggtgttcc ctctgatcag caaacatgaa ttcataattt 120
catttactct catttttgta atgcactctg agcaatcctc caggcagatc ctatttacta 180
agcttcaggc ttttgtccca ttttataatg cccaaacaca tggagaaaac attttgttgt 240
ttttaaaaac aggtatggga tttctgatat aatcaatttt attgacttct tgggagttgt 300
aatgatctgt gactcactgc ataatattgt agttttatag ggtggcacat caccctgtgt 360
aaaacaactt taatgacctg aggactgatg agtacaggaa gtgaggttta tcatgagtag 420
catttattaa gcatctgcta gaatcaaagc actgcattag ctactaaggt acaaagtaag 480
acacagttta ataaggaaga cagggcatct acccaagtca acagttcagt gacatctgtt 540
atttgaacca cacaccaatg caaccgaagt aaatgctgaa agggtgagaa gaaggaatag 600
attactatgc atttttgaga ggatgaagaa ggcttcttgg agaaggttct gaaaagagat 660
acggnattaa agagaaatag aaaagagcac tgacgaagca ctcaggatgg ctattcaagg 720
gaattgggg attcacagca actggtgcac aancatcccc aaatgccaag aaaaatgggg 780
gtaaagggtn aaagggaaac tggggtcnag aagctttgca tggtttttc c 831

<210> 4911
<211> 793
<212> DNA
<213> Homo sapiens

<400> 4911
gaagatggcg gccgagaggg aacctcctcc gctgggggac gggaagccca ccgactttga 60
ggatctggag gacggagagg acctgttcac cagcactgtc tccaccctag agtcaagtcc 120

atcatctcca gaaccagcta gtcttcctgc agaagatatt agtgcaaact ccaatggccc 180
aaaacccaca gaagttgtat tagatgatga cagagaagat ctttttgcag aagccacaga 240
agaagtttct ttggacagcc ctgaaaggga acctatccta tcctcggaac cttctcctgc 300
agtcacacct gtcactccta ctacactcat tgctcctaga attgaatcaa agagtatgtc 360
tgctcccgtg atctttgata gatccaggga agagattgaa gaagaagcaa atggagacat 420
ttttgacata gaaattggtg tatcagatcc agaaaaagtt ggtgatggca tgaatgccta 480
tatggcatat agagtaacaa caaagacatc tctttccatg ttcagtaaga gtgaattttc 540
agtgaaaaga agattcagcg actttcttgg tttgcacagc aaattagcaa gcaaatattt 600
acatgttggt tatattgtgc caccaactcc agaaaagagt atagtaggga tgaccaaggg 660
tcaaagtggg gtaaagaaga ctcatcatcc actgagtttt gtagaaaaac ngagaagcaa 720
ctcttgaaag gtatcttcaa agaacagtaa acatccaact ttactacang atcctgaatt 780
taaggnaagt tcc 793

<210> 4912
<211> 760
<212> DNA
<213> Homo sapiens

<400> 4912
tttaagacat gaattacatt taaaattaga atatggttaa tattaaataa taggcctttt 60
tctaggaagg cgaaggtagt taataatttg aatagataac agatgtgcaa gaaagtcaca 120
tttgttatgt atgtaggagt aaacgttcgg tggatcccct gtctttgtaa ctgaggttag 180
agctagtgtg gttttgaggt ctcactacac tttgaggaag gcagctttta attcagtgtt 240
tccttatgtg tgcgtacatt gcaactgctt acatgtaatt tatgtaatgc attcagtgca 300
cccttgttac ttgggagagg tggtagctaa agaacagttg agtataggtt tttctccatt 360
tacagatgtc tttggtcaaa tattgaaagc aaacttgtca tggtcttctt acattaagtt 420
gaaactagct tataataact ggtttttact tccaatgcta tgaagtctct gcagggcttt 480
tacagttttc gaagtccttt tatcactgtg atcttattct gaggggagaa aaaactatca 540
tagctctgag gcaagacttc gactttatan gtgctatcag ttccccgata cagggtcaga 600
gtaacccata cagtattttg ggtcaggaag agaaagtggc catttacact gaatgagttg 660
cattctgana atgtcctatc tcttaaacgt agaatanatt tggaaagaca tttgatctta 720
aaaccaaagt aantttaaga atgaagtggc atattacata 760

<210> 4913
<211> 728
<212> DNA
<213> Homo sapiens

<400> 4913
gcaagtacac ggagaataag ctgaaggcca tcaaagcccg gaatgagtac ttgctggctt 60
tggaggcaac caatgcatct gtcttcaagt actacatcca tgacctatct gaccttattg 120
atcagtgttg tgacttaggc taccatgcaa gtctgaaccg ggctctacgc accttcctct 180
ctgctgagtt aaacctggaa cagtcgaagc atgagggtct ggatgccatc gagaatgcag 240
tagaaaacct ggatgccacc agtgacaagc agcgcctcat ggagatgtac aacaacgtct 300
tctgcccccc tatgaagttt gagtttcagc cccacatggg ggatatggct tcccagctct 360
gtgcccagca gcctgtccag agtgagctgg tacagagatg ccaacaactg cagtctcgct 420
tatccactct aaagattgaa aacgaagagg taaagaagac aatggaggcc accctgcaaa 480
ccatccagga cattgtgact gtcgaggact ttgatgtgtc tgactgcttc cagtacaagc 540

0567030 - 0567030

aactccatgg agtccgtcaa gtccacggtc tctgaaacct tcatgagcaa gcccagcatt 600
gctaagagga gagccaacca gcaagagaca gagcagtttt atttcacaaa aaatgaaaag 660
agtacctgga ngggcaagga acctcatcac caagttacaa gcccaangca tgnccttttct 720
gcaaaaaa 728

<210> 4914
<211> 726
<212> DNA
<213> Homo sapiens

<400> 4914
accaggaaac tgtcaaagtg caaatacaca gcagagcttc agaatatatc actgatgtcc 60
attcgaatga cctgtctaca ccacagatcc ttccatcaaa tgaaggtgtt aatccacgtt 120
tatcggcaag ccctcctaaa tcaggcaatt tgtggccagg attggcacca ccacacaaaa 180
aagctcagtc tgcatctcca aagagaaaaa aacagcacaa gaaatacaga agtgttattt 240
cagacatatt tgatggaaca atcattagtt cagtgcagtg tctgacttgt gacagggtgt 300
ctgtaaccct cgagaccttt caagatctgt ccttgccaat tcctggcaag gaagaccttg 360
ctaagctgca ttcatcaagt catccaactt ctatagtcaa agcaggatca tgtggcgaag 420
catatgctcc acaagggtgg atagcttttt tcatggaata tgtgaagagg tttgttgtct 480
catgtgtccc tagctggttt tggggtccag tagtaacctt gcaagattgt cntgctgcct 540
tctttgccag agatgaacta aaaggtgaca atatgtacag ttgtgaaaaa tgcaaaaagt 600
tgagaaatgg agtgaagttt tgtaaagtac aaaactttcc ngagattttg tgcatccanc 660
ttaaaaagat tcagacatga actaatggtt tccaccaaaa tcagtaccaa ggtttcaatt 720
tccgnc 726

<210> 4915
<211> 700
<212> DNA
<213> Homo sapiens

<400> 4915
gaagttttta tacagccatt gcacaagcat ttttatcaaa tgaaaaattg ccaaatctag 60
agtgtatcca aaatgccaac aaaggcaccc acacaagttt aatgcagaga ttaaggaacc 120
gaggagagag agaccgggaa agggagagag aaagggaaat gaggaggagt agtggtttgc 180
gagcaggttc tcggagggac cgggatagag actttagaag acagctttcc atcgacacta 240
ggcccttag accagcctct gaagggaatc ctagcgatga tcctgagcct ttgccagcac 300
atcggcaggc acttggagag aggctttatc ctcgtgtaca agcaatgcaa ccagcatttg 360
caagtaaaat cactggcatg ttgttggaat tatccccagc tcagctgctt ctccttctag 420
caagtgagga ttctctgaga gcaagagtgg atgaggccat ggaactcatt attgcacatg 480
gacgggaaaa tggagctgat agtatcctgg atcttggatt agtagactcc tcagaaaagg 540
tacagcagga aaaccgaaag cgccatggct ctaatcgaag tgtagtagat atggatttag 600
atgatacana tgatggtgat gacaatgccc ctttggttta ccaacctggg aaaaagaggg 660
attttaatac cnccaanggc ctgggcaagg aacacagaaa 700

<210> 4916
<211> 668
<212> DNA
<213> Homo sapiens

0030/045503-0403/00

<400> 4916
tgaaaataat gtactgcccc atgtattact gttccaaaag gagaaagcta tgtagaaaga 60
tacattaagg gtgaaaatag caatacagta gatttgaata ccttgatgtt ttgcattact 120
tcatttatgt ttacatcatg tttagaaatg ttttcattta ctgtggtctt tggtcacttc 180
agctcaaaga cctagtgatg gatatttctt tgaggctttc atttatataa ttttattttg 240
tacaatgttt tttttaaatg tgcaaatact gtattcaagt gaaaaaaata cagtatttgt 300
agataaccat agctactaca cagttcttcg gtagtcccag tgtagttata tcagtgttta 360
ctgaagggaa catcaaaata ttaatggtat attataaaat aaagactttc ttaaaggaaa 420
attgcaccta ttttaccttt ttaagagtaa gccatgaaat cttgtaacat gtctcttaac 480
tatttataat gaaaagtggc atttgggtat agtcaccaca gcantgttct anatccctaa 540
gattatctag gtaggacatg tcaaagatga cggttgtcat tctggaggcc ctattatgag 600
aatattataa aagggtgncc ttgtangaag gatcttgngt cctccccctg aggttctctt 660
tttcttgg 668

<210> 4917
<211> 724
<212> DNA
<213> Homo sapiens

<400> 4917
aaaactattt gagacataaa cagttgtgtg atgtaatttt agtcgctggt gatcgcagaa 60
ttccagctca cagattggtg ctctcctctg tctcagacta ttttgctgcc atgtttacta 120
atgatgtcag agaggcaaga caagaagaaa taaaaatgga aggtgtagaa ccaaattcgt 180
tgtggtcctt gatccagtat gcttatacag gccgccttga attaaaagaa gataatattg 240
agtgcctgtt atctacagct tgccttcttc agctttcaca ggttgtagaa gcatgctgta 300
agtttttaat gaaacagctt catccatcca actgtcttgg aattcgttct tttgctgatg 360
cccaaggttg tacagatttg cataaagtgg ctcacaatta tactatggag catttcatgg 420
aagtaatcag aaaccaggaa tttgtattat taccagccag cgaaattgca aagctcttgg 480
ctagtgatga catgaacatt cctaatgagg agacaatatt gaatgcactt cttacttggg 540
tccgtcatga tttggaacag agacggaaag atctaagtaa acttttggct tatattaggc 600
tactcttctt gcaccacagt tcctgggcag acatgggaaa taatgtacnt tttcgggatg 660
atatagatgt cagaaactca ntatgggagc aatgaaatac catttattac cagagagaac 720
cgan 724

<210> 4918
<211> 732
<212> DNA
<213> Homo sapiens

<400> 4918
aaaaaataaa agatttcatt ttatgtgagg aattatttta ataaaaaaaa gagggtttat 60
gctctatagt aataaaattt accagtaaca cccaatcaga aaattttggt tccttagtat 120
ttagggaaga cttttgtctc ttatggaatt ttacatgttt tgatttagaa aagtagatgc 180
aatataatat atttcaagtt ttatacatat tagatgaatt gcatggtatt ttaggcaact 240
taactataaa caaatttatt catagaagca ttgttgccaa caatttagat gacctcgatg 300
aaaaaacaca ccaattgaca aaactggctc aaaaggaaat aaaaaatcca aacagacctg 360
taacaagtaa agagattgaa ccagtaatca aaaatctccc aacaanagaa agtccaggac 420

0050204505 "0502045"

taaatgagtt tactggcaaa ctatgccaaa catataaaga agaattaaca ctaatccttc 480
tcgaactctc ccaaaaaatg gaagagaaag gagcaccctg tgacattcta taaggcggac 540
attaccttaa caccaaagcc agacaaagac ctcacaggga agctacagac caatatccct 600
tatgaatata gatgcagaaa aacttcaaaa tactagcagg ccaaatccag cagcttatta 660
aaaatgtcac acaggcanga ccaagtgaga tttatcacgg aaatgcaggg gatggntctc 720
atacaaaaag tt 732

<210> 4919
<211> 811
<212> DNA
<213> Homo sapiens

<400> 4919
ataagcacac gagctggagg actgggtatc aatctcactg ctgcagacac agtgattttc 60
tatgatagcg actggaaccc cactgtggac cagcaggcca tggacagggc ccaccgctta 120
gggcagacaa agcaggttac tgtgtaccgg ctcatctgta aaggcaccat tgaagaacgc 180
attctgcaaa gagccaagga gaagagtgag attcagcgga tggtgatttc aggtgggaac 240
ttcaaaccag ataccttgaa acccaaagag gtggttagtc ttcttctaga cgacgaagag 300
ttggagaaga aactgaggct gcggcaggaa gagaaacggc aacaggagga aaccaaccga 360
gtgaaagagc gcaagcggaa gcgggaaaag tatgcagaga agaagaaaaa agaagatgaa 420
ttggatggga aaaggagaaa agagggtgtg aacctggtga tcccatttgt tccctcggct 480
gataactcca acctctctgc tgacggagat gactccttca ttagcgtgga ctcagccatg 540
ccaagccctt tcagtgagat ctccatcagc agtgagctgc acactggctc cattcccctg 600
gacgagagca gcagtgacat gctggtcatt gtggatgacc cagcctcctc agcccctcag 660
tctcgagcta ccaactctcc cgcatccata acangctccg tctcagatac cgtgaatgga 720
attccattca ggaaattnca actgcaggac ttggtcactc aaccccgaaa gccgaaggcc 780
gccccaaang gtcaagaaan cacaagccaa a 811

<210> 4920
<211> 851
<212> DNA
<213> Homo sapiens

<400> 4920
gatgtagaag agaattctaa gctctgaaag tgtctgttct ggtcggaagc tgcctcaccg 60
caatgcttct gctgtagcta gaaaaaagtt attacataat tctgaagatg aacagagctt 120
aaagtcagaa attgaagaag aggagctaaa agatgaaaat caactattac cagtgtccag 180
ttctcacact gcccagagca atgttgatga atctgaaaac agagactcag agtcagaaag 240
tgatttgcgg gtagcccgga aaaattggca tgctaatggt tacaagtccc atactccagc 300
accttcaaag acaaaatttc ttaaaataga gtcttctgag gaagactcta aaagtcatga 360
ttcagatcat gcatgtaaca gaactgctgg cccatcaacg tctgtgcaga aacttaaggc 420
agagagcatc tcagaggaag cagattctga accaggaaga tctggtggta ggaaatacaa 480
tacatttcac aagaatgcga gtttctttaa aaaaaccaag attctgagtg actcagaaga 540
ctctgaatct gaagagcaag atagagaaga tgggaaatgt cataaagtgg aaatgaaccc 600
aatttcagga aatctgaact gtgaccctat tgctatgtcc cagtgttcct cagatcatgg 660
atgtgaaact gatttagatt cagatgatga caaaatagaa aaaccaaaca attttatgaa 720
aagattctgc atcacaagga catggactaa gcagaaaaat ttccaaggaa aaagggtctg 780
ttccagtgac tcagacagtt antttacagg gnggttaaga aatcatcaaa agccagaaca 840

aggtcncctg a 851

<210> 4921
<211> 805
<212> DNA
<213> Homo sapiens

<400> 4921
gtggttatga gggctggcga atcgacacat atcttgatat tccattggtc atccgacctt 60
atgggtccag ccaagcattt gctagtgtgg aagaagcatt gcatgcattt attcagccag 120
agattctgga tggcccaaat cagtattttt gtgaacgttg taagaagaag tgtgatgcac 180
ggaagggcct tcggtttttg cattttcctt atctgctgac cttacagctg aaaagattcg 240
attttgatta tacaaccatg cataggatta aactgaatga tcgaatgaca tttcccgagg 300
aactagatat gagtactttt attgatgttg aagatgagaa atctcctcag actgaaagtt 360
gcactgacag tggagcagaa aatgaaggta gttgtcacag tgatcagatg agcaacgatt 420
tctccaatga tgatggtgtt gatgaaggaa tctgtcttga aaccaatagt ggaactgaaa 480
agatctcaaa atctggactt gaaaagaatt ccttgatcta tgaacttttc tctgttatgg 540
ctcattctgg gagcgctgct ggtggtcatt attatgcatg tataaagtca ttcagtgatg 600
agcagtggta cagcttcaat gatcaacatg tcagcaggat aacacaagag gacattaaga 660
aaacacatgg gnggatcttc aggaagcana gggatattaa tcctagtgct ttcgcaaagt 720
tccacaaaat gcatatatgc cggatccaat agactggaag ggntcaagcc aggaaatgca 780
aantttctag aaagtgggng gaatt 805

<210> 4922
<211> 509
<212> DNA
<213> Homo sapiens

<400> 4922
gaaagaaacc ccagaaaacc taaataaatg gagagataag aaggctcaac ctagtaaaga 60
cgtatgttct ttttaaattg atctgtagac ttaataaaat tccaattaga atccaagcag 120
gatttgttct tatagataag ctcattatga aatgtatatg gaatgtaaag gaactagtgc 180
tatggtttgt ccccaccaaa tctcatgttg aaatttgatc ctcagtgtgg tggtgttggg 240
aggtggggcc tagtgggagg tgtttgggtc atgggtgtgg atccctcatg aatagatgaa 300
tgcccttcct cgtgggtaga taagtgagtt ctagctcttt caggtcccaa caagagctgg 360
ttgtgaaaaa gagcctggca cgcccacttg cctctgctcc caccctgtgg tctctgcacg 420
tgccagctcc cctttgcttt ccaccgtgag gggaaatagc ctgaanccct cactggatgc 480
ccaatcctga actttcccaa ccagcanna 509

<210> 4923
<211> 682
<212> DNA
<213> Homo sapiens

<400> 4923
agaagatgct tcaaattcaa cccgagaagg atatcattgt agagtttatc aaaaatggag 60
atttcaagta tgtccgcatg ctgggggcac tttacatgag gctgacaggc actgcaattg 120
attgctacaa gtacttggaa cctttgtaca atgactatcg aaaaatcaag agccagaacc 180

0050950.0050950

gaaatgggga gtttgaattg atgcatgttg atgagtttat tgatgaacta ttgcacagtg 240
agagagtctg tgatatcatt ctgccccgac tacagaaacg ctatgtatta gaggaagctg 300
agcaactgga gcctcgagtt agtgctctgg aagaggacat ggatgatgtg gagtccagtg 360
aagaggaaga agaggaggat gagaagttgg aaagagtgcc atcacctgat caccgccgga 420
gaagctaccg agacttggac aagccccgtc gctctcccac actgcgctac aggaggagta 480
ggagccggtc tcccagaagg cggagtcgat ctcccaaaag gagaagcccc tcccctcgcc 540
gagaaaggca tcggagcaag antccaagac gtcaccgcag caggtcccga aatcgggggc 600
acagatcccg ttccaantcc ccaggtcatc accgtngcac agacacagga gccactcaaa 660
gtctccccga aaggtccaan ga 682

<210> 4924
<211> 693
<212> DNA
<213> Homo sapiens

<400> 4924
gcaaatgaag gcctgggaga gcctgggctg attccatgga gagggcttct aagaatctta 60
agggtcggtg tacccgagag aactgcaagt accttcaccc tcctccacac ttaaaaacgc 120
agctggagat taatgggcgg aacaatctga ttcaacagaa gactgccgca gccatgttcg 180
cccagcagat gcagcttatg ctccaaaacg ctcaaatgtc atcacttggt tcttttccta 240
tgactccatc aattccagct aatcctccca tggctttcaa tccttacata ccacatcctg 300
ggatgggcct cgttcctgca gaacttgtac caaatacacc tgttctgatt cctggaaacc 360
cacctcttgc aatgccagga gctgttggcc caaaactgat gcgttcagat aaactggagg 420
tttgccgaga atttcagcgt ggaaattgta cccgtgggga gaatgattgc cgctatgctc 480
accctactga tgcttccatg attgaagcga gtgataatac tgtgacaatc tgcatggatt 540
acatcaaagg tcgatgctcg cgggagaaat gcaagtactt tcatcctcct gcacacttgc 600
aagccagact caagggangc tcatcatcag atgaaccatt cagctgcctc tgccatgggc 660
cctgcagnct ggganactgc aactgatacc aaa 693

<210> 4925
<211> 719
<212> DNA
<213> Homo sapiens

<400> 4925
ttgcttgagt catcttctga agctttaaaa acaattgatg aattggcctt caagatagac 60
ctaaatagca catcacatgt gaatattaca actcggaact tggctctcag cgtatcatcc 120
ctgttaccag ggacaaatgc aatttcaaat tttagcattg gtcttccaag caataatgaa 180
tcgtatttcc agatggattt tgagagtgga caagtggatc cactggcatc tgtaattttg 240
cctccaaact tacttgagaa tttaagtcca gaagattctg tattagttag aagagcacag 300
tttactttct tcaacaaaac tggacttttc caggatgtag gaccccaaag aaaaacttta 360
gtgagttatg tgatggcgtg cagtattgga aacattacta tccagaatct gaaggatcct 420
gttcaaataa aaatcaaaca tacaagaact caggaagtgc atcatcccat ctgtgccttc 480
tgggatctga acaaaaacaa aagttttggg aggatggnac acgtcaggat gtgttgcaca 540
cagagattca gatgcaagtg agacagtctg cctgtgtaac cacttcacac actttggagt 600
tctgatggga ccttccaaga agtgnctcac agttagatgc aagaaacact aaagtcctca 660
ctttcatcag ctatattggg tgtggntatc tgctattttt caagcagnaa ctctcctga 719

Docket No. 3050-0-PCT-US

<210> 4926
<211> 811
<212> DNA
<213> Homo sapiens

<400> 4926
aaaaagtgta gggagggtac ctctcacaga agagtcttat gactggcatc aggggaaggt 60
caccaagtct ttcctgtaca tgctgtttat caaattcatt catctcgaag tattcagtat 120
gccagaaagg gctattgcaa gacacgaagt ccgagaaatt gagcagcgac atacaatgga 180
tggccctcgg caagatgcca ctttagatga ggaagaggac atggtgatca tttataacag 240
agttcccaaa acggcaagca cttcatttac caatatcgcc tatgacctgt gtgcaaagaa 300
taaataccat gtccttcata tcaacactac caaaaataat ccagtgatgt cattgcaaga 360
tcaggtgcgc tttgtaaaga atataacttc ctggaaagag atgaaaccag gattttatca 420
tggacacgtt tcttacttgg attttgcaaa atttggtgtg aagaagaaac caatttacat 480
taatgtcata agggatccta ttgagaggct agtttcttat tattactttc tgagatttgg 540
agatgattat agaccagggt tacggagacg aaaacaagga gacaaaaaga cctttgatga 600
atgtgtagca gaaggtggct cagactgtgc tccagagaag ctctggcttc aaatcccgtt 660
cttctgtggn catagctccg aatgctggaa tgtgggaaac angtgggcta tgggtnaagc 720
caagtttaac ctaaataatg aataatttct ggtgggagtt actgaagaac ttgaagattt 780
tancatgtta ttggagggaa cattgccccn g 811

<210> 4927
<211> 750
<212> DNA
<213> Homo sapiens

<400> 4927
tttatatttt ataaaaaccg gctgcaagaa agattcagaa agaatactta gtaagtcatc 60
atatgaaaaa ccaacaaaac catagagtgc agatttttc ctaactataa gtcacctcat 120
agttgtccaa agccatgata atgatatctc ttacaaattg acttctgtaa ccccccctaga 180
aataaccctt ttccttattt gattttagtc atcaaacata gtatgatatg ggaaaagtca 240
gccatttacc agaaattatc ttattttgat tttaaaaact catttctata tgtagttatt 300
gtaatgtcta ttttttaga cttaaagatt tatagaagac tatagttatc tgatttgtta 360
ttttgcattt ttcattctgt aaatctttgc ttatggcaca ttgtgctctc tgttttccat 420
ggttttattc atttatctcc tcctattttg aggggacaac atgggtagtt aaatctttgt 480
caatagtatt ggagataaca ctaactgcta ttatcataac atcttcattt ttactgcatg 540
ccaaaaccaa tgcctgccaa acaaaatctt agacatccca atataatatg ttagttatat 600
ttccattcac atcattattg aaaataccca gctcagtgcc tggcttaata aatgtttaat 660
tcccttacct actcctgctc catttttta attgaaatgg gagatgagca aantancaca 720
ttcaatggct ggaagcattt ttttgggnca 750

<210> 4928
<211> 759
<212> DNA
<213> Homo sapiens

<400> 4928
agaagtgact tctccaaaaa gtgtgttagt tcccggtcac ctgagctccg ggtgacgcgg 60

ctgcggtagc tgcggataca agccttccgc gggtcctgcc tggcgacccc gacctcctcc 120
tgctgtctct ccgctccgcc accccgaacc cgccaaggtc ctgtcctttt cctcctgtcc 180
tttgccagcg ttgggccgga tcgggccgag ccgggccgcc cgggcgcagt ctttaaccat 240
ggcgtccctc ttcaagaaga aaaccgtgga tgatgtaata aaggaacaga atcgagagtt 300
acgaggtaca cagagggcta taatcagaga tcgagcagct ttagagaaac aagaaaaaca 360
gctggaatta gaaattaaga aaatggccaa gattggtaat aaggaagctt gcaaagtttt 420
agccaaacaa cttgtgcatc tacggaaaca gaagacgaga actttcgctg taagttcaaa 480
agttacttct atgtctacac aaacaaaagt gatgaattcc caaatgaaga tggctggagc 540
aatgtctacc acagcaaaaa caatgcaggc agttaacaag aagatggatc cacaaaagac 600
attacanaca atgcagaatt tccagaagga aaacatgaaa atggaaatga ctgaagaaat 660
gatcaatgat acacttgatg acatctttga cggttctgat gacgaagaag aaagccagga 720
tattgggaat caaagttctt gatgnaattg gnantgaaa 759

<210> 4929
<211> 722
<212> DNA
<213> Homo sapiens

<400> 4929
gaaaaatatg atcatttcat aatgatgaag gagtcaattc accaagaaga cataataatc 60
ctaaatgttt atgcacccat aatggagctt caaaatatat gaagcaaaaa catacagaac 120
cagatacatc acaattatac tagaagattt caacacccct ttagcaatag ttgatagaat 180
agttagaaaa ttagtaaagt tataaaaggc ttgaacaata ctatcaacca acctgaccta 240
atttttttgt tttttgagac agggtctcat tttgttaccc agagtggagt gcagtggcat 300
gatcatggct cactgcagct tcaacctctc aggttcaggt ggttttccca cttcagcctc 360
ccaagtggct gagagtacag gcatgcacca ccatgcccac ctagcttttt aatttttttgt 420
ggagactggc tcccactatg ttacccaggt tagtttcaaa ctcctgggct caggtgatcc 480
tcctgcattg gtctcccaaa gtgctgggat aataggtatg aagcactgtg cctagccaac 540
ctgacttaat tgatatgtat agaacatgcc accaacagca gaatatacat tctcttcaag 600
gtacacacag aacatttagt aaggataggc attctgaatt ataaaataca tctcagtaga 660
tttaaaggac ttaaatcaag gtccccngac nacaggtgaa attaaatttt ggggatnaag 720
ta 722

<210> 4930
<211> 455
<212> DNA
<213> Homo sapiens

<400> 4930
gtttttgtgt tgctagccgg ggccagcggc ggtggcggcg gcggcggagg cgtcggtgga 60
ggaggggagg cggcgaggag gcgcagctcc cgctgcaccg cgatcgacgc tgcggagcga 120
gcccacccgc cccgggagct cgcctccccg gtgctccccc gccctccccg ccccccccagc 180
ggcgctgcct cctccaaatg agcgattcgc ccgctggatc taacccaagg acacccgaaa 240
gcagcggcag ctgcagcggc ggcggcggga agaggccggc ggtgccggca gcggtgtccc 300
tcttgccacc ggcggacccc ctgcgccagg gcgaaccggc tcccgatcag ggtcctgaag 360
atgctgagcg ctcacaccgg tcacctcctg cacccngagt acctgcagcc gctgtcntcc 420
actcccgtca ancccattga actggacgcc aagaa 455

0 0 2 0 0 7 0 3 6 5 5 0

<210> 4931
<211> 733
<212> DNA
<213> Homo sapiens

<400> 4931
gcgggcgccc agtgcaccgg gaggaggtga gcgccaggtc gccttcgcgg cccggggaca 60
caggcaggga cgcgggagct gatgcggctg gaccggccgg ggaaacagta ttttctggaa 120
gggggcccct ctgaagcggt ccaggatcct gcacatggcg ctgaccgggg cctcagaccc 180
ctctgcagag gcagaggcca acggggagaa gccctttctg ctgcgggcat tgcagatcgc 240
gctggtggtc tccctctact gggtcacctc catctccatg gtgttcctta ataagtacct 300
gctggacagc ccctccctgc ggctggacac ccccatcttc gtcaccttct accagtgcct 360
ggtgaccacg ctgctgtgca aaggcctcaa gcgctctggc cgcctgctgc cctggtgccg 420
tggacttccc cagcttgcgc ctggacctca gggtggcccg cagcgtcctg cccctgtcgg 480
tggtcttcat cggnatgatc accttcaata acctctgcct caagtacgtc ggtgtggcct 540
tctacaatgt gggccgctca ctcaccaccg tcttcaacgt gctgctctcc tacctgctgc 600
tcaagcagac cacctccttc tatgccctgc tcacctgcgg tatcatcatc cgggggggctt 660
ctggcttggt gtggaacaag naggggggcaa aanggaaccc tgtcntggct gggcaccgtc 720
ttcggcgtgc tgg 733

<210> 4932
<211> 734
<212> DNA
<213> Homo sapiens

<400> 4932
acagatgttc tgaactgaat ggtgtggcct ctttttgtgt aaattccttt tgccgtaatg 60
gatgcagtgg aataacaatg tttacaggta ccgatcccga tccctgctca atgtagcatt 120
tttttggttt tattttctta ataaaagcag gggtaggttt ctttaaactg cacaaacatg 180
caaggatttt ttaaaaatgg aaacttctct catgttattc aactagagca cttcagttta 240
caaaacagca agtccatctt tatggaagcc agcacaagga actgtgtgca aataatgaag 300
acgcttgctt ggatcctgtt tcaaaattct agaccagggc taccttacac agaattggtc 360
atgttactgc caggagattt ctgtgtaact tcatttattg gctacagttt tggcatttga 420
agatgtggta ctcagatggg gttttgtcca ccattgtcaa gattgtaatc ttaaaaatca 480
taccagtcat tgataattta agttatcctg aggcagtcga cttgcagagg cacagtctac 540
aaagcctang atgttgccac tcaatgggtt tacattctgg gacatctttt aagttgtttg 600
tagcactgca gttcaaaagt gttaatattt aaagggactt ctagatttta tacctaatgc 660
agtagaacct tgaagtatat taagcttttt tgntaaanct tgaacaagtt gggnaagaat 720
aatggtgagt tccc 734

<210> 4933
<211> 858
<212> DNA
<213> Homo sapiens

<400> 4933
tatttaatga aatgccaagg tgctattaga tgtttttga atatgtatac ttcttttcaa 60
atgatcacag atgtgaccat ccctaatgag tgcatttctt gaaatagagc agaaactcaa 120

Docket No. 2005-0553

gtaacaagaa tgggcaggat accaaggaaa cagactaatc aggcagatgg tgactatttt 180
gtagggaaag tctgagtaaa ccaatagctc tacaacaggg atctgaaaat aaaggaacat 240
tagtgagcat gaaaaaaatg ttttttttcat atttttttcat taccttataa aaattagatt 300
tacatacaca tttttaccta ttaccacaga ctatatgatg aaacttagtt tttctttcat 360
tataatgttt tcatattagc aaaattttgt caaaaaacaa ctttttcata attaagatgc 420
agtaatggat ttccttttttt ttgctctacc ttctgagttc ttgcaatact ttttgaaacc 480
tattggtctt ttaaaatttc ttaatcattt tgaaatgaat tgatttttaa attgaataaa 540
atagatttat attttgtgta aaatataaac atcacaataa actgaaatac atttgccaaa 600
gaacaacatt tttttgtaaa aaaacagaag taaaaaaaca tcctagcagg aaaccaggaa 660
cgggataaaa acacaaaaag gtatctcggg cacaatgccc tgaaggncaa caaccatggc 720
caagaacatg agggtaatgg ccagggnata agaaaacacc cctggggttg ggatcccttg 780
acaactcctg attcctaagg ntcaattagg gggattggtg caaaaaaaat ggtaaanggt 840
gtaaaaggtn gaccttaa 858

<210> 4934
<211> 784
<212> DNA
<213> Homo sapiens

<400> 4934
ccttatggtt tattatgggt aaaggtcatt tttaaaatag aagaattaga aaaacaggaa 60
aaatagaagt aatacagttt tttaaatcct ctttttttttt aagagttagg aaatagaaca 120
gaagcttggg aactaatagt tttagagttt taagatacca cgttttagta taacatttac 180
attttaaaca ttctcacagt taatataggc ttaacttgga aatattaagc ttttaggatt 240
tagtatgtag tagttctctg ctggcactaa gtctttcccc ttcgctcctt tccaacaggt 300
attgcccaag ctctcataag ccgttctttt ctttctatta tgattattat tttgtagaga 360
tggggtcgca ctttgttgcc caggctggtc ttgaactctt gggctcaagc agtccttttg 420
gcctcccaaa gtgctgtgat tacaggtgtg agctgctgag accagccttt tcttttaatt 480
ctgatggtca gtactgatga agtcctttcc agctttgggt acacagcctt ctgttattcc 540
tgctgtcaat tttttgtctt tctactgggc ttttcaacct tgggtattca tggtatcacc 600
ttcatctgtg cgattattac catttaactg cagcaagtaa agacgttaat agtgagggtt 660
ttggggaatg tggtaaaacc ggggaggtat atttgacttt gnccaagtta tccggatgag 720
gnangttagc taaagcaaaa tacaagtggg gtgctcccta caatcactgg gacctagaga 780
ttca 784

<210> 4935
<211> 788
<212> DNA
<213> Homo sapiens

<400> 4935
gtttttttagg aagagtgtcc cgcagagacc cggcgggagc tgccaggagc tctgggattc 60
cagcggctgg aagccacctg ggaagcctgg cctcagtgtg gaagagaagg cagcaggatt 120
attacagaac cttgtgaagc caacgcgggc agccgccagg agctgcagac cgagaggatc 180
tcgtcctttc ttgcggccca gggagaccag gcctttcatt ctgggctcga gaccaacaat 240
tcgaattccg aactcccccct gcgtgtggga ctcaaggttg cccagggctc acctctgatg 300
ggtgggcagg tgagcgcttc caacagcttc tcgaggctgc actgcagaaa tgccaacgag 360
gactggatgt cggcactgtg tccccggctc tgggatgtgc ccctccacca cctctccatc 420

0 5 0 5 2 0 0 6 0 4 5 0 5 2 0 0 6 0

ccagggagcc acgacacgat gacgtactgc ctgaacaaga agtcccccat ttctcacgag 480
gagtcccggc tgctgcagct gctgaacaag ggcttgccct gcatcacgcg ccctgtcgtg 540
ctgaaatggt ccgtcaccca ggcactggac gtcacagagc agctggatgc cggggtgcgg 600
tacctggacc tgcgggatag cccacatgct ggagggctcg gagaagaacc tgcactttgt 660
ccatatggtg tacacaaagg ggctggtgga ggacacactc acgggaaatc tcggagtggc 720
tgggganccgg aatccacgcc agggngtcat cctgggcctt gcaaaaaact ttcnaggggg 780
gttgaacc 788

<210> 4936
<211> 711
<212> DNA
<213> Homo sapiens

<400> 4936
gaaaatttga taatctgaat caccagcatt caaacaaata tttcggcaat aaagtttaca 60
aaatctggat ttttacaacc ttttctattg atgttttgta gaaataagac agggtactaa 120
tttttatact ggtttttaga aaaatattta tattgttggt gctcaaatca ccaatttcta 180
gctagatcat tttgcagcct tcttttcagt gtttaataac aaagtttttc ctaatggccc 240
ttcttttagt aaactggaca tgttattcca ctacaaaaac cacaagttat ctggcctttt 300
agatcttttt ggaatcggac ctggttgagt aaggacctct taaaagggaa aaataaattt 360
tgccgtcagc ttcttcataa cgttttcaag gaaattctag gcaatcattc ctgtcaccaa 420
agaactaaaa ttttggttga ctggaactag tgagctgtgt ccatggtgtg tcatgaagga 480
tgtaccccag agagtaacat gagccactgg gcagatccca gggaccagta cttgctgcag 540
gatctagtct gtaataagct tgggcatggc tctgctgaaa gcaagccatt cagtttcttg 600
tttgtaccta aaacaccaaa naagaaacac tcaaatccag ctgctttgtc aattgtcagt 660
tctgactcct tttgctgtgg ncttaaccgt acatantggg ggtagagtaa c 711

<210> 4937
<211> 776
<212> DNA
<213> Homo sapiens

<400> 4937
tgagaatgga agtaataggc aagaagccaa ggggcttccc aggacaagct aaaaaagagc 60
agatccagac tacaactaca gaatcctgta agattctgaa actttgtcac ttcctttcta 120
aggcttcctt cctaagcctc tctgtgaaac tctttgaaaa ggggtatgtg ggctagcttg 180
caaggacagc cagaagggag aaggatcaca tccccctccg tggccaggct ctgagagaca 240
gaaatccagt gaaggacaga gcatggggct gagtgtctgt agcccactgc attgagggca 300
ggagagctca gggcaggtct gagtcatcac cattttctgt gtgtttcttc ctaataagtg 360
aaataatgtg tagtgtctag cacggtgcct gacagctcac agaaaatccc caacttcccc 420
tcccccaccg ccatgccttc taactctcgg tgagatgaac atctctactg ggaggggaag 480
ccattgaggg aagaaatgct ggcaccttga catttgggga aagaaagga aggaattgtt 540
ttccaagtat ctactttgtg ccagaaatgg tgttgggcaa tttactgatt gcctcattta 600
atcctttgac gtatcctang agttaggtat tctcaagccc canttccaag aaagcaaacc 660
aaggtgaaaa agagttaata atttgttcaa aagacatatg gaaaaatgcc angcatgggg 720
gctcacgcct gtaatcctan cactttggga aggcaagggg ggcanatcac tttagg 776

<210> 4938

EP1530620B1

<211> 788
<212> DNA
<213> Homo sapiens

<400> 4938
acaaagtcag cttcctgcca gcccagggag aaatctggag ggattccttg gattgcaacc 60
ccgtcatctt ccaatggaca gaaaagcctt ggtctgtgga caactagtcc tgaatcaagt 120
tccagagaag atgcaaccaa gacagatgca gaatcagact gccagggtgt tgcttcggtc 180
actagcccag gagacatttc cccacccata ggcctagtca agaaagagcc ttatgggctt 240
tcaggactga aaagagcttc tgcttcttct ctcagatcca tctctgcagc tgaaggaaac 300
aagagctaca gtggatctat tcaaagctta acttctgtag gttccaagga gacacccaaa 360
gcttcaccaa acccagacct gcctccgaaa atgtgcagga gattaagact agacactgcc 420
tcaagcaatg gctatcagcg gcctggctca gtagtggcag caaaagctca actgtttgaa 480
aatgttggtt cacctaaacc agtttcttct gggcgccaag ccaaagccat gtactcctgt 540
aaagcagagc acagtcatga gctttccttc ccacaaggag caatattttc taatgtgtac 600
ccatcagtgg naccaggatg gttaaaggca acttatgaag gnaaaacaag gactagttcc 660
agaaaattan gttgtcttcc tctaatacta tttaagtgga tggcaagtat cttcaaggga 720
tccatgggaa cgantaaatg ctatgatttt atctgacaca gatncacggg gattaagccc 780
actaagtn 788

<210> 4939
<211> 776
<212> DNA
<213> Homo sapiens

<400> 4939
gatgtttatg gaaaggtggt tcaagtatga tggctatgat cggtttgaat tctctcatag 60
ctattccaaa gtctatgcac agagagcccc ctatcacccc gatggtgtgt ttatgtcttt 120
tgaaggctac aatgtggaag tccgagacag agtcaagtgc ataagtgggg ttgaaggtgt 180
gccattatct acacaatggg gacctcaagg ctatttctat ccaatccaga ttgcacagta 240
tggattaagt cattacagca agaatctaac tgagaaacct cctcacatag aggtatatga 300
aacagcagaa gacagagaca aaaacaagcc taatgactgg actgtgccaa agggctgctt 360
tatggcgaat gtggctgata agtctagatt caccaatgtc aaacagttta ttgcaccaga 420
aaccagtgaa ggtgtatcct tgcaactggg aaacacaaaa gattttatta tttcatttga 480
cctcaagttc ttgacaaatg gaagtgtgtc cgtggttcta gaagaccaca gaaaagaatc 540
agctcttcac tatacattat gtctcaaatg ctcagctaat tgctttaaa gaaagagata 600
tatactatgg gcattgggcc cagaacttca tggagcacag ttaccaggga cctggtcact 660
gacctcagga aaggagtggg tctttcaaac acaaaagctg tcaagccaac caanataatg 720
cccaagnaaa ggtggntagg ttgatttgca aaaggtaagg ggattccccc gaacaa 776

<210> 4940
<211> 702
<212> DNA
<213> Homo sapiens

<400> 4940
aaatcgatga agattgtatt tttgcacctt aactccacat tgctttattg gttaatttat 60
attctttcca tgtaattcat gtaattgtat gtctgtgtgt gttttatgtg tcaccacctt 120

tcatgttttt gattgcccta caaagagaaa ccaaatgagc tgattactga ctataagttc 180
tcagccttta tggacctaat cttattttta tttacttgag taatgtttat tctctgcatg 240
aaccatgatt tctcctgtga gccattccag cataagctgt gaatatgtat taacaaatat 300
atacatttct atttttataa tccataagga tatgcctgtt ttaaataaca tacatattaa 360
caatatctat caggaaaacc ctcaagacag cttctagtta aaacctttgt tgctgtcctc 420
tcaaactata tttataaaaa tttgctaggg ccaaatccat acttgcagaa taattcatca 480
aattttattt ttaagtgaaa agtaaccttt caggcatttc agcagcatac attgacaatc 540
tagggtatat atgtatgtat gtttcttatt gtatgtctat atatgtatgt ggggaggaca 600
ggagtgaatg ttcacacact tttcttgcgt actcaactaa attggngaat gtttccgaag 660
aaaattgggn tgaaattagc tgctganatt gagtttcctg cc 702

<210> 4941
<211> 572
<212> DNA
<213> Homo sapiens

<400> 4941
tgattgcaaa cgagcaaaag acttctctcc caaatttgtt ccaggataaa aacagaccgt 60
gtctcagtaa ctggccagag gatacggatg tcctctacat cgtgtctcag ttctttgtag 120
aagagtggcg gaaatttgtt agaaagccta caagatgcag ccctgtgtca tcagttggga 180
acagtgctct tttgtgtccc cacgggggcc tcatgtttac atttgcttcc atgaccaaag 240
aagattctaa acttatagct ctcatatggc ccagtgagtg gcaaatgata caaaagctct 300
ttgttgtgga tcatgtaatt aaaatcacga gaattgaagt gggagatgta aacccttcag 360
aaacacagta tatttctgag cccaaactct gtccagaatg cagagaaggc ttattgtgtc 420
agcagcagag ggacctgcgt gaatacactc aagccaccat ctatgtccat aaagttgtgg 480
ataatanaaa ggtgatgaag gattcggctc cggaactgaa tgtgagtagt tctgaaacag 540
aggaggacaa ggaagaagct aanancagat gg 572

<210> 4942
<211> 587
<212> DNA
<213> Homo sapiens

<400> 4942
acactgctca gggaagagcc tgctacggtg gactgtgaga ctcagtgcac tgtcctcctc 60
ccagcgaccc cacgctggac cccctgccgg accctccacc cttcggcccc caagcttccc 120
aggggcttcc tttggactgg actgtccctg ctcatccatt ctcctgccac ccccagacct 180
cctcagctcc aggttgccac ctcctctcgc cagagtgatg aggtcccggc ttctgctctc 240
cgtggcccat ctgcccacaa ttcgggagac cacggnggag atgctgcttg ggggtcctgg 300
acaggagccc ccaccctctc ctagcctgga tgactacgtg aggtctatat ctcgactggc 360
acagcccacc tctgtgctag acaaggccac ggcccagggc caacccaggc caccccacag 420
gccagcccag gcctgccgga agggccgccc tgctgtgtcc ctgcgagaca tcaccgcacg 480
tttcagtggc cancagccca cactgcccat ggctgatact gtggaccccc tggactggct 540
ttttggggag tcccaggaaa ngcagcnaag ccagagggac ctgccaa 587

<210> 4943
<211> 684
<212> DNA

DOCID: US 2005/0250150 A1

<213> Homo sapiens

<400> 4943
tatataaaca aaccaaaatt atttcttcaa atcaagaact tatctacgaa gggcgacgct 60
tagtcttaga acctggaagg ctggcacaac atttccctaa aactactgag gaaaacccta 120
tatttgtagt aagccgggaa cctctgaata ccataggatt aatatatgaa aaaatttccc 180
tccctaaagt acatccacgt tatgatttag acggggatgc tagcatggct aaggcaataa 240
caggggttgt gtgttatgcc tgcagaattg ccagtacctt actgctttat caggaattaa 300
tgcgaaaggg gatacgatgg ctgattgaat taattaaaga tgattacaat gaaactgttc 360
acaaaaagac agaagttgtg atcacattgg atttctgtat cagaaacatt gaaaaaactg 420
tgaaagtata tgaaaagttg atgaagatca acctggaagc ggcagagtta ggtgaaattt 480
cagacataca caccaaattg ttgagacttt ccagttctca gggaacaata gaaaccagtc 540
ttcaggatat cgacagcaag attatctcca ggtggatnac tggcagacgc atgggcacat 600
caagaaggca ctcatccgaa agacagaaat gtanaaaaac tacaagtcct gttaaattgc 660
atgaccagag antttactaa ncag 684

<210> 4944
<211> 826
<212> DNA
<213> Homo sapiens

<400> 4944
gttaatgacg tcacgttgtt tcgcgggaga aattcgaaag tggattttgt gcaatttgac 60
aggtggtata aatagttgaa tatttcctat tttctggacc cagctggttt ataacttcag 120
aagaaataat ggaaagccaa gaatttattg ttctatatac tcatcaaaag atgaagaagt 180
caaaagtgtg gcaagatgga attctgaaga tcactcactt aggaaacaaa gcaatttat 240
atgatgacaa aggagcatgt ttggagagtc tgtttcttaa atgccttgag gtgaaacctg 300
gagatgactt agaaagtgat cgatacttaa tcacagttga agaggttaaa gttgctggag 360
ccataggtat tgttaagcag aatgtcaata aagaagcacc agagttaaat tcaaggacat 420
ttatatcctc tggccgatct cttggatgtc agccctctgg cttaaaaagg aagtttactg 480
gttttcaagg accacgtcag gttccaaaga aaatggttat tatggaaagt ggtgaatcag 540
ctgcatcaca tgaggctaag aaaactggcc ctactatttt ttctccattc tgcagcatgc 600
ctcctttgtt tcctactgtt ggcaagaaag atgtaaataa tatactggca aaccctgaga 660
acatgtgact tacaagaaca gggagagaaa tgccatgggt ttttcctcgg gtttttcccc 720
aaaccttcc aagatttaac cccaaaaaag tgcctggggt ngaaagaaaa aattattttt 780
tggcnccaac ctgttcaaaa ttcccgggga aaatnaagcc ttttaa 826

<210> 4945
<211> 723
<212> DNA
<213> Homo sapiens

<400> 4945
tgcaaatatt ccaaagacat gattgtaagc ctttgttccc tgtaaaagat tgctctgtat 60
taaaacaaat ccaccaaaca acaagtcata gacccgttag aaaccagcat tctaaagcat 120
ggtttaagtg tgaacaggtg tttgtagctt atctgagact gacagtaggt aaaggggcca 180
aggagagact gctacatggt ggtacccaag ataattctct gaagagagag acttttgtgt 240
gaggaagaca tttattatac agagtgattt attgcaattc ttagctactc catcaagcta 300

0513275.0

gacttgtcac catgtcccat taaaagggtt taagaagaat tctttctcag aatcctgcat 360
tacagtagca tctgcaataa ggagaaaatt ttcttctggg aatcactcca ggaaaccttg 420
acccatcctc tacttagtca ctcttataga gccctgcatt ttcttttgta gcatttatga 480
catgtgtaat gttacatttg tttgtgggat tatttaagga atgtctgtca tgtgagacaa 540
ataagcttta tgaagtacag gcacctcttc tgtcttaatt cctatgcccc aagcacagtc 600
cctgacatct agtanaccct caaaaagttt tacggaatga atgagtgaac aaatgatgca 660
aagtgttggt tgcaggatat ctctctcaag tcttccaant ccttaaggag atnagaggca 720
ana 723

<210> 4946
<211> 748
<212> DNA
<213> Homo sapiens

<400> 4946
agactgagct cagtagccag gcatgaaaga gactgggcaa gttgcagggg ctaattggaa 60
aggggctgtc ggttgcactt ggggtttaaa caagaggttt cttttgcaat gagaattttt 120
aggtggctaa gatcagtctt cttggcaaaa aaataaacta agcatagagt gcagttggat 180
atgaccgagg aaattacaaa aagggctcca ggagcaaagt ctgagctttc cttatcagtg 240
ttgcagtgga atagctgggg gcctgatgct gtttgtgctg atcatacttt gcaaatgccc 300
acactttgtt gctgtttgtc tccttggacg aggtttgctg caacttcaat tccttgactt 360
cggccttact ttgttttcat agcagcaaga attgaagact taagggtttg agcagatggt 420
tttctaccta aattgaataa ttcaattacg tattctcaac tagcatggat ttgggtcatg 480
gaattaaagt agaaacgtat ccggcatgac ttctttgtgc ttatcaaaag tgatcctgat 540
aaacagatct tgctctttca tgtaaagaag taaaagttat ttatgattcc atctgatata 600
cataggagag aaactgatan aagaattctg aagggcaact gtatgataaa aagctatata 660
aagtccaagt gtncaatttc cttcaaccat aattttgagc aaacccaagg atttaaagtc 720
cnnggggaac ctgaacaatt taatttgg 748

<210> 4947
<211> 560
<212> DNA
<213> Homo sapiens

<400> 4947
aacgtatgag ctcgccctcc aaacaggaaa agtgattgaa caaatgggca aattttaccc 60
tgaactgaag ctagcttatg ctgttcgagg caataaattg gaaagaggcc agaagatcag 120
tgagcagatt gtcattggca cccctgggac tgtgctggac tggtgctcca agctcaagtt 180
cattgatccc aagaaaatca aggtgtttgt tctggatgag gctgatgtca tgatagccac 240
tcagggccac caagatcaga gcatccgcat ccagaggatg ctgcccagga actgccanat 300
gctgctttc tccgccacct ttgaagactc tgtgtggaag tttgcccaga aagtggtccc 360
agacccaaac gttatcaaac tgaagcgtga ggaagagacc ctggacacca tcaagcagta 420
ctatgtcctg tgcagcagca gagacgagaa gttccaggcc ttgtgtaacc tctacggggc 480
catcaccatt gctcaagcca tgatcttctg ccatactcgc aaaacagcta gttggctggc 540
ancaanggct ctcaaangaa 560

<210> 4948
<211> 710

US 6,686,205 B1

<212> DNA
<213> Homo sapiens

<400> 4948
aggcctcaga aagatggcgt cctcggagca ggcagagcag ccgagccagc caagctctac 60
tccaggaagt gaaaatgtgc tgcctcgaga gccgctgatt gccacggcag tgaagtttct 120
acagaattcc cgggtccgcc agagcccact tgcaaccagg agagcattcc taaagaagaa 180
agggctgaca gatgaagaga ttgatatggc tttccagcag tcgggcactg ctgccgatga 240
gccttcgtcc ttgggcccag ccacacaggt ggttcctgtc cagccccctc acctcatatc 300
tcagccatac agtcccgcag gctcccgatg gcgagattac ggcgccctgg ccatcatcat 360
ggcaggcatt gcatttggct ttcaccagct ctacaagaaa tacctgctcc ccctcatcct 420
gggcggccga gaggacagaa agcagctgga gaggatggag gccggtctct ctgagctgag 480
tggcagcgtg gcccagacag tgactcagtt acagacgacc ctcgcctccg tccaggagct 540
gctgattcag cagcagcaga agattcagga gcttgcccac gagctggncg ctgccaaggg 600
caccacatcc accaactgga ttctggagtc ccaaaatatc aacgaactca agtccgaaat 660
tactccntga aagggcttct tttaatccgn gganttcctc catcccatca 710

<210> 4949
<211> 648
<212> DNA
<213> Homo sapiens

<400> 4949
ttttgtatga aattggagga aatattgggg aacgctgcct tgatgatgac acttacatga 60
aggatttata tcagcttaac ccaaatgctg agtgggttat aaagtcaaag ccattgtaga 120
agacttaaca agctgcagat aaccatgtgg acttctgtca taattcttgc tgagtcaaga 180
gtgtaaataa aagaaatggc aggactcata ttattcagtt gtacccaagt atttaaaaat 240
gactctctta agccttaaaa agtcatagat ttgtgctgct gccagaatta tattaattat 300
tattaatgtt attattagaa aaaaaatttc tggagtgaga gtaaagaggc ttaattagtt 360
tgtgggcagt tttcatatgc tctgtgaaat gtgtccggat gtgacatagt ttttttttt 420
aatatgtgga aatgtcttct cttcccattc ttttctccta aaatcatata tactgtaata 480
tatgctctct cacctctatt acctcctcac atctaccctt tcccangtta ggtttgcttt 540
ttgaccaaaa agataacaaa taccaaggta tggcaagttg tgaagacagc acattaaaac 600
atacctaant tcacagtatt cctgtcacna cngaatggtt agtattca 648

<210> 4950
<211> 823
<212> DNA
<213> Homo sapiens

<400> 4950
gactgagcta cggttctggc tgcgtcctag aggcatccgg ggcagtaaaa ccgctgcgat 60
cgcggaggcg gcggccaggc cgagaggcag gccgggcagg ggtgtcggac gcagggcgct 120
gggccgggtt tcggcttcgg ccacagcttt ttttctcaag gtgcaatgaa agccttccac 180
actttctgtg ttgtccttct ggtgtttggg agtgtctctg aagccaagtt tgatgatttt 240
gaggatgagg aggacatagt agagtatgat gataatgact tcgctgaatt tgaggatgtc 300
atggaagact ctgttactga atctcctcaa cgggtcataa tcactgaaga tgatgaagat 360
gagaccactg tggagttgga agggcaggat gaaaaccaag aaggagattt tgaagatgca 420

gatacccagg agggagatac tgagagtgaa ccatatgatg atgaagaatt tgaaggttat 480
gaagacaaac cagatacttc ttctagcaaa aataaagacc caataacgat tgttgatgtt 540
cctgcacacc tccagaacag ctgggagagt tattatctag aaattttgat ggtgactggt 600
ctgcttgctt atatcatgaa ttacatcatt gggaagaata aaaacagtcg ccttgcacag 660
gcctggttta acactcatag ggagcttttg gagaacaact ttactttaat gggggggatga 720
tggaactaac aaaagaaacc acaagcacaa ggaaaattta accaangang aaatgagcaa 780
aatccaataa acctgttggg ggttccnggt ccaaattttc ccg 823

<210> 4951
<211> 595
<212> DNA
<213> Homo sapiens

<400> 4951
gagcgacgcc cacggcctgt ctcggccacc agcgtgttcc agcgagcgcc cagccacctc 60
gctcgcagcc tccccagcgc agcagcccgg ctgtgggcct gcggcagccg ggtcttcctg 120
gtccccacct cctggggccg acgggcggca ggaaggggct cggcgggacg cgccgtcagg 180
gacctgagga ggaacaacgg aacgcgttcg gaacggcctg gactcccgag actcacccga 240
ctcgtggcca caccgggaga actgaagcgg cagtagccgg cggagacgcc cgacccgaag 300
gccggctgct atggagcaga cagctgaacc gcttgccaga cgccgaaacc cagtgacgcc 360
ctccaccgct ccaccgtgct cccggctccc cgcccccgcc gcccgcgggc cccaangcgc 420
atgcgccgcc tgtcctggag gggcccattt ccttccgtcg tgggggggaag gcacagtgag 480
tccactgggg cacggcagcg tctaagccac aagcccgagc acataagcca agtcctaacg 540
ngagcctatg ttgtaagtcc actactggtg caaggtttca anacttctaa agaan 595

<210> 4952
<211> 704
<212> DNA
<213> Homo sapiens

<400> 4952
tctgtgttaa ctctgagaga acaaataatg gctttttaaa gactgttaat agaataatga 60
agacttactg tgtttttaac gtgaaaattt taggtgacca agggtcctgc tataacatac 120
tgggggtcat aggatagtag aatggtcaac atctcaattt agacatgtta cttcctgctc 180
taaatacact tgtggacgct acttgtggtg taactcctta tgtatttaat aattatctga 240
ctctggtttt cttggttgat ttttttaaat gggtgaagaa tctagttatg aattctttgc 300
cctttatgga atgtgatatc ttggttttta ttccatctgt tacttccctt ttacttaatt 360
ttatcttatt gttttgcgtt gtgtttctaa aataatggct ttggcttgtt ttttcctgaa 420
tgtttctgca gtttggtttg agtatctggg tttgggcacc actcctgaac ttggactcca 480
tctgtacttg tgacttttgg aangcagagt cagtgttttc tgtggaaaga tgacattttt 540
ttatattata tatgtgtatc tccccctccc ctttttggtt tctcttaaaa agactggaaa 600
gaaagcagtt aaagcagttc tgtggggtct cancaagatg gactcaaaag ttgtgggatg 660
aaaaaaacta anggacctca atanttgacc aagaccaata ggaa 704

<210> 4953
<211> 756
<212> DNA
<213> Homo sapiens

09/25/2006 15:36:09 PM

<400> 4953
ggagaatgcg cgggtcgagt ggtgtagttc gatttttgcg tgtgtgcgtt gcttgcggcc 60
tttgtgcctt tttattcttt gcttaccttt atgatataaa gaccttattt cttacaagga 120
ggaaaagacc gctgacttca gaaacagcgg gaaccccagc tcgtcaccgg taattcaaga 180
ggaaacgctt gagcaattac tgatgttgta aactgggatc agaagacata catggtatcg 240
tatcccaggc aaggcacagt ggctcacacc tgtaatccca gcactttggg aggctgaaga 300
aggcagatca cttgaggtca ggagttcgag accagcctgg cttacatggt gaaacccatc 360
tctactgaac atacaaaaat tagctggaca tggtggttag ctgcacctct actccacgtg 420
ttcctccctt caggtcccag gctgatggag tagcctctgt gtgtttggga tgttgtcagt 480
cataatggtg gacacaaaag agattatgac aaaccgtgta ttgtctccta caatttctgc 540
tcacagaagt ggacaacatc acttctttcc acatttcatt gaccagagca agtcatgtga 600
ccaagcctga ttcaaaatan gctggagcaa ggaggagcaa caaacataac attcccaagt 660
ttacagctga aggaaattaa gcttcaaagt tgcccaagtt tananaatga agtcaatggg 720
aanaggtttg aactcaagat gacaaaaatt gggggc 756

<210> 4954
<211> 695
<212> DNA
<213> Homo sapiens

<400> 4954
ttctgatgaa tgtgtgaaag agttgattat ttcaacagta ttggttaagt cacaacgacg 60
aagtgctgag aaggttatgg gtaccaggaa gaaacaaaca gaagtcttaa gattagaatg 120
agaaccaaag agaatttaac cctgccattt ttttttttt taacaccaag atcctaagta 180
attccaaatg ccttagatat caatgaaagc tacacaccat tgagatgggc aaaattcttt 240
ctctacaaag ggagtaatca agtaaatacc tgttctcttt caatggactg ttgcctattg 300
agcattgtgg atgatgtgtt ttcagatttc caggtgaagt tctgacccta cctgtttggc 360
caaagacgta aattgagagg aaaggccttg gtcttcctga tcaaccagca tttaacgaac 420
agtggcttaa tgcagatcac tcaagaggca gcatagcaat gtaaaaggaa tataagtang 480
tgttggatgc ctttttccta gaccaggaat ggggaatata taacacctgt gccaccgctc 540
ttttanggag gcattatgaa tgagtgcagc attcctgtcc tctgtgccag gatttggnct 600
tagaatccat gtcagattgg ngcttccaga catctattcc cagtccatca nagtgaaatg 660
aaggctattt gccatccctg ccttagacag aggag 695

<210> 4955
<211> 776
<212> DNA
<213> Homo sapiens

<400> 4955
caatttacca acttccaaat ttgaatgtgg agataatgtt aaaacatcat ccaatcttta 60
taatttacct cttaagacat tagaaagtat tgcatttgtt ccaccgcagt ccgacctaag 120
taattcatta ggaactccat cagtgcctcc aaaagctcca gttcagaaat tcagctgcca 180
ggtcgaggga tgtactcgaa cctataattc ttcacagagt attgggaaac acatgaagac 240
agcacaccct gaccaatatg ctgcatttaa aatgcagcgc aaaagtaaaa aaggtcagaa 300
agctaacaac ttaaatacac caaataatgg aaagtttgtt tatttttgc catcaccggt 360
gaacagctca aatccatttt ttacgtcaca gaccaaagcc aatgggaatc ctgcttgttc 420

0068270 2005.07.26

ggcccagttg cagcatgtct cgccacccat ttttccagct catttagcaa gtgtgtcaac 480
tccattgttg tcctcaatgg aaagtgtcat aaatccaaat ataacttctc angataaaaa 540
tgaacaaggt ggtatgttat gttcccaaat gggaaattta cctagtactg ccttgccagc 600
acaaatgggg ggatctaacc aaaacagttc tgcctttgaa tattgacaag tggctcaaga 660
tcctttcctt ccctttacct ggcangaaag gtaggtcaaa tggtctctcc ttccccttca 720
accaagcaag attagtgggg gacctaaant tccggttttt tttccccaan ctgggg 776

<210> 4956
<211> 720
<212> DNA
<213> Homo sapiens

<400> 4956
gtacaacggg aatccgggac gccgggcgcg agtggagctc agtgccagag gaggggattc 60
ccggcgccgg gggacagagc ccctttttt ttttttgccg aaagaccctt tctgctgggg 120
agcctcttgt gtccagccta ggcccgcgtg cagcgccgac ggatgatcgt cttcttggaa 180
agtgaataaa cttaattgag aatgtctgaa aaccttgaca agtccaatgt aaatgaagca 240
ggaaaatcaa aatccaatga ttctgaggaa ggccttgaag atgctgtgga aggtgctgat 300
gaagccttac aaaaagcaat aaagtcagac tcctccagcc cccaaagagt gcagagacct 360
cactctagtc ctcctcgctt tgtgacagta gaagaacttc tagagacagc gagaggcgtc 420
accaacatgg ctctagccca tgaaattgta gtaaatggag actttcagat taaaccagtt 480
gaattaccaa gnaaacagct tgaagaagag agtaaaggag attgtacata aagcgttttg 540
ggattgcttg aagtgtgcag ctaagtgaag attccccaac atatgaccat gctatcaaac 600
ttgtangaga aatcaaaaga gactctccta tctttccttg ctgcctggtc atactagact 660
gagaaaacca gntaacaaga agtcctggat ctgggattct gataaagcag gaagcaanan 720

<210> 4957
<211> 535
<212> DNA
<213> Homo sapiens

<400> 4957
gaacagcgag taataacttc tttgtggatg attatgctag atttactatc ttgggattcc 60
caaggcaaga ctgctgctgt agccaatagt atgaactatc tgacaaagaa aggaatgtcc 120
tccaaggaaa tctatgatga ttcttttatt aggccagtaa ctttttggat tgttggggat 180
tttgatagcc cttctggacg gcagttactg tatgatgcca tcaaacatca gaaatccagt 240
aacaatgtta naataagcat gatcaataat cctgccaaag agataagcta tgagaacact 300
canatctcca gagcaatctg ggcagctctc caaactcaga cttccaacgc tgctaagaac 360
ttcatcacca aaatggccaa ggagggggct gcanaggccc tggctgcaag gagctgacat 420
tgcgggagtt ctctgttggg ggaatgggat ttcagtcttt ttaanagagg nctttgagtc 480
ttccaaaatg gatttcattt tgtcncatgc ccgtgtactg cagggatgtt ctgaa 535

<210> 4958
<211> 718
<212> DNA
<213> Homo sapiens

<400> 4958

US 2005/0059045 A1

agtagttccc ggtgactgtc gcagcctctg ttgccctctg acttgcagat gctgtgagat 60
ccagagctaa gactccacga catcccggaa gccgaaaaat gctatgtctt ctcattacac 120
tgaagacctt ttgccagaac agtgcatgca agattcattc caaaaagtga tactgagaag 180
atatggaagc tgtggacttg aggatttaca cttaaggaag gatggggaaa atgtgggtga 240
gtgtaaggat caaaaagaaa tttataatgg acttaaccaa tgtttgtcaa ctctacctag 300
caaaattttc ccatataata aatgtgtgaa agtctttagt aaatcatcaa atctaaatag 360
agaaaacata agacatacta cagagaaact tttcaaatgt atgcaatgtg gcaaagtctt 420
taaatctcac tcaggccttt cttatcataa ggataattca cactgaagag aaactctgca 480
tatgtgagga atgtggcaaa acctttaagt ggntcccaaa ncttactaaa cataagagaa 540
ttcacactgg agagaaacca tacaaatgtg aagaatgtgg caaagctttt aactggggct 600
cgantcttac taaacataag agaatccata ctggtgagaa ancctacaaa tgtgaagaat 660
gtggaaaagc ctttcactgg ngttcaacct ttgttaagac ataagaaaan tcatcagg 718

<210> 4959
<211> 815
<212> DNA
<213> Homo sapiens

<400> 4959
gagaccacat gttattatgc aaattatcag gcttttaact ctgcttgagg tttgggcctt 60
atgaagatca agatttctta ggcatttata taaaaccact ttcttatttc tggttttata 120
tcaacaacca cataacctag atacgaaagg agcattctcg cggatttagt gttgacctaa 180
gttaacagac ttttaaaaga cagaactctt acaaaggggc ttgagttttt ttttttttt 240
gctttttgga agacgtttaa atttagggtt tccagaccct gaacctcaat agtgtgcagt 300
agatttccaa agtatgaatc ttagaccttg aaaaattctg tatctctgac cttaaaagtt 360
ttgattattt tattctgttt ccaaagtgta taaccagttc tccaagttct aattggagag 420
ctcattagtt atcagcctca cagtcacgga ctctgggatg tcttatttca tatgcctgta 480
aatttgtgac ttgcagtgtg actggccttc tcctgtgtgt ttatgtagca caaccacatt 540
tgtcntgttg gaaggagagc caggtatcat agacagcaca ttcatttaga gccagtcttg 600
actttagatt gacctccatg ttctccaggg agaaaataat tatgcaactg tgaacagaga 660
aaaagggcaa aggcacacta accaagggga taataaggga tgtagtggca tttctaactc 720
cngtatttaa ttggttttgg tgggttttgg agaatagatg cttaaatgtt aatttccngg 780
ggcaagtttt ttaaanaaaa ggaggatgaa aatcc 815

<210> 4960
<211> 756
<212> DNA
<213> Homo sapiens

<400> 4960
attttcgagt gaaggacccg gagccgaaac accggtagga gcggggaggt gggtactaca 60
caaccgtctc cagccttggt ctgagtggac tgtcctgcag cgaccatgcc ccgtaaaggc 120
acccagccct ccactgcccg gcgcagagag gaagggccgc cgccgccgtc ccctgacggc 180
gccagcagcg acgcggagcc tgagccgccg tccggccgca cggagagccc agccaccgcc 240
gcagagactg caagtgagga acttgataat agaagtttag aagagatttt gaacagcatt 300
cctcctcccc cgcctccagc aatgaccaat gaagctggag ctcctcggct tatgataact 360
catattgtaa accagaactt caaatcctat gctggggaga aaattctggg acctttccat 420
aagcgctttt cctgtattat cgggccaaat ggcagtggca aatccaatgt tattgattct 480

0065750 "3/15/2010

atgctttttg tgtttggcta tcgagcacaa aaaataagat ctaaaaaact ctcagtatta 540
atacataatt ctgatgaaca caaggacatt cagagttgta cagtagaagt tcattttcaa 600
aagataattg ataaggaagg ggatgattat gaaagtcatt cctaacagta atttctatgt 660
atccagaacg gcctgcanag ataanacttc tgtctatcac ataagtggga aagaaaaaga 720
cattttaang ggatgtttgg gaaatcctcc ttcgaa 756

<210> 4961
<211> 792
<212> DNA
<213> Homo sapiens

<400> 4961
cctaaagtct cagctggtaa gtaataaaac caaggtttgg accaagactg tgcccctaac 60
ggctatccta tactgtatct gaatacttga ggaaataaaa tatacaactg aaattatttt 120
gcatttttta aagaaacagt agcaataggg gcatagaatc ttaaaattta aaaggtctta 180
gaggtcagat tatagagaaa aaaatggaag tccagggaga gttcctaaac tgtgtcatgg 240
ggtaccttgg aaaatttttt acctttgtat tcaacttccc aaaaaccata aaatgcataa 300
ttttctctgt caatttttt ccagtttttt gttcattatg aatgtcgggg aaggtatcta 360
ttttaaattg gactctgtca taagtaatgc ttgaagaatt acatgttgtg cttggcaatt 420
tgcactgcat gcaaagctgg aatgtaggga atttttctgt tttgtactct ctcttattat 480
gtgtagggta aggagaatgg agccctaatg cagtttcttt aggaagtgta gtacaccacc 540
agtagttaaa atgattatta ngcggtaatg ccaagggctg tagaatagaa tttaaacatt 600
acttgatgtt ttcnagatag atcttaaaat agatatcgat ataaaacaaa ctggaaggga 660
cagaaaatta attttagaat gtcaattctg ggtatatttt gatgagaata tgagaaagta 720
gccacaaatc acaccgtgca acatggaaat ttgcaacnag naaatttcan aagcccaaat 780
atatttaaag tg 792

<210> 4962
<211> 782
<212> DNA
<213> Homo sapiens

<400> 4962
caccttgtca aggtggccct gctcgaggat gtcaaccgca tgtcacctgg ggcgctggcc 60
attatcttcg caccctgcct cctgcgctgc cctgacaact cggacccgct gaccagcatg 120
aaggacgtcc tcaagatcac cacgtgcgtg gagatgctga tcaaggagca gatgaggaaa 180
tacaaagtga agatggagga gatcagccaa ctggaggctg cagagagtat cgccttccgc 240
aggctttcgc tcctgcgaca aaatgctcca tggcctctca aactggggtt ttcgtctccc 300
tatgaggggg tcctgaacaa gagccccaag acccgggaca tccaggagga ggagccggag 360
gtgctgctgg aggaggaggc agccggcggc gatgaggacc gggaaaagga gattctcatt 420
gaacggatcc agtccatcaa ggaggagaag gaggacatca cctaccggct gccggagctg 480
gacccaaggg gctcggacga ggagaacctg gactcggaga cgtcggccaa gcaccgagag 540
cctgctggag gagcgggccg ggcgggggcc ctcggaaggt cagtattaag gtagcgtctg 600
cttttctcct tcccgtccat cccagcaggc cccagggcga gggtcctccg gctgccggcc 660
ctgaaagctg cagtaancct gccatctgtc tctcaaaaag ggcccctgcg cctgctctcc 720
cttgccccgg cgcgcccaac cccgagcccc ctncccaacc gttgggccgc ccctccaana 780
an 782

<210> 4963
<211> 710
<212> DNA
<213> Homo sapiens

<400> 4963
gtcttgtcgg ctcctgtgtg taggagggat ttcggcctga gagcgggccg aggagattgg 60
cgacggtgtc gcccgtgttt tcgttggcgg gtgcctgggc tggtgggaac agccgcccga 120
aggaagcacc atgatttcgg ccgcgcagtt gttggatgag ttaatgggcc gggaccgaaa 180
cctagccccg gacgagaagc gcagcaacgt gcggtgggac cacgagagcg tttgtaaata 240
ttatctctgt ggtttttgtc ctgcggaatt gttcacaaat acacgttctg atcttggtcc 300
gtgtgaaaaa attcatgatg aaaatctacg aaaacagtat gagaagagct ctcgtttcat 360
gaaagttggc tatgagagag atttttgcg atacttacag agcttacttg cagaagtaga 420
acgtaggatc agacgaggcc atgctcgttt ggcattatct caaaaccagc agtcttctgg 480
ggccgctggc ccaacaggca aaaatgaaga aaaaattcag gttctaacag acaaaattga 540
tgtacttctg caacagattg aagaattagg gtctgaagga aaagtanaag aagcccaggg 600
gatgatgaaa ttagttgagc aattaaaaga agagagagaa ctgctaaggt ccacaacgtc 660
gacaattgaa agctttgctg cacaangaaa aacaaatggn antttgtgaa 710

<210> 4964
<211> 799
<212> DNA
<213> Homo sapiens

<400> 4964
gaataagatg gcggggaaga agaatgttct gtcgtctctc gcagtttacg cggaagattc 60
agagcccgag tctgatggcg aggctggaat cgaggcggtg ggcagcgcgg ctgaggagaa 120
aggcggattg gtatctgatg cctatgggga ggatgacttt tctcgtctag ggggtgatga 180
agatggttat gaagaagaag aagatgagaa cagtagacag tcggaagatg acgattcaga 240
gactgaaaaa cctgaggctg atgacccaaa ggataataca gaagcagaaa agcgagaccc 300
ccaggaactc gtggcctcct tttctgaaag agttcggaac atgtcgcctg atgaaatcaa 360
gatcccgcca gaaccccctg gcagatgttc aaatcacttg caagacaaga tccagaagct 420
ttatgaacga aagataaagg agggaatgga tatgaactac attatccaaa ggaagaaaga 480
atttcggaac cctagcatct acgagaagct gatccagttc tgtgccattg acgagcttgg 540
caccaactac ccaaaggata tgtttgatcc ccatggctgg tctgaggact cctactatga 600
ggcattancc aaggccagaa aattgagatg gacaaattgg aaaagggcaa aaaggagcga 660
acaaaattga gtttgtgacg ggcaccaaaa aaggcaccac gaccaacgcc acgtccaaca 720
acactancac tgncaacaca agctgttgca natgcccaga agagaaagag caagtgggat 780
tccgctatcc cagtgcaac 799

<210> 4965
<211> 694
<212> DNA
<213> Homo sapiens

<400> 4965
gaaaggacaa aagccagaca catttcaaca tgagggaccc actgacagat tgtccgtata 60
ataaagtata caagaaccta aaggagtttt ctcaaaatgg agagaatttc tgcaaacagg 120

0082/0.94620360

tcacatctgt tcttcagcaa agggcaaacc tggaaattag ctatgccaaa ggacttcaga 180
aactggcaag caagctgagc aaagcattac agaacacgag aaaaagttgt gttagcagtg 240
cctgggcctg ggcctcagag ggaatgaaat ccacagcgga cctgcatcaa aaacttggca 300
aagcaattgn attggaagca ataaaaccga cttatcaagt cctaaatgta caagagaaga 360
agagaaaatc acttgacaat gaagttgaaa agacagcaan tcttgtcatt agcaactggg 420
natcagcana ttaaggccaa gaagaaatta atggttagta ccaagaaaca tgaagcactt 480
ttccagcttg tagaaagctc caagcaatct atgactgaga aggagaagcg gaaagctcct 540
caataaactg acaaaatcaa ctgaaaagtt ggaaaaggaa natgaaaatt actaccaaaa 600
aaacatgggg gggttattct accagactga aatgggaaaa cacactagag aactgctacc 660
agagcattct ggagctggnn aaggaangaa ttca 694

<210> 4966
<211> 906
<212> DNA
<213> Homo sapiens

<400> 4966
aactacgaag atggcggttg cgcgcttggc agctgtggcg gcctgggtac cttgtcggag 60
ctggggctgg gcagccgtcc ccttcggtcc ccaccgtggc ctcagcgtgc tgcttgcacg 120
gatacctcag cgggcgccac ggtggctccc agcttgtaga caaaagacgt cactctcatt 180
ccttaatcga ccagaccttc caaacctggc ttataagaag ctaaaaggca aaagtccagg 240
aattatcttc atccctggct atctttctta tatgaatggt acaaaagcgt tggcgattga 300
ggagttttgc aaatctctag gtcacgcctg cataaggttt gattactcag gagttggaag 360
ttcagatggt aactcagagg aaagcacact ggggaaatgg agaaaagatg ttctttctat 420
aattgatgac ttagctgatg ggccacagat tcttgttgga tctagcctcg gagggtggct 480
tatgcttcat gctgcaattg cacgaccaga gaaggtcgtg gctcttattg gtgtagctac 540
agctgcagat accttaagtg acaaagttta atcagcttcc tgttgagcta aaaaaggaag 600
tanagatgaa aggtgtgtgg agcatgccat caaaatactc tgaagaagga gtttataacg 660
ttcantacag tttcattaaa ggaagctgaa catcactgct tgttacatag cccaantcct 720
gtgaactgcc ccattaagat tgctccatgg gcatgaaggg atgacattgt taccttggga 780
tacatcaatg caaggtttcc cgattcgaag tactcagcac agatgtggga tgttaatcct 840
cccgaaaaac acaggngatt accgaantga ggggaaaaag gagacattca anctccttgg 900
ttaaac 906

<210> 4967
<211> 795
<212> DNA
<213> Homo sapiens

<400> 4967
aaaaagtgcc ggtcaaaatg gaaagtgaat ccccctaaac aggagcacct gctggcgcta 60
aaagtgatgc ggctgactaa gcctacttta ttcaccaata tcccagtaac atgtgaagag 120
aaagacttac ctggagatct ctttaaccag ctgatgagag atgatccttc aaccgttaat 180
ggtgcagaag ttttaatgtt gggataaatg ctgactttac cacagaattt tgggaatata 240
tttttgggag agacctttc cagttatatc agcgttcata atgatagcaa tcaagttgta 300
aaagacatat tagtaaaagc tgatcttcag acaagttctc agcgtttaaa tctttcagcc 360
tccaatgctg cagtggctga acttaaaccg gattgttgta ttgatgatgt catacatcat 420
gaagtcaaag aaattggaac acacatcttg gtatgtgctg tgagttatac aactcaggct 480

0099/2009 09:45:40 PM

ggagaaaaaa tgtatttcag aaaattcttc aaatttcagg ttctcaaacc attggatgtg 540
aaaaccaaat tttacaatgc agagagtgac ctcagttctg tgactgatga agtatttctg 600
gaagcccaga ttcagaatat gacaacctca cctatgttta tggagaaggt tcactggagc 660
catctattat gtacaatgta acaagaatta aattcagtca gccaagctgg gagaatgtgt 720
gtctacgttt gggtcaagag catattttgc aaccaatggn tacacgccaa gtacttaaac 780
cngcctaaag ncaaa 795

<210> 4968
<211> 794
<212> DNA
<213> Homo sapiens

<400> 4968
atattatggt cagtgaagat atgaaattaa ctgactcaga gctaggaaag ctggcaaata 60
atatccagga attattatat agtgcctcag atatatgcca tgatcgagct gtcaaatttc 120
tcatgtcaag agcaaaggat ggttttcttg agaagctaaa ttccatggaa ttcataacac 180
tttctagatt aatggaaaca ttcattttag acaccgaaca gatctgtgga agaaaaagca 240
cgtcattact tggagcactt cagagccaag ctattaagtt tgtaaatagg tttcatgaag 300
agagaaaaac caagctcagc ctcctcttag acaatgagcg ctggaagcaa gcagatgttc 360
ctgcagaatt tcaggatctt gttgattctc tgtcagatgg gaagattgct ttacctgaaa 420
aaaaatcagg agccacagaa gaaagggaac cagctgaagt tcttattgtc gagggacaac 480
agtatgcagt tgttggaacc gtattgctgt taataagaat tatccttgaa tattgccagt 540
gtgtggataa catcccatct gttactactg acatgcttac tcgtctgtca gatttattga 600
agtacttcaa ttcaagaagt tgccagttag ttcttggagc tggtgcactg caagttgttg 660
gactaaaaac gataactaca aaaaatttgg ctctttcttc acgatgtttg cagttaantg 720
tgcactacat tccctgtgat ccgggctcaa tttgaagctc gactaccaac taagcaanta 780
tagcatgctt aggn 794

<210> 4969
<211> 646
<212> DNA
<213> Homo sapiens

<400> 4969
gagtgttgta gagcctcgag cctgcgagga gcgcgccgcc cgccagctcc ctgcgtcccg 60
tcccgcgtcc ccgcgttccc gcgtcctgcg atccgccgcc atggccagtg aggagctggc 120
gtgcaagctg gagcgccggc tgcggcgcga ggaggccgag gagagtggcc cccagctggc 180
tcccctcggc gccccagccc cggagcccaa gcccgagccc gagcctcccg cccgtgcgcc 240
cacggccagc gccgacgcgg agctgagcgc ccagctgagc cggcggctgg acatcaacga 300
gggcgctgcg cggccccggc gctgcagggt cttcaacccc tacacggagt tccctgagtt 360
cagccgccgc ctcatcaagg acctggagag catgttcaaa ctgtatgacg ctgggcggga 420
tggcttcatc gacctgatgg agctgaagct gatgatggag aagctggggg ccccccagac 480
ccacctgggc ctgaagagca tgatcaanga ggtggatgag gacttcgatg gcaagctcaa 540
cttccgggaa ttcctgctca ttttcacaag ggcgccgcaa gggaactgca agangacatn 600
ggctgatngc ctggaaagtt tctgaatcat gtgcctggag gttcaa 646

<210> 4970
<211> 863

09/25/2006 09:46:56 PM

<212> DNA
<213> Homo sapiens

<400> 4970
ataactatga caaagcttac atgagaatta gaagaccact ttacattttt acattccttc 60
tgctgttcat attaaccttg cacaattact tcatttttc tttgactctt ttaccacaat 120
gttttggtta tttataattt atcagccata tgtttatcag ccatataacc aactagatcc 180
caaatagatc catgtatttg tttccgtgat ttggccacat taataaattc ataaatttca 240
atcaaatatc ttatatatac acacatatgg tttaagctac agccctgtgt atgccgttta 300
actttatttg acgttgccca cttacttctt tgctgaccac ttggataacc gtaataaaaa 360
tcctataagc ctaaatggca tttcttttgg gatatttttc ctgcatttta ttccctttt 420
atataagtag gaattaatta tttattttat gtcttaatct atttgataaa naagactaca 480
ttataataat ctcanagatc atattaccaa aggttgccca cttgagcata ttttcatttt 540
gacacagaaa caaaatttag tacaaccttt cctagttccc atgtcttgat tttcatcatt 600
acatgcacag cagaccttta cctattgtga taccagaaca catcattgtc tttgggttcc 660
cgtcaaagag aattttattg ttgttttgta ttttcaagtc cttaaatagg tcntgaaact 720
cccagttgtt tccctggttg aaagcagnca cacatttagn gcacggttta ttttaccttt 780
cgggtgaaag atcaggagtt ttttattccc tcacttgggt caaatatatt tgggaaagga 840
atgttatcaa aaagtctagg gnn 863

<210> 4971
<211> 668
<212> DNA
<213> Homo sapiens

<400> 4971
agtcctcttg tgtagcctga ggcggcggta gcatggaggg ggagagtacg tcggcggtgc 60
tctcgggctt tgtgctcggc gcactcgctt tccagcacct caacacggac tcggacacgg 120
aaggttttct tcttggggaa gtaaaaggtg aagccaagaa cagcattact gattcccaaa 180
tggatgatgt tgaagttgtt tatacaattg acattcagaa atatattcca tgctatcagc 240
tttttagaat gtggtaggtt ggtacaaatt ccgtcgtcat tcagatcaga tcatgacgtt 300
tagagagagg ctgcttcaca aaaacttgca ggagcatttt tcaaaccaag accttgtttt 360
tctgctatta acaccaagta taataacaga aagctgctct actcatcgac tggaacattc 420
cttatataaa cctcaaaaag gacttttca cagggtacct ttagtggntg ccaatctggg 480
catgtctgaa caactgggtt ataaaactgt atcaggttcc tgtatgtcca ctggttttag 540
ccgagcagta caaacacaca gctctaaatt ttttgaagaa gatggatcct taaaggaggt 600
acataagata natgaaatgt atgcttcatt acaagaggaa ttaaagagta tatgcanaan 660
agtgggaa 668

<210> 4972
<211> 531
<212> DNA
<213> Homo sapiens

<400> 4972
aacaatgcag gcctcaaagt ccacaggagg ctccatactg gggaaaaacc atataagtgt 60
gatgtgtgtg ggaaagccta tatctcacgc tctagcctta aaaatcacaa aggaatccac 120
cttggggaga agccctataa atgtagctat tgtgagaaat ccttcaacta cagctctgcc 180

EFS Web 2.2.0.9 - 05/20/2008

cttgaacagc ataaaaggat tcataccagg gaaaaaccct ttgggtgtga tgagtgtggt 240
aaagctttca gaaataattc tggccttaaa gtacataaac gaatccacac tggggaacga 300
ccttacaaat gtgaagaatg tgggaaagca tacatctctc tctcgagcct tataaatcat 360
aaaagtgtac accctgggga gaagcccttt aagtgtgacg agtgtgagaa ggccttcatc 420
acataccgaa cccttacann ccacangaaa gttcatcttg gggagaagcc ctacaaatgt 480
gatgtgtgtg agaaatcttt taattacaca tcgctccttt ctcagcacaa g 531

<210> 4973
<211> 694
<212> DNA
<213> Homo sapiens

<400> 4973
gataattctc tcgatacggt tctaaaccgt cctcccgggt ttcttcaggt ttgtgactgg 60
ttatatcctc tagttcctga tagatctccg gttctgaaat gtactgcggg agcctacatg 120
tttcctgata caatgctaca agcagcagga tgctttgtgg gggtcgtcct gtcctctgag 180
ttaccagagg atgatagaga gctctttgag gatctgttaa ggcaaatgtc tgaccttcgg 240
ctccaggcca actggaacag agcagaagaa gaaaatgaat tccaaatccc tggaagaact 300
agaccctcct ctgaccaact aaaagaagcc tctggcactg atgtgaaaca gttggaccaa 360
ggcaataagg atgtacgtca taaaggaaaa cgtggaaaaa gggctaaaga tacttcaagt 420
gaagaagtta acctgagtca cattgtacca tgtgagccag ttccagaaga aaagccaaaa 480
gaattacctg aacggagtga aaaagtggct cacaacattt tgtcaggtgc ttcctgggtg 540
agttggggtt tagtcaaagg tgctgagatt actggtaaag gcaatccaga aaaggtgctt 600
ctaaactccg agagcggatt caaccanaag aaaaacccgt ggaagttagt ccagctgtca 660
ccaagggact tanatagcga ancaagctac aaga 694

<210> 4974
<211> 607
<212> DNA
<213> Homo sapiens

<400> 4974
ttgctaaaat attagcctct taaattctct aggaaccccc tcccccgctt ttttttttcc 60
tttcgctggt cgttattttt ctaaacctat cctgaaatca tgtcaatttt cttttgtatg 120
gttgaagaca actagatcac ttgataatgg ttttgctcag gtcacattgt gacaaggttt 180
taatgtagtc ctactttgca gaaggaggcc aagaagatgg gctgttagaa ccccctttaa 240
aagcatttgt ctattcagaa aattttcctg agtagatctc tgcaaaggct cttttaatag 300
tgatttcaag atcacgtttg caggactctg gtctattcgt tcagacgtct actgtgcaca 360
attacaagga gactacaact gaggcatctc aaagagcact gtcaaggtgt gtagggagcc 420
gggtgggtgg agggaggctg ggctctgacc tagaanccat gcttatgaat gctgttaatg 480
tttaaagcaa gcctaanggc actgctgaag gacaggggaa catntagaac tgaccaagac 540
tgaggtataa caggaacccc caggctattc acctgctcaa ggtaaagtgt ggnattacat 600
aaggnaa 607

<210> 4975
<211> 606
<212> DNA
<213> Homo sapiens

<400> 4975
atttgaagtc ctcgttccac gccttctcat catcctgaac accgagctct gggactccgg 60
cggagaatct aaacgtaaag catcacccac ggtcgtgaac tgtaggctct cctggcatcc 120
gggatcttat tctggccttg gcggagttgg ggatggtgtc gcctagcagc cgctgccgct 180
ttggcttgct cgggaccatt tggctggacc cagagtccgc gtggaaccgc gatagggatc 240
tgtcagggcc cgcggccggg tccagcttgg tggttgcggt agtgagaggc ctccgctggt 300
tgccaggctt ggtctagagg tggagcacag tgaaagaatt caagatgcca cctaatataa 360
actggaaaga aataatgaaa gttgacccag atgacctgcc ccgtcaagaa gaactggcag 420
ataatttatt gatttcctta tccaaggtgg aagtaaatga gctaaaaagt gaaaagcaag 480
aaaatgtgat acacctttc agaattactc agtcactaat gaagatgaaa gctcaagaag 540
tggagctggc tttggaagaa gtanaanaag ctggagaaga acangcaaaa tttgaaaatc 600
aattaa 606

<210> 4976
<211> 710
<212> DNA
<213> Homo sapiens

<400> 4976
ttattacagc caacagactg gcctctttct tccctttgac tgggaatggg tcaaaggcgg 60
tgcaggagga ggatctggtc cagataattc acaagcaggg tgcattttcc tctcattatt 120
gagaactgtg agtgttaatc aagaaggcag agcaggagaa gatgaaccag tcttcttccc 180
ctcactaccc agatctctgc ctgccaacaa gccccgtgtt caccctggca aagagtcttt 240
acattcagac caaggagagt gtgactcctt ctcagcacta gctagaaacc tcaagccctt 300
gcttaagggc ctttttcaga gagacccaat gcccagaagg ctagatgcgt ggggaggagc 360
cacatacgag aaactgcctc cctgcttcgg gtcagaacaa gccccaggaa gaaagtattt 420
caaacaacaa ggtgcatctg ccccaaccca tccagcctgc atgttggtgc tgagaacagc 480
cttttatggg gcttgcactg agccatgggc atgtctgaac acaacaagga agaggccaga 540
gcagcaacag cacgcaaagg gttgatgggc atttctttta aggacagagc agaaaactct 600
tagatacttt gcgtccttcc taattgactc agtctatgaa agccaagtta agcttgcttt 660
cttcctccct aaatcctcna tcctcatgac caaacaanng aatagtttga 710

<210> 4977
<211> 587
<212> DNA
<213> Homo sapiens

<400> 4977
atctaaagaa aaaaaagaag aaaagggaaa gctcaggtgt ttcagggtcc cagaatgtat 60
gttgtagaga acagtcatta gctcaggccc atggtaaccg cctctactgt gcactcgacc 120
agtagaggcg atgatgacgg cacttgattc tcttgtgtgt aactcagcca tcctccctag 180
acccacgtcc caggaggcag ggctggtaaa gctatgactg ggcagtgttt gacccagctg 240
tgcttttact ctgtgcctcc tctttatatt gtggcatttc tctcttctcc tttatgttct 300
ttttcttttt atgccaaaat tcttgctgtt gccaaaacaa aaacagaaaa acacacccac 360
acccaattac aacctgcagt tcaaagaacc actctaggtc ggctttaaag tattgtcttt 420
ctctggtaac caaatctgta cctgctgcct aatttagtgt ttgggggcat tgtttacagt 480
atttctgttt gtaatgtgct tttantatag aaatcctctt ttttgttctt aaatctatga 540

US 2003/0165926 A1

atgctgtgtt tccaagctta tacttactac tgcgtgttan gnggttc 587

<210> 4978
<211> 861
<212> DNA
<213> Homo sapiens

<400> 4978
tccacatgcc catcacagta atctggggcg tgtccccaga agacaatggc aacccactaa 60
atcccaagag taaagggaag ttgacattag atagcagttt taacatcgcc agcccagctt 120
cccaggcctg gattttgcac ttctgtcaaa aactgagaaa ccaaacattc ttttaccaga 180
ctgatgaaca ggacttcacc agctgcttca ttgagacatt caaacagtgg atggaaaacc 240
aggactgtga tgagcctgcc ctgtacccat gctgcagcca ctggagcttc ccctacaagc 300
aagagatttt tgaactgtgc atcaagagag ctatcatgga gctggaaagg agtacagggt 360
accatttgga tagcaaaacc ccagggccga ggtttgatat caatgatact atcagggcag 420
tggtgttaga gttccagagt acctacctct tcacactggc ttatgaaaag atgcatcagt 480
tttataaaga ggtggactcg tggatatcca gtgagctgag ttcggcccct gaaggcctca 540
gcaatggttg gtttgtcagc aatctggagt tctatgacct ccaggatagc ctctccgatg 600
gcaccctcat tgccatgggg ctgtcagttg ctgttgcatt tagcgtgatg ctgctgacaa 660
cttggnacat catcataagc ctttatgcca tcatttcaat tgctggaacg atatttgcac 720
tgttgggtcn cctgtcctgc tggggctggg gagcccaatg tgttgggatc tgtcaacaat 780
ttcgggtngc cgtcgggttt tccggtanac ctttgccgtc caattatggg ggttgcctaa 840
cgcctgggtc caaaattccg n 861

<210> 4979
<211> 738
<212> DNA
<213> Homo sapiens

<400> 4979
gtaaaaatga cttggattga aaatatgtgg tagccttttt atttctacat taagttctac 60
ctaggatatt tccaaggact gccacaaaac ccatatgtgc agtactttac tactttggga 120
aagctgcatc tttctaccac attttaacat ctaatatatt taatttcttt gaagagggtt 180
ctgtgtacgt tattgtagtt cccagtttaa tatagttctt tgtatctctt aacaggttga 240
agttattgca aaacactctg gaaagtaata attacatcat aatcatttat tttttaaact 300
taaaagccta gaaatttcct agaaagaaaa taggagacat ctcagagcaa tttggttttg 360
gtgtatatgt tctcaacaga aaaccagtgt taatgaatat catgcctcag cactgtcact 420
tttaaaacct gtcaggatcc caccgtaaaa ttggaaatgg gcagttctga attttcacgt 480
ttgaaatgta aaatataaac ttcagtcaat atccaggttt attgtgtcct actatttaat 540
aatgagagaa gtaatggcaa ggcctttact ttcaggaaag gatagaagta tagattaatg 600
actggaaagt tttaatatat ttagcccaaa gggtactttg aattgaagtc cttgcattga 660
ctggttgtgt ttggntaatt gttagcttta caaggtacac ataaagttag gttgaggggg 720
tgttaanccn tccgtggg 738

<210> 4980
<211> 672
<212> DNA
<213> Homo sapiens

09512010 "09512010

<400> 4980
attttgctgt ggagcggcgg ggaggaggag ccgccgagga gaccccgggc gaggagctgc 60
gagccggagg aggccgcgcg gactccgggc tttccgccgt cgcggggatc tcgggggca 120
aagggatcgc cggggagggg gaccagagag ccgcgcccgc cgcgcggagc gcccttcgc 180
gtcccctgca ccatgagctg gggcaccgag ctctgggatc agtttgacaa cttagaaaaa 240
cacacacagt ggggaattga tattcttgag aaatatatca agtttgtgaa agaaaggaca 300
gagattgaac tcagctatgc aaagcaactc aggaatcttt caaagaagta ccaacctaaa 360
aagaactcga aggaggaaga agaatacaag tatacgtcat gtaaagcttt catttccaac 420
ctgaacgaaa tgaatgatta cgcanggcag catgaagtta tctccgagaa catggcatca 480
caagatcatt gtggacttgg cacgctatgt tcaggaactg acacangaga ggaaatcaaa 540
ctttcacgat ggccgtaaag cacagcagca catcgagact tgctggaagc agcttgaatc 600
tagtaaaagg cgatttgaac gcgattgcaa agangcggac aggggcgcat canttacttt 660
gngaaaatgg ac 672

<210> 4981
<211> 676
<212> DNA
<213> Homo sapiens

<400> 4981
acttatgggc ggagatggat ggtggatggg gggcggggga ggcagcggag ggagatgagg 60
agataggcgg gagcgaggga gcgagggagg gagcgaagga ggtagagaag agtggaggcg 120
ccaggggagg gagcgtagct tggttgctcc gtagtacggc ggctcgcgag gaagaatccc 180
gagcgggctc cgggacggac agagaggcgg gcggggatgg tgtgcggggc tgcggctcct 240
gcgtccctcc cagcggcgcg tgagcggcac tgatttgtcc ctggggcggc agcgcggacc 300
cgcccggaga tgaggcgtcg attagcaagg taaaagtaac agaaccatgg ctcagtttcc 360
aacacctttt ggtggcagcc tggatatctg ggccataact gtagaggaaa gagcgaagca 420
tgatcagcag ttccatagtt taaagccaat atctggattc attactggtg atcaagctag 480
aaacttttt tttcaatctg ggttacctca acctgtttta gcacagatat gggcactagc 540
tgacatgaat aatgatggaa gaatggtcaa gttgagtttt ccatanctat gaaacttatc 600
aaactgaagc tacaaggata tcagctaccc tctgcacttc cccctgtcat gaaacagcaa 660
ccagttgcna nttcta 676

<210> 4982
<211> 800
<212> DNA
<213> Homo sapiens

<400> 4982
attccagagc cagcagcgcg tcctggccgc tcctgcgctc tcccgcctcc cggggctcgg 60
aggagccggg gcacgttcca ggagctgcct agggctgagg ttccaggcct gggggtcgct 120
tccagctgcc agatcccgtg cagtcctggg gaccctgaga agcaccgagc catccctgac 180
ccaggaactt tccgcagact cgccgccatc tgggagtgaa gcaacatgga tgcagtcagc 240
caagtcccca tggaagtcgt gcttcccaag cacatcctgg atatctgggt tattgtcctc 300
atcatcctgg ccaccattgt catcatgacc tcgttgttgc tgtgcccagc cactgcagta 360
atcatctatc gcatgcggac tcatccgatc cttagtgggg ctgtttgaga gcctcccaag 420
agggccgggt gagggatgag gacaggcatc ctatccccag cctcttcctg tcttcagaaa 480

agcagcagga gggactttgg ggcatggacc tgagttctgg ttttgattct gccacgagcc 540
agctgtgtga atttggtcaa gggacctaac tctctgagtt ccangttcct tatctttcaa 600
atggggatgg tgatccctgc cctttctacc tcatagggat gtgagaacca cctgacttag 660
tggatgtgaa agctgtttgt gatcagtaaa gctaccacag atataagggt gttatgctga 720
atcctgagna gcttttaagg ancaagagaa cctgantgct gatgatggcc ttaaaggtgg 780
taagggaaat aatgggggca 800

<210> 4983
<211> 711
<212> DNA
<213> Homo sapiens

<400> 4983
atcaaaacaa tgactaatgc tgggcaacat atagcagaag tcaaacaaaa atgattcctc 60
ctgaaatggt accttcattg gttctgatgt tcttttgcaa aaaatgtccg gaagcagtat 120
agaaaacccc ctgtatgtga accttagatt gtaaggcaag ccagtgcact gtgtaatatg 180
caaagggagt ggtgcaaaag agaaggcacc cgtcccagct ctccatgccc tttccctggc 240
aggcgctgac tgagatggcg ctgagtgaat gtggaaggtg ctaagaccca gtctcttcac 300
tgcagggctg tttacagcca gtttctttta ctctgacctt aaggtttcca ctgagctcat 360
gaaacttcaa catatggtgt ttaaaagttt cccactcaaa tgcacacttg aaaattgggt 420
ccctcagcct cattactgaa ctaaataagt gaagaagttg tatctttggg gtaaaacttt 480
ccagggccac ttaatttttt aaccagttaa gtacgcatct tcctgggtgg gntcagactt 540
tttaagtcag tgctaaagct gaaaagcgcc ttctaaatat gactgtgagt ttagtttgta 600
tcttacattt agtaactgtt ctgttgggcc aggactatga cttttaanta ctatgtactt 660
attcatccac actctgcact aaatacacca tagctactat agcantgtgn a 711

<210> 4984
<211> 667
<212> DNA
<213> Homo sapiens

<400> 4984
aatcgtccgc cgctcccgtt accggggcaa ccgcggcgcc tcctccgtgt cggccccgat 60
cgtccctccg cgccattttc aaactgctct agcgccggag cccgtgcctg gacggaagga 120
gctagtgggg gactcgaggc ctgagggcaa tgcggctgga ggcggaggca acggcggctg 180
gagctgccgg actttaattt ttggaagtga ataaaacttg ttttagaaga cgagatgact 240
acagctgtag agagaaagta tattaatatt aggaaaaggc tggatcagct gggataccgc 300
cagactctga cagtggagtg tttacctttg gtagaaaaac ttttcagcga cttagttcat 360
acaactgaga gccttcggca atcaaaatta tctgctgtga aagctgaaaa agaaagtgcc 420
aattttgatt ttgttttgga accctataaa cttgaaaatg caagattgag tagagaaaat 480
aatgaattat acctagagtt aatgaaactg agagaacatt cagaccaaca cgttaaagag 540
ttgaaaactt cattgaagaa atgtgcacgt gaaacagctg atctgaaatt tctgaataac 600
caatatgctc ataaactcaa actgttggag aaagagagca aagctaagaa tgaangaatt 660
caacnan 667

<210> 4985
<211> 781
<212> DNA

<213> Homo sapiens

<400> 4985
aaaaacaact acggctgcgg tgtggttggt ggtgagatga cggccttagt gctggataat 60
ggagcttaca acgccaaaat cggttacagc catgaaaatg tgtcggttat tcctaattgt 120
cagttccggt caaaaacagc acgtcttaaa acttttactg ccaaccagat agatgaaata 180
aaagaccctt ctggactctt ttacatcctc ccttttcaaa agggctactt ggtgaattgg 240
gatgttcaga gacaagtttg ggattacctt tttggaaaag aaatgtatca ggtaacaaat 300
tagagttgat tttttagata ctaatattat tatcactgaa ccatacttta acttcacttc 360
aattcaagaa tcaatgaatg aaattctatt tgaagaatac cagtttcaag cagtattaag 420
agtaaatgct ggggctctca gtgcacatag gtatttccga gataatcctt ccgaattatg 480
ctgtatcatt gttgatagtg gatattcctt tacacatata gttccttatt gtagaagtaa 540
aaagaaaaaa gaagcaatta ttcggataaa tgtgggagga aaactcttaa ccaatcatct 600
aaaggagatc atatcttaca ggcagctaca tgttatggat gaaacacatg tgattaatca 660
agtgaaagaa gatgtatgct aagtgtcnca ggatttttan agagacatgg atattgcaaa 720
gttgaaagga gaangaaaat acagtaatga taagactatg tcctgcctga cttcagtaca 780
a 781

<210> 4986
<211> 820
<212> DNA
<213> Homo sapiens

<400> 4986
gcacaaaatt actacagaaa aaaggaacaa agtgctttat acatttcata atatatcccc 60
ttttattata attagttaat tccctttttat ctaaatggcc taaatttgcc atgatggtag 120
cagtgtccaa agtgaataat tactgccagt actgcatcac agagaaagga agggatccct 180
caggagacac tgctgtctcc ttctgggttg tgctaaacaa catagggagg aaagctggac 240
ctggagtcaa aggaattgag ttagtgtgct ggctctgcca tacttacggc acccttgggc 300
aggatataca aaggttcctc acttataaaa tgggacagtc taaaactacc ttttagtaga 360
gaagtcaaat gggaaggtat gtgaaaactc tgtcaactaa atataaagac taataatttg 420
ggtattaaga ggctagtttg agaagccacc tgaattacac aaacacagct acagacatca 480
ttctgtctag agaaagataa gagagaacag gttggttgaa cttgggcaga atcacagata 540
caattccaca ctaaagaatg aaaataagca atgaactaga cagaaggaag aaatcatgaa 600
gacttaggaa gcagaattac aatctgtcat attaacaaat ggagtttgcc ttctaagatc 660
agatgttgct cagaaacttt caatgtttac ctaataattt aatatcacta agtttcctag 720
tgggtcaagc aagatgcaaa atccagctta atttcctcca tgtgctcnca agccttaatg 780
cttaatttaa agtaaaatcc tgaaaaangg aaatattang 820

<210> 4987
<211> 744
<212> DNA
<213> Homo sapiens

<400> 4987
tttcagcact aaagaagaat ttaaatacaa aatagaatgt tatatatctt gtagacagtc 60
aaatatttga tgttttatgg gacataatca tttgggaagt ttttgttgta aatgaagagt 120
tagtttgttg ctattaattt gtttgacaca taagttcatt cctaaaagtt agggatgtta 180

cataaagaag ggttgaggac tttatttcag aagtcattta atttttttctt tattttcttt 240
cagattttgt atggtttatt cagaagtgcc aaatttcagt gaacccaacc cagattatcg 300
aggacagcag aacaaagggg cacagagtga acagaagaat aattccatga atagtaatat 360
gggtacaggt acatttggac cagtgggaaa tggtgttcac actggccctg aatcaaggga 420
acaccagttt tcacatgctg gcagaagcaa tggccgggga cttataaatc cacaactaca 480
aggaacagct agtaatcaaa cagtgatgac cacaataagt aatggcaggg accctcggag 540
agcctttaaa agatgaccta tgctaaatac tcatgtgtag tttttatact acatgcccta 600
cttgaacact tattgcactt ttatttaagt gttaactgtg aaaaagtacg tcctttattg 660
gggtttcctt ttaaaactcc ttggntttgt taagaaaaaa tgggtttggt ttttaaangc 720
aaanactggt taaacccggc ctcc 744

<210> 4988
<211> 698
<212> DNA
<213> Homo sapiens

<400> 4988
taaagacaca gtgccccttt ttaatgaagt ctgattcaag atgaatgcca gaccatgttt 60
ccttgtacag aggaatttga cctgcagagg gaagaataag gcccagggtg tcaggactag 120
cattaaggag cacctctgat tttctggtgg agtcgtgcta aagctggccc aaacccactc 180
gggccgttgt tcacctttg cctcatctct gtgttcagtg acatcatgtt ggtggatgtt 240
gggggatgaa caccagtaca ccactgtgta tgttgtgctc tgggagccat agcttgggca 300
cccattctag agcaaggatc agccaacccc agcctgagcc tgtgcagccc attgcctgtt 360
cttgtaaata acgttttatc caaaggcagc catgccatgc ccacgtattt acatgttgtc 420
taaggctgct ttgaccaaaa ggccaaaagt gctcaatatc tggctcttga aggaaaaaat 480
ttgccagcct ctcttctgga gtttaccagg aatctggttc tggacacatg angatatctt 540
gggttaaaaa gagattaggg gccaggctta tgtttgtnnt cccagcactt tgggaggctg 600
aagcgggatc acttgagccc aaggagtttt ttggtaattt tttatacgaa gacagggtcc 660
cactcttatc cagggcaana aanggcatgc acctgtan 698

<210> 4989
<211> 542
<212> DNA
<213> Homo sapiens

<400> 4989
gtggttcggg tccgctttcg tctccgtcct gctgccgtta ccgccgctgc tgccgccgct 60
tgcgtccccc gctccggtct gtggtgcagc cgggacccag gaccatgtct ctgtctcgct 120
cagaggagat gcaccggctc acggaaaatg tctataagag ggtggaagag aagtaccagc 180
ggaacctttt tcctattttt tctccttctg cgctgaaacc agaaagcagg aactttcgtg 240
gtgagagttg gcaggggacc atcatggagc agttcaaccc tagcctccgg aacttcatcg 300
ccatggggaa gaattacgag aaggcactgg caggtgtgac gtatgcagcc aaaggctact 360
ttgacgccct ggtgaagatg ggggagctgg ccagcgagag ccagggctcc aaagaactcg 420
gagacgttct cttccagatg gctgaagtcc acangcagat ccagaatcan ctggnagaaa 480
tgctgaagtc ttttcacaac gagctgctta cgcaagctgg agcagaatgt ggagctggac 540
tc 542

<210> 4990

05570945 07200

<211> 578
<212> DNA
<213> Homo sapiens

<400> 4990
ttacaaattt cacttgataa tttacatgga aatatgaaag ggttctttct ccaagtgtct 60
tgcaattgac ttggaatcag cgagttaaac aaaagggact gagcctctaa ctctgggaat 120
ttcaaggctc cagttacagc aaatgacatg ctgtcccctc cacctatgtc tatgcaggtc 180
tgccttggga accacctcac acatcagtgc cttcgctgtc catctgtgta tgttattcaa 240
attcacataa gttaagataa agatccagga tgataaaaac caatcctgat aggtgggatt 300
agagaattac ttctttctgt agttaataac acaaagcaat cctgttcagg ttctttggat 360
aagcctccct actttccttc ttctgttctt gttctccctt agcccaaagc ancaagccaa 420
gatggcggng tactgccgac tgatctttgg ggatgcccct ctcatggagc ccctggaaaa 480
atatccactg gaatctggag ttcctcttcc aagccctatg gatttaatgt ataaaatttt 540
ggtgaaaaat aagangaant cacacaagtc atcatnaa 578

<210> 4991
<211> 638
<212> DNA
<213> Homo sapiens

<400> 4991
ttggctatga agaagacttg aggtggatag ctctctatct tttaaggtga aaatcatgca 60
attttgttta tatctcgaga gaaagaggct gtgagtgttg ctggagggct cgggaaggtc 120
tctggatgcc agtgagaccc cagccccagc cggttttcca ggttcttgac agcatcacaa 180
gaacgaattc agggggggagt cgagtcagaa tgaagcgcaa ggcgagaagc ttccattgca 240
aagcgaaagt gtgctcttga gaggagcgta gccatgcccg tgagaacaag tcaggcacaa 300
cggaggctgg gtttcttatt ttagggatgt ttctttctct ttctttcttt ctttctattt 360
ctttctttct ttctttcttt ctttctttct ttctttcttc ctttctttct ttctttcttt 420
cctttctttc tttctttctt ctttctttct ttctttctgt ctttttttt tgagacggag 480
tctctctttc gcccaggctg gagttcagtg gcgcgatctc ggctcactgc aagctccgcc 540
tcccgggttc acgccattct cctgcctcaa gcctcccgag tagcggggac tanaggcgcc 600
ggccancaca cccggctgan attttgtatt ttttagta 638

<210> 4992
<211> 474
<212> DNA
<213> Homo sapiens

<400> 4992
tctcacttgc agactctcct ctgaaactgc ggaaaagttc agggaagggt ccggggaacc 60
ctcggcccaa agctcccaga aaaaccacaa gcaagggccc caagtgtctg actcgcaaag 120
gccctggggc tggaccccga cgaggctctg ggcaccagag caaaaccaac agagccactg 180
ggtcccccag tgtccggcga atgaaagggg gctctgccct gggcaccaaa acagcccagg 240
ccaaggtagc tcgaacactg gccaaagctg ctcgtgccca agccaaggtg gctcgaacac 300
aggccaaggc tgctaaggcc cgggccaagg ccaaggcagc actggtcaag gctaaggcca 360
aagctaangc agcacaggtc aaggccaagg ccaaagtcat ggcagcacgg gccaatgcca 420
aggctaaagc caaggcatta cgggccaagg ccanngtggc tcggacccan ccca 474

0056756.0015

0005750.0046.0010

<210> 4993
<211> 625
<212> DNA
<213> Homo sapiens

<400> 4993
acacgtgaag atttgtttaa aagtaccatt ctaatacttc ttcaaaagtg gctcctcatt 60
gtacttcagc gtaaatatga gcactggaaa cagtttcatg gagtttaagt tgagtgaaca 120
tcggccatga aaatccatca cgaatacttt tggatcaata gtctattttt aaaaagaaag 180
aaaaaaacca ctttttata gtccctagct ttgccatatg cccgccttaa gtggaaggaa 240
agttaatcac ttaactatgt tttataaaaa gaaaaaaggg cttggaatgc tattactgtt 300
cacacaaagt atgattctgt ttgaataagg caaatgctcc tttttttaaa aaaaaagaca 360
ttactgtaat atcaaaaacc gtggcagttt gtatacaact cggggcttga tttttttaa 420
aaaaacagaa tgaattgatg tcttatttta taaatgttct atatttatta ggaggaaact 480
ttatattgcc ttttttatca atcatgtaac aggcttatag ctttccaaca gagctgcttg 540
ccaaacaatt ttttttgntt attaaacagt gctgaaacat tcaggntcaa gcatttactt 600
aagatgttaa gaatgnggac tttta 625

<210> 4994
<211> 682
<212> DNA
<213> Homo sapiens

<400> 4994
gtttttttcc cttctgagca atggagctta ccatctttat cctgagactg gccatttaca 60
tcctgacatt tcccttgtac ctgctgaact ttctgggctt gtggagctgg atatgcaaaa 120
aatggttccc ctacttcttg gtgaggttca ctgtgatata caacgaacag atggcaagca 180
agaagcggga gctcttcagt aacctgcagg agtttgcggg cccctccggg aaactctccc 240
tgctggaagt gggctgtggc acgggggcca acttcaagtt ctacccacct gggtgcaggg 300
tgacctgtat tgaccccaac cccaactttg agaagttttt gatcaagagc attgcagaga 360
accgacacct gcagtttgag cgctttgtgg tagctgccgg ggagaacatg caccaggtgg 420
ctgatggctc tgtggatgtg gtggtctgca ccctggtgct gtgctctgtg aagaaccagg 480
agcggattct ccgcgaggtg tgcagagtgc tgagaccggg aggggctttc tatttcatgg 540
agcatgtggc anctgagtgt tcgacttgga attacttctg gcaacaagtc ctggatcctg 600
cctgggnacc ttctgttttg atggggtgca acctgaccaa gagagagctg gaagggcctg 660
gagcggggnc ancttcctct aa 682

<210> 4995
<211> 627
<212> DNA
<213> Homo sapiens

<400> 4995
ttttattaac aaattggacc gaatgggctc caacccagcc agggccctgc agcaaatgag 60
gtctaaacta aatcataatg cagcgtttat gcagataccc atgggtttgg agggtaattt 120
taaaggtatt atagatctta ttgaggaacg agccatctat tttgatggag actttgggta 180
agtgctaaaa atacattatt aaaattttaa attttaaaaa gcattaaaaa gaaggaaagg 240

ataagttcat caaacgcaga gtaactatct ttttgaaatg cgactgcaag aatactctga 300
gatggttttg ttttaatacc tttaatccta atcgctcccc attttattta gtatttattc 360
tgtgagagac tatgttactt tttgggtaat atacccatat cacattatgg catgcatggt 420
gtggtagaag gaggccttca gtttgggtta gtaaatttgg gttagtgaat gtattgtatc 480
tttttgcact tggntcattt attcattcat tctgtggact tttatagagc agctgccaag 540
tctggggtaa tggtgataaa aattaggaag aaaatagaga tcataaatat ttgctcctcc 600
tgctttaaaa ntaccatggn caagnaa 627

<210> 4996
<211> 514
<212> DNA
<213> Homo sapiens

<400> 4996
agcaaagtat tcctgtgttg ctggaaggca gagatgctct cgtgagatcc cagacgggct 60
caggtaaaac tcttgcctat tgcatccctg tggtccagtc ccttcaagca atggagtcaa 120
aaatacagcg cagtgatggc ccctatgccc tggtgctcgt gccaacgaga gagctagctc 180
tacaaagctt tgacactgtc cagaaactgc ttaagccttt cacctggatt gtgcctggag 240
tgttaatggg aggagagaag agaaaatcag aaaaggccag actccgcaaa ggaataaata 300
tccttatctc aactcctgga cgcctggtgg atcatataaa atccacaang aacattcatt 360
ttagtcggct gcggtggttg gtgtttgatg aagcagacag aatcttggat ttgggttttg 420
aaaaggacat cacagtgata cttaatgctg taaatgctga atgccaaaaa acgacagaat 480
gtcntgctat cancgacact cacagaagng taac 514

<210> 4997
<211> 670
<212> DNA
<213> Homo sapiens

<400> 4997
cttacttaca aaaacaggtg gctggctcag actgtagttt gctaaccctg agaacttgac 60
agcaaaaaga agagataaat agtagttaaa acataaagca gaatcaaata aatttttttt 120
ccatataggt gagatctgat aatgttttta ggtagaaagg aagaaacttg tgaagcagga 180
gagactaaac ctgtttgatg tttttggttg ggggccangt tagagatagg atcgggtgta 240
tgtgttgttg aattattcct aaaagggaag agagacacca gtaattgcaa aatcatcaag 300
tatttataga ggtagaggag aaagaataaa ttcagatgtg ttgagataga tgagagtacc 360
tatgaggatt tgtttgattt gggaaaatga aagcagaagt angagaagca gaagtangag 420
aaattcagat gtgttgagat agatgagagt acctatgagg atttgtttga tttgggaaaa 480
tgaaagcaga agtaggagag ggcagaggat aattggaagc ttagaatggg gaaaggatgt 540
ctgtgctgtg gggaatactt tcaggcaatt gttaccanta ttttgaagat gacaacntgg 600
ttaacctcca aacaatttgt ggaccacccc atgattgtag ntacattttt taagtattca 660
acaatgggag 670

<210> 4998
<211> 655
<212> DNA
<213> Homo sapiens

<400> 4998
acatgcgaag aaaatgccca tgcatttctt taagcagaaa tataagttag tgaatttgtt 60
tcttcttgat aaaatggtta gaatttgctt agaaattcct tttatcataa aagtaaaaat 120
tatcagcttt aaccttctca tttgtctcct actgcttctt ttcttgttct ttattctcat 180
ccatcccctt ctctgtcttt gcctctactc ttcctctatt ccttcataag aatctaaaca 240
actcctttaa acatcaattc aaatgttctt cccttggata gagatcactt ccatcccctt 300
cataactagc tgggcctagt acctttgggt tagcaatttt gccagagatg ttggagaaaa 360
agggggtagc atttcctctt gaaaatccag cctgcaaggc atttacaatc tcatgctggt 420
ttcgtaaggc cctgctgtcc ctccagaata gaggcccaca gcactcacta ggtaccaggc 480
atggtgaact tgcttgccca agctctctaa gtaggtggca gatttaccca ggtctgcctg 540
actttagagc ctattctttt aatcattgta ccttactgtc tttatagaca aggtcaggct 600
ctctatgctt ctgtgagata attttcccna aggagtggta aatagntact atana 655

<210> 4999
<211> 735
<212> DNA
<213> Homo sapiens

<400> 4999
agggcgtttc taggcctggt cggctggcgg cggtccttat gtcgtcagaa gatcgagaag 60
ctcaggagga tgaattgctg gccctggcaa gtatttacga tggagatgaa tttagaaaag 120
cagagtctgt ccaaggtgga gaaaccagga tctatttgga tttgccacag aatttcaaga 180
tatttgtgag cggcaattca aatgagtgtc tccagaatag tggctttgaa tacaccattt 240
gctttctgcc tccacttgtg ctgaactttg aactgccacc agattatcca tcctcttccc 300
caccttcatt cacacttagt ggcaaatggc tgtcaccaac tcagctatct gctctatgca 360
agcacttaga caacctatgg gaagaacacc gtggcagcgt ggtcctgttt gcctggatgc 420
aatttcttaa ggaagagacc ctagcatact tgaatattgt ctctcctttt gagctcaaga 480
ttggttctca gaaaaaagtg cagagaagga cagctcaagc ttctcccaac acagagctag 540
attttgggag gagctgctgg atctgatgta gaccaagagg aaattgtgga tgagagagca 600
gtgcaaggat gtggaatcac tgtcaaatct gatcaaggaa aacctggnct ttgatcaagc 660
tcagcaagat aaaatgcttt aataanaaaa ttgttcccgg tgcaataacc ggttccngtg 720
aaaagctggg gttag 735

<210> 5000
<211> 754
<212> DNA
<213> Homo sapiens

<400> 5000
attataaaga ttctgaacaa cccaagagca tatacgttgc ccatatccaa ggaagaatca 60
agattatcaa gactagcaac aaagactcca agcaaaggct accaagaaac ctcatgaagt 120
gaaacaggac tttgagaagt tcctacataa actgcgttcc gaagctgaaa ttgagagaga 180
atgtgtggca tcactatcgt catcatcatc atcatcacca tcatcaacag acaactacaa 240
ctttgaggaa gaagaatact aagagaaacc agaaatgaac tctattcaag aataatgcat 300
acaattcagt ggtatcagtt taattgtaac aatatattta attcaagtcc aatccatgta 360
atcagtatta agagtgtgtt ttaccattca tctttaaaat cttcaaatca ataaatctca 420
gtaagttatt cttaaaagat ctgtccaagc atgatcttgg ctcttaatag taaaaccata 480
ttttaagatg gaaaaagaat cattatgaag catagagagc tttcaaccat ttctttggna 540

10/575,207 5/16/2007

aatatatctt gatataatag caaccgttca tcataataca anacagaagg gagattaatt 600
tactgtggca caagaaagtc ctgccaattc ctaagtgccc caagtagttt ctctcagact 660
ttttacattt tttcaaggct caagcaanac caaaggccca nctccagggt ttgggagcaa 720
acaaactttt gctccccggt gctaaanttc caat 754

<210> 5001
<211> 748
<212> DNA
<213> Homo sapiens

<400> 5001
ctctcaattt tttttgtttt tgtttctttt tacagggttt caccatgtca cccaggctga 60
gtgcagtggc gtaatcgctc actgcggcct caacctcttg ggctcaagca atcctcctac 120
cacagcctcc caagtcccaa gtgcttggga ctccaggaac atgccaccat gcctgactaa 180
ttttttattt ttttaatttt atagagacag agtctcatta tgttgtccag actggtcttg 240
aactcctgga cctaggcagt cctcctgcct tggcccccca aagtgctgag attacaggtg 300
agagccactg tgctcagcct actcagctgt taatcttaga ctttattctc ttttcgtttt 360
gtgtatttgt ggtagaaatt tcattcactc cgatgacttc acttattatc tatacataat 420
gctgatgact ccagatccag aagccaggag tttgagacca gcctggtcaa catagtgaca 480
cgtctctaca aaaaaagaaa ggaaaaaatt agccaggtat ggtggcatat gcctgtagct 540
ccatacctgt ataatcaaca gctattaaat atctgctaag caaactaaac taagcatttt 600
caaaagtaaa cttgtgaaac ctgatggatt tcagtanttg acatcaagca tctacttttg 660
ctgaaagtca gtnncctgga cattatttat gacacttatt ttttttccc aaccttgccc 720
ttatccattc aattcaccaa ngccctgg 748

<210> 5002
<211> 789
<212> DNA
<213> Homo sapiens

<400> 5002
tttaaaaatt agatgtgttg cagttttgca tgtaatcggt tatacctta ttggactttt 60
atagacattt tttatttgca tgaaaaaaac tcactaaatt tacatcacta aacaaaggtt 120
aacccttgtg tgaaatgaag gaactgtcaa taattgacag ccaactaata cagtaaactg 180
ttatactagt tttgagcttt agacctcagc cttttgtgtg gaagaagtca cagctttctt 240
aggctttaaa ggaaaagaag gaaggactta aatagctttt cttcctaccg ggattaccta 300
tgtttttcct tgcttgcaat ctcatctgat tttgctagaa atcacaacca tattgtttat 360
gcatattgca tgagtattac caagaaaaat cttaaaagtt gtgatgtgac atgatataaa 420
ggatctcttt atgttaaatg tctttccatg tacctctggt gtgtcaggga ttttgtgcct 480
caaaaaatgt ttccaaggtt gtgtgtttat actgtgtatt ttttttaaat tcacggtgaa 540
cagcactttt attatttcca gttcagaaga gccaaaaaaa agtatcttca tttaaaaaga 600
aatcaagtca gtttttttta aaagaatgat ctatggaaga aaacccaata gtacttataa 660
tatacaaatg aattatacta ttaagataaa gaattaaata ttccantttt ataaagataa 720
atacntaagt anataaaaac aaattttaag tttaagtttt caagacatag aattcacttt 780
tggagggga 789

<210> 5003
<211> 753

09/09/2008 15:36:29

<212> DNA
<213> Homo sapiens

<400> 5003
tccaagggag gtttttctgt gtttatccag ctgatgccca taattgtatt gatcctcgtg 60
tcattattaa gccagttgat ggtctctaat cctccttatt ccttatatcc cagatctgga 120
actgggcaaa ctattaaaat gcaaacagaa aacttgggtg ttgtttatta tgtcaacaag 180
gacttcaaaa atgaatataa aggaatgtta ttacaaaagg tagaaaagag tgtggaggaa 240
gattatgtga ctaatattcg aaataactgc tggaaagaaa gacaacaaaa aacagatatg 300
cagtatgcag caaaagtata ccgtgatgat cgactccgaa ggaaggcaga tgccttgagc 360
atggacaact gtaaagaatt agagcggctt accagtcttt ataaaggagg atgaactgga 420
atttttattt atacctttta gcgtactctt tatttttttct gtaagtaagt ttggtttcat 480
catgagggat gaaggaaaag atttgatact gaaaactaaa ctgaatagtt ggttcctgaa 540
atcttggact gtttatgacc tactggctcc tttaaatagt aactgaaaac taaaatggna 600
tattttagtt aacgcttcta caagtatttt cattttaaaa gcttacatga tcctaactaa 660
agtgtcatga gaaagggata tcacacctgt ngccaatttc caagttttaa gtgaatcccc 720
aatttttcc cttggccatg gtaaatantt tan 753

<210> 5004
<211> 746
<212> DNA
<213> Homo sapiens

<400> 5004
gaggccgcgc cgggagcgcg gtggggctag gcgtggggcg ctcccggcat gtccctgtac 60
cgcagcgtcg tgtggttcgc caaggggctg cgcgagtaca ccaagagtgg ctatgaatct 120
gcatgtaaag actttgtccc tcatgacttg gaggtccaga ttcctggaag agtcttttg 180
gtcactggag gaaacagcgg cattggcaaa gcaactgccc ttgaaatcgc caagcgagaa 240
catttttctg cacattgtgg acttgtctga tcccaagcaa atctggaaat ttgttgaaaa 300
tttcaagcag gaacataaac tccatgttct gatcaataat gcaggttgca tggtcaataa 360
aagagagctc acagaagatg gacttgaaaa aaactttgct gccaatactc tgggtgtgta 420
cattctcacg accggcctga tccctgtgct ggagaaagaa cacgaccccc gagtgataac 480
cgtctcctca ggaggaatgt tggttcagaa actgaacacc aatgatctcc agtccgaaag 540
aacaccattt gatggaacta tggtctatgc acaaaacaag aggcagcaag tggttctgac 600
ggagcggtgg gcccaaaggc acccggccat ccatttttct tccaggcatc ctggctgggc 660
cgacacccca agtgtgaggc aangcgattc cnggggttca anccaagttc ggggaaacgc 720
ctgcgctccg agggccaagg gggcgg 746

<210> 5005
<211> 698
<212> DNA
<213> Homo sapiens

<400> 5005
aaaaaatggc agcgctggag gaagaattca cgttgtcttc ggtagtcctg agcgccgggc 60
ctgaaggact cctaggcgtg gagcagagcg acaaaacaga ccagtttcta gtgacagaca 120
gcggcaggac agtcatcctc tataaggttt ctgatcagaa acccttgggg agctggtcag 180
tgaaacaagg tcaaattata acatgtccag ctgtgtgcaa ctttcaaact ggagagtatg 240

ttgttgtaca cgataataag gttttaagaa tatggaataa tgaagatgta aacctggata 300
aagtatttaa agctacattg tcagcagaag tatataggat actttcagtg caagggacag 360
aacccttggt gctcttcaag gaaggtgctg ttcgtggttt agaggccttg cttgcagacc 420
cccagcagaa aattgaaact gttatctctg atgaagaagt gattaaatgg acaaagtttt 480
tcgtagtatt cagacatcct gttttaattt ttattactga aaaacatgga aattactttg 540
cttacgtgca aatgtttaac tcacgtatct taaccaaata tacactctta cttggacaag 600
acgaaaactc tgttataaag agttttactg catctgtaga tcngaaattc atctctttga 660
tgtcattaag ctctgatggn tgtatatatg aaancttg 698

<210> 5006
<211> 889
<212> DNA
<213> Homo sapiens

<400> 5006
taccgctagt ggaagaagat ggcggaaggc ggagcggcgg atctggacac ccagcggtct 60
gacatcgcga cgctgctcaa aacctcgctc cggaaagggg acacctggta cctagtcgat 120
agtcgctggt tcaaacagtg gaaaaaatat gttggctttg acagttggga caaataccag 180
atgggagatc aaaatgtgta tcctggaccc attgataact ctggacttct caaagatggt 240
gatgcccagt cacttaagga acatcttatt gatgaattgg attacatact gttgccaact 300
gaaggttgga ataaacttgt cagctggtac acattgatgg aaggtcaaga gccaatagca 360
cgaaaggtgg ttgaacaggg tatgtttgta aagcactgca aagtagaagt atatctcaca 420
gaattgaagc tatgtgaaaa tggaaacatg aataatgttg taactcgaag atttagcaaa 480
gctgacacaa tagatacaat tgaaaaggaa ataagaaaaa tcttcagtat tccagatgaa 540
aaggagacca gattgtggaa caaatacatg agtaacacat ttgaaccact gaataaacca 600
gacagcacca ttcaggatgc tggtttatac caaggacagg tattagtgat agaacaagaa 660
aaatgaagat ggaacatggn caaggggtcc ttctactcct aaaaagccac tagagcanag 720
ttgctaatga acaatttaat ttccacatac gtcacagaaa gagagctaaa gggctctggg 780
tatcatccac agacctgaca atcaacccct aaataacctg atattaactc cacaaatgtt 840
aactagattg ggccaatgtt tnaanccgag tccanaagtc cggaatcaa 889

<210> 5007
<211> 663
<212> DNA
<213> Homo sapiens

<400> 5007
gagctcgccc gctgtccgcc agcccgcggg agggaggaga gaagcgaagc gtttccgcgg 60
ttggctactc agtgtcttgg tctcaagttg cctcattgcg gctggcgttc ccaatacaga 120
cgcatcgttt ctttttaat actccctaag aaagggaata accttcaagc tggcgggagc 180
aatggttcac ataaagaaag gcgagctgac ccaggaggag aaggagctac tggaagtcat 240
cgggaaaggt actgtccaag aagctggaac attattatcc agcaagaatg ttcgtgtcaa 300
ctgtttggac gagaatggaa tgactcctct aatgcatgca gcatataaag gaaaactcga 360
tatgtgcaaa ttactactgc gacatggagc cgatgtaaat tgtcatcagc atgaacatgg 420
atacacagcc ctcatgtttg ctgcactttc tggtaataaa gacatcacat gggtaatgtt 480
agaagctggt gctgagacag atgttgtcaa ctctgtggga agaacagcag ctcagatggc 540
aacctttgtg ggtcaacatg attgtgtgac cataatcaac aatttctttc ctcgagagag 600
actggnttat tacactaagc cccaaggact gggntaaaga gccaaaaact gccccaaagt 660

tng 663

<210> 5008
<211> 632
<212> DNA
<213> Homo sapiens

<400> 5008
attgtgttca cctgacttga nattgggaag tatagccttg ttaaagcttt gctaaacagg 60
acttcttctt atgacttcaa ccacatcctg tggtaggtgt cacattatgg ggctcaaaaa 120
gtcatagaaa aaagtcttca gttctcctct gttttagtca cactctttgt gctatggaag 180
tgcttcctct tgcactacct tctccacctc gtcaattatc agaatcagaa aaaagtcgaa 240
tggaggacca ggaggaaaat actttaagag agttgcggtt gtttctcagg gatgtaacca 300
agaggctggc cacagataaa cgctttaaca tcttcagcaa accggtggat attgaagagg 360
tcttgtttca gtagtgtgca aacagtgaag ttgaactggc taaaagaaaa aaatattgac 420
atctttttt ggaaggaaaa aaaagcaaag gcatggatga atattacccc tagcctataa 480
aattttaatc catgtgataa ctaccgatgt catcagcaaa catctggtga cttttggatg 540
aaattagcga ccaatttana ttggctctta attaatatta acctttgngg tctcctactc 600
ctcgatttaa gangattaaa gggttgcctt aa 632

<210> 5009
<211> 706
<212> DNA
<213> Homo sapiens

<400> 5009
acaccgagtc cgcggcggcg tccagggtcg gcagcaaccg cagccgagcc cgagcgggtg 60
gcggcgccat ggcgtgcgcg gggctgctca ccgtgtgcct gctccggccg cccgcgcccc 120
agccccagcc ccagaccccg cggcaccccc agctcgcgcc cgacccgggg cccgccggac 180
acacgctctt ccaggacgtt ttccgcagag cagacaagaa tgctctcatt tgaggaattc 240
cagaattact ttgccgatgg ggttctcagc ctgggggagc tgcaggaact gttcagcggc 300
attgatgggc atctcaccga caatttagaa acagaaaaac tgtgtgacta cttctcagag 360
cacctgggtg tctaccggcc ggtgctggct gcattggaat cgctgaaccg tgcagtgctc 420
gctgccatgg atgccaccaa gctggagtac gagagggcct ccaaagtgga ccagtttgtg 480
acacgcttcc tgctgcggga gacggtgagc cagctgcaag cccttcagag ctcgctggag 540
ggggcgtcag ataccctgga ggcccaagcc catggctggc ggtatgtaag ggtgctgtca 600
acctgtgggg ctagtgcaca agcgcccatt gttcccccat tccaaatccc cacaatccca 660
gcatcctana gcctgcattt tcnggcgggg aaaccattgc anggta 706

<210> 5010
<211> 716
<212> DNA
<213> Homo sapiens

<400> 5010
tatttcaccc ttccgttgct tcctgccttg aatacaggtg taatgcctgg tgcttgggca 60
gccagattaa aaccatgagg caacaagcct gcacgctaag gattgtttgg gggcaggggg 120
acagcagtgg agagagtgaa aagaaccagc agctaagaga cacaaatcct aaagctcaaa 180

gcctgtccca gatacaatct ttgcagtgat tcacacagga aatgttaccg aaagtattcc 240
taactgataa atagctcgcg agatgcatgt ggagatagtg tctccttaaa tgaagggaat 300
gaataggaga gaagacattg cacagggatg ggggttcctt attctgagtt gattgtggtc 360
ctgcagtgaa atcattctcg aagaattcat tcactccctg gctgtggcca ttaggcttga 420
accagcaggg cctagggttt atgagaggaa gtcaacaact actatttgat cagcatctac 480
tgatttgacc taagcccctt ccctcctctc ccctctcctt cccatctctt cccttccgtt 540
ccttcttttt ttttnntttt tttgctttgc cagcccaaag cttgaggaga ctatattttc 600
aggaattaat acaactttat ctcatttcca cctttagacc caggcaacca gatcctcttc 660
ccgtgccaaa acctagaagc ccctgttccn ttaaccaacn gttctctctc catana 716

<210> 5011
<211> 793
<212> DNA
<213> Homo sapiens

<400> 5011
agttagtggg taggcctgag agccgaggaa aactgagcgt gggcctcaga aagaagtcaa 60
ggcacccgcg agccgggcaa ctgccctcct tccgcgccgg cggagcgatt aaagtgaaga 120
aacaatggcc agcaatcaca aatcttcagc agctcgccct gtttcaagag gtggagttgg 180
gttaacagga aggcctcctt ctgggatacg acccctatca ggaaatattc gagtggcaac 240
tgcaatgcca cctgggacag caagaccagg ttctcgtggt tgtcccatag ggactggtgg 300
agttctgtct tctcaaatca aagttgccca tcgccctgta acacaacaag gtttgactgg 360
aatgaaaact gggacgaaag gtccccagag gcaaatttta gacaaatctt actatcttgg 420
gcttcttaga agtaaaataa gtgaacttac aactgaagtt aataaacttc agaagggaat 480
agaaatgtac aatcaagaga attcagtata tttgtcatat gaaaagaggg ctgagacttt 540
agctgttgag ataaaagagc ttcaaggaca actagcagac tacaacatgt tggtagatta 600
acttaatacc aacactgaaa tggaagaata atgaatgggt acaatatgct taaagctcaa 660
aatgatcgag aaacacaaag tttggatgtc atatttactg aaagacaagc ganagaaaaa 720
caaatcagaa gtgtccaaga anaaattgaa cagggaaaaa caagcaacan gatgacatta 780
tcaaaaatat gtc 793

<210> 5012
<211> 745
<212> DNA
<213> Homo sapiens

<400> 5012
ggaagttgca ggcaatgagg gacattgcta tattaaagga aaagcaggag aaagaaatac 60
agacattaca ggaggagaca aagaaagtcc aagctgagac agcttcaaag acacgggaag 120
tacaggccca gctcctccag gagaaaagat tactggagaa acaactgagc gagccagaca 180
ggaggctact gggaaagaga aaaagaagag agcttaatat gaaggcccag gccttgaagt 240
tggcagcaaa gcggtttatt tttgaatact cctgtggcat caacagagag aaccagcagt 300
tcaagaagga attactgcag ctaattgagc aagcccagaa actaacggct actcaaagcc 360
acttagaaaa caggaagcag cagctgcagc aggaacagtg gtatctggag tccttaatcc 420
aggcgaggca gagactgcaa ggaagtcata atcagtgcct aaatagacag gatgttccaa 480
agaccacacc cagtcttccc caaggcacca aatcaaggat taatccaaag taacttctaa 540
aataacactg attaaataag aactggagca agtactctta agtgctacat taacctggtt 600
agaaaggctg ttggattcca gattgctatt gtaaaatctc catcatgatg tgttggagtg 660

Docket No. 2005-0185.00

aaggattaga tngggtttac caacagtcct actagatatt ttggnaanca gcttccctta 720
actaactttt tccttaaata ccccg 745

<210> 5013
<211> 738
<212> DNA
<213> Homo sapiens

<400> 5013
atttctgaca tgctggtgat tgaagcaatc ttggctctga agggcttgac tgtacaacag 60
tgggatgctc tctatacaga tcttccaaac agacaactta aagttcaggt tgcagacagg 120
agagttatta gcactaccga tgctgaaaga caagcagtta caccccccagg attacaggag 180
gcaatcaatg acctggtgaa gaagtacaag ctttctcgag cttttgtccg gccctctggt 240
acagaagatg tcgtccgagt atatgcagaa gcagactcac aagaaagtgc agatcacctt 300
gcacatgaag tgagcttggc agtatttcag ctggctggag gaattggaga aaggccccaa 360
ccaggtttct gaagataatt ttcatattcc tgagaaactg gacttttac aagtctttac 420
aaaactgtca ataataatgg cagtactaag agatttataa tcataatgtt tacaatgcag 480
cctactggat tgtctctaga tctgtttttc ttaaacacta acagaataat tctttataaa 540
taggtaagcc ttacacttgt tgaagaaatt tacctctaat ttcagtctca ctaatgcaaa 600
atactgggac ttaagtatac aattcagtca ctaactgtac agttttatgt ggggaacaat 660
tcatgcaggc tactgggaaa attaaatcct attaccaaac tcccttggng ataaccnttt 720
gccatcanca atcacatg 738

<210> 5014
<211> 697
<212> DNA
<213> Homo sapiens

<400> 5014
taaaaagcat agtatttgca tataacctac atacatcctc ccatatgctt taagtcattt 60
ctagattact tataatacct aatacaatgt aaatgctata tacatagttg ttatactgca 120
tttttttaa gttgtatttt ttattgtaat gctgtttgtt ttgttttgag acggagtttc 180
actcttgttg cccaggctgg tctcaaactc ctgacctcag gtgatccgcc ggcctcccaa 240
agtgctggga ttacaggcat gagccaccat acctggccag tgctgttatt ttttattgtg 300
gcattttcca aatagttttt gatccactgt gggttgaatc cgcaggtgcg gaatccgggg 360
atacagaggg ctatgttttt aattcagaaa aatacatggc ttatatgtca taaaaggtaa 420
aactgcaagc agtcattctc ttaccgtgtt tggctattct gttcctttct tttctgataa 480
ccaatattat tacttttcg taagttctta tatgagtaat gccaatatat atatatgtag 540
attttctcac ttatcaagta tgcaaatgta tgtatataaa atgtgcttta aaaatagaga 600
cagataatag actanagggt accaagggac cggggaaggg aaagaacggg ggaagttant 660
gtttaaatgg agggacagct ggtgggnttc caagtgg 697

<210> 5015
<211> 745
<212> DNA
<213> Homo sapiens

<400> 5015

5052042 05/20/2009

aatttttaaa cctactgtag tacaacaagc caggattgcc cagaatggaa ttttgggaga 60
ctttatcatt agatatgacg tcaatagaga acagagcatt ggggacatcc aggttctaaa 120
tggctatttt gtgcactact ttgctcctaa agaccttcct cctttaccca agaatgtggt 180
attcgtgctt gacagcagtg cttctatggt gggaaccaaa ctccggcaga ccaaggatgc 240
cctcttcaca attctccatg acctccgacc ccaggaccgt ttcagtatca ttggattttc 300
caaccggatc aaagtatgga aggaccactt gatatcagtc actccagaca gcatcaggga 360
tgggaaagtg tacattcacc atatgtcacc cactggaggc acagacatca acggggccct 420
gcagagggcc atcaggctcc tcaacaagta cgtggcccac agtggcattg gagaccggag 480
cgtgtccctc atcgtcttcc tgacggatgg gaagcccacg gtcggggaga cgcacaccct 540
caagatcctc aacaacaccc gagaggccgc ccgaggccaa gtctgcatct tcaccattgg 600
catcggcaac gacgtggact tcaagctgct ggagaaaccg tcgctggaga actgtggcct 660
cacacggcgc gtgcacgang agggaggacg caagctcgca gctcatcggg ntctacgatg 720
anatcaggac cccgctcctc tctga 745

<210> 5016
<211> 582
<212> DNA
<213> Homo sapiens

<400> 5016
gtgctcttta aacacagaga cctgccaaga cgccctctcg tccaactatg cccaggctga 60
agtcctcacc ctctcttaaa gcggcaccaa cgtgagagag acaggcagac agacagaaag 120
ccagaggctt agggaaactc tggaacccag acaagaatct tttcgctggg aaagactcag 180
atatccttgt ttgcacagga ctggtggaaa atctcccatg cgaccctcgg ggcccagagc 240
catctgggtc tgatgttctg ttccattgta catcgaagag atatatatgc acatatagta 300
tctatattca tacatattat actcttgtgt gtagtgcacg tgctattggt ggtttgtctt 360
ctttgttagg ctgtgtctcc ctaagccctt gccccaccca gagtttcccg tccccttcac 420
tgatttctgt tgtttctgct gactgtgtgg gtggaatgtc ccaagaaaag tgcatctggg 480
aattgccagt ccagctgggt agtcccangc tcctgtcttg gggatgtttc ccctgtcagc 540
aagtaacctg gtgaagtcta ttgaangcca nactgccccc ta 582

<210> 5017
<211> 779
<212> DNA
<213> Homo sapiens

<400> 5017
gctattttag attttattcc tgtgaaaata tatccatgga atactgttat tgaatatgct 60
tcctatttta tgagaggtta tgcaatctaa ctcatttgat tattaaattt gataacctac 120
catgttcagc tatcatgtaa atattgttat ctctatattt atgtttatgt agttacctgt 180
gaaagtagct ttgaaaatgt gacacatatt tttattagtg taattacatt ttaattaatt 240
tttaatactt cacatgtttt gcgtttttcc tttggaggat tggatagctt tagtcaaagc 300
agctgctgca gctgcagcca agaacaaaac agggagtaaa cctcgaacca gcgctaacag 360
caataaagat aaggataaag atgagagaaa gtggtttaaa gtaccttcaa agaaggagga 420
aacttcaact tgtatagcca caccagacgt agagaagaag gaagatctgc ctacatctag 480
tgaaacattt ggacttcatg tagagaacgt tccaaagatg gtctttccac agccagagag 540
cacattatca aacaagagga aaaataatca aggcagctcg tttcaagcaa agagagctcg 600
acttaacaag attactggtt tgttggcatc caaagctgtt ggggttgatg gngctgaaaa 660

aaagggaaga cctacaatga aacagctcca atggctggga gcaaggtatg aaatgggaag 720
catttggttt ttttcaangg gtcccaactg ggaatggatc aaccggggnc tcctaggna 779

<210> 5018
<211> 791
<212> DNA
<213> Homo sapiens

<400> 5018
gagtttatct tgacaccaaa tttgacctaa atcctatagt gaatcaggct tgatagatag 60
ttgctttata cgttaagatt tggcttagat cttttaagta gtctttgaaa aacatggttt 120
tcatattatg gtacttctgt ctttggatca ccaagccatt caaagttatt cataaagctg 180
tggaggagat tttgtttttt aattttctgg gactctggga gtaatatcag atgactataa 240
ctatcctgtc aaaaattatc ccacttattt tgtagtttcc aaacaaatac atgctgttag 300
aaaagattac acagtcaaaa taagagattt tctttttca attgtttacc atctgctttg 360
tttttattct ttcagatgta atacacattg gatgacattt agcctgatgt tagttttgcc 420
ttgacgttga gaatgttgag ccctcattcc actgtcgtag tctgtatgtc agttaaatac 480
ctcacaatag ataatcatac tgtaacgtta aacagctccc tgaaaatact gacacagatc 540
ttaagagttt aggttagaac cataagaatt ggttcattca gctttcagaa agcactggca 600
ggggagtcaa atgaaattgt gaatctcagc ccacacatga aagaacgatt aagattantg 660
tcactaagaa gcccagaaat gggtatcagc cattgataat ttaagaagtg tccttgcctt 720
cctttgctgg attcacaagg tttggggaaa tatttttaag gcnttaggca atttaacnna 780
gaggaacaat a 791

<210> 5019
<211> 743
<212> DNA
<213> Homo sapiens

<400> 5019
tcaatttaat gacaaagtta ataaaccctt tgtgtgtcaa aaccaaggct gtaactacag 60
tgctatgaca aaggatgcac tatttaagca ctatggtaaa attcatcaat acactccaga 120
aatgattctt gaaattaaga agaatcaatt gaaatttgct ccctttaaat gtgtagtacc 180
tacatgtaca aaaacattta caagaaattc taacctccgg gcacactgtc agttggtgca 240
tcattttaca actgaagaaa tggtaaagtt aaaaattaaa aggccttatg gaagaaaatc 300
tcagagtgaa aatgtgccgg cctcacgaag tacacaagtg aaaaaacagc tagctatgac 360
agaggaaaat aaaaaggaat ctcagcctgc tttagaattg agagcagaga cccaaaatac 420
ccacagtaat gtagcagtga tcccagaaaa acaacttgta gaaaaaaaaa gtcctgacaa 480
aacagaaagt tctttacaag tgattacagt tacttcagaa caatgtaata caaatgcact 540
cacaaacaca caaaccaaag gacggaagat taggaggcat aaaaaagaaa aggaggagaa 600
aaaacgaaag aagccagttt cccaatccct tgagtttcca acaagataca agtccttaca 660
gacccttatc gatgtgttca acangggatg ctttgctgnc tttacgatac agcaaaactt 720
tgattcncca ttaccaaggc tgt 743

<210> 5020
<211> 690
<212> DNA
<213> Homo sapiens

DD6B5C9E

<400> 5020
taaaaccata gtgagatacc atctcacatc agtcaagaat ggccattatt aaaaaactga 60
aaaacagcaa atgtttgtga ggatgaagag aaaagggaac acttatacac tgtttgtggg 120
aatgtaaatt agtacaacct ctgtggaaga caggatgggt atttctcaaa gaactgaaag 180
taggatctac catttgaccc agcaatccca ctgttgagta tctacccaaa ggaaaataaa 240
tcattttatc aaaaagacac ctgcacttgt atgtttattg tgacactatt cacaatagca 300
aagtcgtgaa atcagcctaa gtgtccatca atgaatgatt ggataaagaa aacgtggtat 360
atatactccg tgaaatgcta ctcactcata agaaagaata aaatcatgtc tttgcagcag 420
catggatgga tttggaggcc attattctaa gtgaaaaact gcaatggaaa atcaaatact 480
gaaggggtgc gttgcccctc cacacctgtg ggtgtttctc attaggtgga atgagagact 540
tggaaaagaa aaagcacaga gacaaagtat ggngaaagaa ataaggggggc ccaagggacc 600
agcgttcagc atacgggngg atcccgctgg gcctcttgag ttcccttagn atttattggt 660
cattcctggg gggttcncgg aaaggggggat 690

<210> 5021
<211> 755
<212> DNA
<213> Homo sapiens

<400> 5021
ttgtgttaca ggtgaggagt aggaagttca aaaagtttat aaggtcaaag tcacacaact 60
agtcagatgt agaactaacc tttggatttg ggactgttca ccatcaaatc ctatatgctt 120
ttgatacaga caggagaccc agaaatgctg ggtagaagag ggtggttccc tggcaaaggc 180
cctaccctca aacctggaaa cctgcagccc taaatgggaa gaggcattcc tgttttcatg 240
cccaaaagtt gccttttggc ccgtcatgtc ccctatccta tacctgtata aaccccagac 300
cccaggctcc agaagcagat gaggagacaa acagaagagc agaagaatgg cagaatggca 360
cagcagagag aagaaaagga acatctgaat gttgagagga atttggctgg gggcggttgg 420
agaggagatt agccactgga cagccaaact ccaggggaag gtcatcttcc cactccatcc 480
cccttccagc tccccatcca tcctgctgag agccacctcc accactcagt gaaaccgctg 540
cattcatcct tcaagtttat gtgtgacctg attcttcctg gacattggac aaagacctan 600
gtccagtgaa ctgtctaaca cttaagtcat ccacggacag caaggctaac agaatgctgt 660
aacatgtgnc cacttggnct ctggggagtt gcagacacca cccgtaggtg ctgccatggg 720
tccggagccc aaaaaagtgc ttgncctggc tcctg 755

<210> 5022
<211> 703
<212> DNA
<213> Homo sapiens

<400> 5022
gtgaagcaca cctacacctc atgggatctt gaggacatgg aaaaataccg catgcagtcc 60
atccggagag agagccgtgc tcggcagaag gtgaaagggc ctgtcgtgtc ccaatatgat 120
aacatgaccc cggcggtgca ggacgacttg ggtgggatct atgtcatcca tctgcgtagt 180
aaatcagatc ctgggaaaac tggacttctc tcagtggcag aaggaaagga gagccgccat 240
gcagccaagg ccatcagtcc cgagggagag gaccgcttct ataggaggca tcccgaggca 300
gagatggaca gagcccacca tcacggaggc catggtagca cgcagccgga gaagccatcc 360
ctgcctcaga agcagagcag cctgaggagc aggaagcttc ctgacatggg ctgcagtctt 420

cctgagcaca gggcacacca agaagcaagc catangcagt tctgtgagtc aaagaatggg 480
ccccttatc cccagggagc tggccagtta gattatgggt ccaaagggat tccagacact 540
tctgagccag tcagctacca caactctgga gtaaaatatg ctgcatccgg gcaagaatct 600
ttaagactga accacaaaga ggtaaggntc tccaaagaga tggagcgacc ctgggttang 660
cagccttctg ncccagagaa acactccaga gactgctaca agg 703

<210> 5023
<211> 781
<212> DNA
<213> Homo sapiens

<400> 5023
gtgacgggtc cgcgaggccc agctcgcgca gtcgttcggg tgagcgaaga tggcggccga 60
gagggaacct cctccgctgg gggacgggaa gcccaccgac tttgaggatc tggaggacgg 120
agaggacctg ttcaccagca ctgtctccac cctagagtca agtccatcat ctccagaacc 180
agctagtctt cctgcagaag atattagtgc aaactccaat ggcccaaaac ccacagaagt 240
tgtattagat gatgacagag aagatctttt tgcagaagcc acagaagaag tttctttgga 300
cagccctgaa agggaaccta tcctatcctc ggaaccttct cctgcagtca cacctgtcac 360
tcctactaca ctcattgctc ctagaattga atcaaagagt atgtctgctc ccgtgatctt 420
tgatagatcc agggaagaga ttgaagaaga agcaaatgga gacatttttg acatagaaat 480
tggtgtatca gatccagaaa aagttggtga tggcatgaat gcctatatgg catatagagt 540
aacaacanag acatctcttt ccatgttcaa gtaagagtga attttcagtg aaaagaagat 600
tcagcgactt tcttggtttg cacagcaaat tagcaagcaa atatttacat gttggntata 660
ttgtgccacc agctccagaa aagagtatag taggggggatt gtacccaaaa ngggggggntt 720
ccaaaaaaaa gggttttggg gggggggggtt tttaaaaaaa agggggaaaa aagggggnaa 780
a 781

<210> 5024
<211> 740
<212> DNA
<213> Homo sapiens

<400> 5024
tcgtcagcgc cctcgccgcc acgctgtgct tctcgcttca gaacattttc tccaaaaagg 60
tcttgcgaga ttcacggatc caccatctcc ggctgctcaa catcctgggc tgccacgccg 120
tcttctttat gatccccacc tgggttctgg tggacctctc ggctttcctg gtcagcagcg 180
acttgaccta cgtctaccag tggccctgga cgctcctgct cctggctgtc agcggcttct 240
gtaactttgc ccagaatgtt atcgccttca gcatcctcaa cctcgttagc cccctgagct 300
actcggtcgc caatgccacc aaaagaatca tggncatcac ggtgtccctg atcatgctgc 360
gcaacccagt caccagcacc aacgtcctgg gcatgatgac cgccatcctg ggggtcttcc 420
tctataacaa gaccaagtac gatgcaaacc angcaagcca ggaagcacct cctccccgtc 480
accacagcag acctgagcag caaggagcgt caccggagcc cactggagaa gccccacaac 540
gggctcctct tcccccagca cggggactat cagtacgggc gcaacaacat cttaacanga 600
ncacttccaa tacagccggg cagagctacc caaactcgta cagtttgaac cgctatgatg 660
tgtanaggtc caaaaggaca ggaccagact gtttggggac tccccttccc cccnggggggg 720
ggcnccccccc ccccaaaaag 740

<210> 5025

<211> 705
<212> DNA
<213> Homo sapiens

<400> 5025
tatcactgct accttggctc tccaaggaat gggcttgtgc tagaccgctg ccctacttaa 60
cagctgcctc attgcaaggg cagtttttct tgcatgggtt ctctatattc ccagagtatg 120
tggcacaatc tgtgttgttt atatgatacc agatgcccca caagaaccct tattcctctc 180
atttcacatt cttcctttaa tagcctcctt cagatcccat acctgacccc tctctaacac 240
aaaacttatt gggtaagtga ctttgaaaag ttttgtggca cctgacccac cccagacact 300
agggcaatca gaaggtctcc tttttagccc agcacaggcc caggccactt tgtcgtgttt 360
gttttaactt ctaaagaaaa tatgtttcag cattataaga aaggcagaat gcagaacacc 420
tacatttttg ttttagtttg gtgccaaggc tcaggctgta ttggcaaatt cccgaaagtt 480
ttcccacttt gcctggccct gcttctgtct tttctttctc agtaaacagt tctgaangca 540
ggagtggaac ccgggaagta ttttcatgtc tttcatcctt gaaagatttt tangtgcctg 600
catttttttt ttaattaaaa aatgcttttc attgggctta agagaccgca ttggagaatt 660
tcangctttt ganaaatgct tcttcaaaga gaatttttcc nttcc 705

<210> 5026
<211> 718
<212> DNA
<213> Homo sapiens

<400> 5026
acttgaatat ctgctatatg ctgggttcta gagctgcaaa agagaacaag agtagtcttt 60
acctttagga ttttccaggg aactgggggа gacagacaga tacatacaca tacaccccat 120
cctcagtgtg taggtgccat gacaaatcaa ggcttttgat gcagatgcta tgctttcact 180
tctcatggtc gatacttttt gaatcttaaa gtctgattgt tcagatatct agaaaaggag 240
atgtctggct ttgctctgcc ctctgactca ctgtgttggt ttatctttag gcgtggtgga 300
gggggccaga actactggct aatgagagaa ggcagacctt gttagtgaca tgtacaaatg 360
ggcacatctg ctatattcac tttcattact gattattaat agtttattaa atggagttta 420
ctgaattact attattttgg cttaaaatat atatatataa tttatgtagt tctatgttta 480
tagatgtgtt ttcagaggtg tatttgtttt agaatttcac tctgtcctgg aagtgatttt 540
tcaaatgtgg atattaaaat ggataggaca taatttccca actagtacag tatgctagtg 600
ccaaccttat accactgttg taggacccat gaaaaataat ttttaaaaag ctgtaaaagt 660
cccagtgctt tgaggcttcc tcaaaatttg aggnaaatng antgggaaaa aaaaaaaa 718

<210> 5027
<211> 715
<212> DNA
<213> Homo sapiens

<400> 5027
agtgcctgcc gcccacggcc gcaggagtcg ggcttcggtc gcaccagaga cagcggactt 60
tcctccgatg gttgcagcag agggatcatg acggggaaaa agtcctcccg ggagaaacgg 120
cgcaaacgta gcagtcagga ggcggctgca gcgctcgcgg ccccggacat cgtacccgcg 180
ttggccggcg gcagcagtgg aagcactagc ggctgcggga gcgccggggg ctgcgggagc 240
gtcagctgct gtgggaacgc caattttagt ggaagtgtca ccggcggtgg gagcggcggc 300

agctgttggg gcgggagcag cgtggagcgc agcgagcgcc ggaagcggag gagtaccgac 360
tcttccagcg tctcgggctc cttgcagcag gaaactaaat atattttgcc aactttggaa 420
aaagaattat tcttggcaga gcacagtgac cttgaagaag gtggactgga cctgactgtg 480
tcattgaaac cagttagttt ctatatatca gacaaaaaag aaatgcttca gcagtgcttc 540
tgtattatag gagagaaaaa gttacagaag atgcttcctg atgtgttaaa gaactgttca 600
atagaagaaa ttaaaaaact atgccaggaa cagttagagc tcctgtctga aaaaaaaatt 660
ttgaagattc ttgaggggtg acaatggnat ggactctgat atggaagang aanca 715

<210> 5028
<211> 705
<212> DNA
<213> Homo sapiens

<400> 5028
tcagctcttg aatcaagaat tttcaaagac tcacctctct tacctgggct tgcacatatt 60
tgtcctaagt aattctctat cccttaaacc tctgagtccc tctgttttat tacttgcccc 120
actcctccta cttgaatatg tttgttttcc cagttgaatg tgatttttat ctactgttca 180
tattatcttt tatacccatg agtataattt catagtcctt tcaggttcca catcatcaaa 240
gagatgacca taatttcact ttttttgaaa tgaagtcttg ctctgttgcc caggctggag 300
tgcagtggca caatctcagc tcactacaac ctccgcctcc caggttcaag cgattctgcc 360
ttagcctccc aagtagctgg aattacaggt gcctgccacc atgtctggct aatttttgtg 420
tttttagtag agatggggtt tcaccatgtt ggccaggctg gtcttgaact cgtgacctta 480
ggtgatccac ccacctcaac ctcccaaagt gntaggatta caagagtgag ccaccgcacc 540
tggccaattc acttttaaat actaaaaggc acacagcaga cagacatttt cggggcagtt 600
ttctttggga gggtctttga taaattttgt aatcacctct cggaagaaag cccaaaatga 660
catgtgaaaa taatattaan ccatttacca nntgtccaag caata 705

<210> 5029
<211> 519
<212> DNA
<213> Homo sapiens

<400> 5029
tttttggcgg ggcctttgtc cctcgctgtg gcctgagctc caggtctcgt cttcagcgct 60
ctgtgtcctc tgctcctaga ggtccaggct ctgtggccct gtgacctgca ggtattggga 120
gatctacagc taagacgcca ggaacccctg gaagcctaga aatggagaac ctgaagtctg 180
gagtgtatcc tctcaaggaa gcaagtggat gccctggggc tgacaggaat cttctggtgt 240
actcttttta tgaaaagggg ccattgacat ttagggatgt ggccatagaa ttttctctgg 300
aggagtggca atgcctggac actgctcagc aggatttgta tagaaaagtg atgttagaga 360
actacagaaa cctggtcttc ttgggcaggt attgctgttt ctaagccaga cctgatcacc 420
tgtctagagc aaggaaaaga gccctggaat atgaagagac atgcgatggt anntcaaccc 480
ccanttacat attctcattt tgcccaagac ctttggcca 519

<210> 5030
<211> 653
<212> DNA
<213> Homo sapiens

<400> 5030
cttgttggcc tactgggcgg gccacagtct ccagcctgaa gcggaagtgg aggaaagatg 60
gaggaccatc agcacgtgcc catcgacatc cagaccagca agctgctcga ttggctggtg 120
gacagaaggc actgcagcct gaaatggcag agtctggtgc tgacgatccg cgagaagatc 180
aatgctgcca tccaggacat gccagagagc gaagagatcg cccagctgct gtctgggtcc 240
tacattcact actttcactg cctaagaatc ctggaccttc tcaaaggcac agaggcctcc 300
acgaagaata tttttggccg atactcttca cagcggatga aggattggca aggagattat 360
agctctgtat gaganggaca acacctactt agtggaactc tctancctcc tggttcggaa 420
tgtcaactat gagatcccct cactgaagaa gcagattgcc aagtgccaac agctgcagca 480
agaatacagc cgcaaggagg aggantgcca ggcaggggct gccganatgc gggagcaatt 540
ctaccactcc tgcaagcagt atggcatcac gggcgaaaaa tgtccgagga gaactgctgg 600
ccctgntgaa ggacctgccg agtcaactgg gctgaaattg gggcancggn tca 653

<210> 5031
<211> 752
<212> DNA
<213> Homo sapiens

<400> 5031
agttcgcctc tgcagcctct gcggggaagt gccggggctg ctcgaggctc agttcttagg 60
actgcaagga ggcagccccg gcgtgcggcg gtgcgcacag tctagagtgg ccagggcgcg 120
agagtgcaac gtcctcctgg ccccgagcgc gtcgtcgcgc cccgggagca gaccctcgcc 180
cagcagttac cgccgtcccg actttccgtt ccagttgcag ctcctgccgg gcaacatgtc 240
aagagccgcc gccgctacag ctgccgccgc cacctgggga agagcagcag cagcagtggc 300
ggccgcgggc acacgggggc aataaaccga gccacccggg cgtccagcgt gccggggaac 360
cctctctgcg ctcactgccc ggcgggaccc acgccatgtg ctgagccatg tccctggccg 420
cgcccgcggg cagcgcatgg ggcagcgcct gagtggcggc agatcttgcc tcgatgtccc 480
cggccggctc ctaccgcagc cgccgccgcc cccgccgccg gtgaggagga agctcgcgct 540
gctcttcgcc atgctctgcg tctggctcta tatgttcctg tactcgtgcg ccggctcctg 600
cgccgccgcg ccggggctgc tgctccctgg gctctgggtc cgcgccgcac acgaaccgcc 660
aancctgggc aaaactccgg acgggacgcc cccaagctgc cctttcgggg cgccgcaagc 720
aacccaactg gnttaaggca aagganatgg cc 752

<210> 5032
<211> 686
<212> DNA
<213> Homo sapiens

<400> 5032
tttatttgct angaagcaag ttactaacgc agcccttatt caagggaagg aattatccaa 60
gggcatccta acaggagcag gtatcactga gagtcatttt taagtctgct tcttagaaaa 120
ataaaatttc tggtttttgt atagccatag tgacaggtag ccaccatacc aattttaaac 180
acattaaata gatcaactgt aatgtgtctc agtgaacatg cttttgcaag cccaaccagt 240
caatattaac ccctcatttc tgtaaatcca tcagtcagga atgtattcac cagaagaagc 300
acatctctga gtatgccaac caatcaacta aagtctcacc caagtaactg tggttcaaca 360
agtgatgtca actcacttga tgacaatgag tttcagataa tgaccctgaa aatccaccaa 420
tctctgaact ccatgtatcc cccaaacatt ctatgaggtc agcagtctgc tcagctagga 480
gagatggctt gatcagcact gtccttccct accatgtcag cgataagttg agccttgtgt 540

ttttgtttg gttcacatat tgataatggt ctatcaactt ctaacagttc aatnagatgt 600
tggttttaac cactaaagtt ttgggaacaa agctgttagg cagcaaaagt taactgatat 660
actgggaaaa tngcaagttt cntcca 686

<210> 5033
<211> 553
<212> DNA
<213> Homo sapiens

<400> 5033
agaatcgaaa ctgagagctc ctgggcaggc tcggcagggc gggcagctcc aggagggctt 60
cgaaccgtgg ccaacagttc cagtggactg cgtggacccg tgagctcagg agcctcagac 120
gcctccctgg agagccaagc tggtgttcga ggtggcgcct ccagggtcca ccctgctgcc 180
caacagcccc gcggccacca gagggccgtc cctggcccgg ctgtgtgccc tggtggacct 240
gtgtctgggc tgctcccgct gcacccagcg gctcaatgaa agcacctacg tcctccgtag 300
ggtggagcat gactgctccc gcgagatcct gctggcccgc tttaagcagg ccaccaagag 360
caaggtctgg cgcgtggtgg gctgccggcc caccttccca aggcccctgt gctaccaagt 420
ctgccactac tacagccctg ggctcggctg ccggcgccac cgaaaccggt gcacctttgc 480
ccgcagtcgc nangaggccc tggtctggac cttcgagcgt cagcacaanc tccagcgcct 540
atggctgaaa ggc 553

<210> 5034
<211> 517
<212> DNA
<213> Homo sapiens

<400> 5034
gtggcatatt gaagtgatct ataaatatct tcagtcctct ctgaagtgtg ggtatttctt 60
ctatctaaaa aatacataca gtgactgtct tcaaatctac ttggttcttg accaaatagg 120
agctaatggg taatgaatac ctttttgttt gtttgtttgt ttgttttgtt ttttttttt 180
ttaagggtct cactcttttg cccaggctgg agtgcagtgg cacaatcacg gctcccaggc 240
taatgttttt atttttaatt tgtaattttt ttttttattt tttttgttga gatggagttg 300
ctccatgttg cacaggctgt tctcaaactc ctaagctcaa gccatctgcc tgccttggcc 360
tcccaaagtg ctgggattgt agacataagc cacctcaccc agcctatgaa tatctttcta 420
acattgtang aatgaggtaa tgtttccatc agtctaatac agatatattt cttccctcca 480
aaacagttta ttttgattgt ttantttant ttgattg 517

<210> 5035
<211> 539
<212> DNA
<213> Homo sapiens

<400> 5035
atcacgctga ggtccgcgcg cccccggagt ctggggagca gggctccgcc aatccgaggg 60
gagggcgaag gaagtaccat ttatttagcg ctgtgtgtgt gctcttattt ccactggcct 120
tacaagaccg tgcactgtgt agatgaggaa actgagtcat aataaatatg tgctgaaccg 180
ttcgggggtc acacggtgct gaaatggttt cgagtcaact cgctcggacg gcactcggcc 240
tcagcctccg gccctggaac cctctccagg gacgggacca gcccttgttc tgttccctac 300

cggtaccaca ggaatcttga cgaacggccc aaatgcctgg ccgctgtcag agtgacgccg 360
cgatgagagt aaacgggcca gcatcccgtg caccagcggg gtggaccagc gggagtctgc 420
acacaggccc ccgagcagga cgccctcgtg cgcangcgcg gggtgtacgt tggccggggg 480
cntctcctcc ggccccgccc agcgaaggag cttcctcttc cgangaaaag cggggcctg 539

<210> 5036
<211> 622
<212> DNA
<213> Homo sapiens

<400> 5036
ttcattctgt catcagatac ctccaaattt agaacaatat ctatccgtag ccattggttt 60
tcggatatgc tttaccctgg gaacgtgcgt aaaatacatt tccgtgtttg gctatttctt 120
tcccagctgc atagagggtg tcaccattat tttagataat agccatggcc ggtgcccact 180
ttaatcactt ttccaatcac ttttcactga ttgcttctaa ggcacttgat ttcagatgtc 240
acttttgct gaaatacctg gataactgtt tcaggggcc ttgtggacta ccgagaagtt 300
tgcctccagg ggttggtaaa cttctaaaag tgccaagtca tgaatatttt atgctttgca 360
ggcccaagaa gcaaaagtaa gactattatg tagataccca taaaacgatt taaagtgaaa 420
tcatttaaaa atatgaaaac cattcttcac ttgcaggcta cgaacaagca gcctcctgtt 480
tgactggggt tgctcagcga gccttctggc ttctccggca cacacacatt caggtctcca 540
tctatgcaaa tggagacctc cttcttcctt ctcaccactg gtantaaggn ngaaaaacag 600
gacagtggga aagggtttgg ta 622

<210> 5037
<211> 655
<212> DNA
<213> Homo sapiens

<400> 5037
gatggagtgg cagcctgagg agcaagcctg gcactcctac atcaactttg agctgagata 60
caaagaggtg gatcgggccc gcaccattta tgagcgattt gtcctcgtgc accctgatgt 120
taagaactgg atcaagtatg cccgctttga agaaaaacat gcttattttg cccatgcacg 180
gaaagtgtat gagagagctg tggaattctt tggagatgaa catatggatg agcaccttta 240
tgttgccttt gccaagtttg aagaaaatca gaaagagttt gaaagggtac gagtgattta 300
caagtatgcc ctggacagaa tttcaaaaca agatgcccaa gaactcttta aaaattatac 360
catctttgag aagaagtttg gtgataggcg gggtattgaa gatatcattg tgagcaaacg 420
gagattccag tacgaagaag aagtgaaggc gaatccacac aattatgatg catggtttga 480
ttacttgcgc ttggtagaaa gtgacgcaga agctgaagcc gtgagagaag cctatgaaag 540
ggccattgcc aatgtcccac ccattcagga gaagaggcac tggaagcgct acatttanct 600
ttgggatnaa ctatgcactc ctatgaagaa tgggaggcaa aggatcctga naagg 655

<210> 5038
<211> 595
<212> DNA
<213> Homo sapiens

<400> 5038
attacatggt gtctaaccaa atgagcaggc ttaggaattt agatgagatg tgtaagattc 60

acttacaggc agtagctgct tctagcattt gcaagatcct acacttttac cttctttaag 120
ggtgtacatt ttgatgttga acatcagttt tcatgtagac ttaggactca tgtgcagtaa 180
atataaataa gtgtagcatc agaagcagta ggaatggccg tatacaacca tcctgttaaa 240
catttaaatt tagctctgat agtgtgttaa gacctgaata tctttcctag taaaaatagg 300
atgtgttgaa atatttatat gtactttgat ctctccacat cacttataac ttatgtgttt 360
tatttctcca agtgcggtgt tcctgaatgt tatgtatgct ttttttttctg taccacaggc 420
attatctata cctggggcca gattttctgc actttgaaat gttgcctttg cctaatgtag 480
gttgactttc tgaattgtgg agaggcactt ttccaagcca atcttatttg ncacttttg 540
ttttaatatc ttgctctctg acaggaaaga aacaattcac ttaccannct cctca 595

<210> 5039
<211> 638
<212> DNA
<213> Homo sapiens

<400> 5039
caaattgatg ctgaggggtg acaaaggtgc tcttgcattg gtggagaggg gctcagtagg 60
cctaaatgtt gctccaagat ctaagatttt atcattcaac agacagactc atgtgagagg 120
gctcatcagt ctctgtaaat attggttgca gaatttaggg gcagaagcaa tggcttgtga 180
gtgagcaagt tactcttaac ataggttgcc ctacacagtg gctcctgcag tgtgatcagc 240
aggagtctct gtcctacaaa tctacacttt taaggatgta tgaaattgtg gaattcattc 300
cctcaggatc tgaanatctc agttctcaaa aatcacaagt tgcaagaata tgatacctaa 360
aattgaaagt ttttcacatg ttttcactgt atactgaaaa tactcccctg gaagcagggc 420
tgcatcataa tttttgtggg ctttatgtac ttttgccttt gcgaaccatt tcctacattc 480
aaaatagtag taacanatat atatatatat atacacacac acacacagaa atatatattt 540
ataactgcat tgataaaagg tgaatatatt agcattttct tcaacctaaa agtttatgta 600
ttttcttccg attttaatng aaattaaagn cattttan 638

<210> 5040
<211> 698
<212> DNA
<213> Homo sapiens

<400> 5040
tttttttat cctatttgat tatcttgagg gcttgatttt ggtataaggt ggattcaact 60
gactagcttc atttctggaa gattttagag ggccaacatt cagctcccaa ctcctgcact 120
gtgtactcta actctggggg acttctattg ggccccagct ttgttctttg gctccccaag 180
gttaggaatc cactgcggtg aaggggcctg aggtgtggca gctgtggcag agtgctagca 240
ggtgtcgggg tgcctgcctc catgtgggtg ttcaccacag tggcagaaac aatgcagctg 300
ttgggggagc tcctgctggc aactatatgt atggttgtgc tggacatggt gttggcttgg 360
gggtggggtg ctggcagatg caggcctggg tgccttctct gtgccccata agcaggagtg 420
attggtcagc atgggggagg actgttgttc tctgcaaaaa tgtttaaaaa agaaattgtt 480
tcaaaaatct atataaagct ttggattctg taaatccaaa attcattact ggtttattac 540
tttactggcc agggattatg gcaccaagaa gagagatctg tgggtctgac aataagccat 600
gaatgtggtt tgcccantac atggtttanc tttgtttctg tatcanacac gctagtttaa 660
tttacaaatg gagttttgat atactcagga ctgtgaat 698

<210> 5041

<211> 609
<212> DNA
<213> Homo sapiens

<400> 5041
tgaggtccgc ggcctattta cccaagttgg aggtaggggc ctgtggaaac atgaagaggg 60
taaacagctg tgtgaagagt gatgagcatg tcctggagga gctggaaaca gaaggggaga 120
ggcagctgaa aagcctcctt cagcatcaac ttgatacttc tgtctccatt gaggaatgta 180
tgtctaagaa agagagcttt gctcctggta ctatgtacaa gccctttggg gaggaagcag 240
ctgggactat gactttgtcc caattccaga cactgcatga gaaggaccag gaaactgctt 300
ctctcaggga attagggctt aatgaaacag aaatcttgat ctggaagagc catgtttctg 360
gtgaaaagaa gacaaaactg agggcaactc ctgaagcaat acagaaccgt cttcaagata 420
ttgaagaaag gatctcggag cgtcagcgca ttctttgcct gccacagaga tttgcaaaga 480
gcanacagct gacccggcga gaaatggaaa tagaaaagtc tttatttcag ggagctgatc 540
gtcactcctt ccttaaggct ctttattacc aagcatacca caaaaagaca nntgcagaca 600
agtacatgn 609

<210> 5042
<211> 653
<212> DNA
<213> Homo sapiens

<400> 5042
gaggcaaatg gcattgtata atatgtctgt acaaaaaaca aacaaaaaac caaacaaggg 60
caaatagaac cctttggatt ggtattgtac tatctgtttc tgaagaccca gaaacagaaa 120
acaaactttt ccccagactt actgtttcct tgagaatcct ttttctttgt tcttcatact 180
ttaacttcca taaggagctg gctcctctgc ctataaataa gagcttagag aaatacttca 240
aaaagctacc tgcagttagc taaatattac caagtctgcc tggtacatgt ttcattatat 300
ttccttgcct cagtttgtta tctagattta atttacactc catgtgatat agctgttaaa 360
ttagaaatga gattctttct tctgctttag caaaattcag tgacaatttt tagctccatt 420
tccaattttt acatatgtgc gatcacttgg ntcatactga taactgaact gactcagtct 480
catatttatc aggtcagata actgtgctta accgtgcata gtgggccagt catcatttat 540
gtgtcatctt ctttatttgc tttgtgaaca ctcaccacag cacctatttt tctctggtat 600
tttttatacn aaantttcnt gttagaatag gttccttaaa tgtacagaaa ttg 653

<210> 5043
<211> 686
<212> DNA
<213> Homo sapiens

<400> 5043
actagctaaa ggaaaaagtt ttcttctcac aaaaacacag acacgtgatt gttttcacag 60
gttccattaa ttaactcagg tctggaagac ataggacaaa atggagtttc tgaagaagtc 120
caggtgaatt cagctttgga gtcacttatg ttcatttttt ttccttttct tttactatta 180
tcctaaaggt tatttttctt gttgatatag agatttttgt aaaagattgc tacattattt 240
caggattata tcctacattt cgattgctct caaatgtttt atccctaaag agtgagtttt 300
ccacagactg tttggaagca actagaaaaa tctttgtgaa aaatctgaac aaattatcat 360
aatggctctc ttgaaatttt gcactttcac ccttattaag gaaattataa ttagttacta 420

acctttaaaa atagatatat tctaatanga tagaaagtta acttcctggc aaacaaaata 480
ctaagatctc aagggctact gcaggaaaat acctttttcg cacattaaaa tgtttataaa 540
attttcccct ctcatttcaa atgcatggca agaataacat ttttggtggt ccttaaaggt 600
gatggacaga tttactgtca cttaacgatt ttatggaaaa taaattggnt atcntaattt 660
taaaacaatc ctaantttc tcaaaa 686

<210> 5044
<211> 714
<212> DNA
<213> Homo sapiens

<400> 5044
aggttacgtc agcggcggac ggcaaggcgg ggagaggggc agcccgctcg cggccctccc 60
gcctggctct cgcctcggcc tgcggccggg atcctccgcc cgggtcgcgc agcggaggcc 120
gagggctggg acgggcggct gggaagtggg aaagggagct ccttttgtct tctcttccca 180
tcccccaggt ttgggaaagt tttccttttg ggaaagcccc tctcttcagc ctgctggcgg 240
gtgtcggatt ggttagcgac caccggcccc cgcctccccc aacaggattc tcctttgggc 300
cacaggtctt ccggaagttg ccaaaccccg gtagcggcag cgtccggctg ggggctttat 360
taggggcac cggggtctgc tttccgactc ccttccgact ccgcgcctgc gcaggaagcg 420
attgggggag tgttgtgaat tccgagggct ccacacttaa gaggttgtac actcacctgt 480
ctacctggac tccaatttcc atatttccag ccacttgagg actgagaggt ggatgataaa 540
ccctgtcata gtggagcaag ttcangtgtt taaccgctgt tatgggggat ctgccttttc 600
tccctcttct ttcttacttc cataagtatg tatgtgcaga gattgaaaaa taaccttgag 660
aaagtccatc catctnactc caagttttgg tatcaagatn aanctgacct cata 714

<210> 5045
<211> 640
<212> DNA
<213> Homo sapiens

<400> 5045
tgtgtaaaat attgtcctta gttttcacct ttcctaggag acacaggcag agcctgtgac 60
actacagctt ctggcacaca gtaggtaggt gcatcacaaa catctgctta gttcacacac 120
tcttgccttc tcaaaacttc ttgtcaagtc ttcagtgaaa aggaattgct gattgagcaa 180
gaattaaact tctagagact cctggatcca ctgaagtttg agacaaggtg agatttgttt 240
actgtcatat tcctagctca taacatattg tagtcactta aaaaagtttg ttgaataagt 300
gagtaaattg attcatacgt catacttagc tatatatttt ctgagtagaa ttgataaagt 360
taatagttta agtctagtat aattttgctt tactcattca acgaacctga caattcaact 420
aggtgccagg cacactgctg ctgaagaaaa agaggtataa gatataattt ctgtctacaa 480
gaaagccaca gtctaaaaag tagaaacata tgaacaaatc ataacaataa ataggctaaa 540
ttcaaaatca gaggagtttg tttctatttt aaacagctct agtcaggaag tgttagagag 600
ttctaaacan ggaaatattc cancacatca tcnaagcatg 640

<210> 5046
<211> 506
<212> DNA
<213> Homo sapiens

<400> 5046
cttgagtttc atcagttctt tctaagatcg atcagcacac ctgaaagttt ctgttcctga 60
tgaaatgtct gcagatctag aaaagagaag acctgagctc attcctgagg atctgcatcg 120
ccactatatc caaactatgc aagaaagagt ccatccagaa gttcaaaggc acttagaaga 180
ttttcggcag aaacgtagta tgggactgac cttggctgaa agcgagctga ctaaacttga 240
tgcagagcga gacaaggacc gattgacttt ggagaaggag cggacatgtg cagaacagat 300
tgttgccaaa attgaagaag tattgtaagt aatagaagta tatgtggaaa tgccctctct 360
gctgagatac tagttatgct tgaagtgtcc tttgggtagg tttagaaaaa ctggcagatt 420
gtgtatgtgg agcccgttta ntttgtcata agtacttgag aaactggntt ttttttcct 480
ttttctgnga cttttagata aatttc 506

<210> 5047
<211> 785
<212> DNA
<213> Homo sapiens

<400> 5047
agacgatccg ctagccacat taggcgctcg gtctctgcgt ccgcccctcc cgtgcctcag 60
agacttgcgc tccccaggcc cgagcccctg tcggcccatc ctcgagcccg tgtggctcgc 120
gaacctctaa ctccagccgc tgcagccccc tcccaggccc ggcgtccccg agccccgcgg 180
gcgccgcgcc tgcccttctt tggctacgct gcagccgcgg tgtcggcgag tcctcccggg 240
ttgccccccgc gggcgtcaga gggagggcgg gcgcccgcgt ggtgacggcg acgcctgcag 300
cccaaggagc gctccactcg ctgccgccgg aggggccggt gacctcttgg ctaccccgcg 360
tcggaggctt agatggctca ggcgaagatc aacgctaaag ccaacgaggg gcgcttctgc 420
cgctcctcct ccatggctga ccgctccagc cgcctgctgg agagcctgga ccagctggag 480
ctcanggttg aagctttgag agaagcagca actgctgttg agcaagagaa agaaatcctt 540
ctggaaatga tccacagtat ccaaaatagc caggacatga ggcagatcag tgacggagaa 600
agagaagaat taaatctgac tgcaaaccgt ttgatgggaa gaactctcaa ccgttgaagt 660
gtcagtagaa acaattagaa aacccccaag caagcaaaga atccctaaaa gctttgccac 720
aanggaatta tttgattnaa gggtggtcaa taaagttttc tgggaatgaa ttttggggna 780
aaatt 785

<210> 5048
<211> 679
<212> DNA
<213> Homo sapiens

<400> 5048
tcaaattagt gtaattcttg ggatatttaa tatataggta atattttaaa caagtttctg 60
taaaatttag tgttcccatt aactccgtac agaatccctt gtatttccaa tatgtcaggt 120
tccatgaatg tacatgctat ctggttgttt aaacattact tagttgatta taatgactgt 180
gagtataact acttttactg cttatggtag atatcatgtg agttacaata ttatattaca 240
tactcttaaa caactgttgt agaaaagttg cttgaaatta aaatacacac ttgtacaagt 300
tattcacata gaacaagttt gcagttactc ccctttttatt cttgataaat atttcagttt 360
agttcaaatc attccaagga atgtaaaaat tgaatcaact tattanattc ctaaaatcag 420
tgccctgcag gtagcaagat atacctagag tggaggtttc caaaatctac agtctcaatt 480
taattttgaa taaaatgacg aagcccagaa aagtgaatca gnagttgaag tgtcccataa 540
taagctgtca tggcttcaag atcatttgtg tatgtaatta ttataaaaat gcatttgcat 600

ttttaatgct tgtgtcatga ctagcctggn ctttcccttc cntttctgca cacactgaac 660
taagggagaa taaccntgg 679

<210> 5049
<211> 806
<212> DNA
<213> Homo sapiens

<400> 5049
atcatagcaa ccaaacaatg aattgagacc tggaggtctt gggttgtaat ttaaattcac 60
ataaaccagg ccttttgtgc ctattgccta attcatggca taattattat tagccgcctt 120
aggataaaag gaatacagac tttatcccat acatgaaatt atcagacttt cactcatttt 180
aatagctaga atcttatttt ctttccttaa gatgtatatt ttcttttaat gaccaggctc 240
tatgtgctgc tgtagtgaaa ccggatgttc tagaaacaat ggctttgctg ttcagtggag 300
cagatgtcat gtgtgccacc ggagaccccg tgcatagcac cccctatctg ctagccaaga 360
aagctgggca aagtctgcaa atggaatttc tctaccataa caaattctca gatttccctc 420
aacatgatat tcattccgag ggtgtattaa gtcaagagtc ttcccagtcc acattcctct 480
gtgacttttt atatcaagct ccttctgctg cttctaaact ctcttcagag aaaaaactgc 540
ttgaagagac aaataaaaaa tggtgtgttt tggaaggagg cttcttgagt tactatgaaa 600
atgataagtc taccacacct aatggcacca ttaatatcaa tgaagttatc tgcctgggct 660
atacacaaag aggacttcta tttaaatact gggcccatct ttaacctttg agatntactt 720
accctccgaa cggtgtgttt ttaattgggg ctgaaacaac ctttttttcc caagtcctca 780
aaaagggaan agnagaaaaa gggtcc 806

<210> 5050
<211> 626
<212> DNA
<213> Homo sapiens

<400> 5050
aaaatgggcc aagggccccg ggcttggaag ggcaggtggc gcctagaccc agcgttcccg 60
ctccacaggt ctccaggagt tcgcccggcg tttcctctgc agcgggtgct actctagggt 120
ctgcgacctc ccgctggact gcccagttca ggatgtgaca gtgactcggg gcgaccaggc 180
tatgttttct tgcatcgtaa acttccagct gccaaaggag gagatcacct attcctggaa 240
gttcgcagga ggagctccgg actcaggact tgtcctattt ccgagatatg ccgcgggccg 300
aaggatacct ggcgcggatc cggccggctc agctcacgca ccgcgggacg ttctcctgcg 360
tgatcaagca agaccagcgc cccctggccc ggctctactt ctttcttaac ggtggggcgg 420
ggcgcggccg cgtgagtgag cggggtcngg agaggggtgg ggctcgtgcc tggctgacgt 480
gcgcgccccc gcagtgacgg gcccgccccc gcgggcggag acagagttgc angccccgtt 540
ccgggaagtg ctgcgctggg cgccgcggga tgccgagctg atcgaaccct ggaggcccan 600
cctgggcgag ctgctggcan gcccga 626

<210> 5051
<211> 747
<212> DNA
<213> Homo sapiens

<400> 5051

acagtcactt actctacagg cagtggggcc cgacacagac agcgccgccc ccgccagcca 60
gcctcgcacg ccctcggaag cgcaggctcc cggcgctgcg ctggagggtt ccccggcacc 120
ccagcctccc gtccccagcc cgctgcacct ccgggccccc cttacccttg agaggcaccg 180
ggagttgtcg cgggggggcc tcgggaaatt ccccggaccc ctgtgccagg aggtgcccgg 240
ttcgcccgct cttcaccccc cgccccccgc gagggcggtg cccgggggtg ctgccccatg 300
gagcggggag gcgggcgccg tctgctccgg gagccctgac ccgagtcgga gctgtgtgtc 360
gcagccgccc cgaccccccg ccgatcatgc gccggcgccc ctggctctcc agtcccactg 420
ggctgtgagc cccccactcc cagcccgtca gggcctgcgc gccatgggca agcgcccacc 480
ctcgcccctg gctgcggctc cgaccccagc cccagccgcg gccagcgctc tgggtgctcc 540
tgttcttcct actgctgctg gctgctgcca atgcccaggt cagcacccaa tgacattctg 600
gacctccgcc tccccccggg gcccgtgctc aatgccaaca cagtgtgcct aacattgcca 660
aggcctgaac cgggcgggaa aatggaagtt ttgttgtgcg ttaaccctga anttngcntg 720
cctcaagcca atacaagggg aatccaa 747

<210> 5052
<211> 623
<212> DNA
<213> Homo sapiens

<400> 5052
acgcaagtcc ctttcctccc gacacgagtg cagtaaagaa aaacggttat gagcgtaaag 60
tgacagcctc ggccgatggg aataggggga agtccgacac tgagcaacga acgcattccc 120
gcgcctccaa aacctaggcc gggggcgctg gaaaccctta ccggcactcg gccaccgcgg 180
cagacgcttg ctcctgccac gccccccccc ctcccccgca tcacgtgtct gcactcgctt 240
tcctcggatt cccggatgtg gttgccaaaa caaaggggat ttggtgatgg aggctttgct 300
agaaggaata caaaatcgag ggcatggtgg gggatttttg acatcttgtg aagcagaact 360
acaggagctc atgaaacaga ttgacataat ggtggctcat aaaaaatctg aatgggaagg 420
acgtacacat gctctagaaa cttgcttgaa aatccgtgaa caggaactta agagtcttag 480
gagtcagttg gatgtgacac ataaggaggt tggaatgttg catcagcagg tagaagaaca 540
tgaaanantc aagcaagaga tgaccatgga atataagcag gagctgaaga nactacatga 600
agaattatgc atactgaaca gaa 623

<210> 5053
<211> 668
<212> DNA
<213> Homo sapiens

<400> 5053
acaagtggac cggggtgttg ggtgctaagt cggcaccagg aggcaagggt gcgaggacca 60
cggccggctc ggacgtgtga ccgcgcctag ggggtggcag cgggcagtgc ggggcggcaa 120
ggcgaccatg gagcttttgc ggactatcac ctaccagcca gccgccagca ccaaaatgtg 180
cgagcaggcg ctgggcaagg gttgcggagc ggactcgaag aagaagcggc cgccgcagcc 240
ccccgaggaa tcgcagccac ctcagtccca ggcgcaagtg cccccggcgg cccctcacca 300
ccatcaccac cattcgcact cggggccgga gatctcgcgg attatcgtcg accccacgac 360
tgggaagcgc tactaccggg gcaaagtgct gggaaagggt ggctttgcaa aatgttacga 420
gatgacagat ttgacaaata acaaagtcta cgccgcaaaa attattcctc acagcagagt 480
agctaaacct catcaaaggg aaaagattga caaagaaata gagcttcaca gaattcttca 540
tcataagcat gtantgcagt tttaccacta cttcgaggac aaagaaaaca tttacattct 600

cntgggatac tgcagtagaa ggtcaatggc tcatattttg aaaagcaaag aaangtgttt 660
gacaagan 668

<210> 5054
<211> 621
<212> DNA
<213> Homo sapiens

<400> 5054
attgtggcgg tgaggaacag gaagccctga agggtcaaaa gaaatacaaa agcaaaggct 60
attttctttt ttttttttctt tctttcattc cttccttcct ctgtttcttt ctttcttcct 120
ttcatttttt tttctttttt aagagcgagc ggctctgcgg tggcggtttg gggtgggcgc 180
cgccgaggtg aggtcgtctc gcctcccgcg cgccggtaga ataaacagcc attggactct 240
tcaaacaaaa acgctgtctc catcaagtac tgctttcgca ggataagtga ccatttttaa 300
tcagttgaaa ttaacggaaa gtagcagtta tttctgaaag atgacatcaa ttatataata 360
tagcctggat ttggttctca gctctaccat tcaccacctg tatcacctta gacaaataat 420
ctaactcctc tggacctcaa cttcatctgt aaacagataa tatttctcat agggtcaatg 480
atcatgtaaa ttagataata tccataaaag gaatataata catgattgga tgtttcatta 540
tggatggagg ggatgatggt aaccttatta tcaaaaagan gtttgtgtct gangcagaac 600
tagatgaacg gcgcaaaang a 621

<210> 5055
<211> 727
<212> DNA
<213> Homo sapiens

<400> 5055
agtctgtgag ctgggagcct gttggcaggt ccctcttttt attttcgctg agagctttct 60
tttactaaat gccaccatcc ttacctttca aggtgtctgc gtgcctaatt tttcctggtt 120
gttagacaag aacccggatc ttagttgaac tctggagcaa aaatcctgca tcatttgtag 180
gtgggtgtca ttgtgactgg ctgctacctc cccatgagtc ttctaaaata aaacctgcaa 240
attcacatct tccccatgct tccagagaat gcatattctt cctttgaaaa aagaaaacca 300
gcactgttca taatagccaa gatttggaag ccacctaagt gtccatcaac agatgaatgg 360
agaaactgtg gtacatatac acaacggagt gctattcagc cataaaaaag aatgatactc 420
tgtcatctgc aacaacatga atggaactgg agatcattat gttgttaaat aagccagaca 480
cagaaagaca aacatcacat attttcactt attttgggga tataaaagtc aaaacaaact 540
catggagata gagaacagat agacggttac cagaggctag gaggaggagt ggtggggggc 600
agttagtgat ggttaattgg tacaaaaaaa tggttagaaa taataanata agacctagta 660
ttangtagga caacaaggag gactatagtc aaaaataant ttatttgtac attcaaagta 720
actaaaa 727

<210> 5056
<211> 712
<212> DNA
<213> Homo sapiens

<400> 5056
acaaggatga taggatgaga aaaagaaagg acaaatgcac cagaggaggt atgccaaatg 60

ggaaactttt catcactttc cagataaaaa ctagcagtct gtgaaggcaa ctggtctgat 120
ttttcaggta agaacatatg agaggcaggc tgagaccaat tttctaccag gccagctaat 180
tcttcacaat gacaagctat gggtcatatg ctttcaggaa ccagacactg gaacatgtcg 240
tctgatgtac atcacaccaa gaaataaaaa aagaattgga aagccaatgt ccaattattt 300
actaaaacag aatctactgg agagaaatgc aaaggcaggt aaaaaggcaa tctcttaaca 360
tgaaaactca caactgtaaa atgagaacct aaactataca gcgacaaact caggaaaaag 420
tctccagcta ctgctgtctc tcagactctc acagtatgtg taaccacttc ctcctctgca 480
cgggatcacc ccagaagatc aactctacta gatcatttga ggacaatgaa caaagtctca 540
agactgaatt cccacagaaa acattctcat gaaaccaccc aatattctgg tgaagttaaa 600
gaanggcatg tgttcggaga caancaagaa gcagcaatgc tcaaaaccac aaaactctgg 660
gattgccgac tctgcacatc ctggntcctc tagatacagt tcaagtggna ca 712

<210> 5057
<211> 817
<212> DNA
<213> Homo sapiens

<400> 5057
aatgaataca aattattata agataaaata taaagtattt gataatcata caaatgcaaa 60
ataataagaa atgttgtatg aaagtgctta gagagtctgc cttattgaat attgtttgtt 120
tttgaactgt gtgttggtag gaggtactcc tgacaatttt cactttacaa acatttattt 180
cttgatttaa cctaccacca ggatgacggc tgtcactcac tgattcacca aaaattggac 240
aaattgctta cttatttttg ttgatttttc ttaaatgtat gtatagctta catttatatc 300
aatattcaac attagaagtg tttcaagtct tcacttagaa atttgttgat gtttttgtga 360
tacaaatatg ccataggaac taattcttgt ttatattaat tagcctatag taaaactggt 420
tttgttacat ggcatctcac ttgaagttga agtttccaag accctatcaa caacgttgag 480
aacttactgt cataggttga aaaactgtac accaggaacc ggaccaaaat agatctgaca 540
gtaatattga tattagaaaa caactttaag tctaataatg atttttctct aaagaggttg 600
attacttcat gatagaagga tcatgtcacc atggatgaca cagactgtta gtgcacatca 660
atatccattt tgtcctcttc ttttttggca tacaaccaaa acttacatag ggctttttaa 720
cattttaccg gggcctatgt aactggagtt tttagccagt gggnaaaatg tccaagtgga 780
cattttgcca ctttctaagg tccngggnac aattaac 817

<210> 5058
<211> 691
<212> DNA
<213> Homo sapiens

<400> 5058
gaaagatgat caagtgaaag gtacagcaga agatcttgta gataccttct ttgaagttga 60
agttgaaatg gagaaggagg tttgccgtga tctagtgtgc acttccccca aagatgaaga 120
aggattccta agggatttgt gtgaggtctt actatattta ttgctacctc ctggagattt 180
ccagaacaag atcatgcgat actttgtcag ggaaatcctt gcacgaggaa ttcttcttcc 240
attaataaat caactcagtg atcctgatta tattaatcag tatgtcatat ggatgatccg 300
tgattctaac tgcaactatg aggcctttat gaacattatt aaattgagtg acaatattgg 360
agagctagaa gcagtcagag ataaggcagc agaagaatta cagtatctta gatctctaga 420
tacagctggt gatgatatca acactatcaa aaatcaaata aatagcttac tattcgtaaa 480
gaaggtatgt gactcaagaa tacagcgatt gcagtcaggc aaagaaataa atactgtgaa 540

acttgcagca aactttggga aactttgcac agtccccctg ggacagcatt cttgtagaca 600
atgttgcact acaatttttt anggattaca tgcagcaaac tggaggncaa gcacatctaa 660
tcctttggat gacagtggaa ngatacccgg g 691

<210> 5059
<211> 492
<212> DNA
<213> Homo sapiens

<400> 5059
tttgttttga gacggagttt tgctcttgtt gcccaggctg gtgtgcaatg gcacgatctc 60
ggttcaccgc aacctctgcc ttccaggttc ggacgattct cctgcctcgg cccccagagt 120
ggctgggatt acaggcatgt gccaccacac ctggctaatt ttgtattttt ggtagagatg 180
gggtttctct gtgttggtca ggctgctctt gaactaccaa cctcaggtga tctgcctgcc 240
tcggcctccc aaagtgttgg gattgcaggc gtgagccacc atgcccggcc agtttttaaa 300
gaactccttc ttactactca gattactcct ttttaaatag tggtttttaa aaaatatcaa 360
agtagactgg gcacagtggc tcacacctgt gatcccggca ctttgggagg ctgatgcggg 420
ctgatcacct gangtcagga gttcgagacc angctggcca acgtggtgaa tccctgctct 480
actanaaatg ca 492

<210> 5060
<211> 801
<212> DNA
<213> Homo sapiens

<400> 5060
ctggcctccc gaaggcggga ggaggggagc cgggggctgg gctgagaaag gaccctgggt 60
agggagcagt gcgagggaga cagcgccctc agagggagga ctattgggag gcggcaggag 120
ggacagcgaa cgtttcctcc tctgctcctg aatcggagga agccctaggg gacctctttc 180
tcctggacat tgaagatatg gcccttgga ggtgacccag gagagaaggg atgaaggcct 240
ttggtcctcc acatgagggc cccctccaag gactcgtggc ctcccgcatt gagacttatg 300
ggggccggca tcgagcctct gctcagagca ctgctggcag actctatccc cgaggatacc 360
ctgtgctgga tcccagtcgc cgacgcctcc agcagtatgt ccccttgcc aggggttctg 420
gccaggcccg aggcctgtca cccatgagac tgcgagatcc agagcccgag aagaggcacg 480
ggggccatgt gggggctggc ctgcttcact cccccaaact caaggaactc accaaggccc 540
atgagctgga ggtgaggctg cacactttca gcatgtttgg gatgccccgg ctgcccctga 600
ggaccggcgg cactgggaga taggagaggg tggcgacagt ggcctgacca tcgagaagtc 660
ctgganggag ctggtgcctg ggcacaagga gatgagccag gagctctgnc accaacagga 720
ngccctgtgg gagcttctga caccgagctg atctacgtga gaaacttaag atcatgactg 780
atctgctaac cgccggnctt g 801

<210> 5061
<211> 762
<212> DNA
<213> Homo sapiens

<400> 5061
cgtactatct gaatgcccag gatggggctg ggggcgagga agagaaggcc gagggcgggg 60

atggggagga gcacgacctg tttgctgggc tgatgccact ggaacaggag agtcgcatgg 120
aggtactgtc tgcctgtgct gaggccctgc atgcgcatgg ctatagcagt gaggcctccc 180
gtctcactgt ggagcttgcc caggatctgc tagccaaccc acccgacctc aaggtagagc 240
cgccccctgc caagggcaag aagaacaagg tatccacgag ccgtcagacc tgggtggcta 300
ccaacaccct gagcaaggcg gccttcctgt tgacagtgct aagtgagcgt ccagagcacc 360
acaacctggc cttccgagtt ggcatgtttg ccttggagct acagaggcct ccggcttcta 420
ccaaggcctt ggaggtgaag ctggcatacc aggagtctga ggtggctgcc ctgctcaaga 480
agatccctct gggtccaagt gagatgagta ccatgcggtg ccgggcagag gaacttcggg 540
aggggacact ctgtgactat cggcctgtgt tgcctctcat gctggccagt ttcatctttg 600
acgttctctg tgctccagtg gtttctccca caggttcccg gcccccaagt cgcaactgga 660
acagcgagac acctggggat gaagagcttg gatttgaagc ancanttgct gccttgggca 720
tgaagacaac agtgagcgan gcagacatcc ctcttatgtg aa 762

<210> 5062
<211> 489
<212> DNA
<213> Homo sapiens

<400> 5062
gtgtgtgtgt tttgtttttt ttactggggt ctggtcatgc agataacctc tgccttacag 60
tggccaagat tttactgggg tctggtcatg cagataacct ctgcctgaca gtggccaaga 120
ttccagactc ccagaagaaa agcagaggtt cagtataaac tatactgttg gcacacttct 180
gttttttggt tttttgagat ggagttttgc gcttgcttcc caggctggag tgcagtggca 240
cgttcttggc tcactgcagc ttctgcctcc tgggttcaag cgattctcct gcctcancct 300
cctgagtagc tgggactgca ggcgcccgcc accatgcctg gttaattttt tttgtatttt 360
agtagagatg agatttcacc atgttgccca gggtggtttt gaactcttga tctcaggcat 420
tccacccacc tcatactccc aaagtgctgg aattacaggc gtgagccacc gngcccggcc 480
ccacncang 489

<210> 5063
<211> 850
<212> DNA
<213> Homo sapiens

<400> 5063
tgtgctctgt ggagagagat acaatgattt agagaagcat atatgttcag taaaacatga 60
tgatgtttat tttgatcatt ttcatccctg tgctgcgcta acgacagata ttattgaaaa 120
gtatggattc ccacctgatc ttaccctcac ccctcaagaa agcatccagc tttatgatac 180
catggctcaa gtctgggaaa cttggcccag ggctcaggaa ttgtgtccag aggaattcat 240
tctttttaag aataagatag tcattaagaa gttggatgct agaaaatatg aagaaaactt 300
aaaggcagaa ttgacaaatt ggattaaaaa tggccaagtg aagaaggtca aaagagtact 360
gaagaacctt agtccggatt cattgtctag ttcaaaagat atggtgaaaa tgtttcctct 420
tcttgttgaa aagttaagac aaatggataa gttgcctgca atatttttt tgtttaagaa 480
tgatgatgtg ggaaaaagag ctggaagtgt gtgcactttt ctggagaaga cagagacaaa 540
aagccatccc cacactgaaa gtcatagtta tgtctttgca atagatgaag tacttgaaaa 600
agtgaggaag acacagaaaa ggatcactaa aaaaaaaccc aaagaaggct gaaaaactgg 660
aaagaaaaaa agtgtataga gctgaatata ttaatttcct ggagaatctg aagattctgg 720
aaatttctga ggactgcccg tatgctgatg tcaaagccct acacactgaa attaccagga 780

attaagactc actttggata gggnattacc cgcgagtgcg aattacagac acggnaanac 840
tgaagcttta 850

<210> 5064
<211> 740
<212> DNA
<213> Homo sapiens

<400> 5064
cgtattaatt tatttaccat tagaaatgga gggcttcctg tatgtggctg ggcttggtgg 60
ctcacacctg taatcccagc actttgggag gccgaggcag gcggatcact tgaggccagg 120
agttcaagac caacccggcc atcatgttga aacaccatct ctacaaaaaa tacaaaaatt 180
agccgggcct ggtggcgcat gcctgtgatc ccagctactc gggaggtacg agtgctgagg 240
cacgagaatt gcttgaacct gggagtcgga agttgcagtg agctgagatt gtgccactac 300
actccagcct gggcgacaga gcaagatttt tgtctcaaaa aaagaaaaaa aaaaaaaaaa 360
gaggacttcc tgtactttaa gttgattttg ataattattt gctcaagcac taacatctgc 420
tcacactttt gtctttctgg tacaagtggg ctccttggag gcaggtgaga ctgatctttg 480
tctccctgca aagacactgc cccaccatgg gagactcctg ccacactcag gcagcagcta 540
ggatgaagga caagacccgg ggccagggcc tccctnccga ggaccttggc tcccagatcc 600
gaggttgcca taacgttatt tccttcangg tatatgttca ctttggaaac caaggggcca 660
agactggtct aagatcattt tgngctttta gccaagggtg atgatgggtc cgtggncatt 720
ttcacttggn tttcggcaaa 740

<210> 5065
<211> 786
<212> DNA
<213> Homo sapiens

<400> 5065
tcagcatagg agttaagagg gacacaattt agccaatcac agcttcataa cagatgctct 60
gcagacacct ctccatcaat catagcccgg tgtgtttaac ttagagtaga tggtggcacc 120
acccgataac aatggtggtg gcattcagca gcagctcaga gggttccaga agcattcctc 180
cagccttgag gggaaatggt gcctctggct aacggaggga accatcaaag ccgggtatgg 240
tttctttgat cgtgtttagc cgctttgtgg ctgagtagag attcttcctt cttcctgtcc 300
aggtaattaa tgagggactt caaaggcatg aggcttttct gctccaatca attattcaga 360
ttggcatatc caaaggtctc tgaacaggaa atagagagga aatggattgc taagtggtta 420
tgatggagac taaatgaatt acttgttaat caccettgtc tgctctggta gtatctgtgc 480
aagccaggat agctgctcgg ggcacactca ccatcaaaca cgggagggga agggcagggt 540
ggggtaaatt tcactcttag aaacaccaga atttcttcct tttcaggatc aatgtcaccc 600
atatcttgtc aattgtgact gcaaacttca gaaggactca gagtggaaag tcttggcaac 660
catgttgggg ttcaaacagt gggagccatg cttctgcgaa tgagcctggg gactggggac 720
tgtggtccca gccctggatt tgatgaaggg agtatncctg tcctgcnang gtgcaatgtc 780
actttt 786

<210> 5066
<211> 838
<212> DNA
<213> Homo sapiens

<400> 5066
cagccagcag tcttgacaac ttatctggga gtttttcaga actgtcttca gtagttagtt 60
caagtggaac agagggtgct tccagtttgg agaaaaagga ggttccagga gtagatttta 120
gcataactca attcgtaagg aatcttggac ttgagcacct aatggatata tttgagagag 180
aacagatcac tttggatgta ttagttgaga tggggcacaa ggagctgaag gagattggaa 240
tcaatgctta tggacatagg cacaaactaa ttaaaggagt cgagagactt atctccggac 300
aacaaggtct taacccatat ttaactttga acacctctgg tagtggaaca attcttatag 360
atctgtctcc tgatgataaa gagtttccgt ctgtggagga agagatgcaa agtacagttc 420
gagagcacag agatggaggt catgcaggtg gaatcttcaa cagatacaat attctcaaga 480
ttcagaaggt ttgtaacaag aaactatggg aaagatacac tcaccggaga aaagaagttt 540
ctgaagaaaa ccacaaccat gccaatgaac gaatgctatt tcatgggtct ccttttgtga 600
atgcaattat ccacaaaggc tttgatgaaa ggcatgcgta cataggtggt atgtttggag 660
ctggcattta ttttgctgaa aactcttcaa aagcaatcaa tatgtatatg gaattggang 720
angtctgggt gtccagttca caaagaccga tcttggtaca tttgccacan gcagctgctc 780
ttttggccgg gtaacccttg ggaaagtctt ttctgcagtt cantgcaatg naaatggc 838

<210> 5067
<211> 861
<212> DNA
<213> Homo sapiens

<400> 5067
tttcctggca gttcccctta tgagggttac aactatggct cctttgagaa tgtttctgga 60
tctaccgatg gtctggttga cagcgctggc actggggacc tctcttacgg ttaccagggc 120
cgctcctttg aacctgtagg tactcggccc cgagtggact ccatgagctc tgtggaggag 180
gatgactacg acacattgac cgacatcgat tccgacaaga atgtcattcg caccaagcaa 240
tacctctatg tggctgacct ggcacggaag gacaagcgtg ttctgcggaa aaagtaccag 300
atctacttct ggaacattgc caccattgct gtcttctatg cccttcctgt ggtgcagctg 360
gtgatcacct accagacggt ggtgaatgtc acagggaatc aggacatctg ctactacaac 420
ttcctctgcg cccacccact gggcaatctc agcgccttca acaacatcct cagcaacctg 480
gggtatatcc tgctggggct gcttttcctg ctcatcatcc tgcaacggga gatcaaccac 540
aaccgggccc tgctgcgcaa tgacctctgt gccctggaat gtgggatccc caaacacttt 600
gggcttttct acgccatggg cacagccctg atgatggagg ggctgctcag tgcttgctat 660
catgtgtgcc ccaactatac caatttccag tttgacacat cgttcatgta catgatcgcc 720
ggactctgca tgctgaactc taccagaacg ggacccggac atcaacgcca gcgcctacag 780
tgctacgcct ggctgggcat ggcatcttct tctctggctg ggcgtggnct ttgcaaaggg 840
aacacggngt tctggatcgt t 861

<210> 5068
<211> 740
<212> DNA
<213> Homo sapiens

<400> 5068
agctctacac cccaccctcc gatgtcctgg gccatttgcg catctgggga atccatctgt 60
gagatttctc cactgtcttc cccagtctaa ctccttctga tattctcttt tgtccagctg 120
gggtgatgat ggtccctcag aggaaaacca gagatggatt cgaagaacat ttcggcctga 180

actacctagg gcacttcctg ctgaccaacc ttctcttgga tacgctgaaa gagtctgggt 240
cccctggcca cagtgcgagg gtggtcaccg tctcctctgc cacccattac gtcgctgagc 300
tgaacatgga tgaccttcag agcaggtagg tgcaccctgt gaataatcat aacagcatct 360
caggtgggtt aaaggttatt catctccctc tgtctgtgcg gtgtggcgct ccctgcatct 420
gctggacgct ggtgctctgg gaacagtgct ccctgcgtct gccgagcact ggtgctttgg 480
ggacagtgct ccctgcatct gccggacact ggtgctctgg ggacagtgct ccctgcatct 540
gccgagcact ggtgctctgg ggacagtgct cactgcgtct gccgagcact ggtgctctgg 600
gaacagtgct tcctgcgtct gccgagcact ggtgctctgg gaacagtgct ccctgcatct 660
gctgnacact ggtgctctgg ggacagtgct cctgcatctg ccgactctgg ngctctgggg 720
acaagtgntt cctgggtctg 740

<210> 5069
<211> 756
<212> DNA
<213> Homo sapiens

<400> 5069
aaaagtgctc gggacaagga catagggctg agagtagcca tgggctctgg aggagacagc 60
ctcctggggg gcaggggttc cctgcctctg ctgctcctgc tcatcatggg aggcatggct 120
caggactccc cgccccagat cctagtccac ccccaggacc agctgttcca gggccctggc 180
cctgccagga tgagctgcca agcctcaggc cagccacctc ccaccatccg ctggttgctg 240
aatgggcagc ccctgagcat ggtgccccca gacccacacc acctcctgcc tgatgggacc 300
cttctgctgc tacagccccc tgcccgggga catgcccacg atggccaggc cctgtccaca 360
gacctgggtg tctacacatg tgaggccagc aaccggcttg gcacggcagt cagcagaggc 420
gctcggctgt ctgtggctgt cctccgggag gatttccaga tccagcctcg agacatggtg 480
gctgtggtgg gtgagcagtt tactctggaa tgtgggccgc cctggggcca cccagagccc 540
acagtctcat ggtggaaaga tgagaaaccc ctggccctcc agcccggaag gcacacagtg 600
tccggggggt ccctgctgat ggcaagagca gagaagagtg acgaagggac ctacatgtgt 660
gtggcaccaa cagcgcagga cacagggaga gccgngcacc cgggtttnca ttcaggagcc 720
ccangactac acggaacctg tggaactttt ggcttg 756

<210> 5070
<211> 820
<212> DNA
<213> Homo sapiens

<400> 5070
aatggagagc gcctcagtct tccacccaag gtgagaataa tgtttgaggt acaggacttg 60
aaatacgcga ccttggccac agtgtcgcgc tgcggcatgg tctggttcag tgaggatgtg 120
ctgagcaccg acatgatctt caacaacttc ctggccaggc tgcgcagcat cccgctggat 180
gaaggggagg atgaggcaca gcggcggcgt aagggcaaag aggatgaggg ggaggaggcc 240
gcttccccca tgctgcagat ccaaagagat gcagctacga tcatgcaacc gtacttcacg 300
tccaacggcc tggtcaccaa ggcgctagag cacgccttcc agctggagca catcatggac 360
ctaacacgcc tgcgctgcct gggctcgctc ttctccatgc tgcaccaggc ctgccgcaac 420
gtggcgcagt ataacgccaa ccatcccgac ttccccatgc agatcgagca gctggagcgc 480
tacattcagg tcaggggca tcaggggctt cacagagctc accactgcgc cagaccacag 540
gtctgaggac ctctgaaatg ctgcacctgt ggggatgtgc gctctctcct aggcgaggca 600
gagccttcgt tgaggggcta ggaaaggtgc agtgggtgtc tgtgatgcaa gaagactggg 660

aaccactgtc tttaggttaa ctttgcttgt aagtggcttt cttttggtgg tgaaatttta 720
taaaaatcaa agnttaattc ccttttttaat agcgatatct tgggttatgc catacttctg 780
ggnccctggc ttggaaaaaa gccgggttaa aatganaacc 820

<210> 5071
<211> 705
<212> DNA
<213> Homo sapiens

<400> 5071
aatgaatgca tctaaggcac ttagacagga cctggcacac agtaattatt caacaaatat 60
gttgtcacta ttgttataat aacagaggtg aggtttctgt aggtgattca gcaataggaa 120
tcaactctat gttgtttggg ggcactgagg atgatatcaa aaggctagag tgttattttc 180
tccaatttta cattttggct agtccttgtt gaacacagag cagtttttc caaagttatg 240
tcctaaatca agtcatgtca aatgccattg tttaggttct gttcaacagc catccaatga 300
gcacatatta agtgccagac tctcctaatg aacactgggg agatttaaat gtatgagaaa 360
tgacacatcc cccatagaag tgcatataat ttactggaga agacaggctt atgaacaaat 420
tatttcaaaa caatttcagc caggcatggt gcctcatgcc tataatccca gcactttggg 480
aggccaaggc atgaggactg tgctgagctc aggagtttga gaccagcctg ggtaacatag 540
cgagatccca tctctactaa aaataaagaa aatcagctgg gccgtcgggg tgcttacgtg 600
tagtcccgcc tactcangag gctgaggtga gaagatcgct tgagccctgc agttgangct 660
gcagtgagcc atgattgggc cattgcattn cacctgggtg acaga 705

<210> 5072
<211> 840
<212> DNA
<213> Homo sapiens

<400> 5072
aacaaacagg tctgttctta ttaccatttt ccaatctgtc acttcatgtc ccatgtccca 60
catgggcaga caacatggcc tgcccatgtg gcggcacctc cccaggcctt ccacctcgtg 120
ctcctctgca gcccccttgcc tgtccctgcc atcttgccat gcccacgcct gcattgctaa 180
gaacacagtt tacagcccgt gttttttgtg ctgccattct gctggcatac ggccaggact 240
ggaaagcttg attcagtatt agaccatcat atatggacaa taagtgctta atttgttcta 300
ggcactgtgt taaggggggca gaagcaacca tgagtaacat ggattcaggc cctgccaggt 360
tcttcttgtc ctaagggaac cacagacaca cagctgagtg cgattcagat catgggcacc 420
acaatgccct atccagaggt gggggacact cagtgctgca tctctctctg cggagtggct 480
ctgtgaccat ggccaggctt cctgctgcag agcagccctg cacggcctcc cccactgtcc 540
ggggtctttc tgtatctcca ccccccccatt ttttttttttt ttttttggag atggagtcac 600
actttgtcgc caggctggan tgcantggcg tgatctcggc tcactgcagc cttcacctnc 660
caggtttcaa gcaattcacc tgctcagcct tctgagtagc tggaactaca ggcacacacc 720
accataccca gctaattttt ggatttttag canaaacggg atttcaccat gttggccang 780
atgggctnga ctcttgactc ttgatccact gcttgggctt ccaaaggctg ggattacagg 840

<210> 5073
<211> 761
<212> DNA
<213> Homo sapiens

<400> 5073
tgtatcacag gaaaggtcag tttcctggca tcacatttca aaaccacatc attaggcgat 60
gacctagaca agctgctgga aaaaatgcaa caaagaagag gagacagtgt ggttaccct 120
ttcgatggag accttaatga atgtgtgtca ccccaggagg ctgctgctat gattcccaca 180
caaaacctgg atttagataa tgaaaccttc cacatttatc aaccgcagca acagttgcca 240
gaaaactctt atcccaggtg tgtgctatag cggacagtgg cagccagagc ctggacctcg 300
gtcacttcag caaagtagac ttcatcatca ttgttcccag atcggaggtg ttggttcagc 360
aaactcttca gcggattcga caatcagtgt catttcaggc tctttgtcac atagcgaacc 420
cagtcatggg ctagctgata gagtcattaa ttgcagagaa gttctggaag ctttcaacct 480
cctggtgctc caggtcagct ccttcccata cactctgcag acccaacagt cccgcattag 540
ctctagcaat gaggttcact ggatacagct ggatactggg gaggacgtgg gctgcgagga 600
gaagctgtct ttggcttgag tgagtacagc aagtctctgc agtgggggat cacgagccca 660
cttctgagat gtgacgagac ttttgaaaaa atggtgaaca cactcttgga nangtacccc 720
angcttgcac aagcatgggc cgtccgctgc tatcttctca t 761

<210> 5074
<211> 792
<212> DNA
<213> Homo sapiens

<400> 5074
aaaaaacatg agtgactcca aggaaccaag ggttcagcag ctgggcctcc tggtgtccaa 60
ggtccccagc tccctaagtc aggaacaatc cgagcaagac gcaatctacc agaacctgac 120
ccagcttaaa gctacagtgg gtgagctctc agagaaatcc aagctgcagg agatctacca 180
ggagctgacc cagctgaagg ctgcagtggg tgagttgcca gagaaatcca agctgcagga 240
gatctaccag gagctgaccc ggctgaaggc tgcagtgggt gagttgccag agaaatccaa 300
gctacaggag atctaccagg agctgacccg gctgaaggct gcagtgggtg agttgccaga 360
gaaatccaag ctgcaggaga tctaccagga gctgacccgg ctgaaggctg cagtgggtga 420
gttgccagag aaatccaagc tgcaggagat ctaccaggag ctgacggagc tgaaggctgc 480
agtgggtgag ttgccagaga aatccaagct gcaggagatc taccaggagc tgacccagct 540
gaaggctgca gtgggtgagt tgccagacca gtccaagcag cagcaaatct atcaagaact 600
gaccgatttg aagactgcat ttggtgagtt cctgcacatc aagggtcctt gggcctgana 660
tggtctctgt gtgatgtgac tttacttgag ttaccaaccc ttgctgagcc tcaatttcct 720
ncctgtgaa atgagaacac ggggtaactg ngatcattgc acttggnggt tacagtgggc 780
cagcacacag ta 792

<210> 5075
<211> 789
<212> DNA
<213> Homo sapiens

<400> 5075
gctgtttcgg tcgggagtgg gtgggagaga agccggggca ggggaggagc cgccggagct 60
gtcggagccg gcccttggaa gaaaatcctc gctgtgtcca ggctgaggcg gggggctaat 120
gacagtgtga gctctagatg gtgtgagacc accccaaagc caagaaatgg ctacagccgt 180
ggaaccagag gaccaggatc tttgggaaga agagggaatt ctgatggtga aactggaaga 240
tgatttcacc tgtcggccag agtctgtctt acagagggat gacccggtgc tggaaacctc 300

ccaccagaac ttccgacgct tccgctacca ggaggcagca agccctagag aagctctcat 360
cagactccga gaactttgtc accagtggct gagaccagag aggcggacaa aggagcagat 420
cctagagctg cttgtgctgg aacaatttct taccgtccta cctggagaac tacagagctg 480
ggtgcggggc caacggccag aaagtggcga ggaggcagtg acgctggtgg agggtttgca 540
gaaacaaccc aggagaccaa ggcggtgggt gactgtccat gttcacggcc aggaagtcct 600
gtcagaggag acggtgcatt taggagcgga gcctgagtca cctaatgagc tgcaggatcc 660
tgtgcaaagc tcgacccccg agcagtcttc tgaggaaacc acacagagcc cagatctggg 720
ggcacccggc agagcancgt ccacaccagg aagangactt cagaccctgc aggaaancga 780
ggtccaatg 789

<210> 5076
<211> 274
<212> DNA
<213> Homo sapiens

<400> 5076
acttagatat gcagctgaag gggttcctgg gtttatttct cctgagaact ggcatgggct 60
ccgagttttg ccattcctgg cttcggtcct agcattctaa gctgcctgac cttgggcatt 120
tgtcaacctg tctgaacctt agtatccttt cctctctgta gagtgggaag agatggagtc 180
tgtgaagcgc ctggtgcaag ctgtactaat acacctaaca atgagctcct ccctccctcc 240
ctccctccct gcctccttgc ctnnctgnct ncct 274

<210> 5077
<211> 814
<212> DNA
<213> Homo sapiens

<400> 5077
catttgctga tttaaaaaaa aaaaaaagat tttggaaaaa gtaaggcctg ggtcaccaga 60
tacacacctg ccaggtgttc agatgctggt ccttccctgg ccccttaagt gagccatgaa 120
aaggacctgg tgattcaccc acagataacg gaagaaagtt ctgttacctc ttgatagcag 180
cctttgtgtc caccccattt ccccaggtgg gccgagagca ttggtagcta attgtaatca 240
ctccacacaa ttagagctgt gctgcccctt cccctagcca gtggacttcg gtacccagag 300
tgaagcctgc agcctgtgtc agacaccagc atgtgtaatg ggaggaaaca gcttccatgt 360
ccagagcgct ggttccaagg gcatcttcag gcactgaaat tggcactgaa taggcatggg 420
gaagtttcag tggaagtgaa tggggagcac tgggggggact tactgaaaga ctttcagata 480
cagggagtat ttgacacagc tcacctccaa ctggcctggt tttattctga attgtttgga 540
gcagaggaag ggagagggaa aacataaaga tcagggtaat aggttctagg agctgacgga 600
gctgatggag ctgaacaggg tagggaccat ggaaggtaga gctattgcgc aaaaattagg 660
cagcctctag gcaggcaggc acttggctgg atccaagtgg cagtgttaag tgcttgtggg 720
tgaatgcaca cccacaagta tatgcccatt tccttggctt ctggnaagct tacaatttaa 780
nccagngatc catgggatta gaaattttgg aagc 814

<210> 5078
<211> 831
<212> DNA
<213> Homo sapiens

<400> 5078
aaggagcgtc cctgcttcac ccccaacttg gctggagaag aaaggacaag aggcagcagg 60
gtgaagaaga agccccccat cccagctggt ggagatagtt ctggaactgg accccgcagc 120
tgcgtgggca gccgacacac ccaccccagc actggcacca gaccagagcc agagccagga 180
cctgggcaaa gtgcagccgt gcaccctgcc tggtcactgc tctcccagcc ctgcctgggc 240
ctacctcctg cccagctctg cttgggaccc tctgggcatg cagcagcagt agcctaaggg 300
ctctggtcac ttccagggct ctatagggca gcagagcaga gcaaaagggt gcatatgctg 360
ggagctgtca cctccactcc taggcttttc tgcctagagc agaattatag gggcagtata 420
catccagggg tctgtgcggt ggggctgggg gattccttaa gtgactttgg gaaggatttg 480
ttttcccgag catcaatttc acacctgggc attgcacccc aggctatgca gtctttcagt 540
gtgaggaagg ggcagaacaa gaatgaggcg gccccgtggc ctcaaggaag cttgtggctt 600
tggaggatct gactccgcag agtctgtgcc aatgtggggt gagcagggcc cctgccatgg 660
agcagcagga atttgangga cggagcaggt taaagaatgg gaaacatctt cacttggttt 720
tttttcttgc aaactactcc tgctactcat tganactggn tactggaagc aacttgggta 780
agaattttct ttctgggccg gccccggtgg ctttacgcct ggaatcccag n 831

<210> 5079
<211> 734
<212> DNA
<213> Homo sapiens

<400> 5079
aatgaatccc tgcggttggc tgggggcagt gggtcccaca ctgcctaact tccctaaatg 60
ggcagcttca cttttagaac cccgggtcct tccctggcag gcccaggtgg cacatcctgt 120
gtcgggtggg ccctcacctt ggatctccag gcctgacact gcccagctgg atggaaccat 180
ggccccagcc ttcctgctgc tgctgctgct gtggccacag ggttgcgtct caggcccctc 240
tgctgacagt gtatacacaa aagtgaggct ccttgaaggg gagactctgt ctgtgcagtg 300
ctcctataag ggctacaaaa accgtgtgga gggcaaggtt tggtgcaaaa tcaagaagaa 360
gaagtgtgag cctggctttg cccgagtctg ggtgaaaggg ccccgctact tgctgcagga 420
cgatgcccag gccaaggtgg tcaacatcac catggtggcc ctcaagctcc aggactcagg 480
ccgatactgg tgcatgcgca acacctctgg gatcctgtac cccttgatgg gcttccagct 540
ggatgtgtct ccagctcccc aaactgagag gaacattcct ttcacacatc tggacaacat 600
cctcaagggt ggaactgtca caactggcca agcccctacc tcaggccctg atgccccttt 660
taccactggt gtgatggtgt tcaccccagg acttatcacc tttgcctang ctcttaacct 720
tcancanaac cttg 734

<210> 5080
<211> 706
<212> DNA
<213> Homo sapiens

<400> 5080
ctagcatcag taggtttacc atagaaggat tcagtggaga tagcgagggt ggtgagtgtt 60
gctggattga gcccgtccct gcagcctggg cacgggagca ctgcagtgcc atgaaggaga 120
gggctggggg ataatagcac agccggttcc tatttccttt tccacctggt taagactccc 180
ggggaggccc tgcccagcag tccttatgag atgctgcctt cctctttttt gaaaggcata 240
gatgataagg aggtggacat gttttgagaa gagaacctag agctcattac ttgtatttga 300
ggcatgtatt gcttcactcc cactttggga gagtttttc tggggaagtt aaaggctatt 360

caggatcaga gagtttcctg catggtccca ggggctggga ggagccacct gctcagctgg 420
tggttagctg atagcaccca gcctacccac caagatagga ggcagctcag atgtcactgg 480
gattcgcagt accacaggct gtccctgggc ccaagcagtt agctagctgc accccgggag 540
ggggtgttga gagcactgaa gctcctgtgg gagagtgcct ttgacatccc cccactcccc 600
actgcccaga actaggaggt agtgaaaggt gtcagtggca agaangctgg gccagagcat 660
gganggaggc caacctgggc ttcanaccca ccttcttcac caccgg 706

<210> 5081
<211> 720
<212> DNA
<213> Homo sapiens

<400> 5081
aactaacatg ttttgggagg aagttttctc ccttctgagg cacatgcctg tctctcagta 60
aacactggcc taaagcaagg ttgggaagtg actttctccc cgacaatatg tcaggctggt 120
gggaagtctc ctctcaggaa cgtctgtgag aagaagcaag tgattacaag ctggtggatg 180
cataaggagc tcttgatctt gggagtggga aggggccact cccatctgca catggcctct 240
tgctgtttcc ctggcttgta gcatggagat ttatgggcat gtaactttta cagtcacttt 300
ttttttttt tgaaacagag tctcgctctg tcagccaagc tggagtgcag tggcacaatc 360
tcagctcact gcaacctccg cctcccgggt tcaagcgatt cttctgcctc agcctcctga 420
ctagctggga ttacaggtgc acgccaccac gccagnctaa tttttgtatt tttagtggag 480
atggggtttc nccatgttgg ctaggctggt cttgaactcc tgacctcaag tgatctgccc 540
gccttggcct cccaaagtgc tgggattaca ggtgtgaccc accatgccct gccatgatgt 600
cacttttcta gcaagaggtc tccttgnctg tattcaagtg gggggaggta gaatggggag 660
caacaggtgt gaccagaaaa cagcttccca cccancccac ccatntgttt ccccatccca 720

<210> 5082
<211> 860
<212> DNA
<213> Homo sapiens

<400> 5082
gagagggtcc ttcagggtct gcttatgccc ttgttcaaga acaccagtgt cagctctctg 60
tactctggtt gcagactgac cttgctcagg cctgagaagg atggggcagc caccagagtg 120
gatgctgtct gcacccatcg tcctgacccc aaaagccctg gactggacag agagcggctg 180
tactggaagc tgagccagct gacccacggc atcactgagc tgggccccta caccctggac 240
aggcacagtc tctatgtcaa tggtttcacc catcagagct ctatgacgac caccagaact 300
cctgatacct ccacaatgca cctggcaacc tcgagaactc cagcctccct gtctggacct 360
acgaccgcca gccctctcct ggtgctattc acaattaact tcaccatcac taacctgcgg 420
tatgaggaga acatgcatca ccctggctct agaaagttta acaccacgga gagagtcctt 480
cagggtctgc tcaggcctgt gttcaagaac accagtgttg gccctctgta ctctggctgc 540
agactgacct tgctcaggcc caagaaggat ggggcagcca ccaaagtgga tgccatctgc 600
acctaccgnc ctgatcccaa aagccctgga ctggacagag agcagctata ctgggagctg 660
agccagctac ccacagcatc actgagctgg gcccctacac cctggacagg gacagtctct 720
atgtcaatgg tttcacacag cggaactctg tgcccaccac tagcattnct ggggaccccc 780
acagtgganc tgggaacatt tgggacttca gtttctaaac ctggccctcg gntgcagccc 840
tttctggggc tattcatctt 860

<210> 5083
<211> 818
<212> DNA
<213> Homo sapiens

<400> 5083
ctcaaaaaaa aaaaaaaaaa aagtttactt aattgatgta ctgttagtct ggttctattt 60
ccaacttttg ccattgaacc cttttgagct ctcccatcct gctgtttctt gtgttgcttc 120
tgcataggac cccatcgtgt gtaccattca cattttactt ctctgtttcc caaacaaagg 180
gcgtgtagac tgacacaaac tccctggtac cacacacagt gcccagatga ccttcttata 240
tgtgtcccgg cacagacctg ccctgtatga gactcagggc cataaaccca agagtgggat 300
caattgaagg tatattcttg attttgctaa ataaccaaac agctgtactc atttatactt 360
ctcatggaga acagggagtt ttctgacatc ccacatcctc accaatagtg attgttccct 420
ccctttctgg ttttgccctt ttggagacag aggtaaaata gtatctcatt tttatttgca 480
ttctctgctt aacagtaaat ttgagcctct cttcatatat gttagccatt cagacttccc 540
tgactgtgaa ttgcatgctc atatcttttg tatcatctgc cattttctca actgcttctt 600
gntatttccg tattgatttt ccaggggttc tttgtataca gtaatttgca ggagttgttt 660
ggtacaaact ttataaatat cttctcctag tctctcttaa ctctgngcta tgatactatt 720
taataaccct gggggttttg gggtaagttt attatatatt gnacatgttc catggcttta 780
aaaaatttaa ttgggtttta ctacntaant ttaaaggg 818

<210> 5084
<211> 799
<212> DNA
<213> Homo sapiens

<400> 5084
cttgcttccc tctttgcctg gtccaagtga gtgtctgctg cctctgtcct gccttgtttt 60
cctggctcta aaccaactcc acccactctt aatggaaact cagtctggct ttgtgtgttt 120
ctgggaagca catgacttct gggaatgggc aaggaagagg agtgaaacaa aaactgtcag 180
ctatgtgtgc ctggtctggg atccttctct gggtgacagt ggcatcatga atcttagaat 240
cagctcccct ttaactaggg acaattgtaa gcacttggcc tcagagttga ggttcttgaa 300
tgtttgctaa ttttatgtgc atgatccttg cccaaatatt tgtcatccgt ccacatagat 360
tcacgtgtgc atacaacatg tacaagtaat atttgggctg cccataagaa ctggaagatt 420
catagggaat gcatataccc ttctcagtat ggttaggatt ctgtttttgc ttcatttaat 480
tccagagttc ctcagcctca gcaggttctg cttttacctg tcacagaaat gtccagtgtt 540
taatgcattt ggttgctggg gcttacatgc cagcctnctc tgatatgtac ttggtttta 600
aaaacccatt ttgntctctc ttggttcctc tctatttcag cctagtatca gaaggccagg 660
cgagactgca acactgctca tcaccccgcg gcgtgatccc tgctcttaag tgctgggcan 720
aagggaaagg tggtcaaggt gangatggtn aaggaaggct ggtgaagggg ctcaaaagga 780
atactttgga acaaccaca 799

<210> 5085
<211> 800
<212> DNA
<213> Homo sapiens

<400> 5085

0952450.02200

gaaactacag gctgaaaagc atgacgtacc aaacaggcac gagataagtc ccggacatga 60
tggcacatgg aatgacaatc agctacaaga aatggcccaa ctgaggatta agcaccaaga 120
ggaactgact gaattacaca agaaacgtgg ggagttagct caactggtga ttgacctgaa 180
taaccaaatg cagcggaagg acagggagat gcagatgaat gaagcaaaaa ttgcagaatg 240
tttgcagact atctctgacc tggagacgga gtgcctagac ctgcgcacta ggctttgtga 300
ccttgaaaga gccaaccaga ccctgaagga tgaatatgat gccctgcaga tcacttttac 360
tgccttggag ggaaaactga ggaaaactac ggaagagaac caggagctgg tcaccagatg 420
gatggctgag aaagcccagg aagccaatcg gcttaatgca gagaatgaaa aagactccag 480
gaggcggcaa gcccggctgc agaaagagct tgcagaagca gcaaaggaac ctctaccagt 540
cgaacaggat gatgacattg aggtcattgt ggatgaaact tctgatcaca cagaagagac 600
ctctcctgtg cgagccatca gcagagcagc cacgagacgc tctgtctctt ccttccagtc 660
ccccaggaca atgtggatct catcctggtt ctggtaaaga aatganggta ccagctctgn 720
cttgggggct tcgatgcaca tgatggggaa gtcaacgctt ngccagttaa tccaggttcc 780
ggtactggcc ctggagcttg 800

<210> 5086
<211> 807
<212> DNA
<213> Homo sapiens

<400> 5086
catacaatat ggagtgattg tgatggtggg acccctctta gctaattgct ctgtggcgcc 60
atccgtctgg aatgcagagg ggtcttgctt actgcctatg ctgccttcat gatatgctct 120
ctcgttaatt cagactgtaa atttcaggct gaaacagact gcctgtgcat gttgccttaa 180
taagtcaaat gcagctaatc tcaaatttgc cctctctcga agtgtacatt aaacaattta 240
gggtgtgcct aaattcacaa ctgcaaccag cttgcacatc cttaagtggg ccatacatat 300
tcaagcctct ggggctttgt tatagagtgc cactcatttc ccctttctg cttgtcagaa 360
tcctcattgg ccttcaagac caacatgaaa cgcctctgcg atgaagctat aggagttagc 420
agtggctacc tgtcttcgct gtgctcagag catgccaagg gtttctttcc cagcattccg 480
atcatgcttc cccgtggcct ggttaattgt gtgctaggct gtattcctca acaggctcct 540
aaagactaag aattacattt aattcatttt tgtgcccttc acagacccag gagagaggtc 600
tgaattctcc caggctgata agatggggag catccactga gataaagcaa gcatcatgtg 660
gtgtggtggc tggaanagtg taggatactg ccagagagag aaagttgagt tatactgtga 720
aaggcccaaa tgtcagctca aggaatcgga actttaccct acagaaaang gagaaattgt 780
taacggntgg ctaaatgctc antttcc 807

<210> 5087
<211> 685
<212> DNA
<213> Homo sapiens

<400> 5087
attttgcaat tgtgggttgg ctgaagaaaa gaagacaaca tgggaaagga aaatctgggt 60
gataaacgga ttaaaccttt aggttaccgc tgctctagat aaacccatga tgtgactttt 120
tgtttttctc ctaggtcagc tgagggaaca gctcagttac cttaagggtg ataatttttt 180
taggtttact tgttcggatt gctcagcaga tggcaaggag cagtatgaaa ggctgaagct 240
gacatggcag caagtcgtca tgttggcaat gtacaacttg tctctggaag gaagtggacg 300
tcaaggttat ttcaggtgga aagaagatat ctgtgctttt attgagaaac attggacttt 360

0952945 "0/2005

tttactaggg aataggaaaa agacgtctac ctggtggagc accgtggcag gttgcctcag 420
cgtgggaagt cccatgtact tccgttcagg tgctcaggaa tttggagagc caggatggtg 480
gaaacttgtt cataacaagc ccccaacgat gaaacctgaa ggagagaagt tgtctgcctc 540
tactttgaaa ataaaagcag cctcaaaacc aactttagat cccatcatta ctgntgaggg 600
acttanaaaa cgagcaagtc ggaatcctgt ggaatctgcc atggaattaa aagagaanag 660
gtctcgaact caggaagcaa aagac 685

<210> 5088
<211> 709
<212> DNA
<213> Homo sapiens

<400> 5088
tcatcaagaa gctgcagtac agatatcctt tccttcctga cccagggccc ctgcaccatg 60
ggcattttgg agagagaggg accctcttgc ccttcagtcc tcgtggggga agccgagcag 120
catattgggt ggcagtgtga ttgaagtagg gacacaggag ccccatggac cgaggttccc 180
acctctaccc tcccgcattc cagctttgag ctcaggcaag ttcctcatct ctaaaagggc 240
cgagtgaaat gatgtgaaga ggctggaaca tagtctggga atgtgtgtct ggtggcagtt 300
gtggtcattg gatgactcta aaaacgaatt agacatgccc cagactggga ggggtaaatg 360
tgccggtcct gcagacgcct cggagagacc ctcatggtcg gctccggcag cttctcagag 420
ctgagcccca gggcgttggg cacgaaggat accaagaccc aaaaagacag ctcaggggtc 480
agcacagtca ccttccctgg agcggaccct gcgactgcca catccacaac tggaatgggc 540
tcctgtcccc agatctaccc catgggccca ccctcagtaa atgtcaccct ctgcagtagt 600
ggctgaggag gaccccaggg gtttggaagg acccacttgn gtgacccatt gcctnttcaa 660
gtccaaacct gcccatctaa gaagctgacc tgcacttgnt gctctagga 709

<210> 5089
<211> 794
<212> DNA
<213> Homo sapiens

<400> 5089
agctctcact cctttcgtga gaaatgtatt ctcttccaga tatatccctt cctcagcttt 60
tctgctctgg cctatctttg aaccaccatg taagctggtg agccagttct tcatggaaac 120
tgcatggtac ccatcagtct tggctaaaaa tgtctgttga caaagatgaa agtcctgcca 180
tcccctcaag acttagcctt atccgcaggt agaaggccta gagaggctat gtcccaaatc 240
ctacctcaat gctgaattag actgggctct tgcttgtgct agtctgtatt gaagagatta 300
gtcaagttaa gaaccaaagg gttcttaaac tgctaggaga agaatagtgg tcaaaagaat 360
ggcttctttc tatcttgaac tgaagccctg gacttcacgg gcctctgatg aggattccgc 420
ttgcagccct aagagggtct acctatggag atgaccctta gctgtgtgat gcatgcacct 480
gaccttctcc tctcccctgt catccgtccc cattcctgcc ctgttccctg ttggtatgtg 540
tctgagttta tttcactggt aaatcgtgcg tttgcctgtc tttcgcagat atctccatgt 600
ctcctcaaca aactggagct aagtagtggg gagcagacca aagccctgaa ccagttagag 660
agggtactac tctttaagaa cctcaaggnc tctctccctc tctttccttc ccttttttatt 720
tctttcaatg gttatttttt atatatnaca nctgggtccc atttccattg gggtaaaagc 780
cccaacttac tnct 794

<210> 5090

<211> 738
<212> DNA
<213> Homo sapiens

<400> 5090
aagtcttttt tcctaataat ccattttcca cattgccatg agggtaaagg gttccaatca 60
aaaccaccat taaactgcat agtttctagt cttccctcag ccctgatgct aattatgata 120
gtttgcatag acataactta aacttgtgat tctccctcct tccagagctt tttgtagccc 180
tttttccccc caaaattagt tttgttcaaa atcaagcatt gggcccagcc attaagataa 240
gacctaataa gtgagagata cagttcccaa gagtttacag atccaggtgt tcacatggtg 300
gtggccagtc taccgtttat cttgtcaagg ttgttactgc taatttggtg tcactttggt 360
cttgggcagc ggtggtgggc gacgtatcta atgagcgtgc cattgacttc tccatgtttg 420
tctgtgtacg aggggtgcag gttgtctgta atccactaaa gtgtcagcca cacccagctt 480
tagtaactcg ctaatcgcac accctgggta tatcagccag gggctgctac agttaatggt 540
acacagttga tggtacacag gctgaaaatg ataacgaatc aagaccctac tacatttcca 600
aagccgaaaa gccatgaggg ttacaattta aatgagcttg ggaaggaacg ctcccgaaga 660
cgtcttcagc ctgaanggtc agagccgctg gaagcctgct gnctctgggc tttctcggct 720
cantgcagca aggcaccg 738

<210> 5091
<211> 778
<212> DNA
<213> Homo sapiens

<400> 5091
ttgacactgt taactcctcc ctgtttcttg aaatcctctc ttctcttgtt ttctctgtgg 60
cacccttttgc tcctgtgttc ctcctttttc tatgcatcct taggggttcc cgggggtttt 120
gttcatggtc ctcttctttc tcaatctgtt ttcgagaaac ttgcaaaagt acaactcagc 180
ctaacatgcc tgtccaagtt ccagacctga agagctccag cctcctcgtg gatcccttta 240
tctcaacacg tctggaacag aactcatgtg ggtctctttc tgggcttctt atctcagtaa 300
atttcaccac caaatatcca gttctgaagc aagaaacact gggcttcact tttgattcct 360
ccctccctct caatgcccaa atctcatggg tctaaagtcc catcaatgtt atcacttgca 420
tatttttgaa atccacacca ttgcaaccca tttccaaagt agactactga ttgccagggg 480
ctgggggcta ggcggggcag gggaaatagg gaaatgcttc cattttcatt ctcaccaatg 540
ctgtcctgga ccactgcaaa gccttctgac tggtcttcat gctctcctca cctcctcttt 600
ctaaagcatc ctgcttaaca ttgctaaaat aatttgtcta aatggaaatt tgaccgtatt 660
actccctagc ttaaaatact ccgggggttc cgcattgnct cctncatagc atggccataa 720
agtcctgcaa gaatcacatg ctttggcctt tgcctncttc agcgtgtcat tccttgca 778

<210> 5092
<211> 837
<212> DNA
<213> Homo sapiens

<400> 5092
tctaatatgc tggtgctatg gtttggatat ttgtcccctc taaacctcat gttgaaattt 60
gatccccatg ttggaggtgg gcctcatgga aggtatttgg gtcatggggg tagatacctc 120
atgaatagat taatgccttc ccttagtggt gagggagttt ttcttctatt aattcccaca 180

09/832,256 6/4/2004

agagctggtt gttaagcaga gcctggcact ttccccttt tcactgtttc ttcttctctc 240
accatgagag aagccttttg ccttccacca tggatggaag caacctgaag ctttcaccag 300
aagtcaagca gatgccagtg ccatgcttct tgtacagcct gcagaaccat gagttaaata 360
aacctctttt ctttataaac tacccagtct cagttattct tttatagcaa tacaaaacag 420
actaagacag ctgggtttct atagaagtag tcaactgtag atttgtagca acagccttta 480
caagcaaagc aaggtgcaga aattagtagt taactaggtc atttccagaa atatatctgg 540
cactattaca taaggattaa tagtactgcc tctggaacta gttctgggtt tgcattccag 600
ctttgcctct cactagcagt gtgaacttct gggtaagttt cctctttgtg cctcaatttt 660
ctcacctgta aaaagggaat gacagtaata gtcccaacct catagaatta ttacncaaat 720
taatatttgg aatatgcctg gcatgggcaa ggccaggtgg ctcacgccct gtaatcccac 780
acttttggga ngcttaagtg ggaaggnaaa ccttgagggc ccngaagggc aaagaac 837

<210> 5093
<211> 713
<212> DNA
<213> Homo sapiens

<400> 5093
agttgcagcg gccggggaag atggtggagg acggcgcgga ggagctggag gatctggtgc 60
acttctccgt gtctgagttg cctagtcgcg gctacggcgt catgggtgag atcctgcggc 120
agggcaagct gtgcgacgtg accctcaaga ttggggacca caaattcagt gcccaccgga 180
ttgtcttagc agcctcgatc ccgtatttcc atgctatgtt tacaaatgac atgatggagt 240
gcaagcagga tgagattgta atgcaaggaa tggacccaag tgccctggag gctctgatca 300
actttgccta caacggcaac cttgccattg accagcaaaa tgtccagtca ttgctgatgg 360
gggcgagctt cctgcagctg cagagcatca aagacgcctg ctgcacattc cttcgagaac 420
ggcttcaccc aaaaaaactg cctgggtgtg cgccagtttg ctgagacaat gatgtgtgct 480
gtgctgtacg acgctgccaa cagcttcatc caccagcact ttgtggaggt gtccatgtca 540
gaagagttcc tggccctgcc cttggaagac gtgcttgagc tggtgtctcg ggatgagctg 600
aatgtcaaat ctgangagca ggtctttgaa gctgcattgg cctgggtcag atacnaccgg 660
gagcanaggg gtccctactg cctgagctgc tgtccaatat ccggcttgcc cct 713

<210> 5094
<211> 797
<212> DNA
<213> Homo sapiens

<400> 5094
agttttaaaa ctgggggatc cttcttgtgt ggaagcagag ctcctggact cagagccgac 60
cctgcttctt cctagctgtg gagcaagtag gggagctttt ccaaacctca atttcttcat 120
ctagagaatg agggtaatgg tgatttaagg actattatct tcttcctctg tgcctgatac 180
ttgtgattct cacaggaacc ctcaaaggct gagagtatcc cacccacttc acagatgaag 240
caaactgagg cccagagaag ggaaattact tgcccaagat cacccagcaa gtaagaaaca 300
gagctggaga tgagctcagg ccagcacgga accacgcaaa ctccttctgt aggctttgta 360
aaggattgat gagaaaagca gatggttaag agctctacaa cttctgtgag gtaaagaata 420
tctgcagggc tggacgtggc ggctcttgcc tgtaatctta gcactttggg aggccaaagt 480
gggtggattg cttgagtcta tgagttcaag accagcctgg gcaacatggt aaaactctgt 540
ctctctaaaa aaaaaaaaaa aaaaaaatta gctgagtgtg gtgttgtgtg cttgtagtcc 600
cagctacttt ggaggctgaa gcggaaggat cccttggccc aggaggcaga ggttgcagtg 660

0082750.0556

agctgagatt gtgccctgca cttcagcttg ggtgacagag ccagacctta tttaaaaaaa 720
aaaagggtta tcttgggaat tccnngatta cccatgccat ttttgaaagc ctgcttgttg 780
cccaacttgg acanctt 797

<210> 5095
<211> 775
<212> DNA
<213> Homo sapiens

<400> 5095
atcaagaaca tggagaagga caatgggctg gatgtgttca agttgggtga ccgcgacttc 60
ctgcgcagca tggagaacgc catccgcttt ggcaagccat gtctcctgga gaacgtgggc 120
gaggagctag acccagccct ggagccagtg ctgctcaagc agacgtacaa gcagcaggga 180
agcacggtgc tgaagctggg ggacacggtg atcccctacc atgaggactt caggatgtac 240
atcaccacca agctgcccaa cccacactac acgcccgaga tctccaccaa actcaccctc 300
atcaacttca ccctgtcgcc cagtggccta gaggaccagc tactgggcca ggtagtggca 360
gaggagcgac ccgacctgga ggaggccaag aaccagctga ttatcagtaa tgccaagatg 420
cgccaggagc tgaaggacat tgaggaccag atcctgtacc ggctcagctc ctccgagggc 480
aaccctgtag atgacatgga actcatcaag gtgctggaag cctccaagat gaaggctgct 540
gagatccagg ccaaagtcag gattgcagag cagacggaga aggacatcga cctgacgcgc 600
atggagtaca tacccgtggc catccgcacc cagatcctct tcttctgtgt gtccgacctg 660
gccaacgtgg accccatgta ccagtactcc cttgagtggg gttctcaaca tcttnctctt 720
gggcattngt caaacttcaa tgaggaagcc ngaccaacct tggaagaaag ccgca 775

<210> 5096
<211> 734
<212> DNA
<213> Homo sapiens

<400> 5096
ttaggtcccc tcaatgggga cacagctata actgtccagc tctgtgcatc agaggaggct 60
gagcggcacc agaaggatat aaccagaatt ctccagcaac atgaggagga aaagaagaaa 120
tgggcacaac aggtggagaa ggaaagggag ctagagcttc gagacagact ggatgagcag 180
caaagggtcc tggaaggaaa gaatgaagag gccctgcaag tcctccgggc ctcatatgaa 240
caggagaaag aagcgcttac ccactctttc cgggaggcca gttctaccca gcaggagacc 300
atagacagac tgacctcaca gctggaggct ttccaggcca aaatgaagag ggtggaggag 360
tccattctga gccgaaacta taagaaacat atccaggatt atgggagccc cagccagttc 420
tgggagcagg agctggagag cttacacttt gtcatcgaga tgaagaatga gcgtattcat 480
gagctggaca ggcggctgat cctcatggaa acagtgaaag agaaaaatct gatattggag 540
gaaaaaatta cgaccctgca acaggaaaat gaggacctcc atgtccgaag ccgcaaccag 600
gtggtcctgt caaggcagct gtcagaagac ctgcttctca cgcgtgaggc cctggagaan 660
gaggtgcagc tgcggcgaca gctccagcag gagaaggang actgttgtac cgggtccttg 720
gggccaatgc ctng 734

<210> 5097
<211> 700
<212> DNA
<213> Homo sapiens

<400> 5097
ttggcaggct gaggcaagcg gatctcttga gcttaggagt tagagaccag cctgggtaac 60
acagcagaac cctgtctctt aaaaaaaaaa aaaatctagt tccaacgaat gcctcctcag 120
tgaatctttt tcacagtatc cctggaaagt gaatatttag tctcttgaat aactccagcg 180
tcttgaaatc tgctatcttc accctcatga aaacgtcaag agtttgagga ccacctcttt 240
ctacatctac tagcctaaac attttccctc cctttagcta gtcctccttg acatagtgtg 300
gactcctggc atcaccttgt ctactctctg gatgagctca aatgtgtcag tgtgcctgtc 360
taactttggt ccagatgtgg cctcaccaag ccaaatagaa ctaaaccatt acctgcttgc 420
ttgtagacct ggaccgtagg agagcccaag gccccttag gttttcttta ctacttatgc 480
tactgactca tatcaaactg acacctaagc tggacatggt ggtgcacact tgtagtctta 540
gctgctctag aggctgaggc agaaggtagc ttgagctcca agagtttgaa accggcctgg 600
gcaacatagc aagatgccca tctgacaact gacaaaaacc tacaggtggt attttcgggg 660
tatggnaggg ttggtntgat ttcataatna taaataatgc 700

<210> 5098
<211> 761
<212> DNA
<213> Homo sapiens

<400> 5098
tcttttggtg ctgtctcaaa tgggtcaacc attcacttcc tccttatgcc ctccatgctt 60
ttggctgagg ataatgaagc ctttgtttgg agtaccaggt tacactccaa taaatgatta 120
catttcccag ccaccccacc ctaccaattt cattgtgttg gctgttcttt tccgactaag 180
gcaataccta ggaaaacgct tgaagcagca attgttactg caattttctg tgagctgagc 240
ctggtgttct aggtggccta gaaataatgg tgtcatttgt gacacctcga gtgagggcag 300
gagagtaaat actttggcta ggagaagagt gatttattct ttatcagaat tctaggtggg 360
ggagggagaa tctgtgaatg cataaagttt tcttcatttt taaattttgt ctcagtcttt 420
attgcttagg ttagtggtcc ttgaacttgt cccctgaaag agcccagttc tctatattct 480
ttttcttctc ttgggttctt aattccccat atagtggaaa ttccttcttt gctgntntgg 540
tatgggtagg tctgggggcc agctgggctt ggacaagcca tttcctgctg cagcccagag 600
cagcctgctg ttccaccttg ctctaaacag tcctgaaatt gcccagtcct ctgcttttgg 660
gaaatcatcc ccttcttcca ttctttgtct accacttaac ttaaggcttt cttacctttt 720
atttcgactg ancccggtng gcttttacca agnctctttg g 761

<210> 5099
<211> 761
<212> DNA
<213> Homo sapiens

<400> 5099
taccaaagca agttaagtat agttcctcaa atacctatga cacagccctt cctctaagcc 60
tccttccacg gaggggccct ctctcttcca cctgtagaag cccaccccag ataccaccac 120
cttcttgaaa ccttttttgcc tctccagccc ttggtgcagg ctgtcctctc ttaggctgtg 180
tgagggctgt tttgtgtcca tctcctctct cctgctggtt tgctctcagc atctgagtca 240
tctttgaatc tctggccctt gatggtagcc tggcccgagc caatgttctg tgagtgtctg 300
tggaaaggat aggtctttca gccccagtga tagaagccca cctctaacgt gcttaagtaa 360
gaagggcaag tacctaatca tgtaactggg aatgatggga tgtggggctt cacacagcac 420

0095.3456.0

tgagggagag ctgcaggaac caggccccag gacagaactg tggctgtcct gcccctgttt 480
tttctctctc tctggttttt ttttttttt ttttttgggg acagagtctt gctctctcac 540
ccgggctgga gtgcagtggt gcgatttcag ttcactgcaa cctccgnccc gtcccgagct 600
caggcgctca agcgatcctc atacctcagc ctcccaaata attgggacca caggcatgta 660
caacaaagcc cagctatttt atttgnattt tttagtagaa atggggctca tcatgttgcc 720
agctggctaa aactnctgac tgaatggccg ccacctnggc t 761

<210> 5100
<211> 838
<212> DNA
<213> Homo sapiens

<400> 5100
ggtgaaggcc tcccccgtcg ccgcgcggct tcccggagcc gactgcagac tccctcagcc 60
cggtgttccc cgcgtccgga cgccgaggtc gcggcttcgc agaaactcgg gcccctccat 120
ccgccctcag aaaagggagc gatgttgatc tcaggaagca caaagggacc ttcctagctc 180
tgactgaacc acggagctca ccctggacag tatcactccg tggaggaaga ctgtgagact 240
gtggctggaa gccagattgt agccacacat ccgcccctgc cctaccccag agccctggag 300
cagcaactgg ctgcagatca cagacacagt gaggatatga gtgtaggggt gagcacctca 360
gcccctcttt ccccaacctc gggcacaagc gtgggcatgt ctaccttctc catcatggac 420
tatgtggtgt tcgtcctgct gctggttctc tctcttgcca ttgggctcta ccatgcttgt 480
cgtggctggg gccggcatac tgttggtgag ctgctgatgg cggaccgcaa aatgggctgc 540
cttccggtgg cactgtccct gctggccacc ttccagtcag ccgtggccat cctgggtgtg 600
ccgtcagaga tctaccgatt tgggacccaa tattggttcc tgggctgctg ctactttctg 660
gggctgctga tacctgcaca catcttcatc cccgttttct accggctgca tctnaccagt 720
gcctatgagt acctggagct tcgattcaat aaaactgtgc gagtgtgtgg aactgtgacc 780
ntcatctttc aaatggngat ctacatggga gttgggctct atgctccgna ttggctct 838

<210> 5101
<211> 326
<212> DNA
<213> Homo sapiens

<400> 5101
agaaaagaaa aggacaggag ggacagggga aaggagggtc gggggaggag gatcagggag 60
gaggaaggtc aggtgaaagg aggatcagga aggatgaggg tcagtgggga gcggagttgg 120
tgggaggaag gtgggggaag tgtcagcaga gaggagggtc gggataaagg taggggggaga 180
tgagggttgc agggatgagg gcaggggact atgagagtcg ggggcattag ggtcaggggg 240
atgaggatgg gggtaaatga aggttgtggg ggaggagagt cacagaanaa ggtcagtggg 300
aggactatca ngggagacct ntctct 326

<210> 5102
<211> 767
<212> DNA
<213> Homo sapiens

<400> 5102
gcaggtagag gaatgaatta gatcccgaac ctgaaatctg gatgaaatca cacaaacatc 60

cacaggacaa acaaggtagc ctgcattaag ttgcctgtaa gacttctgac tctgaattct 120
tccctgggag ctcaatagca ggtgttgggg ctgctccaag aatggagagg gcagtatgca 180
tacctcagtc ctaccaacca agaactgaag taggaagctg tgtccatgct cctgacatga 240
gaaagtcttg ccaatagaaa aagaggggga aagacagaga ctagctcagg tcacaggggt 300
gagtgtgggc aacttaccca gggaggacat aaatgccagg ttctccagcg tcacatcacg 360
ttacaggcat ctctgagcct cactaaggag attccattcc tcctgggtaa atttcacagc 420
cacgtcttca aaagtcactg tgccctgtta tgatgttgac agatgaaacc acaaaccacc 480
cctatgctga ggtatcacaa tccatctctc ccacacatct actctcgcac atcctcctct 540
caaggtcctc aaacatagga gaaactaggc ccactggtca tggggtacag ccaccaacaa 600
caatagttag ttgaacaaat aggtatctgt gcggtggctg tgatataaga gtccaccccc 660
tcctgacagg cacttccccc agtatggccg aggtcatgga aagcccaatg tggcaccttc 720
agcacagcag agataccctc tctgaacgca cctcattctt tntttnn 767

<210> 5103
<211> 884
<212> DNA
<213> Homo sapiens

<400> 5103
atatcaacac tctgcccccc cttcctccag ccctgtctcc ccagactcct ctgtcagccc 60
cccacaagcc actcccattc attctccctc aggggaagag ccctgccaag atggccctgc 120
agcttctctc aagatcctgc tggcttgggc tgggggaata cagactgagg tcaccctggg 180
cccctgggct agtggtttct agcacttacg gaggatttcc ctccatcgcg tgagttcttg 240
ggagaaggtg gcaagatgct caacttactg ggcacaagag tcactgaatc ggtgccctct 300
agggttcttt ctcttttgcc atcttatcca tattttaagg ggtttctctt tttctgggga 360
agaggagagt gagcgaattg ggggtcaagg gggaggtgat aagagaaaga aaagaggaca 420
gggctgggca cagtggctca catctgtagt ctcagcgctt cgggaggcca aggcaggagg 480
atcacttgag ctcaggaatt ccagaccagc ctgggcaaca tagtgagacc cccatctcta 540
ctaaaagaaa aaaaaaagaa gaaaagagga caggaagaaa tgaaacaatc cctttagtca 600
taattcagtt ttaaattggg gtctgtcccc cgcagcccgt cattttatcc tttgtaaaat 660
atcttggcct ctactttctg acccccttt tggtcatttt ctgggatgaa tgancgcagg 720
acagagaatt tctgntggta ggaataatga cagtattctc cgagctctcc tgcagtgata 780
ggtcctagtc ctaacgcang aaatttgaag ctcgattaga tcaaaagaaa tggggnccaa 840
atggtttttg actcatgctc gatattgaca ccntgggtgg gtgt 884

<210> 5104
<211> 849
<212> DNA
<213> Homo sapiens

<400> 5104
ggaatctttt ttttctgagc agtaggtctc attagtgagc ttagaatact ccataaacca 60
tgctgtaaac agatgcactg tcatccaggc tttgttattc catttccaac acaggcagag 120
tggatttagc atcattctta agggtcctag aatttttgga atgggaaatg accattggct 180
tcacgtcacc agctgcattc gcccctaacg agagtcagcc tgtccttttc aatctttgaa 240
gccaggcatt gacttctctc tagctgcgaa agtcctagat gccatcttct tccaatagaa 300
agcggtttta tccacactga aaatcttttt agagtagcca ccttagtcaa ccatcttagc 360
tagatctgga gaacttgctt cagtttctcc tgtaaagctt gcagcttcac cttgcacttc 420

0963764.0756

tatgtgtgga agtgacttct ttccttaaac ctcatgaacc aacctctgct ggttttctgc 480
ttttcttccg cagcttccct cacccgtctc ggccttcata gaattgagga cggttaggac 540
cttgctgtgg attcagcttt ggttgccagt cacaccagcc gtcgggcaaa gttgttgttt 600
taatctctcc agaccactca gacttcttcc acatcagcaa taaggctgct tgctatcctg 660
ncatttgtgt gttcactgga gcagctcgtt taatttcctt ctggggcttt tcctttgcat 720
tgccgctcaa ccgtttgatg caagaagccc ggctttctga ctggagtttt agacatgccg 780
ttccttacaa agcttaatca tttctagctt ttgggtttaa aggnganaaa atgnggggat 840
tcctccttt 849

<210> 5105
<211> 806
<212> DNA
<213> Homo sapiens

<400> 5105
ttcccccagc actgctccag cccctctgtc accccgccct tcggctcccc tcgcagtggt 60
ggcctcctcc tttccagaga cgtccccga gagacacgaa gcagcagtga gagcctcatc 120
ttctctggga accagggcag ggggcaccag cgccctctgc ccccctcaga gggtctctcc 180
cctcgacccc caaattcccc cagcatctca atcccttgca tggggagcaa ggcctcgagc 240
ccccatggtt tgggctcccc gctggtggct tctccaagac tggagaagcg gctgggaggc 300
ctggccccac agcggggcag caggatctct gtgctgtcag ccagcccagt gtctgatgtc 360
agctatatgt ttggaagcag ccagtccctc ctgcactcca gcaactccag ccatcagtca 420
tcttccagat ccttggaaag tccagccaac tcttcctcca gcctccacag ccttggctca 480
gtgtccctgt gtacaagacc cagtgacttc caggctccca gaaaccccac cctaaccatg 540
ggccaaccca gaacacccca ctctccacca ctggccaaag aacatgccag catctgcccc 600
ccatccatca ccaactccat ggtggacata cccattgtgc tgatcaacgg ctgcccagaa 660
ccagggtctt ctccacccca gcggacccca ggacaccaga actccgttca acctggactg 720
cttntccagc aacccctgtc cagncacang agcaacagca gaccctgtca gatgcccccc 780
ttacacatgc ccaaaaggtc ccgcca 806

<210> 5106
<211> 814
<212> DNA
<213> Homo sapiens

<400> 5106
acaactattt ggccctgaga agtcgttctg gacgctccat catcaatggg aactgggcaa 60
ttgatcgacc aggaaaatac gagggcggag ggaccatgtt cacctacaag cgtccaaatg 120
agatttcgag cactgccgga gagtcctttt tggcggaagg tcccaccaac gagatcttgg 180
atgtctacat gatacaccag cagccaaacc caggcgtgca ctacgagtac gtgatcatgg 240
ggaccaacgc catcagcccc caggtgccac cccacaggag accaggggaa cccttcaatg 300
gccagatggt gacagaaggc aggagccagg aggagggaga acagaaaggg aggaacgagg 360
agaaggaaga cttgcgtggg gaggcccctg agatgttcac ctcagaatcg gcacagacct 420
tcccagtcag gcatccagac agattttctc cccatcgacc ggacaacttg gtgccaccag 480
caccgcagcc cccacggcgc agccgggatc acaactggaa gcagcttggg acaacagaat 540
gttccacgac ctgtgggaaa ggatcgcagt accctatttt ccgctgtgtg cacagaagca 600
ctcatgaaga ggctcctgag agttactgtg actccagcat gaagccgacc cccgaggagg 660
agccctgcaa catcttccct tgccagcctt ctgggacatc ggggagtggt ctgagtgcag 720

DC6-2-5-2005-5-1-0

caagacctgt ggcctgggca tgcagcaccg ncaggntctt gtgcccgcca ggtgtacgcc 780
aacccgcagc ctgacggtgc agcccttacc gntg 814

<210> 5107
<211> 776
<212> DNA
<213> Homo sapiens

<400> 5107
tttttgtgct ggtttttcct catcttcatg gatttatcta cctttggtct ttgatgttgg 60
taaccttcgg atggggtttc tgtgtggatt ttttttttt ttatgttgat gctattcctt 120
tctgtttgtt agttttcctt ctaacagtca ggcccctctg ctgcaggtct gttggagttt 180
gctggaggtc cactccagac cctgttttcc tgggtatcac cagcggagac tgcagaacgg 240
caaagattgc tgcttgttcc ttcttctgga atttttgtcc cagaggggca cccacaagat 300
gccagccgga gctctcctgt atgaagtgtc tgtcgacccc tgctgggagg tgtctcccag 360
tcaggaggca tgggggtcag ggacacactt gaggaggcag tctgtcctc agcagagctt 420
gagcactatg ctgggagatc cgctgctctc ttcagagtca gcaggcagga atgtttaagt 480
ctgctgaagc tgtgcccaca gctgcccctt ctaccaggtg ctctgtctgt cccagggaga 540
tgggagtttt atctataagc ccctgactgg ggctactgcc tttctttcag agataccctg 600
cccagagagg aggaatctag agaggcagtc tggctacagc agctttgcgg agctgcagtg 660
gactccaccc agtttgaact tnctggtggc tttggttaca ctgtgangtg aaaaccacct 720
actcaagcct cantaatggc aaacgccccc tcccccacca agcttaaagt gtccca 776

<210> 5108
<211> 833
<212> DNA
<213> Homo sapiens

<400> 5108
taaaagttcg gaaaatttgc agcctgacaa tgtgatagaa aagaaaaatt cccattttct 60
gaggagaaat tcaagctggc tgcagaaatt tgcatgagta acaggagcca aatgctaatt 120
cccaagacaa tggggaaaat gtctccaggg catgtcagag gtctttatgg caacccctcc 180
catcacaggt ccagagatat caggaaaaaa tggttttgtt ggccaggccc ggggtcctca 240
tgctgtgtgc agcctaggga cttggtgccc tgcatcccag ccactcccaa ccatgactga 300
caggaggcaa ggtagagctt gggctgtagc ttcggggagt gcaagctcca agccttgaca 360
gcttccatgt ggtgttgaga ctgcgagtgc acagaagtca agaactgggg tttggaaacc 420
ttcgcctaga ttaaagagga tgtgcggaaa tgcctggatg gccaggcaga agtttgctgc 480
aggggcaggg ccctcatgga gatcctctgc cagggcagtg cagaagggaa atgtggggtc 540
agagacccca cacacagtcc ctactggggc accacctagt ggagctgtga gaagaggtcc 600
tccagacccc agaatggtag atccaccgac agcttgcacc gtgtacctgg aaaagttgca 660
gacactcaat gccagcccat gaaagcagct ganagggagc tgtaccctgc aaaggtacag 720
gggcagactg ccaagacatg ggaacccacc ttcattgatg actgatgtag atgtgagcag 780
agaatatttg acttaaattg ntgccctgat ttgcttatgg ctgacctttg ttn 833

<210> 5109
<211> 838
<212> DNA
<213> Homo sapiens

0052207.0035.0035.0

<400> 5109
cgtatataaa cttggtcatg tggcttggtt ttaaaacagt tcccttgact gtaattggca 60
ggtgatagca tctacagcat ggaaacctgc acctagtagg tgcttaagca tagcttccct 120
tcccatgaag aggaggagac agggcaccca ctggccgaga ggacaggaga gatttagttc 180
attaaggctg ctcctctgtg ctgcccccac cccgcttctg tggcaggcct ggacctgatc 240
tgcaaacaga cttgcctgcc tgtgcctgtc cctgaggccc atctccagag cagagggagg 300
gcatgcaccg ctgggctggg tggtggtcct ggctgagcct cctgctctca ccttggacca 360
tttgaggtgc gtgctcagag agtcctttgt tgccatgaga cacttgccag ccatgtcccg 420
ggatccacct gttctgccac aagaactgtg tctgtgacat gctgtcatca ttggtagaga 480
ctcctggcac tagaacagat gacagaaacc cacttatacc agcgtaagca aaacaaggaa 540
gtcctgtgtt acaaatctga aaagtgtagt agatttggtg ctgggcaggg ctagatccag 600
gtacttaaac aggttggcca ggcatttgtc tgtctgtttc tgagctctcc tctcctatgt 660
cgacatcttt ggtctcaagc agcttttcct gtgtgttggg agaaccatcc cagctgctct 720
aacttancta cctcagtaga gagagaaggt cgcttttcta atagttctgc ggaagtccaa 780
agctggttct tcatagtcag aactgggtca cgcaccccat gtntgaanaa tgcnggta 838

<210> 5110
<211> 849
<212> DNA
<213> Homo sapiens

<400> 5110
ttttaacctg gaggatgcag tgaaagaaac ttcctcagta aagcagccat gggaccacac 60
caccaccacc acaaccaata ggccaggaac caccagagct ccggcaaaac ctccaggtag 120
tggattggac ttggctgatg ctttggatga tcaagatgat ggccgcagga aaccgggtat 180
aggaggaaga gagagatgaa accatgtaac caccacgacc aagaggccag taaccaccag 240
agctccagta aatactttag gaaatgattt tgacttggct gatgccctgg atgatcgaaa 300
tgatcgagat gatggccgca ggaaaccaat tgctggagga ggaggttttt cggacaagga 360
tcttgaagac atagtagggg gtggagaata caaacctgac aagggtaaag gtgatggccg 420
gtacggcagc aatgacgacc ctggatctgg catggtggca gagcctggca ccattgccgg 480
ggtggccagc gccctggcca tggcactcat cggtgccgtc tccagctaca tctcctacca 540
gcagaagaag ttctgcttca gcattcagca gggtctcaac gcagactacg tgaagggaga 600
gaacctggaa gccgtggtat gtgaggaacc ccaagtgaaa tactccacgt tgcacacgca 660
gtctgcagag ccgccgncgn cgccgaacca gcccggatct gagggccctg tccagctgca 720
ngcatgcaca atggtgccac cgcttgtcac ccggttcccc acccttcatt tggacccgca 780
ctgctgtgct gtctggcctc ggtcttgtgg ctgagttccg gtgacttggt gttgtanttg 840
gtcttgcct 849

<210> 5111
<211> 868
<212> DNA
<213> Homo sapiens

<400> 5111
tccgaaagat ggacagcctt gcatggatca tgatagacaa actggagagg gtgttggacc 60
tcaggaatat actttactca aattgaaggt gcttgagcca tacccatcta aattaagtgg 120
cctgaaaggt aaaaatattt tcttggtggc tgctactctc agacctgaga ccatgtttgg 180

0068230 5 5 0 5 3 6 0 5 0

gcagacaaat tgttgggttc gtcctgatat gaagtacatt ggatttgaga cggtgaatgg 240
tgatatattc atctgtaccc aaaaagcagc caggaatatg tcataccagg gctttaccaa 300
agacaatggc gtggtgcctg ttgttaagga attaatgggg gaggaaattc ttggtgcatc 360
actttctgca cctttaacat catacaaggt gatctatgtt ctcccaatgc taactattaa 420
ggaggataaa ggcactggtg tggttacaag tgttccttcc gactcccctg atgatattgc 480
tgccctcaga gacttgaaga aaaagcaagc cttacgagca aaatatggaa ttagagatga 540
catggtcttg ccatttgagc cggtgccagt cattgaaatc ccaggttttg gaaatctttc 600
tgctgtaacc atttgtgatg agttgaaaat tcagagccag aatgaccggg aaaaacttgc 660
agaagcaaag gagaagatat atctaaaagg attttatgaa gggtatcatg ttggtggatg 720
gatttaaagg acagaaggtt caagatgtaa agaagactat tcagaaaaag atgattgacg 780
ctggagatca cttattacat ggaccngaga aacaagtgat gtccaggtcg tcagatgaat 840
gtgttgnggc tctgtgtgan cagtggtc 868

09/25/2006 15:36:52

<210> 5112
<211> 778
<212> DNA
<213> Homo sapiens

<400> 5112
acttgactta caagcagcgg ccgtacacct tcctcttgcc tagaaaatgc cactcctcgg 60
ggaaagtcca gaatggcaag atgtccacca acggtgtgtc caacggtgtg tccaatggcc 120
tgcaccttca tagcaatggc ttccggctgc cggagagtag gggacatgtc agcccccaag 180
tagagctacc accatacctg gagcgtgtga aacagcaagc caatgaggct tttgcctgcc 240
agcagtggac ccaagccatt cagctttaca gcaaggctgt gcagagggcc cctcacaatg 300
ccatgcttta tggaaaccga gcagcagcct acatgaagcg caagtgggat ggtgaccact 360
atgatgccct gagggactgc ctcaaggcca tctccctaaa cccatgccac ctgaaggcac 420
actttcgcct ggcccgctgc ctctttgagc tcaagtatgt ggctgaagcc ctggagtgcc 480
tggacgactt caaagggaaa tttccggagc aggcccacag cagcgcttgt gatgcattgg 540
gccgcgccat cacagctgcc ctcttctcta aaaatgatgg tgaggagaag aagggacctg 600
gtggcggcgc cccagtccgn cttcgcagca cgagccgcaa ggactccatc tcagaggatg 660
aaatggcgct gcgggagcga aactacgact atcaagtttc cgctactggg ggccactggc 720
aacaccacca cggatantca aaaganggcc aanttctttt ggcaagcaaa cgcttcaa 778

<210> 5113
<211> 783
<212> DNA
<213> Homo sapiens

<400> 5113
ttttggggtc acagattagt gttcttgtat acttgtcaat gggctcttaa ggcactcctc 60
aaagaatctg ccagtgattt aagcatcatt tgaataagag cacagggtga gcagaagaac 120
aacttgtgtg gccaggagca ggggtaggga gtgcagagaa gagagagcct gggtgcaatg 180
tcatcaagaa ggccttccct atagtcccag ctacttggga ggctgaggtg ggagggtcgc 240
ttaagcccag gagttctagg ctgcggtgcc ccttgattgt gcctgtgaat agccagaata 300
gccagtgcgc tccagcctgg gcaacatagc aagaccctgt ctctagttta aaaaaaaaaa 360
agggaaaagg ctaggcatgg tgcctcatgc ctataacccc agcactttgg gaggctgagg 420
caggaaaatt gcttgagccc aggagtttga gaccagcctg agcaacatgg tgaaactcca 480
tctctacaaa acatataaaa aaaaatagcc aggtgtggtg gtgcatgcct gtggtcccca 540

gctactcagg aggctgaggt gggaggatcg cttgagtcca ggaggtcaag gctgcagtga 600
gctgtgattg tgccactgta ctccagcctg ggctacagag gtgagactct gtctcaaaaa 660
aaacaaaaag gcttcccagc agcactggtg ccacaactga catggcanct gcagctagaa 720
caagttgagt ttcttggctg ntcttatcaa aattgggtca aaattgngtg tgggccacac 780
cat 783

<210> 5114
<211> 868
<212> DNA
<213> Homo sapiens

<400> 5114
tactttcaga gaaaatcttt ccaaagaccc tcttaagaaa gtcctatttc taaaatttc 60
atgtttgatt cattcagata tgattaaagc ccatcatggt ctgtgtaaat gtttctgcat 120
tcttagaaac tttctccagt tttttataac tagtccattg gatgtaggaa tgccaaagag 180
tctaactaaa aagagaggga atcttggcta caatggaata cctaggggta tgggaagtaa 240
gtaatagtct ttatttccat atgaatattg ctggctttac acctgcaata attaggcaag 300
agactcaaag atagtttttt cagaaaagtt ttctttcaag gatctagcaa gtctgagcta 360
tgcttccaac tttactgccc tccatcatcc ggcatctttg actcatccac caccttctgt 420
ccctttcatt ctcattcccc atgtgtcagc tccccagaaa ggacatatct tgtacacctt 480
gccacagcac tcatcacctg cttctggact gcctgagcaa gagtgatact tcctgttcta 540
aagacaggag tgaggatggg ggatactcag actttgggat gtgccagaac tgtggctagt 600
ccccaggaag cagaacttgg aggactcata aaggagccaa tcccacctcc atcctaaaca 660
aggccagttc ataaacccca tctggcacag cagcagtctc aggaagctaa attggggagt 720
gccctgtatc tcactcccta aactggggag tgagagcatc ctgatggtcc gctcttgggc 780
tgtgacagtg gtccctgcaa atgaaaaagg ggagctggac tgatgtcagg agatgtggct 840
tancgtcatt antagagcag ggcctntc 868

<210> 5115
<211> 821
<212> DNA
<213> Homo sapiens

<400> 5115
agcggtggcc tagcccttca ggcctggccg ctacaataag gctggcgaac tcgcagcgct 60
tgaatacccg tggcctaacc gtccactcgg aagaccggtc ccgctcggga ggctctgcag 120
tcgcgcctgg ggtcagggcc gggggcgaat gtggctcgcg ttctaggcct ccctgggttg 180
gaaaaagact atgttagcaa gtgtcacgcc atgcttttgc caactttcca attaaaggtt 240
gacattcctg cataagcatt tctctgtgaa aatgtccttg cctcttacag aggagcagag 300
gaaaaagatt gaagagaatc gacaaaaggc tctggcccgc agagctgaga agttattggc 360
agaacagcat cagaggacta gctcgggcac ctccattgct ggcaacccat tccaggccaa 420
gcaaggccca tcccaaaatt tcccaaggga gtcttgtaag ccagtgagcc atggtgtcat 480
tttcaagcaa cagaatctca gtagctcatc taatgctgac caaagacctc atgattccca 540
cagttttcag gcaaagggaa tatggaaaaa gccagaagaa atgcccacag cctgcccagg 600
ccacagtcca cgtagtcaaa tgcctctcac tggaatctct cctcccttgg cacaaagtcc 660
ttcagaggtc cctaaacaac agctcttgaa ttatgagtta ggtcaaggtc atgctcaggc 720
ttaacctgag atcanggttc acacccttg nttaacccaa ctcataagcc ttttgggcca 780
aacccaaaga agttnccaag aagacaccag cttaattcct t 821

<210> 5116
<211> 812
<212> DNA
<213> Homo sapiens

<400> 5116
ctaggtttga gtcctggttc taccacttac aacccagtga ggatccccag agggatcagt 60
cccattgtac atatgagaca acaggttcag aggtgctaag tgtctcagcc aaggtcacag 120
agctagttag gggcagagct gggatttgca cataggccaa ctgtctaaag acccagtggg 180
ctcatatgcc actatgggca gaacttttcc ggaacagccc ccagttttcc tggcagccgt 240
aaagggaacc tgtagttttc taggggcaat atcagttgtt acaagatctg aatctttgat 300
gtctaatgag ctgggcctag cctcagtaga ggactcctgc tccacattcc accaagggaa 360
acaggcatta cggcccctac ccaggacagc tggtgccagg aatccaactt tccccatagg 420
acaatggacc tcccttaaac ttgtctattt atttatttat tttaaataga gacagagtct 480
cactcactat gttgcccagg ctagtcctga acttctgggc tcaagcagtc ctcctgcctc 540
agcctcccaa agtgacagga ttacaggggt cagccactgt gcctggcccc tccttaaact 600
tcttttccag agactctaga atctttcttt ttggtggaaa acaataaaag atttggcact 660
ccacatggaa tgcggcagga gactgcagtg ggtgaactcc cccggtccct tccagccctg 720
ggccctgctg cctgcctgcc tgcacaccac cctgtaagna tctgctgtcc angggacctt 780
tgacaggccc tcagccatag tcagtnttcc tg 812

<210> 5117
<211> 467
<212> DNA
<213> Homo sapiens

<400> 5117
cttggcttca gccctgatct gttcagagcc ctcagcacgg tactggagga gaggccttgg 60
gccgcatcgt ggcatattgt ggctttgggg agaaagaaaa gcagatagtg caatggaaag 120
agcgtggact tgagagtcag acttgccttc aactcctagc tctaccactt accacctagg 180
tgacctcaag ccactttctc agcctttctg agactctgta tcctcatgtg tatcctagag 240
tttgtctgat agggctatag tgagaattaa ttgaattaag tgtagtgaga attaagccag 300
gtctggagag gcctggctac tggtgagtga ggtaactgag atcaggtatg gagaggactg 360
gctcctggtg agtgagttaa ttgagatgag gtatggaggg acctgtctcc tggtgantga 420
gttanttgaa atgaggtgtg gagggacctg nctcctggtg agtgagc 467

<210> 5118
<211> 854
<212> DNA
<213> Homo sapiens

<400> 5118
gtcagtgata aaatctcctt gaatcgctct ctcccagata tccggcaccc aaactgcaac 60
agcaagcgct acctggagac acttcccaac acaagcatca ttatcccctt ccacaacgag 120
ggctggtcct ccctcctccg caccgtccac agtgtgctca atcgctcgcc tccagagctg 180
gtcgccgaga ttgtactggt cgacgacttc agtgatcgag accgcattgc tcggaaccgc 240
aagaccattg tgtgcccgat gattgatgta attgaccatg acgactttcg gtacgagaca 300

caggcagggg atgccatgcg gggagccttt gactgggaga tgtactacaa gcggatcccg 360
atccctccag aactgcagaa agctgacccc agcgacccat ttgagtctcc cgtgatggcc 420
ggtggactgt tcgccgtgga tcggaagtgg ttctgggaac tcggcgggta tgacccaggc 480
ttggagatct ggggagggga gcagtatgaa atctccttca aggtgtggat gtgtgggggc 540
cgcatggagg acatcccctg ctccagggtg ggccatatct acaggaagta tgtgccctac 600
aaggtcccgg ccggagtcag cctggcccgg aaccttaagc gggtggccga agtgtggatg 660
gatgagtacg cagagtacat ttaccagcgc cggcctgaat accgncacct ctccgctggg 720
gatgtcgcag tccagaaaaa gcttccgcag cttccttaac tgcaagaagt ttcaagtggt 780
tttattgacg aaagatagcc tggggacctt gncccaaatt tttacccaac ccgtnggaac 840
cccccgggtt gcan 854

<210> 5119
<211> 827
<212> DNA
<213> Homo sapiens

<400> 5119
aacggacttt ttcagagagg gaactatctc tttgacacaa aacatacgtt ttaattaata 60
atacttgctc tggtaatata gtttcttatg agttgctaca tattttctag aatagatttt 120
ccctaaaata tgcctttgta agatttttt aataaaatca agtttagaaa taatttgaac 180
ttttttgggg gatagagttt cagtcttgtc gcccaggctg gaatgcaatg gcacgatctc 240
agctcaccgc aacctccacc tcctgggttc aagtgatttt tctgcttcag cctcccgagt 300
agctgggatt acaggcacgc accaccacac ctgtctaatt ttggtgtttt tagtagaaac 360
ggggtttcac catgttggcc aggctgattt ctagttcctg acctccggtg atccacctgc 420
atcagcctcc caaagtgttg ggattatagg cgtgagctac cgtgcccggc ctgaactttt 480
tttttttgg agacggagtc tccctctgtc gcccaggctg gagtgcagtg gtgctatcct 540
ggctcactgc aacttccgct tcctgggttc aagcgattct cctgcctcag cctccggagt 600
agctgggatt acaggcactc cgccgccatg cccagctaat ttttgtattt ttagtagaga 660
cgggatttca ccatgttggc caggctggtc ttgaactcct gacctnaagt gttctgccac 720
cttggcctcc aaagtgctgg gatgcagatg tgagccacgt catcttggcc tggcctgaac 780
ttttagaatt caatatttaa cccattttnc cctaanttat tncctta 827

<210> 5120
<211> 451
<212> DNA
<213> Homo sapiens

<400> 5120
taatgaggaa tcaaaggaag aagaagaaag agagaggaag gaaggttgga aggaaggaag 60
gagggaaaat tanaagggga aaccatgatt gctggtgagg ttttgagcac atttcctgc 120
aggctggtat gggtgagagg ttnggtcttg nttgcaaatc ttctgaaggc cattccagag 180
gagcagttgc cactgcccca tcccctgagc tctgagcatg ggggttcccc tggggagact 240
cctggtgaga ggatgccgat ttctgctgat ctgtcactgg gtaccgagga ctgggtgtgt 300
ttaaggcaga cagccaggtg aggatcccag ctactggggc ctgctgtcat ctcctgggag 360
tacccggggg tcangagcct aggggactct tgcacttcac atccagccat gctaattaca 420
ctttttggna aaggaaacag ctnggagcag t 451

<210> 5121

<211> 817
<212> DNA
<213> Homo sapiens

<400> 5121
tcatggcaga tgacttggat tcaggacaca atggtttggt ccactgctgg ctgagccaag 60
agctgggcca cttcaggctg aaaagaacta atggcaacac atacatgttg ctaaccaatg 120
ccacactgga cagagagcag tggcccaaat ataccctcac tctgttagcc caagaccaag 180
gactccagcc cttatcagtc aagaaacagc tcagcattca gatcagtgac atcaacgaca 240
atgcacctgt gtttgagaaa agcaggtatg aagtctccac gcgggaaaac aacttaccct 300
ctcttcacct cattaccatc aaggctcatg atgcagactt gggcattaat ggaaaagtct 360
cataccgcat ccaggactcc ccagttgctc acttagtagc tattgactcc aacacaggag 420
aggtcactgc tcagaggtca ctgaactatg aagagatggc cggctttgag ttccaggtga 480
tcgcagagga cagcgggcaa cccatgcttg catccagtgt ctctgtgtgg gtcagcctct 540
tggatgccaa tgataatgcc ccagaggtgg tccagccggt gctcagcgat ggaaaagcca 600
gcctctccgt gcttgtgaat gccttcacag gccacctgct ggtgcccatc gagactccca 660
atggcttggg cccagcgggc actgacacac cttcactggc cactcacagc ttccgggcat 720
tccttttgac aaccattgng gcaagagatg canactcggg ggccaaatgg gaaagcccct 780
ttacaagatt ccgaatggga aatgaanccc ccttttt 817

<210> 5122
<211> 831
<212> DNA
<213> Homo sapiens

<400> 5122
atcaagttgc tataaacatc gaaaggggcg tgactttggt gaggggtca ataccaggac 60
tgaggactcc tgttttatcc catttcaaga ctttggctgg gtgaggtggc taattcctat 120
aatcccagca ttttgggagg ccgaggtgga aggatcactt gagtccagga gttcaagacc 180
agcctgggca acatagcaag ctcttgtctc tagaaattat ttaaaactta gctgggcatg 240
gtggtgtgca cctgtggtct cagctacttg ggaggctgaa ctggaaggct gcttgagcct 300
gagaagtcga ggctgcagtc agccgaaatt gtgccactgg actccagcct gggcaacaga 360
gtgagaccac catctcaaaa aaaaaaaaaa aaaaaaaaaa gaagactttg gcacattaaa 420
aaatatagca atatttcatc ttgctaaaac aattatttca cactaaccta ttcagaacaa 480
aaatagagaa gaggtaaaaa tagtttctaa gtagccaaat agatgacaga cagtcatgca 540
ttccagatgg aatgggcagt cctgcctgca gcgtcactct ggttttgctt aaatctcata 600
cacttcactt gtaagtatct tgnatcttta ttaggatctc actttacctc attttactta 660
caagtttaac tagattggna tcctagttac tattttccat agcaaaggag aagaggaagg 720
aagtttgtta aaggaagtca cacttgacaa aacccaaatt ttaaaaagtg acccccttgac 780
aaaccncccg anggaaggga aaaacccaaa ccaaaattta aaaccaaccn g 831

<210> 5123
<211> 820
<212> DNA
<213> Homo sapiens

<400> 5123
aggcttaagc tgtcctccca cctcggcctc ctgagtagct gtgacaagag gcgtgtacca 60

ccatgcttgg ctagtttttg tatttttttat agagatggtg tttcgccata ttgcccaggc 120
tggccttgaa cttgttagct caagtgatcc tgcctcagcc tcccaaagtg ttgggattct 180
agggatgagc caccatgccc agctggattc ctttttttag tttgtttgtt tttaaagaca 240
gttttccttt tttgcccagg ctggagtgaa atggcatgat cttggctcac tgcaacctcc 300
acctcgtggg ttcaagcgat tctcctgcct cagcttcctg agtagctggg attacaggtg 360
cctgccacca tgcccggcta atttttgtat ttttagtaga gatggggttt tgccatgttg 420
gccaggctgg tctggaactc ctgacctcat gtgatccacc tgcctcagct tcccaaagtg 480
ctgggattac aggcgtgagc caccgtgcct ggcctccagc tgaattcctt tgctttaagt 540
gtatatatgt ctccaggggc tgtcttcatt tcagcaggct gtcctggcct gaaggaggca 600
cccctaggct ccttcctctg aacattccta gcctaggagc tgggtggtag gaggtagcat 660
gctgggaagc aggcacattc ctatacctgg ggtcccaaga gagccattgg gtgggtgggc 720
agacagacat acagtttaat anggccaggg agaaactgnc ttccttcttt gctcttttag 780
gcctgcggnc ctggggcact gacattatta aggagcatga 820

<210> 5124
<211> 610
<212> DNA
<213> Homo sapiens

<400> 5124
ataacagccc tatgaggcag ggatagatag ggttaccatg taccttgggg agaggtgtgt 60
tgaggaaaga gtatgggcaa atatttatat aagctctcag aagaagttgg attaaccagc 120
tattcccact ctcttccagc acaacatgcc tttctggagg atcacaaacc atggagacct 180
agtatccctt caccaggctt tagagcttga ttttctctaa gaactggaat gaggagcctt 240
ccccttgagc tccttttcac tcctgaaggg agctggagac tggaaccaac tgagaacttt 300
ctccgtctgt ctctctctgt gtctctgtct ctatctctct ctctttctct ctttctctct 360
ctccctctct ccctccctcc cttcctctct ccctccctct ctgcctctct ctctctctct 420
ctctgtcttt atccatggaa tgctggcgag aacacaatca gaaccaacag ctgcaatttt 480
tgctaagagt gagctgcagc cccgtgttca tctccataca gaagcaggga cagttggata 540
gagagaacaa tggactcact gaagctacag tgcttttaat tnttctgtgt tntggttttg 600
gtnttttgtt 610

<210> 5125
<211> 736
<212> DNA
<213> Homo sapiens

<400> 5125
ctgcgacgac tggagttcca tgccagcaag atcgatgagc tgtatgaggc atactgtgtc 60
cagcggcgtc tccgggatgg tgcctacaac atggtccgtg cctacaccac tgggtccccg 120
ggaagccgag aggcccggga cagcctggca gaggccactc gggggcatcg cgagtacacg 180
gagagcatgt gtctgctgga gagcgagctg gaggcacagc tgggcgagtt tcatctccga 240
atgaaagggc tggctggctt cgccaggctg tgtgtaggcg atcagtatga gatctgcatg 300
aaatatgggc gtcagcgctg gaaactacgg ggccgaattg agggtagtgg aaagcaggtg 360
tgggacagtt aagaaaccat ctttctccct ctactcacgg aatttctgtc tattaaggtg 420
acagaactga agggcctggc caaccatgtg gttgtgggca gtgtctcctg tgagaccaag 480
gacctgtttg ccgccctgcc ccaggttgtg gctgtggata tcaatgacct tggtaccatc 540
aagctcagcc tggaagtcac atggagcccc ttcgacaagg atgaccagcc ctcagctgct 600

EFS-Web ASCII Output

tcttctgtca acaaggcctt cacagtcacc aagcgcttct tcacctatag ccagagccca 660
ccggacacac cctnacttcg ggaacaggct ttctataaca tgcttgcgac ggcagganga 720
actgganaat gggaca 736

<210> 5126
<211> 623
<212> DNA
<213> Homo sapiens

<400> 5126
tcccagtcca cttctctagg gccagtagca gacaccagcc agtatgccga ggaaccaggg 60
cttctccgag cccgaatact cggccgagta ctcagccgag tactccgtca gcctgccctc 120
cgaccctgac cgcggggtgg gccggaccca tgaaatctcg gtccggaact cgggctcctg 180
cctgtgcctg cctcgcttca tgcggctgac tttcgtgccg gagtccttgg agaacctcta 240
ccagacctac ttcaaaaggc agcgccacga gaccctgctg gtgctggtgg tctttgcagc 300
cctctttgac tgctacgtgg tggtcatgtg tgctgtggtc ttctccagcg acaagctggc 360
tcccctcgcc gtggctggaa ttggactggt gttggacatc atcctcttcg tgctctgcaa 420
aaaggggctg ctcccggacc gggtcacccg cagagtgctg ccctacgtgc tgtggctgct 480
cataaccgcc cagatcttct cctacctggg cctgaacttc gcgcgtgccc acgcggctag 540
tgacacggtg ggctggcagg tcttctttgn cttctncttc ttcatcacgc tgnccctcag 600
cctcagcccc atcgtgatca tct 623

<210> 5127
<211> 735
<212> DNA
<213> Homo sapiens

<400> 5127
agctaccgaa acgctctgaa aatcgagccg gaggagccga tcactttctg tgaggaagcc 60
ttcgtgtccc actaccgctc cggagccatg aggcagttcc tgcagaacgc cacacagctg 120
cagctcttca tgcagtttat tgatggtcga ttagatcttc tcaattccgg cgaaggtttc 180
agtgatgttt ttgaagagga aatcaacatg ggcgagtacg ctggcagtga caaactgtac 240
catcagtggc tctccactgt ccggaaagga agtggagcaa ttctgaatac tgtaaagacc 300
aaagcaaatc cggccatgaa gactgtctac aagttcgcaa aagatcatgc aaaaatggga 360
ataaaagagg tgaaaaaccg cttgaagcaa aaggacattg ccgagaatgg ctgcgccccc 420
accccagaag agcagctgcc aaagactgca ccgtccccac tggtggaggc caaggacccc 480
aagctccgag aagaccggcg gccaatcaca gtccactttg gacaggtgcg cccacctcgt 540
ccacatgttg ttaagagacc aaagagcaac atcgcagtgg aaggccggag gacgtctgtg 600
cccgagccct gagcaaaaca ccattgcaac accagctaca cttcacatnc tacagaaaag 660
cattacccat tttgcggnca agttcccgac aagangctgg acctcttcat cacattgact 720
tacgccgttg ctttt 735

<210> 5128
<211> 840
<212> DNA
<213> Homo sapiens

<400> 5128

cctaaattcc tttatattgc cttagtatta aggataatat tatcttgcat aatcttcctc 60
tgaaatattt attacttccc ttcttaatga tttggaaaag cagtgtattt tagataatat 120
cttcttacag atactccaag tatcacagct aaattaatta gtgaacaaaa agatgacaaa 180
gaaaagaaaa accatgaaga gaaagaaaaa gttaaagcgg aaaatggatt tcaagacaat 240
tacagtgttg ttgttgcctc tgggctgaag tctcaatcta aacgtgctgt gtcagctaca 300
ccacctcgcc caccatccag gagggggagg acaatacctg ataaaatagg aagtacttca 360
ggagcagagg ctgccaacaa aataattact gtcccagtgt ttcacctgtt tcacaaactc 420
ttggcaggcc agccattgcc agctgaaatg acacttgccc agcttttaac tctcctatat 480
gaccgaaaac ttcctcaggg ttaccgctca atagatctga ctgttaaatt gggatcaaga 540
gttataacag accccagtct atcaaaaaca gattcttata aaagactaca ccctgaaaaa 600
gatcatggag acttacttgc tagctgtcca gaagatgagg ctctcactcc aggtgatgaa 660
tgcatggatg ggatactgga tgaatctttg cttgaaacct gtccaattca gtcaccatta 720
caagtttttg cagaaatggg tggactggct cttattgctg aaagactacc catgctatat 780
ncagaagtaa ttcaacaggn gagtgctcca gttgtaacat ntacccttc aggaaaagcc 840

<210> 5129
<211> 545
<212> DNA
<213> Homo sapiens

<400> 5129
tgtccatgta tactattgat tagctcccac ttgcaaatga gaacacgtgg tatttgattt 60
tcttttctgg gttagttcac ttaggatgat ggtctccagc tccatgttgc tgcaaaggac 120
atgatttcgt tctttttta tggctgcctc ttttgtttct taaatctgaa ttttcatgtg 180
gcttcaatgc tagtctggcc tacccttcc ttcccaaagt caccaccaac tcactcccac 240
ccccacctca tgcagtgcac ccctcacagc ccccaccctt ggcagtgaca tttggatttc 300
cagggccttt cctgatcctt tagagacatc ctctcccggc caagtcctgc aagggagact 360
tgagtcagag gttcgatggg ctggggtgag gtgggccaca caattaccac acccactccc 420
aggcctattc ccggtgatct aagcacacag aagcaggctg gtacttangg aagaaggcac 480
cagtgtatgc cagagcttan gatggcgtga ggaccaaatg gaaagatnga tattgaaagt 540
ggttg 545

<210> 5130
<211> 770
<212> DNA
<213> Homo sapiens

<400> 5130
aattcttgta ttggaatcct ttatactttg gcgcaggaca gcacttctcc tgatgtgcag 60
acctgggcat tacattctct atcattgatc attgattctg ctggcccact ctattatgtg 120
catgtggaac ctacccttc tcttattata atgttgttgt taaatgtgcc tcctactcat 180
gctgaagttc accaaagcct tggtcgctgt ttgaatgccc ttattaccac gttaggtcca 240
gagctacaag gtaacagtac ttcaatttct accttaagga cttcctgtct actgggttgt 300
gcagtaatgc aagataaccc agactgcctt gttcaagctc aggccatctc ttgccttcag 360
cagcttcata tgtttgctcc acgacatgtc aacttgtcta gcctggttag ctgcctctgt 420
gtgaatcttt gtagccccta cttgttactg agaagagcag tactggcttg cttacgtcag 480
cttgtacaaa gagaagcagc tgaagtttca gaacatgctg ttatgcttgc taaggatagc 540
agagaagagt tgactccaga tgctaacatc agagaagttg gccttgaggg ggcattgttg 600

atctcactag acaaggagac agatgagaga ttatgccatg atatcaaaga gactttaaat 660
tatatgctta catctatggc agtggaaaaa ctcttcctgt ggntaaagct ttgtaaagat 720
gtacttgctg catcagctga ttttacagct gnacttgngt ggatccatgc 770

<210> 5131
<211> 435
<212> DNA
<213> Homo sapiens

<400> 5131
caaaaaattg ggtgggcatg atggcactgg cctgtagtct gagctcggga ggatcacttg 60
agcccggggg gttgaggcta cagtgagccg tgattgcacc attgcactcc agcccgggca 120
acagagcaag accctgtctc aaaaaacaag aaaaatttgg ttctttttct ttttttttga 180
gacataatct cactctgttg cctaggctgg agtgtaatgg cacgatctcg gctcactgca 240
acctccacct cctgggttta agtgattctc ctgcctcagc ctcctgagta gctgggatta 300
caggtacatg ccaccatgcc cagctaattt ttgtattttt agtagagatg gggtttcacc 360
atgttggtca ngctggtctc gaactcctga cctcgtgatc cgcccacctc ggnctctcaa 420
agngctggga ttaca 435

<210> 5132
<211> 835
<212> DNA
<213> Homo sapiens

<400> 5132
tctgctaaag aagtgggcag gtatttttag aaacatactt gattctgaca actacagtcc 60
tataccagta acaagtgaag agatgtacaa aaaggtggta ggacaattcc catttcaaga 120
tatagaactg gaaaagcaac catttccaaa aaagtttcct ttctctgaat ttgtgccaaa 180
agtttacaac caaattaaag aatttatcta cgcttgtctg aagttttcag aagatcttca 240
tctaagctca actgaagttg atgacatgat tcggaaatca acaaacctgt tgctaaccag 300
gactctgagc aactctctgc agaatgtaat taaaaggaag aatattgggc ttactgagct 360
tgttcagatt attatcaata caacacattt ggagaaatcc tgtaagtact tggaagaatt 420
tatcaccaac atcacaaatg tgcttccaga gacagttcac actaccaagc tctatggcac 480
cacaactttt aaggatgcta gacatgcagc tgaagaagag atttatacta acttaaacca 540
gaagattgac cagttcctac agctggcaga ctatgactgg atgaccggag atttgggcaa 600
caaagctagt gattacctgg tagacctcat tgcctttctt cgtagcacct ttgctgtatt 660
cacacacctt cctggaaagg tggcccagac agcgtgtatg tcagcttgca agcatttagc 720
cacatncttg atgcaacttt tgntggaagc tgaagtgcng cagctcacct tgggagcatt 780
acacagttca acttggacgt cagaaaatgt gaacagtttg cagatccggc ccgng 835

<210> 5133
<211> 664
<212> DNA
<213> Homo sapiens

<400> 5133
aaggacagag atttccatct gttttgttca atgctatgtc tctagggcct agaacagagc 60
ctgggacccc ataaggtgct gaataaatag gggttcagtg aattcattaa ttacatttct 120

gcaagatggg gtggcatgtt gtcatcttca gccatttttt ttttcttcga ttgcattata 180
tttggaacag gcacgatggt gacatctgta atcccaacta cttgggaggc tgaggctaga 240
ggattccttg agcccaggaa ttcaaggcta aagtgtgcta tgatcacacc tgtgaatagc 300
actgcactcc agcctgggca acacataaga cctctctctt taaatgtaaa aaaaaaagtc 360
tgcgtgcagt ggcttatgcc tgtaatccca gcactttggg aggctgaggc aggtggatca 420
cctgaggtca ggagttcaag accagcctgg cgaacacagt gaaaccctgt ctctactaca 480
aatataaaaa aaagaaaaaa cattagctgg atgtggtggt gcatgcctgt aatcccagct 540
acttgggagg ctgaggcagg agaatcgctt gaatctggga ggcagaggtt gcagtgagcc 600
aagatcgcac cattgcactc cagcctgggt gatagaatga gactctgtct caaaaaaaaa 660
annn 664

<210> 5134
<211> 716
<212> DNA
<213> Homo sapiens

<400> 5134
cccctccttg gccccaagcc tggccagttg tgctaaaagt agcgctgacc caatcatggt 60
ctgtccagag gccaggacta ttttgactct gtcctcagga ttcatgtggt ctgaggcgtg 120
tacgagctgg actgctccca tgaccactca gatgtggtgc caggaatgtt ctggctgaca 180
cacctgtccc cagagctgct aaacgctgct acttacccca cagccccaca gcgtgcgtcc 240
tgagatactg gttccaggag ggataggtgg tgaggacttg caccaggcgg tggttagggg 300
ctttctatcc tcattcataa gagagcaacc agccagtttt gggtggcatt gcttctcata 360
gctccccact ggactggagc atgttaatct gtgtatttgt gacattcact cagaatgggg 420
gcccgacaac agaaggctcc ttagagacag caaacattat tcttccaagg aaggctggag 480
gatttccttc tctggaggcc gttaatagtg gaagaacttt tcatcctact ggcttaaata 540
taagtcccag tgcaaggctc ctgcctggaa catcatcctn ccctctacta gattggcttt 600
gccattcttc aaagtccaac tgaaatcccc ttcctaagga cttccttctt ttgcaccana 660
ggggtactta cacagacttt ccattaatag agangctttt tcctnctttt tttctt 716

<210> 5135
<211> 575
<212> DNA
<213> Homo sapiens

<400> 5135
gtcttgctct ttaattgtaa ctttacagtg ttttcgctca cgagccgaaa cttcaagttc 60
ccttttgcc agcagagttt gggttgcggt cgctggaaaa cttgatgcgc actgaaatct 120
cttggtctgt gcatgaggaa gagtggatcc agcttcttgt cttggctctc tgttctctga 180
atgccttgta ctttttgctt ttctatctta ccatttttt tttgtttgct ttcactgtga 240
ataatatatt ttcatctttc cttaccttgc tttttttgct gacagaaaat ggtgaatgca 300
caccgtgggt gcagtgaggg cttggtgcct gctacgtggg cagcttccac ctgtggctgg 360
cttattgggc tacttggagc cacagaatca ttgctgagct ccgatgtgcc agagagtccc 420
aggccatatg ggtcactctt ctagcttggg aatcttaagt ccagcttttt ggatgtcatc 480
ctccctggag ggggagctca tgaaagtcca aggttcgagt cttcctcccc agagggctac 540
cctgtaatgc cgtgggggggg tgtgtgtggg ggnnn 575

<210> 5136

09825-0350

0503503.5

<211> 776
<212> DNA
<213> Homo sapiens

<400> 5136
acttccaagt tctggtacaa ggcggatatt tcaagagaac aagccatcgc catgttgaag 60
gacaaggagc cgggctcatt cattgttcga gacagccatt ccttccgagg ggcttatggc 120
ctggccatga aggtggccac gcccccacct tcagtcctgc agctgaacaa gaaagctgga 180
gatttggcca atgaactcgt ccggcacttt ttgatcgagt gtaccccgaa gggagtgcgg 240
ttgaaagggt gctcgaatga accatatttc gggagcctga cggccttggt gtgccagcat 300
tccatcacgc ccttggcctt gccgtgcaag ctgcttatcc cagagagaga tccattggag 360
gaaatagcag aaagttctcc ccagacggca gccaattcag cagctgagct gttgaagcag 420
ggggcagcct gcaacgtgtg gtacttgaac tctgtggaga tggagtccct caccggccac 480
caggcgatcc agaaggccct gagcatcacc ctggtccagg agcctccacc tgtgtccaca 540
gttgtgcact tcaaggtgtc agcccagggc atcaccctga cagacaatca gaggaagctc 600
ttcttccgga ggcattaccc cgtgaacagt gtgattttct gtgccttgga cccacaagac 660
aggaagtgga tcaaagatgg cccttnctta aaagtctttg gatttgtggc ccggaacang 720
gcagtgccac ggataatgtg tgccactgtt tgcagancat gaccctgtgc aacctg 776

<210> 5137
<211> 791
<212> DNA
<213> Homo sapiens

<400> 5137
aacatggtca tttttattaa agtaaaaaat aagatagtag tagctctgga catttggaaa 60
tgtgtatgtt tgtttacacc ctgtgaaaag tagacatggt ctgcaaaaga gccaatctcc 120
taaatatatt tctttctcta gaaatgttat tttgggacaa atgaatgaat ccctgttggg 180
aaaaaagaac ctgctgcata tcatccatat tttattttat tattattttt tttgagatgg 240
agtctcactc tgtctcccag gctggagtgg agtggcacaa tctcggctca ctgcaacttc 300
tgcctcctgg gttcaagcga ttctgctgcc tcagcatgcc cagtagctgg gattacaggt 360
gcatgccacc acacccggct aatttttgta ttttagtaga gacggggttt cactatgttg 420
gccatgctgg tcttgaactc ctgacctcaa gtgatccacc cgcctcggct tctggaatta 480
caggtgtgag ccaccgcacc cagccatgat ccatacttta atgtgggttc tggattgctt 540
cctaggccac gtgtttaaca tgccacatga tgatgcaaag cagtgtgcca gccttaatgg 600
tgtgaaccag gattcccaca tgatggcgtc aatgctttcc aacctggacc acagccagcc 660
ttggtctnct tgcagtgcct acatgattac atcatttctg gataatggnc atggggaatg 720
tttgatggac aagcctcaga atccatacag ntcccaggcg aactcctggc accttgtacg 780
atgccnaccg g 791

<210> 5138
<211> 757
<212> DNA
<213> Homo sapiens

<400> 5138
tatccatgga ggaaatcata cctcctaaaa cctgtggcac tgaatggggt tcagccatta 60
ctccacaaat tcctatagca agggctaaac cctgccagtc cccaggcaac acctcggtcc 120

tccctgttaa aaagcctaat ggagaatatc agtttgtgta ggacttgaag ggggtaatga 180
ggcagtcatt cccatccacc caacactggt cccaagcttg tctgtgctca gatacctgga 240
gatgctcagt ttttcactct actacacttc aaggatgctt tcttttgtgt agccctctcc 300
acccagaatc cctgtatctt tttgctttga atggagaaat ctctgatacc cagaaagcca 360
catagtacac atggactgtg cttccccagg gcttctggga aggcccccac ctttttggga 420
atgcagggag ctaagcctac agaatgggac ttttattaca atatgtggat gacttgttca 480
ttgtcagcca aacatggcag gattcagatt ttaatatcat taaaaccttg aatttcctgg 540
ctgaacggtg atacaaggtc agccccatcc aaggcccana tttctttaca gaagttccga 600
tatctggggt tcattctgac cccaggagcc cgaacactag ttgtggactg gaaaaagcaa 660
tcacttcatt gctggtccca caaacaaaaa ggcagcccca gggtttcttg ggaatggtgg 720
gcttctgtag tatttggatt ncaaantatg gnctgac 757

<210> 5139
<211> 821
<212> DNA
<213> Homo sapiens

<400> 5139
acaactttgt gttttgttgt tgtgttgtgt tttctctttc agtttcaaag aagctggcac 60
cgattccacc caaggtcccc tttggccagc cgggggctat ggcagaccag tccgctggcc 120
agccgtcccc agtcagcctg tcccccaccc agcccagcac cccgtcaccc tatggactga 180
gctaccctca ggggtactcc ttggcctcgg gccagctctc cccagctgca gctcctcccc 240
tggcctctcc ttctgtcttt acaagcactt tgagcaaatc gcggcccact cctaagccgc 300
gacagagacc tactctgccg cctcctcagc ctcccacagt aaacctctcg gcctctagtc 360
cacagtccac ggaggccccc atgctagatg gcatgtcccc tggggaaagc atgtctacag 420
gtaaccaagc cacaggctcc ctcacttttt tttatgaact ttagtgaaat gtgcctaggg 480
gatggattgc tagagttact gccagtgaac acattcctgc gtgctttggg atgactgggc 540
tggcaccagg ggtagctcat aagatctcct tagaagccca ccaatggaaa gcaaccctgg 600
aatccatgtg tcccacacag gggcttctta tgggatctct ctcggtctaa gcccaccagc 660
ctggggttct ggttttgctc ttattatcgg gggttgaaga cactgagtca tttggagtgg 720
ggcctcagga gaagctggaa ctgggtatga tcacaaaaca gcatcaaaac ttangtattt 780
cctggataga agcccaacaa ctgacaggtn tnaatgctta t 821

<210> 5140
<211> 840
<212> DNA
<213> Homo sapiens

<400> 5140
atatctggca gctggctatg ccatcattgc cgaaaacaaa ctcctataat ccaatgctct 60
ctcatcacat atcacctcac aacaagcgga actatttgcc ctaaccaaga ccctcactct 120
agcaaaggga aagagggtca acatttacac caattccaaa tatgcatacc atgtcctaca 180
gtctcacact gtaatctggc aggaaagggg tttttctaac tacaaaaaga accgccataa 240
taaatggcaa actcatacac aagccgctgg aggcagctaa actaccacta gaggccgtca 300
ttatccattg caagggacac caaaaggcta cagatgccat aaccaaggga aacttcttag 360
cagattcggc agcctggcag gcagccctta gaacactatt gttattgccc attttcccta 420
gcatacaccc aagaagaaaa aggtgccttg ctggctccag ggctgttcat aacgaaagct 480
gaatttactt agactacaaa ctcatcctac ccaagaccca aaaactttct gttctcaccc 540

acatccataa ccaattccat gcgggttatc tcccgttgct ccaatttcta aaaacctgta 600
tacattccct taccatggcc atcagcttgg accgcctcac taaaggttgc tctgcctgca 660
gtcagacttc ccctcanggg cccttagacc acctnctttt ccctccttca ggcccaaang 720
ccagttgccg ggacaggatt ggcaaattga cttcactcat acgttccccc ataaagaaag 780
tctgatatct cttacgatgg tagatccttt tcaggtggat agaaccttct tactccatga 840

<210> 5141
<211> 749
<212> DNA
<213> Homo sapiens

<400> 5141
gcgggaaggg tcctgggccc cgggcggcgg tcgccaggtc tcagggccgg gggtacccga 60
gtctcgtttc ctctcagtcc atccaccctt catggggcca gagccctctc tccagaatct 120
gagcagcaat gccgtttgct gaagacaaga cctataagta tatctgccgc aatttcagca 180
atttttgcaa tgtggatgtt gtagagattc tgccttacct gccctgcctc acagcaagag 240
accaggatcg actgcgggcc acctgcacac tctcagggaa ccgggacacc ctctggcatc 300
tcttcaatac ccttcagcgg cggcccggct gggtggagta cttcattgcg gcactgaggg 360
gctgtgagct agttgatctc gcggacgaag tggcctctgt ctaccagagc taccagcctc 420
ggacctcgga ccgtccccca gacccactgg agccaccgtc acttcctgct gagaggccag 480
ggcccccccac acctgctgcg gcccacagca tcccctacaa cagctgcaga gagaaggagc 540
caagttaccc catgcctgtc caggagaccc aggcgccaga gtccccagga gagaattcag 600
agcaagccct gcagacgctc agccccagag ccatcccaag gaatccagat ggtggccccc 660
tggagtcctn ctctgacctg gcagccctca ncctctgac ttcancgggc atcaggagca 720
ggacacagaa ctgggcagta cccacacaa 749

<210> 5142
<211> 845
<212> DNA
<213> Homo sapiens

<400> 5142
gaggctgagg caggagaatt gcttgaacct aggaggcaga ggttgcagtg agccgagacc 60
gtgcctttgc actccagcct gggcgacaga gtgagactcc atctcaaaaa caaaaaacct 120
tggcaaaata ctgcaaataa ccccattaaa aagagggcaa aagaagccgg gcacggtggc 180
tcacacctgt aatcccagca ctttgggagg ccaaggtggg tggatcacga ggtcaggaga 240
ttgagaccat cctggctaac acggtgaaac cccatctcta ctaaaaatac aaaaaattag 300
ctggatgtgg tggcggacgt ctatagtccc agctacttgg gaggctgagg caggagaatg 360
gtgtgaaccc aggaggcaga gggtgcagtg agctgagatt gtgccactgc actccagcct 420
gggcgacacg gcaagactct gtctcaaaaa aaaacaaaca aaacaaaaca aaacaaaaca 480
aaaaacagaa ggcaaaagag ttgaagaaac atttcactga agaggatgta tagatggcaa 540
ataagcatat aaggagatat gtaacattat tagctatcag ggaaatgcaa attaaagccc 600
agtgagagaa ctacctcagg atgactaaaa taaaaagtag tgaaaatacg aaatactggt 660
gactgtgcag ggaaactatg ctcatggatt gctgatagga atgtgaaatg gtacagccct 720
tctggaaaac agatctggca gttaccatcc ttgggtattt attcccagag aaaatgaaaa 780
ctactctgga taccttagcc cagccttggg gatccnggcc tgtaattccc agnttcttcc 840
ggang 845

09653259 D 5/2/2006

<210> 5143
<211> 668
<212> DNA
<213> Homo sapiens

<400> 5143
gggatcaggg cggggccctg agcgccgcca tgcttttgta cggcaggatc gcaaagcacg 60
ccgggaccgg ttggtttggt tttgaagacg tggatggcgg gaattctcgc ttctggcctg 120
ggtgttttag ctcacttgga aaggctagag acccaagtga gcagatcccg taaacggtct 180
gaagagctgc agagcgtgca ggcccaggaa ggtgctcttg gaaccaagat tcataaacta 240
aggcgtctgc gagatgagct gagggctgtg gtgcggcacc ggcgagccag cgtgaaagca 300
tgtattgcca atgtagaacc caaccaaaca gtggagatca atgagcaaga agcattggaa 360
gagaaattgg aaaatgtgaa agccattctg caggcatatc attttacagg cctcagtggt 420
aaactgacca gccgaggagt ttgtgtctgc atcagtactg cttttgaggg gaacctattg 480
gattcctatt ttgtggacct tgtcatacag aaaccactcc ggatacatca ccattcagtc 540
ccagtcttca ttcccctgga agagatagct gcaaaatatt tacagaccaa catccagcac 600
ttnctgttca gtctctgcga gtacctgaat gcttactctg ggangaagta ccangcagac 660
cggcttca 668

<210> 5144
<211> 749
<212> DNA
<213> Homo sapiens

<400> 5144
agaatttagc tttttcagga actgccatac tggcttttct tttgtttttt tgttttgaga 60
cagaatctca ctttgttgcc caggctggag tgcagtggca ctctctcagg tcactgcaac 120
ctctgcctcc gcagttcaag tgattctcat gcctcagcct cccaagtagc tggaattaca 180
agtgtgcacc accacacctg tttttgtatt ttttttttt tttatgagac ggagtttcgc 240
tctcgttgcc caggctgaag tgcagtggta caatctaggc tcaccacaac ctccacctnc 300
caggttcaag cgattctcct gcctcagcct ccccagtagc tgggattaca ggcatgcgcc 360
accacacccg gctactgttt ttgtattttt aatagagatg gattttgcc atgttggcca 420
gggtggtgtt gaactcatga cctctagtga tccacctact tccgcttccc aaagtgctgg 480
gattacaggc gtgagccact gtgctcagcc ccatactggg ttttgtatca gcatgtatat 540
tttccattcc caccagcagt gcagactgtt gcaatttctc cacatccttg gcaacactta 600
ctatttttta ttatggcctt tctaatatgt gtgaagtggt atctcattgc ggttttgata 660
tgcattcccc taatgaccaa tgacatcgag catccattcc tgggtttatt gaccatttgn 720
gnatcgattt ttgggggaaa tgtaaganc 749

<210> 5145
<211> 736
<212> DNA
<213> Homo sapiens

<400> 5145
gaggcctccc tctagctggc ctcaggaccc agatggggga caggcggagt gtcagtatca 60
aggaaagatg tccctgggag gaagggctga gtcttgactt cttaaagagg cactgcccag 120
ctaaacactt gggggtctga tgagtctcca ggtcggactc cctccccgcc attgtgtcac 180

tgccaggggc acagataagc atccccccg ccccagtttg gggaattttc caacacctca 240
tggggagaaa aacaaggaaa aaccaacaag tgcaggtgga gattattcca tggtgctgct 300
gacaacagtg ggagggagac agtgcagctg acggggacct caccctccac cagccttgag 360
gacagggtgg gtgggagctg acagtaatgt tcgcctggat ccaaatcaaa gcctggaacg 420
accaagtaac cggcctgctg ggtctgaacc acagccctct ggccgccttt ggccccactg 480
agcccccgtg tcacagtgtc actgaagcgc cttcccttga cgggtctgtg tttccaaatg 540
aaaggtgtca gcaggaaagt tcctggtgcc ttcagagtcg accggttcaa ggccagctca 600
cgaatccact gtggagactt gcattggtga ggtctgtatg cacttangag gcacgctggg 660
ctgtgagcct gggagactct ctgaaagggg actccgnact ccttgggctg tgcttaacct 720
gacgggcact ttagtn 736

<210> 5146
<211> 771
<212> DNA
<213> Homo sapiens

<400> 5146
ttaaagaaaa gaaggcagca gtgaaagaat ttgaagacaa gaaggttgag ctgaaagaga 60
acctgattgc tgagctagaa gaaaagaaga aaatgattga aaatgaaaag ctgacaatgg 120
aactgactgg agattctatg gaggtgaaac ctatcatgac cagaaagttg cggaggcgac 180
caaatgatcc cgtccccatc ccagacaaga ggaggaaacc tgctccagcc cagctaaact 240
atttgttaac agatgaacag atcatggagg atctgagaac attaaataag cttaagtcac 300
ccaagagacc agcatctcca tcctctcctg agcacttgcc tgcaacaccc gcggaatctc 360
cagcccagag gttcgaagct cggatagaag atggcaaact gtactatgac aaaagatggt 420
accacaagag ccaggccatc tatctggagt caaaggacaa ccagaaactg cgctgcgtga 480
tcagttctgt aggagccaat gagatctggg tgaggaagac aagtgacagc accaagatga 540
ggatctacct gggccagctt cagcgcgggc tcttcgtgat ccgccggcgc tcagctgctt 600
gactttctac agtgctcttc tcttgaccct ttttctggag tgggttttat ttttggtttg 660
gttcgttttc tccttaatag aaaaatgtta cttactggga atagctactc agccttggaa 720
atgganagca ctgcagtgaa ttctttangg cacttttgtg gncggatgct t 771

<210> 5147
<211> 670
<212> DNA
<213> Homo sapiens

<400> 5147
tccacctctt ggtgggagag ggtgcaaaaa attttatgat cattctcagt ctaccacaag 60
aaggttccag tgatcaagaa aggcttcatg gagataccaa gcattgagca ggacttcaag 120
gatggataag atctgatgct gaaggaagga gaaggggtga tattccagga gggaaggaca 180
gtgtgaataa aggagcggag gtgggaagga agtgtttggg aggccctgat ctgaccagtc 240
ttgttgagga gagggtgcat gaggcaggct ggtaggagat gagaaaaaga gaattggggg 300
tagatttagg ggtcttgaag gctggcctga gaatttgata aatgacccaa taggcaaaag 360
gaggcacgga aggattgtaa gtagggtcag gaggtaacat tgaatgccat tgcctacacc 420
cccatgtccc cacctgaaag taacatcctt cgttgcgtgg ttttctaaac atcgggactc 480
ttcatggttt gatggctggc cccagggtag ttggcacttt tcatttttct cccgttcctg 540
ccccaccacc atcaaaaggc ttggacacct ccatcatcgc tgatgagtac tgaatgttgg 600
gtccctgcgg tccananctg cctgcttctg ccagagggaa tgacagaagg gaagtgactt 660

tnaaacagga 670

<210> 5148
<211> 731
<212> DNA
<213> Homo sapiens

<400> 5148
cgaactaatt atttagataa ttaagtggct gggcacagtg gctcatgcct gtaatcgcag 60
catgttggga ggctgaggtg ggcagatcac ttaagcccag gagttggaga ccagcctagg 120
taacatagac cttgtcttca caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagaaaaaaa 180
gttagggcat ggtcacatgc ctgtagtcct agctactctg aaggctgagg caggaggacc 240
acttgagcca aggagttcgt ggttatagtg ggctatgatc aactactgca ctcaagcctg 300
gacagcanag caacaccctc tcttaaagaa aaaaaaagat aattaagcta caagccacat 360
ttatttgaaa cattctccgn ggatgatctg ggtatttgat tttgaatcct tcaagtaaat 420
ttctcagttc cttaacgtgc atatgtaaac gatcatgagt catctttggt tattaaaaat 480
aacccaaacc acagtgattg aagccttgac atgctttctt tttcttggtg agattttcct 540
ggattgtcag ctcctccccc cttcctcccc gtacgtgctt tcagtgagac ggaacagttc 600
atttcttcct tgactacaat tgaataaaca tttcgnaatg acattaaaaa gtattgactt 660
ttgggtcata agtaccagca tttgcagcat tttctgactg catcgttgca cttatgnttc 720
tcaattngaa g 731

<210> 5149
<211> 571
<212> DNA
<213> Homo sapiens

<400> 5149
agctcagtgc ccagcatgtc tgtggtgagt gtgtagttca ggaagtgaac tggcaaaact 60
gagtatcacc ctctcttcct gggttcttgc cactcccctg aaaaccaggg tagcattgtc 120
acatcagata gctccgctac gtgtgcgctg accatgctga gatgggcact gtggactcag 180
cctctggtca ttgctggaac cagcggcctc catgtgaggt acaggggaac gcactgctag 240
cagatggttg ggatgtggac actcgtcctg ccctcttggc ttggtgctgt gccatcgcac 300
agtcattcgc tgnttagcat gcatgggaga gagtgaagca caagggccca ggcccctggg 360
agtgcctgcc ctcaatttgg aagagccctt gggcacagca taggcgcctg gcagaattgg 420
actgggccat gatccagggc attgggacct cacctaggag ttggggttct ggtcagaagc 480
cctgtggaga cagggtctcc cctgtgggca ccaaactgac ctcaaactgc tggntctttg 540
nccctgggga cagggctggn tgaagtactc t 571

<210> 5150
<211> 730
<212> DNA
<213> Homo sapiens

<400> 5150
ttatcatcct tcaagtgggg ctgaacacca ttgcagacct ttggtacctg ttcggagacc 60
tcagtctttc attggtgagc acccaagggt ttgctgtgga aatgtttttg ctccctgatg 120
ttgctgagta ggagctggtg gccttctctg tctctactgc aggtggcaga gtggctgtgt 180

tctgggtccc aggtgggctg gacccccaa cctccgcaga cagcaggaca tcagggagtg 240
ggcccggctg aggactggat agggttcaag ggagaggata gattaacatt cttggaagtc 300
tcttttgca tttgttttat aatgtctgtc ttttttttt ttttttgaga tagagtttca 360
ctctgttacc caggctggag tgcagtgggc cgatcttggc tcactgcaac ttccgcctcc 420
tgggtacgag tgattctttt gcctcagcct cccaagtagc tgggattaca ggcacatacc 480
accatgccca gctaattttt gtagttttag tagagatgcg gttctaccat gttggccaga 540
ttgttctcaa acccctgacc tcaagtgatc cgcccgcctt ggcctcccaa agtgcgggga 600
ttacaggcat gagccaccga gcccggtctg aactcacaat tttcatttcc tgacccacgg 660
nctccatatt tggaggccag taagggcctt tacaggttat tatttattaa nggctgattc 720
tacnccaggc 730

<210> 5151
<211> 796
<212> DNA
<213> Homo sapiens

<400> 5151
tttaacagtc ttcttgccta ctaaacatag acttagagaa cacagtctgt tttggggctc 60
cagaactcaa aagggaagtg aagacaatgg agagtgttca gatagcactt ttagtagata 120
gaatctgata tttaaaaata aagagtgggg gagttggggg ccatctgcca aggagataat 180
ccttcataaa gcagattaac catatctttg tcttagttca aatcactata acaaattacc 240
atagaccggg tagcttaacc aacaaacatt tatttctcat tgttctggag gctagaaatc 300
tgagatcagg gtgctagcag agacaggttc tggcaagggt ctttgccaac ttttgctgta 360
ttctcacata gcagaaagag agctaaaaag ccgtctggta cttcttctta cagaggcacc 420
aatccaattc atgtgggctc caccctcatg acctaatcac ctcaaaaggt cccaccacat 480
aataccatca cactggggat tcaatttcaa catgtgaatt ttgggggaac acaaacactc 540
agtccataac actcccccag cccacctctg ctgccttttc tctttgaaag cacttacctt 600
ctctttctgc attgatgtaa tgccagagga ttggatctgg gaaaggaagt aaatgtggga 660
gggaagaatc agggttcagc catttagcga gccaagtagg tgccgtgtgt cagcaagggt 720
accctgggca tgagtatttt accaccctta cagcaatnca ncagcctgtg tgataagggt 780
gggnttctgg gtggga 796

<210> 5152
<211> 719
<212> DNA
<213> Homo sapiens

<400> 5152
atcagcctcc tgagagctgg gactacaggc gcctgccacc acatccggtt aatttttgta 60
tttttagtag agatggggtt ttgccatgtt ggccaggctg gtcttgaact cctgagctca 120
ggtgatctgc ccacctcggc ctcccaaagt tctgggatta caggcgtgag ccacggtgcc 180
cagcctggct cctgtttttt gagacggggt ttcaccctgt ttcccaggtt ggagtatagn 240
ggtgccgtca tgacttactg cagccttgaa ctctttggct caagcagtcc tccccactca 300
gcctctctag tagctggggc tccaggcatg aatcaccgtg ccagactaag ttttttaaa 360
atttttttgta gagagaatct ctctctgttg cacaggctat tcttgaactc ctaggctcaa 420
gtgatcctcc tgcttcagcc tccgaaagtg ctgggattac ngttgtgagt cactgtgcct 480
ggctctttta atcttgaaaa ctctgggaag agctcacttc tgtttaggag gctgccttgg 540
gaactgcatc tcctgggctg gtgctctgtg ctgcttggag tctgcagacc ctatctgggt 600

cgcttggcct tccgtgcaca agctgccaga atggaggccc cattctcaat gtgggggctg 660
gccaaagagc aaggagcttc cacangacag aagctgggca cctgcttggn ctggntctt 719

<210> 5153
<211> 856
<212> DNA
<213> Homo sapiens

<400> 5153
aacgggaaaa tctccttctt ccacaatgca gttgtccgtg aaaatctgcg acaatttgta 60
gaaagtcttc ttccagggaa cttggtggag aaagttacaa ataaaaatta cgtcagattc 120
ctctctggct ggcagcaaga gaataagcct catgtccttc tgtttgacca aacgcccatt 180
gtgccactgt tatacaagtt gactgccttt gcatacaaag attatttatc atttggatat 240
gtatatgtgg gtttgagagg gacggaagag atgataaggc ggtacaacat caatatctac 300
gcccctaccc tcttggtctt taaagaacat acaaacaggc ctgccgatgt tatccaggcc 360
cgaggtatga agaagcaaat cattgacgac ttcatcaccc gaaacaaata tctattggca 420
gccaggctca ccagccagaa gttgttccat gaactctgcc ctgtgaaacg gtcgcatcga 480
cagaggaagt actgtgtggt tttattgact gctgagacta ccaagttgag caaacccttt 540
gaggctttcc tgtcctttgc cctggcaaac actcaagaca cagtgagatt tgtgcatgtc 600
tacagcaatc ggcagcagga gtttgccgac accttactac cagacagtga ggcgtttcaa 660
gggaaatcag cggtgtctat tttagaaagg cgcaacacag caggaanggt ggtgtataaa 720
accctggaag acccttggat tgggagtgag agtgacaaat ttatcctctt ggctatcttg 780
ancagctgcg taagatccag ctnttctgnc ctctgaagca aggtttctga ctgaccgatg 840
aacttggccc tgtttt 856

<210> 5154
<211> 775
<212> DNA
<213> Homo sapiens

<400> 5154
aaaaaggtac aactaccttg ctgatgctgt acatatggct cacttgtgcc cagagagaga 60
ataaagccat gtcgaaacta tctacgattc cttgagtgtt tttccagcta cctgccactt 120
gcccacccac tcccctcaga tctcagttag aacatgacaa ttgggctcat gaacaggatc 180
ctgagtggtt gcaggtgaac aagcagttgg cacaagggca aagtgatcac atcctgattg 240
agtggctatg gacagccata cagactgtgt ggaacaacgc tggtgaaata cccaaaccat 300
ttagaagcag taatgcctca cttgcctggg actgggatgg tgtggctgag actgccttac 360
tggcagccag gtgcgctatt cagcagccac aagccctaca agtaattaac caggggcacc 420
tgtttgagct ggaggtgcat gtggccacag acggttttgg ttgaggcttg tggcaatgca 480
cagagcgcct aagaatgcca gtaggctttt ggtcccaact atggaaagga gctgaactcc 540
ggtattcatt gatagagaaa cagctagcag ctgtatatgc tggccttcgg gctcatgaga 600
gcatgacagg acaggctgca gtcatcatat ggacaactta cccaataaca ggatggatgc 660
gtctatgtgt aatgaccacc tggagtggga tagcacagat gtccactttg gcaaaatggg 720
gcgactnctt gcacantgga gtaagctgag tacaagtccc atacagcaga nttgc 775

<210> 5155
<211> 670
<212> DNA

<213> Homo sapiens

<400> 5155
attacaggcg gatcccatgg ggccggaggc ctgcaccacc gcgagatgtg gccattttac 60
aagaaagggc taataagttg gtgaaatacc tgttggttaa ggaccagaca aagatcccca 120
tcaaacgctc agacatgctg agggatgtca tccgagaata tgatgaatat ttcccagaaa 180
tcattgaacg agcaagctac actctggaga agatgtttcg agtcaatctg aaagaaattg 240
ataagctaag tagcttgtat attctcatca gcactcagga atcctctgca ggcatactgg 300
gaacgaccaa ggacacaccc aagctgggtc tcctcatggt gattctgagt gtcatttta 360
tgaatggcaa caaggccggt gaggctgtca tctgggaggt gctgcgcaag ttggggctgc 420
gccctgggta tgactgggct ctctcagcgc ttgctgtccg tgttgtcctt tggcaagaga 480
ggatggtcct aggattgcat cagtctggtg gtctggtgga gcgggtgggg tgctggactg 540
ggtagagggc ccagggttct gacctgggtg gatgacgggc aaatggtcct gaactctctg 600
ctgnctctct ccttaatgnc ctctgctgnt ctaagctgag atgttagata gaccttcagg 660
gatccctgac 670

<210> 5156
<211> 851
<212> DNA
<213> Homo sapiens

<400> 5156
tttattcctg gactgccagc tccctctctg acgatgtcca acacaatgcc tcggcccagt 60
actccactag atggcgttag tactccaaag cctcttagta aactccttgg atcattggac 120
gaggttgttc tgttgtcccc agttccagaa ctgagggatt cttcaaaact tcatgattct 180
ctctataatg aggattgtac tttccaacag cttggaactt acattcattc tatcagagat 240
cctgtccata acagagtcac cctggaactg agtaatggct ccgtggttag gatcactatt 300
cctgaaattg ccacctctga gttagtacaa acgtgtttgc aagcaattaa gtttatcctg 360
ccaaaagaaa tagcagttca gatgcttgtc aagtggtaca atgtccacag tgctccagga 420
ggacccagtt atcactcaga gtggaattta tttgtgactt gtctcatgaa catgatgggt 480
tataacacag accgcttagc atggactaga aattttgact ttgaaggatc actttctcct 540
gtcattgcgc ccaaaaaagc aaggccttcc gagactggat ctgatgatga ctgggaatat 600
ttactaaatt cagactacca ccagaatgtt gagtctcatc ttttgaacag atctttatgt 660
ctgagtcctt cagaagcttc acagatgaag gatgaggatt tttcacagaa tctcagtctg 720
gattcttcta cacttctctt tactcacata cctgcaattt ttttcggtct tcacttgggt 780
atgaagagct taagttgaat actctaatgg ggagaaagga atttggtcac ttggtgnacn 840
tnttcgttca a 851

<210> 5157
<211> 715
<212> DNA
<213> Homo sapiens

<400> 5157
aaacgattga agttgaagaa caacaggaag gcaatgatgc agaggcccag aggcgtgaga 60
ttgagctgct tcgccgtgag ggagaattgc cactggaaga gctgctccgt tcccttcccc 120
ctcagctgtt ggaagggcct tccagcccct ctcaaacccc ctcatctcat gatagtgaca 180
cccgagatgg gcctgaagaa ggtgctgaag aagagccccc tcaggtgttg gagataaagc 240

ccccaccctc tgctgtcaca cagcgcaaca aacagccttg gcatccagat gaagatgatg 300
aagagtttac tgccaacgaa gaggaagcgg aggatgaaga ggatactata gcagctgagg 360
aacagttgga aggggaggtg gatcatgcca tggagctgag cgagttggct cgagaaggtg 420
agctttccat ggaggagcta ttgcagcagt atgcaggagc ctatgcccca ggctctggga 480
gcagtgaaga tgaggatgaa gatgaggttg atgctaatag ctctgactgt gaaccagagg 540
ggcccgtgga agcggaagag cctcctcagg aggatagtag cagtcagtca gactctgtgg 600
aggaccggag tgaggatgag gaagatgaac attcagagga ggtagaaaca agtggaagtt 660
cancatcaga ggaatctgag tctgaanagt ctgaggatac ccaatcacag agccn 715

<210> 5158
<211> 491
<212> DNA
<213> Homo sapiens

<400> 5158
gatgacaggt tcttggagac ccagctgtgt gctgtgttga tgggcaaaca tgaggtgggc 60
cccaggggaa aggagctgtt ctggactctg tgaatgctgc tgctcccaag ggcggtgccc 120
aggtgagatg cctgcggggg aagcagcagg agctaccacc tccacccagc cactgcattc 180
tggagcagcg cttcccaaac ttcagtgtgt gcaccgatca cctagggcct ttttttttt 240
tttccttttt gtggagaacg ggtctcgcta gattgcccag gcaggtctca aactcctggg 300
ctcaagccat cctcctgcct ctgcctccct aagagttggg attaccggct tgagccactg 360
tgcctggctt gtttgttttg tattaattac atttttatag agagagatgg ggtcttactt 420
tgttgcccgg nctggttgca aactcctggg cctcaaggga acctcccatt tcagcctccc 480
aaagtgccgn n 491

<210> 5159
<211> 758
<212> DNA
<213> Homo sapiens

<400> 5159
agagaagcaa catctttaag gtactgaggg caggagaagt taatgtagaa tactatgcca 60
gaaaaaataa attcccaaaa gtggaagtga aataaggaca tttagagatg tacaaaagct 120
gaccgaattc actaccagtc aacccacact acaagaaaca tcaaatgagt cctccaagca 180
gaaggaaccc aataccagat gaaaatccag atctccacga ggaaatgaag aacaccagaa 240
atggatcggc cctttcttca aataagagca gttggaataa caaagctgtt cagttgtacc 300
cttggaatcc actgaaatcc tgggtaggga agctccagta ccaccaactg gaaagactgg 360
gaatgcctaa tagctggtac tggccattgt cgtaggcttt gtccactctg acaaactgaa 420
gatggggact cgactcacct tcgccagcca caggaggacc tccagacgag gttaggtcga 480
cttcccgata actttagatc ctgaaacctc acgggatttt tcttctcttc cctttgatct 540
ctcttccgct tgctcaacag gacaggactc gctgcctttc tttcccgtca gaaagggatc 600
ccttgcggac aggacctaag tgagtagctg gtttccccta cttgccttcc gggcctgggt 660
gtctcgggag ctcangctga cgggagacct actaccggcg agtgagacca gcaggacctg 720
gaagggccgc gcaccaaggt ggaggttggn ncccgggg 758

<210> 5160
<211> 649
<212> DNA

<213> Homo sapiens

<400> 5160
cagcaccagg ctgtggcagg ttgggttttg ctctgtgctg tgatttctgt tggagttgga 60
aagttggctg tgagtcggcc cagatgtgaa gcggaaacgg ggaggaggga ggtgagtggg 120
cctggctggg tggatgggga tctgctcgcc tgcacggttt cctctttggt aaagtggggc 180
ctgcactcgc cccatctaga caggcatgtg gggactgagg tgattgattc ccagcgtgga 240
ggagcatctc gctcagtgcc aggcggacca tggcctggag gtggccggca ttttcccttc 300
tcctgagggg atttattgat cttgtgctgc aggtggtgtg gcctgagggc aggtgtggct 360
tgcagagctc atcactgggg caggtgcagg gctctggggt gctgagctgt cactggcgaa 420
gggcctcagg tccccccaa cagctcccac ctgctcagcc acagcgtgga tgcgtcccgg 480
gctccccggc cccgggggat accataagca cagaggtggc ctctttaatc aggggcttcc 540
cagggagggt ctgaggctgg gctgcgggat tactcctttc ttgggaagca ngcaggggtg 600
gccaggcaca gtggctcacg ccagtgatct cancccctg anaggctaa 649

<210> 5161
<211> 742
<212> DNA
<213> Homo sapiens

<400> 5161
ataaatcccc ctttttgtgt ctcagggcag acagaggttc tggctgcctt ttacttgagt 60
catgggcgct ccagagtggc agggtagtgt ggtacagaga gactcactgc tccgtgtgtg 120
tcctctggca caccctccgc tctggggccc cactctcacc tcgttcagtt gacctgaagg 180
agctccagcc cactccagcc ccttcccacc catcatgcca ggctataact ccactggagc 240
agtaggcgga ccagctggag gccttctcag cagagcagag agctctcaag gagcagacag 300
ggggaggtgt tggcaaggca gctgcaacaa caagttcacc ccgctttgga ttttaaaagg 360
atcgaaattc gaaatcctct tctggggtta tgtgaggtgc tgtggggtct ttttccttcc 420
tcctttcttt ttggtaggca agcaacatac caagttccta gaaaaggaga aaaacactgt 480
ggcagcccag agggccatag ctaaagcgtg actcactcag agccgatcct actgacacac 540
gtcccctccc tccgtcccac tctgccattg ccccctcctg tcaggaccag actagggggt 600
ctgggactcc cggggagcca tgcacccccc acttgggtgg tggtggcang gcaggggagt 660
gntgccaaac ctcaggagga cttggagctg cccgtgccac ttnctgtgga gagactccag 720
tgcgcctgcc gttaaccctg ca 742

<210> 5162
<211> 743
<212> DNA
<213> Homo sapiens

<400> 5162
cggatgggac agggagagga agcagctgtg ctttcatgct gaccctgatc ctctgtgggg 60
gggccgtctc caaactggtt gctgaaattg gggatctgaa aaacatctta agctatccta 120
cagcaaaagt tgatgattct aatgttagca atcctgtcta taggaataac ggggttgtga 180
atcaatttgt aaacagtctt tggaccctaa agtcagaaat cctatctaca ggaacaactg 240
ggatacacaa ggtcaggatc ttgtgctgtg tgactttcag caacaaggaa gtgggccaaa 300
gtgcagccca attaatgctt aattataact ctatttcagt ccataatgtg gcatgcaatt 360
cttgtcaacc ctctggggac acttttgaat ttgggcattt gggaaatgtt ccttcattca 420

ccagttgctg tttttaacta agtgatttac tttgtgctgg agctgagctg cgccaagctg 480
gagacacaaa tagaacaaac acactccctg ctctcatgga gctcctggca ttgtcccgtg 540
cactagtgac catttgctgc acacccagct cttctctaag cacttttcaa ggatgctctt 600
gnttaatcct catgacaacc ttatgaggca gatactggta ttctcctcan gtgaggaaac 660
cgaggcacan ggagattaaa taacttggcc aaggtcactc catctgancc gggatttcaa 720
cccaagtagt cttgcttgca aaa 743

<210> 5163
<211> 781
<212> DNA
<213> Homo sapiens

<400> 5163
agcaatttgg gaggtggagg aggagcagga ggaggaaaag gaaacaacca ggccagtcat 60
ggtgtctcgt gcctacgagg aggaggaagc ggaggagggg aaaaaaagga ggagcgaaaa 120
gaaacggagc agaaggagtt ggaggaggag gaggtggagg aggaggaggg aaaagaaatg 180
gagcagcagg aggagggaaa agaaatggaa gaggaggagc aggaggaaaa tgaaatggag 240
gaggaggagg aggaaaaaga aatggaggag gaaaaagaaa caggaggagg aaaaagaaac 300
ggaggaggaa gaggaggagg aggacaaaga aacagccagg ccggacgtgg tggctcaccc 360
ctgtagtccc agctgctcgg gaggctgagg cagaagaatc gcttcaaccc gggaggcaga 420
gtttgcgtga gccgagatcg tgccactgca ctccagcctg gagacagagt gagactccat 480
ctcatctcaa aaaaaacaaa agaaaacaaa acanaaacaa aaaaacagcc aggagccgtg 540
gctcacgcct gtaatcctag caatttggga ggcgataaga attattgaaa tgcagtaaga 600
attaccgaaa tgttgaacaa agacccaagt gagcacgtgc tgttggaaaa atacccaata 660
ctacactact cacacaagtt ccacattctg tatanttaaa atggccagca gggcggaggg 720
tgctaactta ttaccttgag cagagcgtac tagnagactc ncactgcact gaacctttta 780
a 781

<210> 5164
<211> 735
<212> DNA
<213> Homo sapiens

<400> 5164
ggttggcagt ggtcacgtcg cttgtcaagg cacccaggag tggggcccga gtggggattt 60
caggacgtgg gctctcaggg ggagggaaag tggctaacca ggacttttgc aataccaaaa 120
tcagccacgc ggtgtcatcc tcctcccaag aggtctggct ggggcttgcg ggcagtttag 180
ggttggagcc aggggagaag tcacagaaga attgctagag gtgaagtttt gcattttgtt 240
tgcgtaacag ccccacaccc tgccctgcga agatgcataa attagcccct ggcccttccc 300
cacggttcct tccttcccta gtgtcttccc gtcactccag ggactcccaa tatggtgata 360
cgaggcagcc tgggggtggg ggcagaagga agtcctgcca acattcactg tgtgaccttg 420
ggcatttctc tggctgcagt ctccggtggc cctcacattc gatggctcta ggttccccag 480
ctgacctggc ctgagggctt gggttgagga gaggatttga ccccatgtga acagaaggct 540
cccagggtga gtaagacatg gccctggttt cacctagatc tcagcctgcc ctgctggtgt 600
gaaccggagg ggagggtgag tggacagact ggtttggcag ctctggctgg ctctggaagg 660
tggggagttt ggtgggaaga aagccagggc tacacttgta ncaggaccag cangtgtcan 720
gactgggaca tggaa 735

<210> 5165
<211> 767
<212> DNA
<213> Homo sapiens

<400> 5165
aggcgttaac gcgcacgcgc ttagggatcc ggccgtggcc gagcgcgcgg ccgtaagacc 60
gcgggtgact agcatgcaga tacccatgct ctgactttct gcccctccac tgacatggcc 120
caccggggtg gggagaggga cttccagact tcagctcgac gcatgggcac ctcgctgctc 180
ttccagcttt cagtgcatga acgggagctg gacctggttt ttctggatca tagctatgcc 240
aagccttgga gtgcccaccc agatgccagt agtgcccgcc ccacccgcat gctctttgtc 300
actccccggc ggcagcacga aagtaccata tgattgttaa atacctgtga agtatgtgtg 360
gcccggtcct atttcctcac ctgtttacag tgaatcagac gtcccaatag atgtggagac 420
ggtcacatca acgcctatgc cactctatga caatcagaag gcacgcagcg tgatgaatga 480
gtgtgaacgg catgtcatct ttgccaggac tgatgcagat gcccctcctc caccagagga 540
ctgggaggag catgtcaaca ggactggctg gacaatggcc cagaacaagc tattcaacaa 600
gatcctcaaa gccctgcagt ctgaccggct tgccgcttgg ccaacgaagg ggcttgtaat 660
gagccagtgc tgcgccgtgt tgctgtggac aagtgtgcaa gganagtgcc ggangctctg 720
gcaagtgtga nctgggatac ccagctgatc caatggctgg acaccaa 767

<210> 5166
<211> 749
<212> DNA
<213> Homo sapiens

<400> 5166
tgtggtgact ctaaccataa cagcctgaga cagaggtccc aggagatccc tccttgtgga 60
aaagcagtag ttctcttccc cagaaaggac tggggtcaaa ggatgcacaa cagtaacgac 120
tttgtggtga ggttggcaga gaatatacga tggggagctt gatgtgtgag aagtggaaag 180
aaggtcatct tggatgattg gaggacaaca tcccgcaaac gacaacaggg aaagcacagt 240
acttttacaa aaggctccgc aaatatctca tccttaccat ctgttccttg tgccttataa 300
gatttttgga tttcatccta agagtaacac gcatttatgg ggagactgag ggataggact 360
gggtaaattt gagatatatc tccaaaaacc atcttcattt taccaaagag aaaaatgaag 420
cccagagagg ttaagtgact tgcccaggat catacagcta atgagtagtc aggaaaatat 480
tctctttaga gttctttgta tttctttctt catagtgttg ccaaatataa ataatagtgt 540
agggttggcc tgccatgtgt tggagtgggc aggatctttg gtgtgacaaa ggtagataat 600
ttgtctagcc aagttttgag atatcacaaa gctccagtgc cttaccaggc agaagttata 660
ttcagaatga ttacaagttg ctctatgata gaangtgctc aaataaatgg tantataggc 720
cacactgnat tctatgctac agggatttc 749

<210> 5167
<211> 832
<212> DNA
<213> Homo sapiens

<400> 5167
atgtttctac caataaacag taactaaaat ataaactatg ctccaatgaa ctaatttttt 60
tttactgcta tttgtcttct cttttagaaa attattacta tatgtttatt tgaattctgt 120

agtttttgt tttctaattt gaatattaat tctccttatc ccaattgtga gattacccca 180
gcacttaatt attttgattt ctctttctct atcctatgaa ttcttgtttt atttttatcg 240
ttttaaacat aatctattga gggaaagtta agtaattttc tgtattccct aaacctagag 300
atatcaaagc aggaaatatc cttctgacag aaccaggcca ggtgaaactt gctgactttg 360
gctctgcttc catggcatca cctgccaatt cctttgtggg aacgccgtat tggatggccc 420
cagaagtaat tttagccatg gatgaaggac aatatgatgg caaagtagat gtgtggtctc 480
ttggaataac atgtattgaa ctagcggaaa ggaagcctcc tttatttaat atgaatgcaa 540
tgagtgcctt atatcacata gcccaaaatg aatcccctac actacagtct aatgaatgga 600
ctgattattt tcgcaacttt gtagattctt gcctccagaa aatccctcaa gatcgaccta 660
catcagagga acttttaaag cacatatttg ttcttcggga gcgccctgaa accgtgttaa 720
tagatctcat tcagangaca aaggatgcag taagagagct ggacaatctg cagtatcgaa 780
aggatgaaga aactcctttt ncaggangca cataatggac cacagtagaa gc 832

<210> 5168
<211> 775
<212> DNA
<213> Homo sapiens

<400> 5168
taatacatgc cctccttgcc aattgttttc tctagttcaa tttatttttc tttctttctt 60
tctttcttcc ttccttcttt ccttccttcc ttccttcctt tctttttttc ttttttttt 120
tttcggggtc tggctctgtg gcccaggctg gagtgcagtg ccatgatctc ggcttactgc 180
agccttacct cccaggctca attaattctc ccacctcagc ctcctgagta gctgggatta 240
caggtgtgcg ccaccatgcc cggctaattt ttgtattttt agtagaggca gggtttcacc 300
atgttggcca ggctggtctt gaactcctga tctcaggtga tctgccctcc tctacctccc 360
aaagtgctgg gattataggc gtgagccacc acacctggcc cagttctata cttttctgta 420
aaaagtaaac aagttgccca aatccttgtc tctactttca gctgggaaac tggcctgggc 480
agctcaaacc attagatctg gagagggaga gggtgctgag tctgctcagt gatgtggcag 540
tagtggatca aaaatatctg tttggaggtc agacaggcct agattcactg ctgtgcaatt 600
ttgagtaagt tccttgactt cccttgactt ctctgatcct cattttttct atctgaaaaa 660
tgcagcaaat agaatgatag aattattgng agaacccaaa cccagtanag tgctaggaca 720
gtgccagtca catagtatgg gctgtggnac tagcaaatgc agcattggct taggc 775

<210> 5169
<211> 809
<212> DNA
<213> Homo sapiens

<400> 5169
cacaaagcac ggggccttgg gctccccact aaggctagag ggctgcgtcc gaggccgtgg 60
ggaggctgcc tggaacaaca tgcaggtatt caccttcacc tggagagagg acatccggcc 120
tggagacccc cagcacacca agaagttctg ctttgatgcc atttcccaca ccagccctgt 180
cacgctgtac gactgccaca gcatgaaggg caaccagctg tggaaatacc gcaaagacaa 240
gaccctgtac caccctgtca gtggcagctg catggactgc agtgaaagtg accataggat 300
cttcatgaac acctgcaacc catcctctct cacccagcag tggctgtttg aacacaccaa 360
ctcaacagtc ttggaaaaat tcaataggaa ctgagccctc atgccccctt ggcaggcccc 420
ccagggtctg gcactcactg cagacttcct ctttcaaggg aggcagggcc cctgtgggca 480
ctagatgtaa aaggtgctgg ccaaatggtt cagggtgaag agggctcttg attcaggggc 540

tggggtctgc ctggtccttg agcccctgag ttgtgggggt agggtgaaga gcatatccca 600
caagaggccc cacagggagc agagactgct ttaatccctg ctgacatcac ggaaaagcaa 660
cagagccttt tcaactttgt cactatgtcc ccttgaacat tatgtgggag aacaccaagg 720
tagcctangc cacccaaaat gagtcctgcn aggttgccaa ccctcanatg gctcttctac 780
atgatggtgc tttagaaaca aaggtaaaa 809

<210> 5170
<211> 811
<212> DNA
<213> Homo sapiens

<400> 5170
aaataaaagt aaaaagattt caaaataatt cagacataaa aggagtgaca ttctgataca 60
tggatggagc tggagaatat tatgcttagt gaaataagcc agatacaacc ttttgtacaa 120
aaatacaaaa ttgtatgatc tcatttatat gaggtagtta gaagaggcaa ctctatggag 180
acagaaagta gaatagaggt taccagggct gtgaggggag aggtgaatgg ggagtttaat 240
gaatacagag tttctgtttg gaatggtgaa aaaattctgg agatggataa tagtgatggt 300
tgaacaatat tttgaatata tttaatgcca cagaattgta cacttaaaaa tggttaaaat 360
ggtaaatttt acacgatatg tatctgtatc tatatatatc tctctctata tctatatatc 420
ttaccagaat acaaaattta ataacacact ccgaaaacct ttacagatga ggaaactgaa 480
gaaaactgtc tacaggggag gagttaagaa tttgcccagg attattcagc tgggaatttg 540
cattcgggat ccaaacttag ttctgtttca ctacatatta tctactccat attatctgtt 600
ctgtgttatc tgctggcttt ctgggtgatt aaagatatgt cagctccgag aagaatgagt 660
ttatttgaat cattcagaaa gttacattta aaaagtaggt aattgtagtt tgatggaagg 720
tacagtgtga aaccctagac agactaaagg ntaactttga ggatttcttt ctcaaccnaa 780
gtggtaatag tatgcatttg aaaagggang a 811

<210> 5171
<211> 865
<212> DNA
<213> Homo sapiens

<400> 5171
ccttctgaag aatgagcagt ttttatcgca tctcctcttg ttcctacact tggacagcgg 60
tgtccctcag ggtgtcacac aacaggtcac ccacaaggtg gcacagcacc tgacaggagc 120
cagccatggg gacaacgtga agcttctcaa cagcatgatc caggcacaca tatctgtaag 180
cactcagccc aatgaagtgg gccccgttgc tgtgttggag ttctgggttc aggctctcat 240
aagccagcat ctctgatacc gagaacaacc tatcctcttc ctcatggacc acttgtgtaa 300
agcagctttt cagctgatgc aggaagactg catacagaaa ttactctacc aacaacataa 360
gaatgccttg ggttaccacc gtgaccggag tctgctctca tctttggtaa gctggattgt 420
ggcaggcaac atcactcctt cctttgtgga gggcttggcc acgcccactc aggtctggtt 480
tgcctggaca gtgctcaaca tggaatccat ctttgaagag gactcccagc tccggagagt 540
tattgaaggg gaattggtga taaactctgc tttcaccccc gaccaagctc tgaagaaagc 600
ccagacccag ctgaagctcc ccatcgtgcc atccctccag aggctgctga tttatcgctg 660
ggcccaccag gctctggtca caccttctga tcacccccc ctgccactca tttggcagaa 720
gttcttcctt ctgtatcttc accgtccggg accacagtat gggttaccca tagatggttg 780
nattggaaga aggttttta aagtcctgtc atatcaattt gttgaaagaa atgaanaacg 840
ttggaccaag tggctgactt ccanc 865

<210> 5172
<211> 780
<212> DNA
<213> Homo sapiens

<400> 5172
agaatcctac ctaatgcaac ccgacttttg gcctgagcca ttcaatggat aattagtcct 60
aactgtattg ctggagtgga ccattactga agtcttacct tttttgtcct tgcttttacc 120
ttgccttgtt ccagcaaggc ttaagcatag ctttaggtcc tatgttatgc gcatgttatg 180
tgattgtctg attgattaca ttataaactc tgcacaggcg gcatcacggt ctttctgccc 240
tttcctgcct ccctccgtcc ttgcactgcc ttgcttcatg gagctttgca cttagcaggt 300
gctcagtaaa tacttgctgg gtggttgaca caggattaca tgttaatcca tcatcttcaa 360
aggctagaac cagacctatt taaaaaaaca aacaaaatcc ttccttttaa aagtggcatt 420
accttcttac cctcacaaat gttcatttta gtcgccttta ttgctttctg gggtaggggg 480
tcttaaggga gtaactcaga gagcctcttt aacttaaaag aggcataata aattacagtc 540
tttaagagaa gatcggatgc ctgcgtgcct cccagaagtg ggttaggagc acagaattct 600
agatggctcc tttgtttgca ccccaccctg tctgcagggc tggcctccca cagcagtgtg 660
tggtatccta cagatcacta ttaaataaac agtcccttga aatcacaaca ttaaaaagtg 720
ctggctatgt attgnaccag gagagccaaa tattatggaa aangccaaat atttncactg 780

<210> 5173
<211> 874
<212> DNA
<213> Homo sapiens

<400> 5173
cggtttgcta taatttctta aaattcaatc aatttcacat ccattaaact tacaagtacc 60
gtaatccagt tttcctagga aaactaagcc cagccgaacc ttgggaaaaa tacctctgtg 120
ttaaacatat atacatgatc gattttaaat gttttcacca caaaaaatgg taagtacgtg 180
aggtgatgga tttgttaact cagaagcagg cacaccaaat cacaatgggt ctgattcgat 240
cctccctgat ggcaatggag acccatctaa ctaatcccac ttctaattac ctttcttttt 300
ctccttacag acctaaaaaa tctcaccatt tctattagcc tgaaaatccc tctgttcttc 360
tcttcctcct tcagcactga atctcgctta cactaggttt tacttaatga ttctcctcct 420
tatactttct gtctcaccag tttcctctca cacttattta cctgctacac aaaattattc 480
ttattgggct tatgtgccct ttcctccact tattcgacct ctcacctgga ttgatgctcc 540
tgcggaaatc tacattaacg atagtttgtg gatgcctgga gctacagatg accgttgccc 600
tgctcaacca ggagaagaag gcactacatt taatgttatc atgggttata aataacaccc 660
tctgtgcctc agaaatgcac ctggttatat ccatctagaa actcaagtct gggctgctta 720
tcttcccgag ggatcagctt cagangaacc gggacatttg gtctctgggc ctctcctttc 780
tcctttaaaa caaatgaaaa gggggagtaa tgggacatac cccatacttt caataagtag 840
ncttcangca tttcctttca cccagangag caat 874

<210> 5174
<211> 730
<212> DNA
<213> Homo sapiens

<400> 5174
cggtttcctc caatggtaac atcttgccaa actataggac aatgtcagag ctaggatatt 60
gaccttgata cagtgaagat acagaacagt tctaacacca caacggtctc tcatgttggc 120
cttttatagc cataccagct tcccttctcc ttaaccccca taaccactga tttcttctcc 180
atttctataa ttttatcatt tcacaatata accatatagc atgtaacctg tgggtttggc 240
tttgttcact cagcagagtt ctgcggaaat tgggcaggtt gttgcagtca ctggttcatc 300
aggtttaaga ctaggataca tgaggcaaag ggaaatccca gagacacact tctgtgtgtt 360
tcgttgggtc cccagtctgc ctttttccac ctttcagagt cttctgtttt tttccccata 420
taatgtacag ggttctgagt tatacttagt gggtgaaata gggtaaagta tgtctaattc 480
atcttccctg aagctgaagt cagtgagatt agtttcctaa agttgcaaat agccaaaagc 540
tttgctcagg tgaagtctaa tgactgcagg tttaaaattt ttggtttgga taaattggna 600
tttcttattc aaaattgcta agaccatatc ccagctctgg ggttgnaatt tggattttga 660
gaaaagacag aattttagga aaatgctgag tanaattaag aggaacaaat ttctcatatg 720
gngaatattc 730

<210> 5175
<211> 800
<212> DNA
<213> Homo sapiens

<400> 5175
tttatgtatt tatttatttg agacggagtt tcgctcttgt tgcccaggct ggaatgtaat 60
ggtgcgatct cggctcaccg cagcctctgc ctccggggtt caagcgatta tcctgcctca 120
gcctccagag tagctgggat tacaggcatg cgctgccacg cccggctgat tttgtatttt 180
tagtagaggc ggggtttcac catgttggcc aggctggtct ccaactcccg acctcaggtg 240
atccgcctgc ttcggcctcc caaaatgctg ggattacagg cgtgagccac tgcgcccggc 300
ctgagaaggg gggttttatt gggcagagga gatcagcagt ggattcaaag gaggcttgga 360
aggaggcaag ggtgtcacag agtgggatcc ttcagggcct gggtatgatg cctgcactaa 420
cctcactgga cagtagcgta ggctagacaa gattttagag atgtgttgtg accagctgca 480
ctccaggaaa actgtttaca ttatatctta cctcattcat ccagcctttg catttttgtt 540
tgcttgtttt tgagacagag tctttttctg tcgcccaggc tggagtgcag tggcacaatc 600
ttggctcact gcaatctccg ccttctgggt tcaagcaatt ctcctgcctc acctnctgag 660
tactgggata acaggcaccc gcaccatgcc ctggccattt ttaaatattt tagtggaatg 720
ggttcacatg tggctgctgc tcaatctgac taatacacca cttgcctgct caatntgatc 780
gctacaccct gcacntnttt 800

<210> 5176
<211> 757
<212> DNA
<213> Homo sapiens

<400> 5176
attgaagctt aaagaatgct ttattaagcc ccttttctgg gatcattagc tgcatgttaa 60
cctattgtcc aaaaatagta gttagacagt acctgtaaaa cgtttgactt gcaagctatg 120
catgatctgt actgtgaaat tgtgtctagg gtcttgtggc caaaaagtaa atgttacagg 180
aaaaaaaaag cctaatgaaa tccctgttca cttccagtat cctatccaaa cttcattgct 240
gtattagtaa ggtgcaaata taagagcaag catgttttgc agtgttcaga ctggttttgt 300
ttgcccttga agttggccag cttgtcgttg tatttggtgt gggcatatgt gggcatcatt 360

tttcagatgc caaactaaaa tgtaggtagt atttttagaa tgagatttga cattgtttta 420
gtgtctttct tttttaagca aaaatttgag ttatccctga aagagttgaa gatttgaagc 480
tttgcacaaa agcacttttt ttaacagtaa aaaatactgc ccatgaaatt taaagacttg 540
aagtttacta aagctacaat aattactttt tagctaaata aaaggaagca gaaaattcag 600
tttgagatat atttcctata aagaccagat tcttactgat aatctggtat ttattccagt 660
ctagattttg attttaagag ttcccatncc tttatttgaa aacttatgtt ggttcaaaat 720
tgggtaagnc tgcttttcat tggtttncaa atgggat 757

<210> 5177
<211> 786
<212> DNA
<213> Homo sapiens

<400> 5177
gaaatcaaaa ctaaaaatcc ttgatgatgt gttatgggtg tggtttgtac aagagagcta 60
atacagaatt ccattcagtg aatcctctgt ttaaagagaa agccttggcc tttgtcagaa 120
gatgggaaaa caaatgtaca tttataaact ttcagttaaa ataaaatgtt taaattatat 180
atctgtgtat ctttttttt taaacgattc cttctaacct tttttttaa acgattcctt 240
ctaacccatt tttttttttg ttaaacccaa ccagccaact cttggtcctg attgtattgg 300
aaactagggc ttctattaaa gatagttaac atctatttag ttcatataca atatcagcat 360
tattcgaaga gtttcacttg aattatctca gttaagcttc gtaacaaccc tatgtcttct 420
ctttatagtt aagaaaactg aaccttagag aggtgaagaa ttcgtccagg gtcataaaac 480
tagcaagtgg caaaattgag atttaaacac tgctaggtgt taccttagga tctaaacttt 540
taaccattac tccaaagtac aggctgggtg cggtggctca cgcctgtaat cgcagcactt 600
tgggaggcca agacgggtgg atcacttgag cccaggagtt caagaccaga ctaggcaaca 660
tgacaaaacc ccgtatatct aaaaacaaaa attagcccgg gcatggtagc acacacctgc 720
aatcccagct tcttgggaag ctgaggcatg agaattgctt gaccctggga agcanaagnt 780
gcagcn 786

<210> 5178
<211> 863
<212> DNA
<213> Homo sapiens

<400> 5178
tttaaatcta agggatattt tcccttccta tagaaaaaga tgcttttgct tggcctaatg 60
accatactgg gcagagatca gggtgaaatc cagagacttc agcccatgtt actagtttca 120
gctacaggtg agaagtagca ctgcaaagaa aagctaaact ggtaaccttg ctgtgtagca 180
gagatctttg gtcataggag tattcctgca tgggccataa ggttgtggtt tgaggtggaa 240
actccctgaa acatcagctg gaaagtcgcc tttagaataa agacaaagaa ccttctgcaa 300
gccagccaag gcaataccag gacttggagg tggcaagttt gataaactaa tctgtaggaa 360
aaagttccta tcttagtgct tacacagttc ttttttcttt ttttggtata gacggggtct 420
tgctacatta attctttgac tggggctggg tcttcttttg cacagggcag cttgagacta 480
caatcaccat ggcttcctct caataccaag tcagggatta ggctgtaaga ataacaatac 540
aagtactaaa gactgaaatt ttattaaagc caaagattga gaactggttt ccggacagct 600
tctagccatg cattcatagg ctgtgagcag gagtcctgta gaataacagg agacctctgg 660
ggtccaagct ctgagcttct gggcacattt taaatgggtc tcactttatt ggccaatctg 720
gaatgcagtc acatgatcac agctnactac agcctggaac ccttggactt cagcagtttc 780

caaccttagc cttcctgaat agttgggact accggcacgt gcccanctta actnaattta 840
ttaatttaac cttttanaag aac 863

<210> 5179
<211> 747
<212> DNA
<213> Homo sapiens

<400> 5179
tccctgatat gatgtctgca ggtattcatg ctcctgtata gttccctccc acactgaata 60
gggttgccct gttgaaacgt tggaatattc tggaaatgac catgtgtgac ttccaaggca 120
aggtcataat aaaaaacatt gcagctccta ccttgtctct cagatcacta gttcagggga 180
agccagctgc catgtcataa ggatgctcaa gcagtcctac agaaagttcc atgtgaccag 240
gagcagaggc ctcctgccgg caaccagcac tagtggcagg catgtgagtg cgccatcttg 300
caagcagctc ttccagcccc agttgagcct tcagatgact gcagccccag ctgacatctt 360
aactacaacc tcatgacaga ccttgagcag accctctggc taagcttctc ccaaatttat 420
gactcccaga aacagtgcaa gatgatacat atttattgtt gttttaagct gctaagtttt 480
gaggaaattt gttacacagt gagaggtact caatacactg agtcactccc ctaacccata 540
gcacaggctg agtccccaaa cctgcactag aggcaacaaa gagggagaag ccctttccat 600
ggagctaact gtgcatctgg ggagaaagag tcatcctaag tccatctggg gaccatgaag 660
ggttggtgtg ggatctgggt gggggtggnc taaggcccta nagcaagtag ccctggtnta 720
ggacaccagg aaaacaactt cagggca 747

<210> 5180
<211> 743
<212> DNA
<213> Homo sapiens

<400> 5180
tttaatggga aactcccccc gcacacacac acacttttt tttgaggcac agtctcacta 60
tgttgtccag actggttttg aactcctggg ctcaagagat cctcccacac cagcctcccc 120
agtagctggg actacaggca tgacccactg cacccagcta aatttttcaa ttttaaaatg 180
ttggcaactc acttaaatgt aagacaaata aacacatctg taggctggca gtgctgccca 240
cactgcccag actaggggtt agggggtctg tatgggccat caccaggctg ctaaccacag 300
caaccaatat gtgccaagcc tgactacacg taccttctca ttccaccctc ctggcagcct 360
cacatctgct ttacaggtgg ggaactgagg ctctaagaga ctaagaaaat tacccaaggc 420
cactgcagct agccaggggc aggtatggga gtcagagctg ggtgcagctg actacaaacc 480
ctgtgctcag gatgacaccc tctaggagcc tcgacctctc tcccagttct cttctccctc 540
cactcaggca aatgagctct gccttcacag ggcaccaggc tggaacatat gtctggaggc 600
caggggcggt ggctcacgcc tgtaatccta gcactttggg aggccaagat gggaagatca 660
ttgaggtcag gagttcaaga ccatnctggg caacatgatg aaaccccgtn tntactggaa 720
attccaaaac tggctgggca tgg 743

<210> 5181
<211> 745
<212> DNA
<213> Homo sapiens

<400> 5181
aaaaaacaag gttagcctgc agcagagccg cagcagcaac agccaccaaa gcgggggctg 60
aaagggaaga gaacttagat ttgacctgtg caaggacctc agcagcttgg acacagccca 120
ctgcagagat gaaaggagaa gctggacata tgctacacaa tgaaaagtca aagcaggagg 180
gacacatctg gggctctatg aggaggacag ctttcatcct gggctctgga cttctctcat 240
ttgtggcctt ctggaactca gtgacatggc atcttcagag attttggggt gcttctggct 300
acttttggca agcccagtgg gagaggctgc tgactacatt tgaagggaag gagtggatcc 360
tcttctttat aggtgccatc caagtgcctt gtctcttctt ctggagcttc aatgggcttc 420
tattggtggt tgacacaaca ggaaaaccta acttcatctc tcgctaccga attcaggtcg 480
gcaagaatga acctgtggat cctgtgaaac tgcgccagtc tatccgcaca gttcttttca 540
accagtgcat gatatctttc cccatggtgg tcttcctcta tcccttcctc aaatggtgga 600
gagacccctg ccgccgtgag ctacccacct ttcactggtt ccttctggag ctggccatct 660
tcacgctgat cgaggaaatc ttggtctact attcacaccg gtgagcaagc cctgnctgan 720
gcacagctgg cttctnatcc tgcta 745

<210> 5182
<211> 730
<212> DNA
<213> Homo sapiens

<400> 5182
ttccagacat gtccttccaa cccagagttc ccctcctttt tcagctacgc ttcttgttcc 60
ctgtctcatc tccttttttc ccatcactcc ccaagtccct gtggtctggc tgacactgtt 120
ctggtcacat tctactggct aaatccaaca gagtttttc agtctttatt ttgtttgaca 180
tgtaacctag ctggctcttc atcccttccc aaaacttccc ttttgacttc tgtgtccttt 240
aatctttgtg ttttcctctg atctctctga ccgttccttt ttagcctttt tagctggttc 300
ctcttccctg cctattcatc agtgttgttc cctgacgtct cattcttgat gctctcctca 360
ctctgctaag atttatcagg nctaacagct ttagctatta cctataaagc ttctgcatct 420
ttttcatctt cagcactatc atctcctaaa gtccagacat acagtaaact agaagcagtt 480
ctaaaatttc cactttatct ttgccccctt gcctgacgtc atttgtccat tctagatctg 540
cccccccttt cctcattcag aggcctgtga tgtctggagt tcctcctttt cctcacatct 600
agtcactcac cagggcttgc agtcccactt tcaaaatacc tcttggttcc atctttccgg 660
ccctggctct ggcccttacc atgttttgcc tcanntgctg caatggnttc ttaacctggg 720
cttctcactg 730

<210> 5183
<211> 788
<212> DNA
<213> Homo sapiens

<400> 5183
ctgcatggct ggggaggcct cacaatcatg gaagaaggtg aaggaggagc aaagggaagt 60
ctatcatggc agcaggcgag acagtgtgtg taagggaact cccatgtaca aaaccatcaa 120
atctcttgag acttatttac tatcatgagt acagcatggg aaaacctgtc cccatcattc 180
agttacctcc caccaggtcc cttccaggat atctggggat tatgggagct acaattcaag 240
atgagatttg ggtggggaca cagccaaacc acgtcaccat ctggtttgac ttctccttag 300
aggccacatc atgggcctgt cagccaccat aattctggga ctcttttccc aagttcatgt 360
ccataacccc tcttccgtct gcaactggga ggtcagcttt catgaacatt cccaggagaa 420

agcgaggtgg ggaggaggtg gagctggaaa actgccaacc ctaaagagaa aggagtacct 480
ttgggcagtt acctagggta gaagagctgt tcgcacaaag aacccacagt actaaaatga 540
ctttcacaga ctccactcat aggcaaggct gctattgagc tgatgaacac tggcacagcc 600
atgccagttg ctaaaataca gaaattcttt tgtgtaaatt gataaagagc aaccaccctg 660
gacactctaa gtctagtcca actgcccaaa gtcaccctga cccaaagtca accatttaag 720
atgatcccat gagccacaag tnaangggtt aatggtttgg cggggcttgg ggcaccagga 780
ctctnttt 788

<210> 5184
<211> 727
<212> DNA
<213> Homo sapiens

<400> 5184
caaaatatta tccattgtaa actgagattt aattctcaaa tgtattctac ttgttctaaa 60
acaatctgtc cacaaatata agactataag taataaattg ttatttccgc acaatgggaa 120
tctctaatgt gaaaatgtat tctatgaaaa taatttttt aaataaaatg ttgtataaaa 180
aaaaaaaaaa aaagatgaac tgtccctgca tcggcctaaa ggtatcagtg ctcaaaatcc 240
cactcctgct ttccaactca aaggcttgac tcttgcagtt catctctctt ctgtatcatc 300
agatttttcc tctctatcgg attattgccc tcctgcttct cctccatttc tctgttcccc 360
tttatagcaa agtccttggc agagctgccc ctgcatgctg tctccacttt ctcatctcct 420
gctcttgaat cagtcaagcc aggctgttgc cttcttcctc ctctacaacc atgcatgcca 480
aggtctcctg gccaaatcca atggctactt cccagccctc atccgacttg acctctcagc 540
agcattcagc ccacctgggg ccctctcttt ccttgccttc caggacctca tgctctcctg 600
ggcttcctcc tgcctctcca agcacaattc tgnctccttt gctggctctt acacatgtcc 660
ccctctaaaa tgcagggtgt tctaagactc agtcctnaac ttcttnccat ctctctttat 720
cctcact 727

<210> 5185
<211> 770
<212> DNA
<213> Homo sapiens

<400> 5185
taggggcaag attagaagct gggagaccat ggatattagg caagaaatta tgagtatttg 60
ttggcaagat acagtgctat taattggaaa gagttattta ggagattagc aaataattac 120
atattgggtg acatggttgg gagacagctc agtgcagaga taagagaaag aagttttggt 180
gaattgcatg gttttgcccc aggcaactgg gtggacggtg gaactgtaaa ttgagaatga 240
ttacaataat gctaacattt aaggggtatt tagtatgttc caagcactgt gctgtatgct 300
ttacacaaag taacttattc ctcataataa cctgtgaagt cggtaaacta ttacccccat 360
tttatagatg gggaagctga gacctggaga caaaacggaa gtcccactta gctaagattc 420
taaaccagac attctgactc cagaacccag cgcatagact ctatattacg gcaatattat 480
agcccatacc attgtcaata atagtatgaa atttgacatc tcctaatcaa ctttatatct 540
cacacatatg gagtgatgac aaataatgcc ttaggtcacc acattagttg gagaaatgta 600
gcattaaatt accgctctta tagtaaatta ccatcaaata atgaatttgt gccaagtaca 660
agagcctgaa tttccaacaa tagattataa taccattggn gaagttaaat agcagatttg 720
aattgcagtn tttaatgtgt tctttatcaa tgagggatct acttanctttt 770

<210> 5186
<211> 780
<212> DNA
<213> Homo sapiens

<400> 5186
agatgtaggg gagatggggc agaggagagg tctctgagca ccaggagaag gtcctggggt 60
gggaggaggc atggtgtggt aaccgccgcc ctacctggtg gcacccgagg agcttcccca 120
ctcaggatgt ggttttctcc atcatggaaa tgttttggat agtttctcag ctgcatctga 180
agcctggaag cccaggccga tgggtcagag caggagcctt tggggagagg ctatcagtgg 240
ctctcagagc aaggaggggt ctgggcagtg cctggtaccg ggcgggagcc aggctccctg 300
ggcccgtgac tgagttctgc ctgctccccc cttctcacag gtggtacaag ctgcactcca 360
agccaggcaa gaaggagaag gaacgcggcg agattgaagt caccatccag ttcacgcgca 420
acaacctgag cgccagtatg tttgacctgt ccatgaagga caagccaagg tctcccttca 480
gcaagatcag ggacaagatg aagggcaaga agaagtatga tctggaatct gcctctgcca 540
tcctcccaag cagcgccata gaggatcctg acctgggcag cctgggcaag atgggcaaag 600
ccaaaggctt cttcctccgc aacaagcttg cgcaagtccg tcccttgacc cagtccaaca 660
cctcgcttgg gctcggacaa gcacccttgt cctcagccag ccgggagctt ggcctaccan 720
ggacctgcgc cgacttctta ccccgntnac caagccgtac aagctgcttg tccacttgaa 780

<210> 5187
<211> 701
<212> DNA
<213> Homo sapiens

<400> 5187
gactggaaga aagtgaaggg gagctccgga agaacctgga ggagctatcc aggtgaagat 60
ggaacgggag cagcatcaga ctgagatcag ggatctccag gaccagctct cagaaatgca 120
cgatgaactg gacagtgcaa agcgatcgga ggacagggag aagggagctc tgattgagga 180
gctcttacag gcaaaacagg atcttcaaga tctgctgatt gccaaagagg ggcgagaaga 240
cctcttgaga aagcgagagc gtgaactcac cgccctgaag ggagccctga aagaagaggt 300
ttccagccat gatcaggaga tggacaagct gaaggagcaa tatgatgctg agttgcaggc 360
cctgagggag agtgtggaag aagcaaccaa gaatgtcgag gtcttggcga gcaggagcaa 420
cacttcagag caagaccagg cggggactga aatgcgcgtg aagcttctgc aggaggagaa 480
tgagaagctg cagggaagaa gcgaagagct ggagcggaga gttgctcagc ttcaaaggca 540
gatcgaggac ctgaaaggcg atgaagccaa ggcgaaggaa acgctgaaga agtacgaggg 600
agaaatcgac agttagagga ggcccttgtg cacgtcagaa aggaagaaaa agaanctgtg 660
tcagccanaa gggccctgga gaatgaactg gangctgctc a 701

<210> 5188
<211> 734
<212> DNA
<213> Homo sapiens

<400> 5188
ttggcccagg aagtcgtttg tttggacagt agcggtggca gtgaggatga aaaaagcagt 60
cgagatgagg tgattgaact gagctctgga gaggaggaca ctctgcacat tgtggacagc 120
agtgaatctg tcagtgaaga tgatgaggaa gaagagaagg gtggcaccca tgtcaatgat 180

gtcttaaacc agcgtgacgc ccttgggcgg gtccttgtca acctaaacca ccctccagag 240
gaggaaaatg tcttccttgc cccacagttg gcacgggctg tgaaacctca tcagattggc 300
gggatccggt tcctttacga taacctagtg gagtctctgg agaggtttaa gaccagcagt 360
ggctttggct gtattctggc ccacagcatg ggtctgggga aaactttgca agtgatctct 420
ttcatcgacg tcctcttccg ccacacgcca gccaaaacag tccttgccat tgtgccgaat 480
tggctggcag agttcaacat gtggcttcca cctcctgaag ccctcccggc tgacaacaag 540
cctgaagaag tccagcctcg gtctttaaag ttcacatctt gaatgatgag cacaaggcga 600
tggcatctcg tgctaaagtg atggctgatt gggtgtcaga aggtggcgtg ctgctgatgg 660
ggtaccaaga tgtacagact tctcactctt gaanaaatca tttgncccag gtagacccga 720
anaaaacccc agaa 734

<210> 5189
<211> 680
<212> DNA
<213> Homo sapiens

<400> 5189
cctttccctg ttggtgattc tgggtctggc cgtgggcttc agcctagtcc aggatgttat 60
cgctattgaa tatattgtcc tgaccatgaa taggaccaac gtcaatgtct tttctgagct 120
ttccgctcct cgtcgcaatg aagactttgt cctcctgctc acctacgtcc tcttcttgat 180
ggcgctgacc ttcctcatgt cctccttcac cttctgtggt tccttcacgg gctggaagag 240
acatggggcc cacatctacc tcacgatgct cctctccatt gccatctggg tggcctggat 300
caccctgctc atgcttcctg actttgaccg caggtgggat gacaccatcc tcagctccgc 360
cttggctgcc aatggctggg tgttcctgnt ggcttatgtt agtcccgagt nttggctgct 420
cacaaagcaa cgaaacccca tggattatcc tgttgaggat gctttctgta aacctcaact 480
cgtgaagaan agctatggtg tggagaacag agcctactct caagaggaaa tcactcaagg 540
ntttgaagag acaggggaca cgctctatgc ccnctattcc acacattttc agctgcagaa 600
ccagcctccc aaaaggaatt tttcattcca cggcccacgc ttggcccaac ccttacaaag 660
actatgaang taaagnanga 680

<210> 5190
<211> 745
<212> DNA
<213> Homo sapiens

<400> 5190
atatgtgtcc catatagaac ttttcaaact atttcctctt cttacttgca aaaaattgca 60
gccaaaacat attacatgtg ttaacaaatt tttaacttgc atagagtcct aacatttgtg 120
ttaatgatag gagactttca ggtctccgtt gattctatta tactaatcct aaaatagcat 180
cactggcagg cacaggatct agatctaaat aaactctcag gctgctgagg gataagcagg 240
atctcataaa aaattgtggt atttctttat gacactgttt gccagcaggt gagccattaa 300
cagctttatc tcccagccct tgcctccttc tctggaatgc cagtttctct tacttaaaag 360
agcaacgcct ttctttttct ttctttcttt ctttttttct ttttaattgt ttttgtttga 420
gatggagtct cactctgttg tgcaggctag agtgcaacgg ggtgattttg gctcactgca 480
acctccgcct cccaggttca aacaattgtc ctgcctcagc atcccgagta gctgggacta 540
cgggcatgag ccaccatgct cggctaattt ttgtattttt agtagagaca gggtttcccc 600
atgttggcca ggctggtctc gaacttctgg cctcaagaga tccacccggc tnggccttcc 660
aaaatgctgg gattcaggcg tgagccaccg ncaccggcct gcatttcttt atagaagtcc 720

accaggaaaa nccctggacc tactg 745

<210> 5191
<211> 669
<212> DNA
<213> Homo sapiens

<400> 5191
ctagctatgg aattactgct ttcaatcatc ccctgaatct caccaagcag cagctctcag 60
aggtggctct gatgaccaca tcagtggatg tccttgtgtc catctgtgtc atctttgcaa 120
tgtccttcgt cccagccagc tttgtcgtat tcctgatcca ggagcgggtc agcaaagcaa 180
aacacctgca gttcttcagt ggagtgaagc ctgtcatcta ctggctctct aattttgtct 240
gggatatgtg caattacgtt gtccctgcca cactggtcat tatcatcttc atctgcttcc 300
agcagaagtc ctatgtgtcc tccaccaatc tgcctgtgct agcccttcta cttttgctgn 360
atgggtggtc aatcacacct ctcatgtacc cagcctcctt tgtgttcaag atccccagca 420
cagcctatgt ggtgctcacc agcgtgaacc tcttcattgg cattaatggc agcgtggcca 480
cctttgtgct ggagctgttc accgacaata agctgaataa tatcaatgat atcctgaagc 540
cgtgttcttg atcttccaca tttttgcctg ggacgagggc tcatcgacat ggtgaaaaac 600
caggcaatgg ctgatgccct ggaaaggntn ggggagaatc gctttgngca ccattatctt 660
gggacttgg 669

<210> 5192
<211> 785
<212> DNA
<213> Homo sapiens

<400> 5192
ccagaagaaa aaccagaaga agagaaagaa gaggttatag atgaccagga gaacctggct 60
catagcagga ggaccaggga agatagaaag gtagaagcca tcatgcatgc ttttgaaaac 120
ttagagaaaa gaaagaagcg gcgggatcag cccttggaac agagcaactc tgatgtagag 180
attactacaa ccacctcaga gactcctgtt ggtgaagaga caaaaactga agcccctgaa 240
tctgaagtta gcaactctgt ttcaaatgtt accatcccaa gcaccccaca gagtgttggt 300
gtgaataccc ggaggtcttc ccaagcaggg gatattgctg cagaaaaact agtccccaag 360
ccacctccag caaagccttc taggccccgg ccgaagagtc gaatttctcg gtacaggacc 420
agttcagccc aaagactaaa gcgtcagaag caggccaatg cacagcaggc agaattgtca 480
caagctgcct tggaagaggg aggaagtaac agtttagtaa ctcctactga agctggaagt 540
ctagacagtt caggagaaaa caggccatta acagggtctg acccactgtg gtgtcaatta 600
ctggatccca tgtcaaccgt gctgcatcta aatccccaaa accaaaaagt ntctagttac 660
agaatggttg aatgacaaag cagagaagca agaatgccct gttgagtgcc tttcgtatca 720
caacggatcc actgtctggc aacgacccta acatgttcca ggncttatcc ttncccgtta 780
attgn 785

<210> 5193
<211> 882
<212> DNA
<213> Homo sapiens

<400> 5193

aggaacccga gccgcacgga acggcggtgg tggcccgcgg agccggacgg ggcactatga 60
acgaagagga gcagtttgta aacattgatt tgaatgatga caacatttgc agtgtttgta 120
aactggaaac agacaaagaa acactctcct tctgccacat ttgttttgag ctaaatattg 180
aggggtacc aaagtctgat ctcttgcaca ccaaatcatt aaggggccat aaagactgct 240
ttgaaaaata ccatttaatt gcaaaccagg gttgtcctcg atctaagctt tcaaaaagta 300
cttatgaaga agttaaaacc attttgagta agaagataaa ctggattgtg cagtatgcac 360
aaaataagga tctggattca gattctgaat gttctaaaaa cccccagcat catctgttta 420
atttcaggca taagccagaa gaaaaattac tcccacagtt tgagtcccaa gtaccaaaat 480
attctgcaaa atggatagat ggaagtgcag gtggcatctc taactgtaca caaagaattt 540
tggagtagag ggaaaatata gactttggac tttctatgtt acaagattca ggtgccactt 600
tatgtcgtaa cagtgtattg tggcctcata gtcacaacca ggcacagaaa aaagaagaga 660
caatctctag tccagaggct aatgtccaga cccagtattc acattacagc agagangaat 720
tgaattcgat gactcttggt gangtagaac aactgaatgc aaaagctcta cgcaattccg 780
gaagtttttg aaagtacctt accaagtgca agaaaagatc ttggcctaca gtcatgtccg 840
cacgttgcct cgacagtttg aaactggtct aagttccatg nn 882

<210> 5194
<211> 690
<212> DNA
<213> Homo sapiens

<400> 5194
ccgcttggca gcttgattct caacttccag tactccaaac actcagtcag aaaagtcagt 60
cagctgcttt cctgctggca tgttagtctt ggccttggca gctgcagggg tgagatgtgc 120
taatgatggg gccaagctga gctttggggg tgaagccatc agctgttccc atctccctct 180
ggcggaggca aaatgagaac agctgggaag caaggccaac atccactccc agaagccgct 240
cctctgccag cagaggtgtc aacagaattc cagtcatgtg agccttccag gagtgtatag 300
tgaattcatt ccatacttaa acattctagt atacaaagaa gattgtacaa tggagtaagc 360
caacaatgga gacactcatc tgtttatttt tgtaaccttc agaatgaatg ctatgattcc 420
atatagattg atttctccac taatttatct acaggaaaat cagacgcctg atttgccact 480
aaaatttgga catgtcagat ttagtctatt caattcacta agctttactt ccagtttctt 540
agtagggaga gtctgctcct tggagcataa tttattcagc tgcaatagat ggtactcttg 600
aaacttttt ctcacatact ttagtctctt ttctggttct tgnctctgct ctnctttaaa 660
aaggtgatta tcatccttct ttctncctca 690

<210> 5195
<211> 641
<212> DNA
<213> Homo sapiens

<400> 5195
tacacgcctg tagtcccaac tactcgggag gctgaggtgg gaggattgct tgaacccagg 60
aggcagaggc tgcagtgaac cgagatcatg tcactgtact ccagtctggg cgacacagca 120
agaccctgtc tccaaaaaaa aaaaaaaaaa agttggggga agcattccat gtgcagatgg 180
agggactggc ccgagtcaag gtgggaggcg tgcaaacgca ggctctcaca gtgcgtggcc 240
agcagcgtgg gccccggcac ggggcatgga gcagagtaga cagtgctgag tcctgctcac 300
tgtcctgtct ggggagtcat cacatctact ggaggtggct cagggcaggc tccatctctt 360
gcccagggca gcagggtggg ccctgtggct gtactctttg ttgctgccct aaagtgccaa 420

gagaacttgt tttggaatca taaatcctga gtttgcagcc tgttgctctc aactcttccc 480
tggttgtgtg acctcaggca agtcaccctt tctggtttgn tttcccatct gcaaaacagg 540
atgagagcca gtaaggcccc ttcccgccct caagttctat gtctctggtg gctttaaagg 600
tggagtcgnt tcttgctgnt catctgcant gcccaatggc a 641

<210> 5196
<211> 684
<212> DNA
<213> Homo sapiens

<400> 5196
aatgagactc ctgagtgtct tcatgtcccg caccaaatct ggatccaagt cttccatatg 60
tgagtcatct tccctcatct ccagtgccac agcagcagct ctactgagct ctggggctgt 120
ggactactgc ctgcacgtgc tcaaatcact gctggaatat tggaagagcc aacagaatga 180
cgaggagcct gtggctacca gccagttgct gaaaccacat actacctcct ccccacctga 240
catgagccca ttctttctcc gccagtatgt gaagggtcat gctgctgatg tgtttgaggc 300
ctatactcag cttctaacag aaatggtact gaggcttcct taccaaatca aaaagattac 360
tgacaccaat tctcgaatcc cacctcctgt ctttgaccac tcgtggtttt actttctctc 420
cgagtacctc atgatccagc agactccatt tgtgcgccgt caagtccgca aacttctgct 480
cttcatctgt ggatccaaag agaagtaccg ncagctccgg gatttgcaca ccctggactc 540
tcacgtgcgt gggatcaaga agctgctaga agagcagggg atattcctcc gggcaagtgt 600
ggntacagnc aagctcaagc tccgccttgc aatatgacac actcatcagc ctgatggagc 660
acctgaaagc ctgtgcanag attg 684

<210> 5197
<211> 729
<212> DNA
<213> Homo sapiens

<400> 5197
agaagggcgc tgagaaggga gctggaagga aaagaaggaa acattccttc ctcaactgga 60
ggaagacacg cggccacaca cagaaccagc ggccccagga ccgtcaccct gcgtgcccgg 120
gcctgtccct cctgacccca ggattatagt ggcgaggcag ggtgttagcc aagcggattg 180
agccaggaca cagcaccgcg gagccctgca ggcgagtcct ccggaggctg agagcaaacg 240
gctgcactag gaacccagca gtcagaccgg cccccaccct ggagtgaaca catcgccact 300
gccaggcatc gcagggagga ttaccccaat ggcacctagc tgggcgacga gaacaacccc 360
gagatgcggg tgcactgcgc catcatcccc tccgacatgc tgcacatcag caccaactgc 420
cgcacggccg aggagatggt gctcacgctg ctggactacc tcttccacca cgaggtgcag 480
gctgtgtcca gcctctcggg gcagggcaag cacgggaaga agcagctgga cccgctcacc 540
atctatggca tccggtgtca ccttttctat aaatttggca tcacagaatc tgactggtac 600
cgaatcaagc agagcatcga cttcaagtgc cgcacggcgt ggcggcgcaa gcantggggc 660
caganccctgg tggtcaaaaa ctttttgcgg gagaatgccc aacttaatcc ttctacttgg 720
cccttaaan 729

<210> 5198
<211> 882
<212> DNA
<213> Homo sapiens

<400> 5198
ctatcgaatc cacttttgtt cgcatcaaag aaactccttc tgaacaggag agcaaagtct 60
tcgttctgac tgaaaatggg gagcgtacct acactgttaa ccatgaaacc agccacccac 120
caccctccaa agtctttgtc tgtgacaagc ccgagagcat gaaggaattc cgcctggatg 180
gtgtttccag ccatgcgctg tcagacagct ccaccgagtt catgcaccag attattgacc 240
aggtcctgca agggggccca ggtaagacca gcgacatcag tgagccatct ccagaatcct 300
ccattttatc atccagaaag gagaacggga ggtccaactc tttgccgatc aagaaaacag 360
ttcactttga ggctgacacc tacaaggatc ctttctgcag taagaacctg tccctttgct 420
ttgaagggag cccaagagtg gcaaaggaat cattgaggca ggatggacat gtcttggcag 480
ttgaggttgc tgaggaaaag gaacagaaac aggaatcctc gaagattcca gaatcctcct 540
ctgacaaggt cgctggtgac attttttttgg tggagggcac aaacaataat tctcagtctt 600
cttcctgtaa tggtgcttta gagagtacag cccgccacga tgaagaaagt cactctcttt 660
caccccccagg agaaaatact gggatggccg attcctttca gatcaagggt aacctgatga 720
ctgtagaagc tttanaggag gggagactat tttggaagcc atnccattta aagcctcaaa 780
atttaacagg gacctaatag aatttgcttt ttaccagcca aggcttttaa caaagttcct 840
tnancttatg agaacaaaaa cctggccaag gatgcttnag gc 882

<210> 5199
<211> 888
<212> DNA
<213> Homo sapiens

<400> 5199
ttttcatgct tgctccctgg cctgaatcta gaaagtaaaa ctttgctgga atgaagttgg 60
ggttgaaaca gtttcggttt gtaaccatac tgtctctgtc tcatctactc agctctgcct 120
ttgtaatgta aaagcagcca tagatggtat gtaaatgaat gaacatggcc atgttctgat 180
agcattttat ttacaaaaac aggcagtggg ctaaatttgg gctatagttt gccaacccct 240
cttctaggca aagaactgcc tgagcgtagg aagctggact gaggttctct gctagtgtgt 300
gaacttgtgg atgccaaagc caatctcttc ccttcatgtc agacactttg caaatgttac 360
ctcttttaga tctcccatta actctaaaag gtggagggtg ctattatgct tccatttcat 420
acattgttct aagagattat cacactacta gtaagttagg atagtaggaa tttgaacttc 480
aggtctgtca gaccctaaaa ccccatgccc tggaaatggt tttctaaggc tggcctgtgg 540
ttcgttggtt gatttcaatt agaatttaag aatttttca gaatacatct aggtgtaaag 600
atttttttgt caatattact ccacaaacta gattatttct tttggcctga taactcagga 660
actttcttgn attacttctc tcccttctta ctggtttctt ctttggactc tcctgttgca 720
caggtattgg atctcctgga cctatccagt tcctttcttt tctatgctgn catattttc 780
atctcttaat gctctgggtc tgggagcttc cangacagtt gctctttaca caactnaatt 840
gggtttcagt tatatcagtc tccaattagc ccttcttttt tggangca 888

<210> 5200
<211> 793
<212> DNA
<213> Homo sapiens

<400> 5200
caaaaaatga gcattatttt agcaacacaa tcctgacact atgagaggga gaaaactggg 60
ttggatcaag tattcatctt acccagtaag ccattataac tcaggctttt gatgcatatt 120

ttgggctgtt attcatcaag gtggtcaaag tcatgaagaa ctgtatgtta ttctataata 180
tactttctat attaagtctg ttcagatgat accacatttt ctacatcact gatccattaa 240
aaaaaaatct ttctttgaat gcctcttgcc actaatcagg ctatgatatt cagtttttga 300
gataggttaa caaattgaaa acccagcttt aaatgttatg gtagtttaaa aatagaagtg 360
ttttacttca aactattctg agttgctgct tagagcaata aaaatgtact ttatagcttg 420
ttaacctaga tctcagggat atccgttcta caataatgga agtagatttg tttactgtct 480
aaatcagcct tgtcagaaca atgctctcca gtgacttttt aaagtcagag taaaccaata 540
cattctgtct tctgtgatta tacagcatgg catggtgttc tcttgtatac ttgtgttttg 600
aatatgagta acagtcttta gctgacttta ncattttgga gaaatctgga tatgnggctt 660
ctacttatat aagcatctac caaatatatt aactgagntt tataggcccg gtattttcca 720
tttcagtact ttcaagactc ttcgatatgc ncttacatac ttnatactca ttaaatgaag 780
atattgggaa gct 793

<210> 5201
<211> 766
<212> DNA
<213> Homo sapiens

<400> 5201
ccattcaagc attcaaagac acatgataat gcacaatgga gatggaactt ataaatgtaa 60
gttttgtggg aaagcctgcc cttgtctcag catatatctt atacatgaac gagttcacac 120
tggagagaaa ccatataaat gtaaacaatg tggtaaagcc tttagttatt caacttccct 180
tcaaatacat gaaagaactc acactggaga gaagccttat gaatgtaagg aatgtgggaa 240
agcattcggt agtcccaatt ccctttatga acatagaaga actcacactg gagagaagcc 300
atatgaatgc aaacaatgtg gaaaagcctt cagatggttc cattcctttc aaatacatga 360
aagaactcac agtgaggaga aggcttatga atgtaccaaa tgtgggaaag cattcaagtg 420
tcccagttat ctttgtagac atgaagtgac ccactctggg aaaaagccct gtgaatgtaa 480
acaatgtggg aaagcattat cttatcttaa ctttcaaaga cacatgaaaa tgcacactag 540
aatgagacct tataaatgta agactgtgga aaagcctttg attctcccag ttcgttttga 600
agccatgaaa gaactcacac tggagagaaa ccttatgaat gcaagcactg tggtaaagcc 660
ttcaatcgtt ccagttcctt tcactatcat gaaaggactc acactggaga gaaaccctat 720
gaatgtaagc ngtgtantaa agccttcatt tctttcactt nctttt 766

<210> 5202
<211> 788
<212> DNA
<213> Homo sapiens

<400> 5202
cactgttcct acagcaatcg gtcagttgtg ggagtgcttg tccactacca gaaaagacac 60
ccagaaataa aggttactgc caaatatatc agacaggctc ctcccacagc tgcaatgatg 120
agaggggtcg aagggcccca aggctccccc cggccacccg cccccataca acagctgaac 180
cgaagcagct ctgagagaga tggccctcct gtggagaatg agatgttctt ttgccagcac 240
tgtgattatg ggaaccggac ggtcaaaggg gtactcattc attatcagaa gaagcaccga 300
gacttcaagg ccaatgcaga tgtgatccgg cagcatacgg ccaccattcg aagcctctgc 360
gaccgaaatc ggaagaagcc tgccagctgc gtgcttatct ccccctctaa tctggagcgg 420
gacaaaacga aactccgagc actcaaatgt aggcagtgct catatacctc cccctacttc 480
tatgcactga ggaagcatat caagaaagac caccccgccc tgaaagccac agtcacgtcc 540

atcatgcgat gggcatttct agatggcttg atagaagctg gctaccactg cgagtggtgc 600
atctactccc atacggagcc caacggtttg ctcctgcatt accgacggag gcattcagaa 660
cactatggtg attacaccta catggctact aaactgtggg ctgggccaga cccatccctt 720
cctntcttac aatgccagcc gaagcccaaa cctacagatc ngggactggg tttcnaactg 780
gttccatt 788

<210> 5203
<211> 802
<212> DNA
<213> Homo sapiens

<400> 5203
ttatctactg tatctcacac tactacttca gggattttga actctgctcc ccactcctcc 60
agcacctcac acctccatca ccccagcgtg gcctacgact gtctctggaa ctactcacag 120
tacccatctg ccaatcctgg cagcaacctc aaggacccac cccttctctc ccagttctcg 180
gggggacaat acccactcaa cggcatcctt gggggcagcc ggcaaccttc atccccaagt 240
cataacacta accttcgggc tgggagccaa gagttctggg ccaacggtac ccagagtccc 300
atggggctta actttgattc acaagaactg taagattcct ttcctgacca taattttgag 360
gtgatgccca atggaccccc tagtttttc acctccccac agacttctcc tatgttggga 420
tctagcattc aaacctttgc accctcccag gaggtaggca gtggtatcca tcctgatgag 480
gcagcagaaa aggagatgac ttcagttgtg gcagagaatg gcactggctt ggtaggcagc 540
ttggagctgg aagaagagca gccagaactg aagatgtgtg gctacaatgg ctctgtccct 600
tctgtggaat cgttacacca agaggtctca gtcctggncc ctgaccccac agtgagctgt 660
ttagatgatc cttcacatct tcctgatcaa ctggaagaca cttcaatcct cagtgaagac 720
tctctggagc ccttcaactc tntggcacca gagccagtga gtggaggact atatggnatt 780
gatgaccnga ctgatgggtg ca 802

<210> 5204
<211> 725
<212> DNA
<213> Homo sapiens

<400> 5204
gcagttaagt atttgtttaa tcttgctttg tcttttcaaa cagcgattta gtaatcctgt 60
ttgaggctgc agtgtggcaa tgctttccag aggatggagt ccttttttgtt tgttttgaaa 120
aaatagagat ggggtttcac tatgttgcct aggctggtct catactcggc ctcgagccat 180
cctcctgcct gggcctccca aagtgttggg attacaggcg tgagccatgg tgccagactg 240
gagtcctttt attaaaatta actgccctgc tcagctttct gctgggccac cccagagcca 300
atccttggtt cttgggccca aggctggacc caggggttgc aggaaacagt ctgtagcatc 360
caagtggggc ctgtcgtacc cactccagtg tgtaggtgca gaacgctctt tgggggattt 420
ctctgctggg ccaccttact ccagggatcc ctcagttttc aaaacaaagc aagagggcaa 480
ggaagaatgg agaaacagct cagtgttgac tctcttcccc ctggtgagtg ctgtgctggg 540
gcctctgtgc acatcatacc acttcccccc tgaatcagcc ccacaaggca gggtgagaga 600
tgaggactca gggtgcaagg aggtctcaca gcttggaaat ggatcaggac agctctgatt 660
cttcaaggnc aaggncttct ctatatcatg aggcanccca aaaatgtggt tctacacata 720
ttctg 725

<210> 5205

<211> 662
<212> DNA
<213> Homo sapiens

<400> 5205
caactataca aaacagtatc cggtgtttgt gggccacaag ccaggacgga acaccacaca 60
gaggcacagg ctggacatcc aggtgattat gatcatgaac ggaaccctct acattgctgc 120
tagggaccat atttatactg ttgatataga cacatcacac acggaagaaa tttattgtag 180
caaaaaactg acatggaaat ctagacaggc cgatgtagac acatgcagaa tgaagggaaa 240
acataaggat gagtgccaca actttattaa agttcttcta aagaaaaacg atgatgcatt 300
gtttgtctgt ggaactaatg ccttcaaccc ttcctgcaga aactataaga tggatacatt 360
ggaaccattc ggggatgaat tcagcggaat ggccagatgc ccatatgatg ccaaacatgc 420
caacgttgca ctgtttgcag atggaaaact atactcagcc acagtgactg acttccttgc 480
cattgacgca gtcatttacc ggagtcttgg agaaagccct accctgcgga ccgtcaagca 540
cgattcaaaa tggttgaaag aaccatactt tgttcaagcc gtggattacg gagattatat 600
ctacttcttc ttcanggaaa tagcagtgga gtataacacc atgggaaang tagttttncc 660
aa 662

<210> 5206
<211> 746
<212> DNA
<213> Homo sapiens

<400> 5206
atgttgtgtg aagtacatga gtcacaatct caactgtgaa ctggatctgt gcagcagctt 60
ctcaatgttt tctgggcatt gtgtcccctt agataagtcg cagcctgaca cgtgtgctaa 120
attatggttt gaaggtcaac aaatccatgc ataacaaaaa tccatgtatg agagtcaaca 180
ttgcaacttt tgactgcctc tagatataag attcaaatcc tcaacagtgg gccatgctca 240
tgtgagagga caacaatctt tactcttgac tgtgtctgct tactagtatt acaatctcac 300
ctttgagctg ggctctgtta gtacactctc tgtaccaccc aaagaattta tgagatacat 360
ggtttggctc tatgtcctca cccaaatctc atctacaatt gtaatctcca tgtgttaaag 420
caggcaggtc attggatcat gggacagttt cccccatact gtttttgtga tagtgagtga 480
gttctcagag atctgatggt tttataagtg ttggaagttc cttctttatt cactttctcc 540
ctcctgccac cttgtgaaga aggttcctga ttctncttct gccatgatta taaatttcct 600
gaggtctncc cagctatgtg gaactgtgag tcaattaaat ccctttttcta cctaaattac 660
ctggncttgg gcagttcttt atagcantgt gaaaatgaac taatacaata tgatatgcat 720
ganaattgca atctgcatta aaacct 746

<210> 5207
<211> 708
<212> DNA
<213> Homo sapiens

<400> 5207
gaatgggctc ctgcctgcct ggtgccacat cctgccccag ctttgagggc tgaatcctct 60
cagctcagag aagagcttcc ctagttttgc aggcgcacgg aggcctccca cccgtacacc 120
tgcctctgct ctccccctgg ccattgcaat gcatgcccgg gatctgggtt taccctgcag 180
cccgactcct ccagggcagg ctccttccgt ccttgggtcc agcagcctcc cccctccgct 240

gggtactgag catctgaaaa gtctcagata gggccctaca cctcttctcc cttctcaagt 300
gctcagccca ggggtggggc ttgctgcttg caaagagcag cccaccctcc tgtactgcca 360
tcctattgcc tttgaagaag gaggtcagcc tggacaggtg aactgagttg ccttcagaaa 420
ggcctgtctc aggcagccgc agcaggcttc acgatgtcca tgtatcctgt ttgcctgctg 480
ccgtctctcc tctcccaaga ggggaggtct gcgtgttgag ccagggagga aggagcctgc 540
agcctgctca nggtggtggc tggtgactgc ggggccaggg cttgctgctg tctctcggaa 600
tgtcctgcat gtgggtctgg ctgttcctgc tggcactgcc tcttctnttt tccttctttn 660
ccactctgcc tgcttgcccg tcanggtctt cggatgcccc tgcttgga 708

<210> 5208
<211> 645
<212> DNA
<213> Homo sapiens

<400> 5208
ttgtttattc tgttcactgc tgtatatctg cagccctggg cacgtagtag gtgcttgata 60
aatagttgtt gacttgactt gttagcagct ggtagaagct tcccctaatg tttcattctc 120
caggctttat tttgagtgaa gttgaggcca gaaggcctca gtatcctctt ccagggatgc 180
tgggaactgt agactggatg accgtgagct tttcagtgtg tgtgtgtgtg tgtgtgtttt 240
ttttttttt ttttgaagct ggaagaaact gtacagaaaa gaggcccatt ttgcagatat 300
ggagaccaag gtccagaggg accagggcct tgccttctac ggcacctttg atgggagaat 360
ccgtaggctt gatgttgagg tccttcggtt tgtctttctg ccttttcatt gcaattccag 420
ggggagaggg accctctggc ctcacccttg gctctgacct cagtgcggtc agtaaagtct 480
gcctttccct ctaactttca cctctttctc cccactgcct acgtgcctgc cctctgccca 540
ctgaaagtgg gagcatcaga agggagctgt gcccccaacc cccatgtgag ggacagatca 600
gcaaaagcct naaagtccgt gggcccgngt gnctccatct cattg 645

<210> 5209
<211> 723
<212> DNA
<213> Homo sapiens

<400> 5209
tggagagcct catccttgaa cgtgaaggac gtttgaagac tgtggcatga tcacaggatg 60
agatcacagg gaacttgagt ttctctcctc ctctcccttc acagttattt cactgaggga 120
aatccctccc ctgcccagaa tgaaaactct agccaactct tgacttttcc atcactccaa 180
agtagttgaa agtacattag tctccacagt ggcaaaacag tgtgcaaaag ctaaataatt 240
agaacagcca gtcccatgtg acagtcaaag cttctaactc cattcaaagt tgcagccatt 300
cccctcaagg gctggcaggg aggggagggg taagagaaac aggaaggttc ttactgagtt 360
tggtcctggt gtgagctgcg tcacactccc tgcagaggtt tcaaggagac tctctctctc 420
tctgtctcca tggggacctt atttgaattc ttctactctt accccagcct gccatctcca 480
gctatcctcc cctgaagagc ccttctgctg cgctggattc tggtggccat gtcatctcct 540
cggccccgtg ggagtctgaa gatctggctg cagcctcacc tctgaggtcc tgctagttgc 600
cacctcttaa acatgatctg aggctcccat gcactctgac ctgtgcccac atggggccca 660
cgggaaacac gctggcaagc aaactgtggg tgtgcanacg gntctcangg cttgcagcac 720
ctg 723

<210> 5210

<211> 710
<212> DNA
<213> Homo sapiens

<400> 5210
ttgatgcatt ttggctgcag cggcagctca gtcgtttcta tgatgatgcc atcgtgtcgc 60
agaagaaggc agatgaagta ttggagattt tgaagacggc cagtgatgat cgggaatgtg 120
aaaatcagct ggttctgctg cttggtttca acacctttga tttcattaaa gtgttgcggc 180
agcacaggat gatgatttta tactgtacct tgctggccag tgcacaaagt gaagctgaaa 240
aggaaaggat tatgggaaag atggaagctg acccagagct atccaagttc ctctaccagc 300
ttcatgaaac cgagaaggag gatctgatcc gagaggaaag gtcccggaga gagcgagtgc 360
gtcagtctcg aatggacaca gatctggaaa ccatggatct cgaccagggt ggagaggcac 420
tggctccacg gcaggttctg gacttggagg acctggtttt tacccaaggg agccacttta 480
tggccaataa acgctgtcag cttcctgatg gatccttccg tcgccagcgt aagggctatg 540
aagaggtgca tgtgcctgct ctgaagccca agccctttgg ctcagaagaa caactgcttc 600
agtggaaaag ctgccaaagt atgcccaggc tgggtttgan ggcttcaaaa cacttgaatc 660
ggatcccaga gtaagnttta cccggctggc ctttganacc gattgaaaaa 710

<210> 5211
<211> 816
<212> DNA
<213> Homo sapiens

<400> 5211
aggtatttac tttttgttga attttaaggg acctcaagtg aaataataat cggtgaattc 60
aggatcaacc tttatgtcca gagcgtttgt tccgtcgtcc atttcttgtc tagagtagtg 120
gtatgagctg aaaacattgc taagtgatca ccacatattg ttgatgtaag ggctactggt 180
tattacaaga gatttttatg actcctgctg tgggggtgcc ctttctaccc ggctgagctt 240
ggtgggagcc aaggctgagt cggatgtatc tttatattcc cagttctcgg tggaacttaa 300
aatgctgtga gacaccagac agacagatac tgtgaacttg gagctctcta atgaagggat 360
accaaagtct tgtattcaat tttttttcc ttaaattgtc agccgaaaat gagagcacac 420
ctattcagca actcctggat cacttcctcc gccagcttca gagaaaagat ccccatggat 480
tttttgcttt tcctgtcacg gatgcaattg ctcctggata ttcaatgata ataaaacatc 540
ccatggattt tggcaccatg aaagacaaaa ttgtagctaa tgaatacaag tcagttacgg 600
aatttaaggc agatttcaag ctgatgtgtg ataatgcaat gacatacaat aggccagata 660
ccgtgtacta caagttggcg aagaagatcc tttacgcagg ctttaagatg atgagcaaac 720
cggcagctct tttgggccat gaagatcngc tggttganga acctgtccct gaagttgtcc 780
agtccagtng aactgccaga aatccaaaag ccagtt 816

<210> 5212
<211> 772
<212> DNA
<213> Homo sapiens

<400> 5212
gcgatgattc ccccacagga ggcatccgct cgacggcggg agattgagga caagctgaag 60
caggaggagg agactctgtc cttcatccga gacagcctgg agaagagcga ccagctcact 120
aagaacatgg tgtctatctt atcatccttt gagagccgcc ttatgaagct ggagaactcc 180

atcatccctg tgcacaagca gacggagaat ctgcagcggc tgcaggagaa tgttgagaag 240
acgctgtcct gcctggacca tgtcatcagc tactaccatg tggccagtga cactgagaag 300
atcatcagag agggccccac aggtaggctg gaagagtacc tgggaagcat ggccaagatt 360
cagaaggcag tggagtattt ccaggacaac agcccagaca gcccggaact caacaaagtg 420
aaactgctct ttgagcgcgg gaaggaggcc ctggagtccg aatttcgcag cctgatgacg 480
cggcacagta aggtcgtctc gcccgtgctc atcttggatc tgatcagtgg tgacgatgat 540
ctggaggccc aggaggacgt gaccctggag cacctgccga gagcgtgctc caggatgtca 600
ttcgcatctc ccgctggctg gtggaatatg gcccgcaacc aagatttcat gaacgtctac 660
taccagatac gcttncagcc agcttggacc cggtccattc aaagggaccn gaaaggagca 720
ttttccatta agaaccagtt ctttcctttt gggggttccc tanttcccct tg 772

<210> 5213
<211> 700
<212> DNA
<213> Homo sapiens

<400> 5213
aaatgctttt gctttgtgtt cagccaagat ttgcagcctt ttttcagagg ttttaaaatt 60
ttcagaaaaa acatttctaa tgtgtctaat gtgtcagtgg taacactgac ttaatggtaa 120
atggtaaatg atttaagttt ccttgtcaga gtcagtatta tttgaaggag ttaggaaggc 180
agtctgaggc tgtgatgagt ctccttacct cccaaatgat caagatggca accccagctc 240
gcaagccatt caaggcgggc ataacgtacc atgggttttc tccctttgat ccacataccc 300
ttctcccggg agctggaaga actgtgagga gaaagggagc tcttgaagtt gaagcatcag 360
tgaggagaaa aaccattcac cccttccccc cactatggct gaggactggc ttctgagaca 420
gtttaggaaa ctgacaaagc catgaaggaa tggctcagct atcgaccatc tggacatcca 480
gcagtatcta tccatgtcct tatctttgtg gggctctttc tagctggaca cactagattc 540
tgcccggccc aaggcctctg gagaaatcca gcttgggcat gcatgcatgc agggagagcc 600
acacagcaca gctgtgaggg caggagccag ccctggagtg tgccccangg aagacacagc 660
tctcangagg agactggaaa nggtcctatg gaagacattg 700

<210> 5214
<211> 659
<212> DNA
<213> Homo sapiens

<400> 5214
atattgactg tatgtcaggc ccatgtcctt ttggggaggt tcagcttcag ccctcgacat 60
cgttgttgcc taccctcaac agaactttca tctgggatgt caaagctcat aagagcatcg 120
gttagagctg cagttttcca tccctcgcct gaggcagatc ggtccgggtg agagctgccc 180
agacggagtc actcactcca tcagcggccg aatcgatgcc accgtggtca ggatcggaac 240
cttctgcagc aatggcactg tgtcccggat caagatgcaa gaaggagtga aaatggcctt 300
acacctccca tggttccacc ccagaaatgt ctccggcttc agcattgcaa accgctcatc 360
tataaaacgt ctgtgcatca tcgagtctgt gtttgagggt gaaggctcag caaccctgat 420
gtctgccaac tacccagaag gcttccctga ggatgagctc atgacgtgtc agtttgtcgt 480
tcctgcacac ctgcgggcca gcgtctcctt cctcaacttc aacctctcca actgtgagag 540
gaaggaggag cgggttgaat actacatccc gggctncacc accaaccccg aggtgttcaa 600
ctggaggaca agcagcctgg gaacatggcg gggaacttta acctntctnt gcaaggctg 659

<210> 5215
<211> 812
<212> DNA
<213> Homo sapiens

<400> 5215
ctaaggaagt tgggctcggt cccagtgtca agtgtccata ttttctttat tttcttttag 60
aaactaaagg gaagggaatg aaccatttca gagcatcaac cgaaacaagt taaaagaatt 120
gatctttgcn tagaagaata actagttgtt tcaagtctca tatgctacat actgtgtctt 180
tttgaatacc aggttatacc tcagctcatt gcaagaattg atacgcccag acccttggtg 240
ggacgtctca ttcaccagct tctcacagac attggtcggt accacccccа ggtatgtgga 300
gactctgggc agtttctcat ctaaccactg gtttggtggt cagcctttcc aaaagctgcc 360
ctggcgacac aagcgcagga actgggagcc atgtgttcca tcctggccca ggagggtctg 420
tccagccagc cgtcccagag ggcccgggag ccttgctaaa aagaaagcgt tccctcgaag 480
actgagcccc ttcctggtag tctcaagcag atgttaatgt cacactcacc acttgttttg 540
ntattctcct taaaattcat accagctctt ccccaaccca catttccttt atagatgttt 600
cttctgnttt tccctcangc cctcatctac ccactgacag tggcttctaa gtctaccacg 660
acagcccggn acaatgcagc caacaagatt ctgaagaaca tgtgtgagca cagcaacacc 720
ctggtccanc aggccatgat ggtgggtcgg aacccctggg gggctttata nancctggtc 780
ccttaacttg gtggggcccc aagtgggaat gg 812

<210> 5216
<211> 660
<212> DNA
<213> Homo sapiens

<400> 5216
aggtaatgct tcattgttga ggctgttcgt gcattgtaga ctgttcagca gcattcctgg 60
cttctatctg ctaggtgcca atagtgtttt ttatgacaac cagaaagtgt ccagacactg 120
ccaaatgccg aggcagggga agtgcagaat ccttagttga gagtcactgc tctagggtct 180
ggacccttcc actaattaaa tcttcttgca cctgcatact tagcttacct tggtatgcag 240
gtgggtgaac acctgcctat tagtagtgcc cgtcgtcaaa tcctgcatat aaactggtaa 300
gaagtggtgc tttctctttt cctggtacag atcctagccc agaggtgatg agcagtaaag 360
ctgcagattg gaagggaggg gctggtgaaa acagtggtgc ggtgcagatg gggagggatt 420
ctagtagtag gcatcttaga cttcagttgg tgttggtggc aatggtatct gtacccctct 480
aagaccgcat ggcaagaata caattttata tttaatagtg atcagcatgg atgttggtgc 540
gtcacaaaca ttgactcagc agtgnctaaa cctgggcatt tagaacaagg cctcacagaa 600
tcttctggaa gtgcttcaaa ctcctttnca aacctagtcg cagttggttt ttgnaacctt 660

<210> 5217
<211> 774
<212> DNA
<213> Homo sapiens

<400> 5217
ggcatctaca attgtcagaa gaccagcatt gtgcgggtgg gtggaaggag caacagtgaa 60
atcctgaagc agttcaccct aagggagctg aggaacaagc gggaattccg ccgcaacctc 120
cccatgcacc tccgaagggc ctacatgagt atcatgacac agatgaagga gtcagagcaa 180

gagcttcatg aaggagccaa gaccctggag tccaccatgc gtggtgtcct acgggaacag 240
tacctgcaga agtacatctc accccagcac tgggaaagtc tcatgaatgg accagtgcag 300
gatagtgaat ggatttgctt ccagcactgg aagcattcca tgatgctgga gtggctaggt 360
cttggtgtcg gttctttcac gcaaagtgtt tctccagcag gacctgagaa tacagcccag 420
gcagaagggg atgaggagga agaaggggag gaggagagtt cgttgataga gatcgcagag 480
gaagctgacc tgattcaagc agaccgggtg attgaggagg aagaggtggt gaggccccag 540
cggcggaaga aggaagagag tggagcagac caggagttgg ctaaaatgct tctggccatg 600
aggctagacc attgtggcac tgggacagca gctggacagg agcaagccac aggagagtgg 660
cagacccaca caaccagaaa aagaaaatga anaaaagagt gaaggatgag cttccaaact 720
gaacaccatg actgcagccc aggnccacca gatcnaagat gtttggcacc tgga 774

<210> 5218
<211> 780
<212> DNA
<213> Homo sapiens

<400> 5218
tttgctttat ttttttcctt ttctcttttt ttttttttt tctctttcct ttttttaaat 60
ttaaaccatt gagacttcag aagagcagga cacaatgctg tggacaggca ccaatttctt 120
taaagaaatt caatgtgggc aaggcatatg tgtaaatttc acttttactt tttataaggg 180
gttagggagc tatttttggt tttgtccttc actttccctc tgtcttcctt ctttatactt 240
ttctcagttc tacttatgac acctcacttc cctagagaag gcctgcctcc ccatagggaa 300
tctgggggtt tcttctggaa cggggcgtga ggacacaagg aggcctctgg gccacgcctc 360
cctaccagat gcaggaactc ctggactcct tggtgggctg gccctggcta gcccttgggc 420
ctcggagatg atcagaggtg aagaaccgcc tggaagagga aggccagggt ttggccagga 480
gaactaagaa ggtctcaact ccaggctttg ttgtgtttaa gctattggga gccccaggcc 540
acaccaggac ttgcagtggt gggaatccat tcctcttctg ccctgtgttg cagggaacta 600
ggaggtaagg gtggagggcg accatctcgc tcttgctggc ggtggagcag ccatccctgc 660
cttctgttgg gaaaaactgt tgngccaaac tcttgtgtgg aacacagctg ggncttcagc 720
aggcatctgg cactgccgga ggcaacgctt ttacctaact ggctnctgga atggcatctt 780

<210> 5219
<211> 715
<212> DNA
<213> Homo sapiens

<400> 5219
agtactagaa ctttcatgtg ccctctgaag gatgtgagcc atggaaccgg caaaccgcat 60
ccctgactag gggcctgtgg ccttgtcatt tacctcccaa ccaccacccc tccatgcccc 120
tttatctgct tagcgcattt cttttcttcg gttttgtaca tgtatctgag tcctaatccc 180
ctatatgctc cccttacaga ggaaaaagac gggtttgcct gtgacctcct acataatcct 240
cctgggagct cagatcaaga aggagacgat ccgatggagg aggatgattt catgtttgaa 300
ctctcagaca agcctcttct cccttgctac aacctccaag tgtcagtgtc ccgcgggtaa 360
gtgtccgaga gatccacggt gactgagtgt caggatcctg gcactcagta ggaaggtgga 420
gttctccacg aggaagtgaa gacctggcaa cgagtgccat cacacatgac aaaggctagc 480
ctgccctttt agcccagagt agtcatgttc aaactagagg ctgcaggctc catggacatt 540
gactatctgc atttcctgaa ccttaaatct agattctctc tcggaaggct ttttttggc 600
actattactg ggtataaaag ataatctgag agatacttgg gcctatgaac tgctagaatc 660

tctggaacat ttttgnantt tctgggggta aacagattga acattanaaa ttgga 715

<210> 5220
<211> 755
<212> DNA
<213> Homo sapiens

<400> 5220
accgatcaag gatcaccagc ctccaccccc tctactacac ggcccctcaa ctctgtggag 60
cccgccacca tgcagccaat tcccgaagcc cacagcctct atgttaccct gattctctcc 120
gattccgtga tgaatatctt taaagacaga aactttgaca gctgttgcat ctgtgcctgc 180
aacatgaaca tcaaaggggc ggatgtcggg ctttacatcc ccgattcttc caatgaggac 240
cagtaccgct gtacctgtgg gtttagtgcg attatgaacc gcaaacttgg ctacaattca 300
ggactcttcc ttgaagatga gttggatatt tttgggaaga attctgatat tggtcaggct 360
gcagagaggc gcttaatgat gtgtcagtcc accttccttc ctcaggtgga aggaaccaaa 420
aaaccccagg agccacccat aagccttctc ctcctcctcc agaatcaaca cacacaacct 480
tttgcttcac tgaatttcct ggactacatt tcctctaaca atcgccaaac tcttccctgt 540
gtaagctgga gttatgaccg ggtgcaagca gataataatg attactggac ggaatgcttt 600
aatgcgttgg agcangggcg gcagtatgtg gataacccca ctggtggaaa agtggacgaa 660
gctctggtga gaagtgccac tgtgcactct tgggctnaca agcaatgtgc tggacattag 720
catgctcttc ttcccaggat gtggntcgna tgctg 755

<210> 5221
<211> 733
<212> DNA
<213> Homo sapiens

<400> 5221
tgccaaggtt ctaagtaata caatttcaaa ggttcagagg tgtctaatac aattttcccc 60
cttttgtaca taattctatg ccctttgtgt aattctgtta gaaacattag ggtaattata 120
gagctacgtt ctgcttttca gttgctataa tattagcctg ggtctgctcg taccagctgt 180
attaataagc aatgactatg gccgggcgcg gtggctcacg tctgtaatcc cagcactttg 240
ggaggccgag gcaggcagat cacctgaggt caggagttcg agaccggcct ggccaacatg 300
gtgaaacccc gtctctacta aaaaaatаca aaaagtagcc aggtgtggtg gcaggtgcct 360
gtaatcccag ctactcagga ggctgaggca ggagaatctc ttgaacctgg gaggcagagg 420
ttgcagtgag ctgagatcat gccagcctag gcatcaacag cgaaactcta tcccaaaata 480
aaaaaagcaa tgactgaagt ttagcaaact cctaaattaa gacttttтct gagcctttct 540
ctgtagcatg tatttgctac tagaggcagg caaggtcata acctanggtg agctttgggt 600
tattaattca aagacccagt gtctaaatcc tcatctgtaa aatggggacc aaattatctg 660
aacttccagt cactggatgt ggggaccant gaacctgctt gggtgtgaaa acccnttggg 720
aactgaaaaa nga 733

<210> 5222
<211> 583
<212> DNA
<213> Homo sapiens

<400> 5222

cagtcagtta ctcaatattt atggaacact tcctgtgcca ggccctggat ttctcagctg 60
taacacagat aaccaatatg tgccttatcc ctcaaatagc tgacccaacg gggcccaaac 120
cccattttca tggtcctacc tgtcctacca actttttttt ttttttttgc caatttctgg 180
tttttcttcc tctagatcct gcctgcagac atttatattt gaacctgtgt tcttggttcc 240
agacaatgtg ggttcccacc aaaacccact tgcaccgaac tctcatgggc ttattagtaa 300
ctctgtgaaa gagttggctg cagtgggtgg ggtgaggggt ttctggaccc ccttcacaca 360
ccacttagcc ctctctgact ggcccttctg ttaccactcc tncgctttgc tctgaacaag 420
tgacccttc cctggcccag caaaccaaga gggcgtgaac aagccagtcc cgctacctgg 480
cgcttctccc agggagcatt ctcctnccct tctctggccc cttctgtatt tttatggngt 540
tttccccagg ctgntaatta attagccttc tttacaaagg cgg 583

<210> 5223
<211> 839
<212> DNA
<213> Homo sapiens

<400> 5223
agataatatg caacagcatc tgtaatgact gcataaacaa ttcttgcatt ttcctgaagt 60
gttcatttta aatgattgat tcatggctcg gttcaagtat acacacagat tagcctttgc 120
aaataattca cttaatacta gctacaccct gtggcagttg ttttaaggtt tttgatctct 180
agggggtgta cagaagtgtt ctacttgtgc aaattgtttt ccttttttatg tcatcaattc 240
tgaaaacgta ggcttattac aggaattttt ccccccatat atttttgagc ctcatgcaat 300
tttgtatagc agtagccagt gaagttatcc atattgcttc ctctgatata gtctctgagt 360
caatttgttt taatgtttaa aaacttattg cctacttttc cttgacactt acatgttcgg 420
cgtttcagtg gaagataaaa tgaagaaact tgatttccac tccactagaa acaggctatt 480
ttccttctat ttcatcaaat ctcaaagctt atagagatta taactgcatg ttggttattt 540
tactgntctt gcctatctat ctatctatct acaaatctat ctttctatct tgntcatttt 600
agggataatg aagaagcatt tagtgggacc ccacaagcat aataaaaagt gtcactgtaa 660
gatatattta ccagcataaa tataaaaagc aatatagtac ttaacaaaaa atattacaca 720
ttctctcata aggcacattt tttncacact tttaattttg gttttaccaa ttaaagtagt 780
cactttaaaa atcagaaagc aaaggttttt ganctanatt aagttgggtt atataagtc 839

<210> 5224
<211> 745
<212> DNA
<213> Homo sapiens

<400> 5224
gttttgtttt ttcatggagt ctcactctgt tgtccaggtt agagtgcagt ggtgtgatct 60
cagatcactg caacctttgc ctcctgggtt caagtgactc tcctgtctca gctttctgag 120
tagctgggat tacaggcacc tgccaccaca ccctgctaat tttttttgta tttttagtag 180
agacagggtt ttgccatgtt ggtcaggctg gtcttgaact tctgacctca agtgatctgc 240
ccgccttggc ctctccaagt gctggaatta caggtgtgag ccaccgtgtc cggcctaaaa 300
tattgttgat atgtgtttta agtcttttta agcctatgct cccccatttc cttacacttg 360
gccatagtca catccagcca tttttctctg gtgtcctttg gtctgggttg tgcctgttgt 420
ccctctgcct ctgtgtttcc tgcacgtggg cagttagatc ctgagatggg atcaggctcc 480
actcagctgc tgtggaagaa taaaggggat tcggatgtct gtcctctcat gctcctcgaa 540
gctgatgatg cttgatgcca ttcttggcct tttttgcttt tatttttttgt agttcttaag 600

gggtttaaaa aatcgtggca taaggtaatg caaaaaggtg tccatgtgtt aaacgtacaa 660
ctagacggac tctgcagtgt gcccacctgt cctgctgctg gangccattt gangagccaa 720
ctgcctntca cagctatgga ctgca 745

<210> 5225
<211> 526
<212> DNA
<213> Homo sapiens

<400> 5225
ggttggctct tgcacttcct ggctctctgg acttggttat gtgattgagc ctccatggcc 60
tccgtgtctt tgtctgtcaa tgggtttgat taaagcgttg acctcatagg ttcttaggag 120
gattaatgag aacattttat gtaaagctgc ttacatggag ccttggtatg tgccggaaag 180
ctttagccct ttattaaaag tgacagcaga cccagcacgg tggctcatgc ctgtaatccc 240
agcactttgg gaggctgagg cgggcagatc acttggggtc aggagttcga gaccagctac 300
tcgggaggca gaggcaggag aatcgcttga acctggggtg cagaggttgc agtaagctga 360
gctcgcacca ctgcactcca gcctgagtga cagagtgaaa ctcagtctca aaaaaaaaaa 420
aaaaaaaaga gtggcagtag tggtggggga gacccccatc ccccttgctg gggtttccta 480
ggaaagaagg ctggtganag ctgntgctgg nggtgggccc tgaccg 526

<210> 5226
<211> 713
<212> DNA
<213> Homo sapiens

<400> 5226
cagatgaagt attggagatt ttgaagacgg ccagtgatga tcgggaatgt gaaaatcagc 60
tggttctgct gcttggtttc aacacctttg atttcattaa agtgttgcgg cagcacagga 120
tgatgatttt atactgtacc ttgctggcca gtgcacaaag tgaagctgaa aaggaaagga 180
ttatgggaaa gatggaagct gacccagagc tatccaagtt cctctaccag cttcatgaaa 240
ccgagaagga ggatctgatc cgagaggaaa ggtcccggag agagcgagtg cgtcagtctc 300
gaatggacac agatctggaa accatggatc tcgaccaggg tggagaggca ctggctccac 360
ggcaggttct ggacttggag gacctggttt ttacccaagg gagccacttt atggccaata 420
aacgctgtca gcttcctgat ggatccttcc gtcgccagcg taagggctat gaagaggtgc 480
atgtgcctgc tctgaagccc aagccctttg gctcagaaga acaactgctt ccagtggaaa 540
agctgccaaa gtatgcccag gctgggtttg agggcttcaa aacactgaat cggatccaga 600
gtaagctcta ccgtgctgcc cttgagacgg ctganaatct gctgctgtgt gctcctactg 660
gtgctgggaa gaccaacgtg gccctgatgt gcatgctccn anagattggg aac 713

<210> 5227
<211> 699
<212> DNA
<213> Homo sapiens

<400> 5227
tgcgcttttc cctctgcagt gataatctgg aaggaatatc tgaaggtcct tcaaatcgct 60
ccaattcagt gtcctcccta gacctagaag gagagtctgt gtcagaactt ggagcaggac 120
cttctggcag taatggagtt gaagctctac agctgttaga acatgagcaa gctacaacac 180

aggataacct tgatgataag ctaaggaagt ttgaaattcg tgacatgatg ggattaacag 240
atgataggga catatcanaa acagtgagtg agacctggag tacagacgtc ttgggaagtg 300
actttgaccc taatattgat gaagatcgct tgcaagaaat tgcaggtgct gcagcagaga 360
acatgttagg cagtttgctg tgcctcccag gttcagggtc agtgcttctt gacccgtgca 420
ctggttctac catatcagag acaacaagtg aagcttggag tgtagaggta ttgccaagtg 480
actcagaggc cccagaccta aagcaggagg agcgtctgca agaactgnag agctgttctg 540
gactgggtag cacatctgat gatacggatg tcanggaggt cagttcccgc cccagcacac 600
caggcctcan tgttgtgtcc ggcataagtg caacctctga ngatattccc aatagattga 660
agacctgaga tctgantgca ctctgaattt gggggtaaa 699

<210> 5228
<211> 737
<212> DNA
<213> Homo sapiens

<400> 5228
gttctggcgc ccggagcgcg gccatgtgaa ccgcttgtac cccggggaga gacgagcccc 60
gagcccggct ggacgccgct gcctcagaaa tggaggcaaa cgaccatttt aactttactg 120
gccttccccc tgcacctgct gcctcaggac tgaaaccctc tccttcctca ggggagggcc 180
tctacactaa cgggtctccc atgaacttcc cccagcaagg gaaaagtttg aatggggatg 240
tgaatgttaa tggcttatct actgtatctc acactactac ttcagggatt ttgaactctg 300
ctccccactc ctccagcacc tcacacctcc atcaccccag cgtggcctac gactgtctct 360
ggaactactc acagtaccca tctgccaatc ctggcagcaa cctcaaggac ccaccccttc 420
tctcccagtt ctcgggggga caatacccac tcaacggcat ccttgggggc agccggcaac 480
cttcatcccc aagtcataac actaaccttc gggctgggag ccaagagttc tgggccaacg 540
gtacccagag tcccatgggg cttaactttg attcacaaga actgtatgat tcctttcctg 600
accagaattt tgaggtgatg cccaatggac cccctagttt tttcaccttc ccacagactt 660
ctcctatgtt gggatctagc attcaaacct ttgcaccctt ccaggaggta ngcagtggta 720
tncatcctga tgangca 737

<210> 5229
<211> 867
<212> DNA
<213> Homo sapiens

<400> 5229
tgcgtgtcgt tccccttctc tgggatggga ggcagctgcc acgggcctct gaaagaggtg 60
cctggaggca aagacattgc aagtccgaac ttcgttctgg gccaagctgt gtgcccacag 120
gagcgggcaa acggggctga gaagcagcaa gaaggacaag ctcgggtagg agaaaagggg 180
cagaagaaga gtgacactgt ggcttccttg atgttgcagc acccctctac ggcccctccc 240
aatccacaga gcctctgacc agcaccagtc ttgctgcctg tgctgggggc acttggaaca 300
ttggttagca ggagcaacag gcctggcact gccagctagg ttcagggaag agagaaatgg 360
gctgagctgc tgctcctggt actactgggc catggatgaa ggcaccagac tagaagtcca 420
gagccctagc caggggcggc aggagggaag actaccactt attgtgtacc tattctgtgc 480
ctagccccgc aggaggcact tgaatgtttc tcatttagtc acatacattt attgagcacc 540
taccacatgc caggcattgt cctgatggga tgcagtggtg agcaaggttc ctgctctcat 600
aacaaccctg ggaggtaggc cctattgtca tccccatttt acagatgaga aaatcaaggc 660
tcaatacagt ttcatgattt atcacagcta gtgagtgtgg aggaaggatt ctgggcccct 720

gacctaactc gtaagccttc gnttttcagc tacctttcat gggcatgacc actcttctaa 780
tagcccccag gcttaacctt gcctctgggc aaggctatng gcttgccctt ttggtggaat 840
gttggananc ctggctttta cttggtt 867

<210> 5230
<211> 536
<212> DNA
<213> Homo sapiens

<400> 5230
catgtagtat ttggtttgct gttcctgcat tagtttgctt agaataatgg ccttcaactg 60
catccatgtt gctgcaaagg acatgatttc attccttttt atggctgcaa aatttttaa 120
tatttttgta tcaatgaggt ctcactgtgt tgcccagact ggtctcaaac tttggcctca 180
agcattcctt gcacctcagc ctcacaaagt cctgagatta tacctgggag ccactgcacc 240
cagccctttg atgcagttct caatgacacc agtcttttt ttttttttc ttttttgttt 300
ccctttaga gacagggttt cgctctgttg cctaggctgg agtgcagtgg agtgatcata 360
gctcactaca gccttcaatt cctgagctca agcgatcctc ctgcatcagc tttcggagta 420
cctaggagta taaacatgag ccactacacc caactaatgt ttttggttgg tgttatttt 480
tttnctttaa gagatagggt tgccggcccg gaggctggnt cacacctgta atncca 536

<210> 5231
<211> 682
<212> DNA
<213> Homo sapiens

<400> 5231
attggatcaa acatgtcaca agagtcggac aataataaaa gactagtggc cttagtgccc 60
atgcccagtg accctccatt caatacccga agagcctaca ccagtgagga tgaagcctgg 120
aagtcatact tggagaatcc cctgacagca gccaccaagg ccatgatgat cattaatggt 180
gatgaggaca gtgctgctgc cctcggcctg ctctatgact actacaaggt tcctcgagac 240
aagaggctgc tgtctgtaag caaagcaagt gacagccaag aagaccagga gaaaagaaac 300
tgccttggca ccagtgaagc ccagagtaat ttgagtggag gagaaaaccg agtgcaagtc 360
ctaaagactg ttccagtgaa cctttcccta aatcaagatc acctggagaa ttccaagcgg 420
gaacagtaca gcatcagctt ccccgagagc tctgccatca tcccggtgtc gggaatcacg 480
gtggtgaaag ctgaagattt cacaccagtt ttcatggccc cacctgtgca ctatccccgg 540
ggagatgggg aagagcaacg agtggntatc tttgaacaga ctcagtatga cgtgccctcg 600
ctggccaccc acagcgccta tctcaaagac gaccagcgca ncacttcgga caggacatac 660
agcgagagct tnaaggaccn ca 682

<210> 5232
<211> 560
<212> DNA
<213> Homo sapiens

<400> 5232
atagatgccc cctcctttgt gcctagctcc tgcgaatcca ccgagtgcct gagaccatag 60
cttctactgt gcccacccag gcagggaccc tcggcccccc ctcctccatt tctgagcccc 120
catggccaga tcctgggcag ggaaatgatc ctttcaggag acaaccagag cccctcacca 180

ggaacggggg cacccgtgga ctacgggagg gtggcggttg ggttctctgc tccctcccag 240
ctcctgaacc tggaacaatc ggcagaaaac ccaggaaccc cggcactcct gcattcagca 300
cgggattccc ccacccatgc ccagaagccc tgaccttgct gtttctggaa aaagcatggg 360
gtggggcagg gagggctggc atttccccca gaagaccttg ccctttgacc tgcccactct 420
ccacactgcc tcacctggaa agccatgtcc tgctggcctc attccttcct gaagggccta 480
ggagtggaga ggcctgngta gggctgncac aggctgggta gagccgcctg gcntgaagca 540
cggggtaagg tgccatacca 560

<210> 5233
<211> 770
<212> DNA
<213> Homo sapiens

<400> 5233
gaatattatg aatagaaaat gtatttttg tttgttttgc aaggaaggat ataaagaaag 60
agtaatttta tatgtggagg aatcctgtat agtaaattcc ctatcctaga gtaaaataac 120
tttaagaaag aggtagtata gaacatgtca ggaaattcag ctatgttgta gatggtctgt 180
gtaagtcatc tgcacagtgc atgagtgtgg aggtgggcgg gcactcattg gcccttgaac 240
tccttttgag cagtatggaa gccaagaact agaagccagg aaatggggtt gtaaaactga 300
tttgtctatg gattttatgt gttgagctgc tgtggtcttg gcttgtagta attacctata 360
tgaaccttcc ctcctcccct ttagaattta ggacaggttc aaaaggccct ccaatataaa 420
aataaaatac tgtccttccc cacaaaggaa aaaatagctc cccggttcaa ccaggagact 480
tagtcttgct aaaaccttaa agacagggta aagacaggga taccccaaga atcaattaca 540
atgaaatgga aggggcctta tcaggtattg ntaagtaccc ccactgctgt taaacttcag 600
ggaacaccta cttgggcaca cagatccagg actaaacctg gttcttatga gtcacaggca 660
caaaggaagg gcactacaac cacaaccaat atcagtaaag ctttggaaga cctctgctac 720
ctatttaaaa taatcaacac tcancccna agangtaatg taatgctgta 770

<210> 5234
<211> 689
<212> DNA
<213> Homo sapiens

<400> 5234
aagtctttct ggaaattgac aaccgccagt gtgttcaaga ctcagaccac tgcttcaaga 60
acacggatgc agcagcagct ctcctggcct ctcacgccat acaggggacc ctgtcatacc 120
ctcttgtgtc tgtcgtcagt gaatccctga ctccagaacg cactcagctc ctctatctcc 180
ttgctgttgc tgttgtcatc attctgttta ttattctgct gggggtaatc atggcaaaac 240
gaaagcgtaa gcatggctct ctctggctgc ctgaaggttt cactcttcgc cgagatgcaa 300
gcaatcacaa gcgtcgtgag ccagtgggac aggatgctgt ggggctgaaa aatctctcag 360
tgcaagtctc agaagctaac ctaattggta ctggaacaag tgaacactgg gtcgatgatg 420
aagggcccca gccaaagaaa gtaaaggctg aagatgaggc cttactctca gaagaagatg 480
accccattga tcgacggcca tggacacagc agcaccttga agctgcagac atccgtagga 540
caccatcgct ggctctcacc cctcctcagg cagagcagga ggtggatgtg ttagatgtga 600
atgtccgtgg cccanatggc tgcaccccat tgatgntggc ttctcttcga ggaggcagct 660
canatttgag tgatgaagat gaagatgca 689

<210> 5235

<211> 719
<212> DNA
<213> Homo sapiens

<400> 5235
cttcaccagt agaaaattct gattgttcca caaatagcag attatctttc tctcctgaaa 60
atatcctcat ccaaaaccaa gacattgtga gagaagctgc agtgcaggga gatgggcaga 120
agcaaaggca gcctcaggcc acagatctgg actccagtgg gacacatggc agtgagatgc 180
ttccagccac agaagtgact gtgtcaggag ggttttctgt tgaagaaacc agctgtggag 240
acacagggag atctggtggt gaggccctgg ctgttgcaaa tgattctacc agcacaccac 300
aaaatgctaa tggactttgg aaattgaaat ctacaactcc cggtggtgct ttgcctgagt 360
gttttggcac cacagacact actttttctt cagcattttg cagaaaacat ggagagacac 420
aggatacctc ccaaagtagc ctgcctggta ccttacattg ttacacaggc attcgagagg 480
ggggagacga cactgaggta gagagtgagg catttagctg cagtgagggg agcgaatagc 540
aagatgctcc tgatgactca cagaaaaatt tangagacac agatgctgct gtagcccgag 600
gtgagacctt ccttagaggt aggttatttg acgtnagctc tgcaagattt taacataagt 660
ctttttctga ctggatagac tttncacatc anaggttgtg atggttcttg agagctgcc 719

<210> 5236
<211> 733
<212> DNA
<213> Homo sapiens

<400> 5236
tgaagaacat ttatgaatct cttgatgaag ttactataaa agacactttg gaaggtgata 60
acatgtatac ttgttctcat tgtgggaaga aagtacgagc tgaaaaaagg gcatgtttta 120
agaaattgcc tcgcattttg agtttcaata ctatgagata cacatttaat atggtcacga 180
tgatgaaaga gaaagtgaat acacactttt ccttcccatt acgtttggac atgacgccct 240
atacagaaga ttttcttatg ggaaagagtg agaggaaaga aggttttaaa gaagtcagtg 300
atcattcaaa agactcagag agctatgaat atgacttgat aggagtgact gttcacacag 360
gaacggcaga tggtggacac tattatagct ttatcagaga tatagtaaat ccccatgctt 420
ataaaaacaa taaatggtat ctttttaatg atgctgaggt aaaacctttt gattctgctc 480
aacttgcatc tgaatgtttt ggtggagaga tgacgaccaa gacctatgat tctgttacag 540
ataaatttat ggacttctct tttgaaaaga cacacagtgc atatatgctg ntttacaaac 600
gcatggaacc agaggaagaa aatggcagag aataccaatt tgatgtttcg cagagtacta 660
gagtggattt gcatgatacc tgcagttctt caagacaaaa cattttgaca tnntattttg 720
ggtaagttgg naa 733

<210> 5237
<211> 765
<212> DNA
<213> Homo sapiens

<400> 5237
cactgatgga tattccaatg ggggagaccc tagaccaatt gcagcgtcac tgcgagattc 60
aggagtggag atcttcactt ttggcatatg gcaagggaac attcgagagc tgaatgacat 120
ggcttccacc ccaaaggagg agcactgtta cctgctacac agttttgaag aatttgaggc 180
tttagctcgc cgggcattgc atgaagatct accttctggg agttttattc aagatgatat 240

ggtccactgc tcatatcttt gtgatgaagg caaggactgc tgtgaccgaa tgggaagctg 300
caaatgtggg acacacacag gccattttga gtgcatctgt gaaaaggggt attacgggaa 360
aggtctgcag tatgaatgca cagcttgccc atcggggaca tacaaacctg aaggctcacc 420
aggaggaatc agcagttgca ttccatgtcc tgatgaaaat cacacctctc cacctggaag 480
cacatcccct gaagactgtg tctgcagaga gggatacagg gcatctggcc agacctgtga 540
acttgnccac tgccctgccc tgaagcctcc cgaaaatggt tactttatcc aaaacacttg 600
caacaaccac ttcaatgcag cctgtggggt ccgatgtcac cctggatttg atcttgtggg 660
aagcagcatc atcttatgtc tacccaatgg tttgtggtcc ggnttanaga gctactgcag 720
agtaagaaca tgtcctcatc ttcggcagcc gaaacatggn cacat 765

<210> 5238
<211> 759
<212> DNA
<213> Homo sapiens

<400> 5238
gggtaggaaa acagttcctc gtggacagca gagctgcctg ctcggtcctg acccagccta 60
tttgcctcct ctccaattgc aattgcaggg taatgggaat agacaggtgt cctaaggtaa 120
gaaaatttac tttccctctt gcttgtgagg ccatgtctag gctttttttct cctcatttct 180
gtatgccccc cggaatgtcc tactccattg ctgggtagag acttattaag caaaatggga 240
gccaccatct ccctggaaga ggacagactg caggtagagg cagagccaga acagggaatc 300
cacctgctag cactcttaaa tggacaggaa cttgagaccc aaaacatacc caaagaaagc 360
aaggatcaca tcacccttc cctatcggac acttcagtcc taggacaggc taataaagtt 420
ccgccagtaa agacagacct gaagcctggg atgggctatc catggaggaa atcatacctc 480
ctaaaacctg tggcactgaa tggggttcag ccattactcc acaaattcct atagcaaggg 540
ctaaaccctg ccagtcccca ggcaacacct cggtcctccc tgttaaaaag cctaatggag 600
aatatcagtt tgtgtaggac ttgaaggggg ttaatgaggc agtcattccc atccacccaa 660
cactggtccc aagcttgtct gtgctcanat acctggagat gctcagtttt tcactctact 720
acacttcaan ggatgctttc ttttgngtag ccctttca 759

<210> 5239
<211> 812
<212> DNA
<213> Homo sapiens

<400> 5239
ctttatcgct ttcagatttg gaggccaatc actgccacct tttatttccc tgtgggtcca 60
ggaactggat ttctttattt ggtcaattta tatttcttat atcagtattc tacgcgactt 120
gaaacaggag cttttgatgg gaggccagca gactatttat tcatgctcct ctttaactgg 180
atttgcatcg tgattactgg cttagcaatg gatatgcagt tgctgatgat tcctctgatc 240
atgtcagtac tttatgtctg ggcccagctg aacagagaca tgattgtatc attttggttt 300
ggaacacgat ttaaggcctg ctatttaccc tgggttatcc ttggattcaa ctatatcatc 360
ggaggctcgg taatcaatga gcttattgga aatctggttg gacatcttta ttttttccta 420
atgttcagat acccaatgga cttgggagga agaaattttc tatccacacc tcagtttttg 480
taagtgtttt tgtcctgtct catctaacat tttactgcct gtgttcttag tgcatcctaa 540
tgagagctcc atgaggagta tgatttaccc ctatgcccca tctgctggag aaacctgagg 600
caacaagtga cttaccctag tcacacagtc acaggaagtt agggattaaa gcttangctc 660
agttgccttc ctgntactct tttagccagg gaccactgac aactagattc caacattaca 720

ggaggcatct caactctctg agcctgctga gggacctgat gcacttcaga gtgcgaaaca 780
gtangctggt gaatgggcag agcacangtt an 812

<210> 5240
<211> 785
<212> DNA
<213> Homo sapiens

<400> 5240
tactcaccag ctcaaaacct gactcatctc ccgtcacccc acccacagac ccagccgatg 60
actcctcttc ctttgacccc gtggattttc tccctcctcg acagcatcat gatcctccac 120
cagagcatca tgatcctcca ccgtatgtcc ctgctccggc tctacccctc tcccccactc 180
tctccaacca acccacttct gactctgaga cctctctgcc tcctcccctc acccgctctc 240
gggcccaatg tgctcagcaa ccagctccct tgcttcctct ccgggaagta gcgggagttg 300
aggggatcgt ccatgtccac gtcccttttct ccttctacga tctcttacag attgaagaac 360
gtctcgggtc cttctcctcc gatcctgata cttacatcaa agaatttaaa tatcttactc 420
aatcttatga actcacttgg catgatctct actttatcct ctcttctacc ctncttncag 480
aagagaagga aagagtgtgg ctcgcagcac aggcatatgc cgacgacctt catcagcagg 540
atcctactaa gcccgtagga gctgctgctg atccctggga agagccttcc tgggaatacc 600
aacccacaga acctggccaa gtgtactgta gccatatgat tacttgcctc attgcaggcc 660
ttaacaaagc tgcccatagg ctgtaaattt tgaaaaactt aaagacattn nccaaaangc 720
aggatgaaaa tcctggccaa tctcttttcc ggcttacaga aagctcttca aaaatatacc 780
cggat 785

<210> 5241
<211> 804
<212> DNA
<213> Homo sapiens

<400> 5241
ggccatggat gggcttggat aaagcaccat aagttcttcc tctaggccat ggactccccc 60
tggaactggc agcctggccc ccaggcttca ggctgtccct gggttgaagg tggtgtttca 120
cctgggacct gccccttttct gcccaggagc ctgtctgcct cctgctacca tcaacatggc 180
atccacagca cccaggctgt gcatgctgag ggacgcctgc aggcctgcac tgagctgccc 240
tcagtctcct cttggcttcc ctcctgtgcc tgtcggtgac caaagtctgg agggggccaa 300
gatgacaggg gtcttgcatg tcaacaccac ccagagtaca tacacaccca gctgggttgc 360
gacagcaccc aggctcagtt tcaactttgc tccaaaaatc agagtggaca ctgggagtgg 420
tgagatgcca gggagcggga gcaggcaatt acaagcctgc atgacagggg ggcttcctgg 480
gtccccaaga gcagagggat gcctgggtcc agagctgtgg ctaggtagct gcagctgtgc 540
ctgggagctc agggctcctg ccctgccaac ttgatagaag gcagggttcc cacctgttcc 600
tggtccctgc cagctctgtg gagcatgcag ccccagctat gcctnccctg ctgcagctgg 660
catccccaca gcagctgctc cagataggcc actgctgcat cactgacaat tctttcagct 720
cacaaaggta gccatgaatt angaaagttg ggtcangctt caagcaagcc tgcgttaagc 780
aagctcaana gctgaggatg ccca 804

<210> 5242
<211> 866
<212> DNA

<213> Homo sapiens

<400> 5242
aggatgccta aaatcatcca gactgttggt ggtggtgctg tgcaggagag agcgcctgag 60
ctggatggtg gtgggcccac ggagcaggac aaaagccatt ctaacagcag caccttgtcg 120
gaccgaagac tcagcaactc cagcctctgt agcattgaag aagagcaccg aatggtgtat 180
gaaatggtac agcggattct cttgtcaaca cgaggttatg tcaacttcgt gaatgaagta 240
tttcaccagg cattttgtt gccttcctgt gagatagctg taacaagaaa agtagttcaa 300
gtgtacagaa agtggattct ccaggacaaa cctgtgttca tggaggagcc agatagaaaa 360
gatgttgccc aagaagatgc tgaaaaatta ggattttccg agactgatag caaggaggcc 420
tcatctgaaa gttctggtca taaacgatct tccagttggg gacgcacata ctccttcaca 480
agtgcaatga gcagagggtg tgtgacagag gaggaaaata caaatgtgaa agccggcgtc 540
caggctttgt tgcaggtatt tttgacgaac tctgcaaaca tctttttgtt ggaaccatgt 600
gctgaagttc ctgtgctctt gaaagaacaa gttgatgctt gtaaagctgt tttgattatt 660
tttaggcgca tgataatgga gcttacaatg aataaaaaga catgggaaca gatgttgcaa 720
atactactca ggataacaga actgtcatgc agaagccaaa ggataaacga ataaaggact 780
tggttgccca aagcttgcag gggtactatt tangacgctc atggtagctg gatccgacca 840
aactntggng acatttctcg agagct 866

<210> 5243
<211> 842
<212> DNA
<213> Homo sapiens

<400> 5243
actggcaagg atcgcctgca tatgttgctg acttagtctt agccaaccaa caaattatga 60
gccagatttt gtctgctctg ggcctgtgta atagcagtgc catggcaatg ataattggag 120
caagtggatt acatctcact aaacatgaaa actttcatgg tgggttggat gccatatcag 180
ttggggatgg attatttacc atactgacaa cccttagtaa aaaagcttct acagtccaca 240
tgatgctgca gccaatttta acatacatgg cctgtggata tatgggcaga caaggctctc 300
ttgctacttg ccagttatct gagccattat tgtggttcat tttgagagta ttggatacta 360
gtgatgcctt gaaagcattt catgatatgg gtggtgttca gctcatatgc aataatatgg 420
ttactagtac aagggctatt gtgaacactg caaaaagtat ggtatcaact attatgaaat 480
ttcttgactc tggtccaaat aaagctgttg acagcacatt gaaaacaaga atactagctt 540
ctgagcctga caatgctgaa gggattcata actttgcacc cctcggtaca atcacatcta 600
gcagtcctac tgcccaacca gctgaagtgc tattgcaggc cacaccttct cacagaagag 660
ctcgctctgc tgcttggtcc tacatctttc ttncagagga agcttggtgt aaccttacca 720
ttcacctttc tgcacagtgc tgcttaagga gatacatatn cagcctcatc ttgcatctct 780
tgcaacctgg cctttctnaa tgctggtgaa gtaagtgcan atggggaaat atgctacctt 840
tg 842

<210> 5244
<211> 766
<212> DNA
<213> Homo sapiens

<400> 5244
catagcatac catttatcgg gctcggcgca ggcccgcggg gagcgcagcc cggcggagag 60

actgatggag aggcagaaac ggaaggcgga catcgagaaa gggctgcagt tcattcagtc 120
gacactaccc ctaaagcaag aagaatatga ggcctttctg ctcaagctgg tgcagaatct 180
gtttgctgag ggcaatgatc tgttccggga gaaggactat aagcaggctc tggtgcagta 240
catggaaggg ctgaacgtgg ccgactacgc tgcctctgac caggtggccc tgccccggga 300
gctgctgtgc aagctgcatg tcaatagggc cgcctgctac ttcaccatgg gcctgtatga 360
gaaggcgctg gaggacagcg agaaggcgct gggcctggac agtgagagta tccgggcgtt 420
gttccgcaag gcacgcgctc tcaatgaact gggacgccac aaggaggcct acgagtgcag 480
cagccggtgt tccctcgccc tgccccacga tgaaagcgtg actcagcttg gtcaggagct 540
ggcccagaaa ctggggctgc gagttcgcaa ggcgtataag aggccccagg aattggaaac 600
cttttctctg ctcagtaacg gcactgcggc tggcgtggca gatcaggtag gatcgggctg 660
aaccaacctg tctcagttta tccgttatga gaggttttgg attcactctc ttccgggtat 720
aaatgacctc angcagtggg tccaggggcc ttcgcttcct angang 766

<210> 5245
<211> 746
<212> DNA
<213> Homo sapiens

<400> 5245
gtttgacgat gagagtgatg gggaagaaga ggaggagctc atggatgagg atgtggaaga 60
agaggatgac tcagagatct cagggtacag cgtggagaat gccttcttcg atgagaagga 120
agacacctgt gctgccgtgg gggagatctc tgtgaacacc agtgtggcct tccttccata 180
catggaaagt gtctttgaag aagtatttaa actgctggag tgccctcacc tgaatgtgcg 240
gaaggcagcc catgaggctc tgggtcagtt ttgctgtgca ctgcacaagg cctgtcaaag 300
ctgcccctcg gaacccaaca ctgctgcttt gcaggctgcc ctggcccgag tcgtgccatc 360
ctacatgcag gcagtgaaca gggagcggga acgccaggtg gtgatggccg tgctggaggc 420
cctgacaggg gtgctccgca gctgtgggac cctcacactg aagccccctg ggcgcctcgc 480
tgagctctgt ggcgtgctca aggctgtgct gcagaggaag acagcctgtc aggatactga 540
cgaggaggag gaagaggaag atgatgatca ggctgaatac gacgccatgt tgctggagca 600
cgctggagag gccatccctg ccctgcagcc gcggctgggg gagactcctt tgccccattc 660
tttgccggtt tcctgccatt attggtgtgc aagacaaaac anggctgcac agtggcagag 720
aagtcctttg cagtgggggg gggggg 746

<210> 5246
<211> 744
<212> DNA
<213> Homo sapiens

<400> 5246
tttaccgcgt cagcatgctg gtgcatttat ttcgggtcgg gattcggggt ggcccattcc 60
caggcaggct gctaccgccc ctccgcttcc agacattctc agctgtcagg tactctgatg 120
gctaccgcag ctcctccctc ctccgggccg tggcccacct gcggtcccag ctctgggccc 180
acctccctcg agccccccta gctcccagat ggagcccctc tgcctggtgc tgggttgggg 240
gagccctgct aggccccatg gtactgagta agcatcccca cctctgcctt gtggccctgt 300
gtgaggcaga agaggccccc cctgccagct ccacacccca tgtcgtgggg tctcgcttta 360
actggaagct cttctggcag tttctgcacc cccacctgct ggtcctgggg gtagccgtcg 420
tgctggcctt gggtgcggca ctcgtgaatg tacagatccc cctgctcctg ggccagctgt 480
agaggtcgtg gccaagtaca caagggacca cgtagggagt ttcatgactg agtcccagaa 540

tctcagcact cacctgctta tcctctatgg tgtccaggga ctgctgacct tcgggtacct 600
ggtgctgctg tcccacgttg gcgagcgcat ggctgtggac atgcggaggg ccctcttcag 660
ctccctgctc cgacaaagac atcaccttct ttgacgccaa taagacaggc aactggtgaa 720
cccgnttgac aaaacccttt ttgn 744

<210> 5247
<211> 712
<212> DNA
<213> Homo sapiens

<400> 5247
atgaaccacg agtgggtggg gaacgactgg ctgcccagcc tggggctgcc ccaataccgc 60
agctacttca tggagtcgct ggtggacgct cgaatgttag atcaccttaa caagaaggag 120
ctccggggcc aactcaagat ggtggacagc tttcacaggg tgagtctaca ttatgggatt 180
atgtgcctga aacggctcaa ctatgaccgg aaggacctgg agcggaggcg ggaagaaagt 240
cagacccaga tccgagacgt gatggtgtgg tccaatgagc gggtcatggg ttgggtgtcc 300
gggctgggcc tgaaggaatt tgccacgaac ctcacggaga gcggggtaca cggggcactg 360
ctcgccctgg acgagacctt cgactactcc gacctggcct tgctcctgca gatccccacg 420
cagaatgcac aggcccggca gcttctggag aaggaattca gcaaccttat ctccttaggc 480
acagacaggc ggctggacga ggacagcgcc aagtctttca gccgctcccc atcctggcgg 540
aagatgttcc gggagaagga cctccgaggc gtaactcccg actcagctga gatgttgccc 600
cccaactttc gttcggctgc agcgggagcc ctgggctctt ccggggcttc ctttccgca 660
agcttgcanc ccagaaggnc agactttntg ggaagtttcc ccgggccaga ac 712

<210> 5248
<211> 857
<212> DNA
<213> Homo sapiens

<400> 5248
aagtgattct tccacggcca aactagaggc acagagctgg aaaaacttca tccccactca 60
gcacatacta gggaggtaac ttgccagctt tgctttgggt catagttctt acagctaact 120
tatgtgttcc agaaaattta ccgagaaatc gacgttgaca ggtctggtac catgaattcc 180
tatgaaatgc ggaaggcatt agaagaagca ggtttcaaga tgccctgtca actccaccaa 240
gtcatcgttg ctcggtttgc agatgaccag ctcatcatcg attttgataa ttttgttcgg 300
tgtttggttc ggctggaaac gctattcaag atatttaagc agctggatcc cgagaatact 360
ggaacaatag agctcgacct tatctctgtg agtcagcagg ccccgccttg cttctaaggg 420
gatgggggag gcatggggcg gaaagggctg ttacttgagt gatctgcttt ttcaagtttt 480
gctttaaaga gctcttggtc tgtcggggcc aggcctgtaa ccggttgtaa gatcccacaa 540
tgcactttta cttgcagttg ttttccaacc acctattctc aagtccaaaa tgcacgcctg 600
gctccctctt ctcatgagct ttgacttgag tgtanctcaa gggtaaacta aggagtggct 660
gcaggatcat gcttagaaaa atgaactcct gattagcatg caagggagaa catgttatat 720
aaagaaatcc tttanctgaa attcaagttt gggntttggg aagatccatc attcttagaa 780
ggggatctac ttaaaaatct ttaagccaat tagtttctct actccttccc cgttaanata 840
aacttatnct agtaaat 857

<210> 5249
<211> 686

<212> DNA
<213> Homo sapiens

<400> 5249
attcattccc tgtcctcgga tcacagtctc ttctcactac agtgtcgccg cctctgcctg 60
cgtagccccg gccatggctc tgtagcctcg acccctttgt gcccccggcc cgtctccgcg 120
ctcaccacgc ctgcgctctc cgctcccacc ttctttcttc agccgaggcc gccgccgcct 180
ctccttgctg cagccatgga gtcttccact ttcgccttgg tgcctgtctt cgcccacctg 240
agcatcctcc agagcctcgt gccagctgct ggtgcagcct ctcctgttgc catcagtgcc 300
cagcacctgt gctacagcca tgtcactcct ggcgaccctg gggctggagc tggacagggc 360
cctgctccca gctagtgggc tgggatggct cgtagactat gggaaactcc ccccggcccc 420
tgccccctg gctccctatg aggtccttgg gggagccctg gagggcgggc ttccagtggg 480
gggagagccc ctggcaggtg atggcttctc tgactggatg actgagcgag ttgatttcac 540
agctctcctc cctctggagc ctnccctacc ccccggaccc tcccccaacc ttccccaacc 600
ccacctgacc tggaagctat ggcctnctc ctcaagaagg agctggaaca gatggaagac 660
ttcttcctan aatgcccccg nccctt 686

<210> 5250
<211> 646
<212> DNA
<213> Homo sapiens

<400> 5250
aaatccttcc ttccccgggg tagaagtcca gggtgagaaa ttggttccga actcaaagga 60
acccagtgcc gggccacagc cgggtcacgt ggccggcggc cccccatgac gtgctggctg 120
cggggcgtca cggcgacgtt cgggcgacct gccgagtggc caggctacct cagtcacctg 180
tgtggtcgca gtgctgccat ggacctggga cccatgcgca agagttaccg cggggaccga 240
gaggcatttg aggagactca tctgacctcc cttgacccag tgaaacagtt tgctgcctgg 300
tttgaggagg ctgttcagtg tcctgacata ggggaagcca atgccatgtg tctggctacc 360
tgcaccagag atggaaaacc ctctgctcgc atgttgctgc tgaagggctt cgggaaagat 420
ggcttccgct tcttcactaa cttcgagagt cnaaaaggaa aagagctgga ctctaatccc 480
tttgcttccc ttgtcttcta ctgggagcca cttaaccgtc agtatctgag aaagaaaaat 540
gaggaactgg aacagctcta ccaggatcaa gaggtgccca agccaaaatc ctggggtggc 600
tatgtcctgt accctnangt gatggagttc ttggcaaggt cnaacc 646

<210> 5251
<211> 733
<212> DNA
<213> Homo sapiens

<400> 5251
atgcaaaaat tagctgggtg tggtggcagc ttcctgtaat cccagttact caggaggctg 60
aggcaggaga atcacttgaa cccgtgaggc agaggctgca gtaagctgag atcgcaccgc 120
tgcacattcc agcctgagtg acagagcaag actccatcta gaaagaaaga aagaaaaaga 180
aagaaagaaa gaaagaaagg aaggaagggg gagagagaga gagacagaga gagagagaaa 240
gaaagaaagg aaggaaggaa ggaaggaagg aaggaaggaa ggaaggaagg aaggaagaag 300
agagagagag aaagaaagaa agagagaaag aaagaaggaa aagaaagaag gattccctag 360
aagctcaata catagaatag atgaaaggga ctagctgcct ggggctgggg gctcagctca 420

gcatctcatc cctctactac tcttgacagt atacctcaat cctggggcat cataaagcat 480
cacttgaaaa gtagcaactc aacactctca caggacaagg gaaaggctca gagagggcaa 540
gcaatctgct caaggtcaca cattaagttt ggatgaatgc atggctccct gcccagcact 600
ccatgccctg caggaggggc aatgcccatc tatctgtcaa ccaggctgca gaccttgacc 660
cacatgtnca ggagcctgta tgcttggccc cctctaccct tgagtgccca ggangggatc 720
tcatacactn tta 733

<210> 5252
<211> 668
<212> DNA
<213> Homo sapiens

<400> 5252
cacaccccat ctgggggaag gacaggagct ggacaggcca agagctatct cccttggctg 60
gagaagaccg ggaaaaaggg agtactggag ccaggaagga agaagaggga gggccagtgc 120
tggtaaagga gaagttgggc ctgaagaagt tagtcctcac ccaggagcag aagaccatgt 180
tgttggattg gaatgactcc atccctgaga gtgtgcacct caaagctggg gagcgaattt 240
cccagaaaag tgctgagaat ggtagaggag gccgtgtgct aaaaccagtc cgccccctgc 300
tgctccctag ggcagcagga gagcccctgc caacccagag aggggctcag gagaagatgg 360
ggaccctgc ggaacaagct caaggggagc gaaacgtgcc tccacccaag tccccactgc 420
ggctcatagc caatgccatc cgaaggtctc tagagcccct cctttccaac tctgaaggcg 480
ggaagaaggc ctgggccaag caagaatcca aaactttgcc cacacaggcc tgcactcgct 540
cattcagcct tcggaaaacc aattccaata aagacgggga ccagcattcc cctgggagaa 600
accagtcctc agcctttacc ctnctgaccc tgccttcgac ccacagtttg cccaatcggn 660
catncaag 668

<210> 5253
<211> 690
<212> DNA
<213> Homo sapiens

<400> 5253
ggaacacatt actccttaca catcgtcttt atacaacata cattcaggct cagattcaac 60
ggctatccac tgcttgctaa caccttttg agcatatgac atctatcagg tagctgcata 120
gggtttaggt ctagttattc atggattctg cataggagct cagcctctga taagatctgt 180
gacaatgctc atcacttacc tgtctcttca tattcctgtc ttgatattcc atttttactc 240
tataatttc tatcttcatt tggttttatg ttattaaata cttcattgta aactgtttca 300
actcttttct ggaacagggt ggcacagaaa caaacctcta actcttctca tccttctttt 360
tttcttgggg gagggtggtt atttctgaat tttatttta ttttattnta ttttaagtta 420
tgggatacat gtataagatg tgcaggtttg ttacacaggt aaacgtgtgc catggtggtt 480
tgctgcacct atcaacccat cacttaggta ttaagccctg catccattag ctatttttcc 540
tgggctctcc ctctacccgc tccaccccca caacaggtcc cagtgtgtgt tgtttccatc 600
cctgtgccat gtgttctcat tggtcagttc acacttgtaa gtganactgc ntggngttgg 660
gtcttctgct tctgggtaag ttgctgagga 690

<210> 5254
<211> 781
<212> DNA

<213> Homo sapiens

<400> 5254
ttcaaaaata gagaaaactg tgagctttct gatcactgta ttaaactaca aaaaaagaaa 60
aagcaatgta gagtcagccc tcagtcatgg attaaagtct cttaatcgta aatctccctc 120
tcactccagt agcagtgaag atgctgattc tgcatcagaa ttagctgact ctgaaggagg 180
tgaggagtat aatgccatga tgaataactg ccttcgtgtg aatctcactt tagctgattt 240
ggaacaattg gctggcagtg atctgaaggt tccaaatgaa gatactaaga gtgatggacc 300
agaaaccacc acccaatgca agtttgacag aggctccaag agccccaaga ctcccactgg 360
cctccgcaga ggccgacagt gtattcgtcc tgcggagatt gtggcttccc tgttagaagg 420
agaggagaac acctgtggca aacagaaacc aaaggaaaac aatttaaagc caaaatttca 480
ggctttcaag ggagtaggct gtctatatga aaaggagtca atgaaaaaat ccttgaaaga 540
cagtgctgcc tctaacaata aagatcagaa ttccatgaaa catgaggatc ccagtatcat 600
atccatggaa gatgggtccc catatgttaa tggctcatta ggtgaagtga ctccatgcca 660
acatgcaaag aaggcgaatg gccaaactat attcagctca aaaaagacag acccttttga 720
aagccaggat cgcangcagt gtccctanca gtctgaaaga gaagtagaat ctattntagg 780
c 781

<210> 5255
<211> 755
<212> DNA
<213> Homo sapiens

<400> 5255
attcctcgct ccaaggggca gacaggacag gctgaaaata gcaactggtt ccaaaaagat 60
aaaggggatg actccagcag agcacctcac tcctttgaag agcacagagg aagatgtcag 120
cccagtccct tcctgcagca acacccccca cgcagaagcc ccctcggatc atccgccccc 180
gccctccttc tcgttccagg gctgcccagt ccccagggcc tccccacaat ggctcctctc 240
cacaagaact accccgaaac tccaatgatg caccaacccc aatgtgcact cccatcttct 300
gggagccccc agctgcatcc ctcaagcccc ctgctctttt gccccccctcg gcttctagag 360
ccagcctcga ctcccagact tccccagact caccttccag caccccccaca cctagtccag 420
tgtcccggcg ctccgcctcc ccagaacctg ctccccggtc tccagtcccc ccacccaagc 480
cgtctgggtc accctgcacg cctctgctcc ccatggctgg agtcctggct cagaatggct 540
ctgcctcagc tcctggcact gtgcggaggc tggctggcag gtttgaaggg ggtgctgaag 600
gccgggctca ggatgcagat gccccggagc caggtcttca agcgagagca gatgtgaatg 660
gggagagaga agctcccctn acccggagtg ggtccaggag acggngttca agtgagtgtg 720
gcggtggggg cnctggtgac tcatcaccat tttcg 755

<210> 5256
<211> 724
<212> DNA
<213> Homo sapiens

<400> 5256
tggtgctgat gtgtgaactg tctcgggagg atgcccctgt gcgctggtac aaggatgggc 60
tggaagtgga ggagagcgag gccctggtgc tggagaggga tgggccacgc tgccgcctgg 120
tgctacctgc tgctcagccc gaggacgggg gcgagtttgt atgtgatgct ggagatgact 180
cggccttctt cactgtcact gtcacagccc caccagagag gattgtgcac ccggcagccc 240

gctccctgga tctgcatttt ggggctccag ggcgcgtgga gctgcgctgt gaggtggccc 300
cagctgggtc tcaggtgcgc tggtacaagg acgggctgga agtggaggca tcagatgccc 360
tgcagctggg tgccgagggg cccacccgca ccctgaccct gccccacgcc cagcctgagg 420
acgccgggga gtatgtgtgt gagacccggc atgaggccat caccttcaat gtcatcctgg 480
ctgagcctcc agtgcagttc cttgctctag agacaactcc aagcccgctc tgtgtggccc 540
ctggggagcc agtggtgctg agctgtgaac tgtcccgggc tggcgccccc gtggtctgga 600
gccacaatgg ggggcccgtg caggaggcna gggcctanag ctccatgccg agggcccccg 660
cgagtcctct gcatccaggc tgaagcccag cccatgcagg gctctacacc tgcagtctgg 720
acan 724

<210> 5257
<211> 740
<212> DNA
<213> Homo sapiens

<400> 5257
gcacacttct atttgtttgg atgtggagag agaaaagaag aaatccacgt ggtgggtaaa 60
gcacctgggt ccacagccga aaaatcccgg gtttagtctg tttcactata caaaattggg 120
ccatttacct gagttccagg ctccacatat aaaacacaga cataatatta ctcacccatg 180
tcactgggct gctgggggac tctactagga caacagaggc aaagctctga tataagctct 240
ttgcaaatgt aagaagtggt ccttatgtca cccagtttag ggcagtggtt gagagcagac 300
acattctgat ccctcgaatc tgaatcctat ctttggccca tctggaagtg ggacaagttt 360
cttaaacctt tgtgcctggg tttcctatct ggggaagaat aaattaacag atgcaaggac 420
cctgaacagt ccggttggag actgctccag tccttggcac cgtcctgcat tctgtgggtc 480
ccaacagtgt ggtgaaacca ggaagccgac cagccatcca accagggtgt ggtcctctgg 540
ctgagactct ctatcccacg tctgggcacc catgccacca gctggccttg aattccaggg 600
atgcgggagg acaatgagca tgaaccgaaa cgtgccgagt ggagttgaga acgtaaagga 660
agaangggga gatgangacc tctcctgggg gagatgaagg ctgccaagtc ctaagacaca 720
ggcttcaagg tctgcangaa 740

<210> 5258
<211> 788
<212> DNA
<213> Homo sapiens

<400> 5258
agacctgaag gctgcttccg ctaacccggg ctggcgctgc taacctcacc caacgatccc 60
tgctgtcgga aaatgtccag aggcaccatc cctgctatga agagggaatg ccagtacaac 120
agccacaagg ggtcttcctg tggccctcaa acaaaaaatc actgcattac atcagcagac 180
tgcattggag agaaaggcgc cgggacagaa aagcctgaga taaaccacct gtcattcttg 240
gagaaaagga tgctgcggct ttcccgattt ggttgatgag atggaaaatc aacccttaca 300
ggaaggacat caccaattcc ggaaaggatg ctgcgccagt catgtttccg cactctgtga 360
gacgttgaaa tctccagaag ttgcccaagg ttttcaagct gaacacagga gaaatgactc 420
tggatctctg aggactgttt tcctcaataa ggagctgcaa tcttggctcc accaccctcc 480
ctccaaaaca tctcctgtgt ctggtatctg gttatattgt ggcctgacag agaagtttct 540
ttcggggcca gtgaatttaa aaaaaaaaaa aaaagaaaag cgggtcctac caactcatta 600
atactttaat actttaaatt tccctcttta tagtaggttg aaatgcagta tctcttaaga 660
acaatggctg aaccaaatgt ttcctcaaaa ctcacatttt ttcccaccat ttcanaaact 720

gcctcaggac taagctttga attttttttt ttttttaat ctgggccaaa ntnctatcta 780
aagggcct 788

<210> 5259
<211> 711
<212> DNA
<213> Homo sapiens

<400> 5259
gtaacatggc tactggtcac tcagtgtctg tgagaccctg agggccagag gcaaggctgg 60
cggggtggag ctgctgtgtg agcccaggca aagcccttcc ttctttggac tttggcccct 120
ggcagaagaa aatgattctc agcccctggg atccttagag atggtgggtc atgattcccc 180
tcctccctcc actcactcag cttggtattg aggcctcact gctagaagaa gaggaacaga 240
tgacctgttc tgggaactga ggcttcacaa gaagaacaaa gctccagaga ttgagccata 300
gtccctgaca ggaagcctcg ggggtgctgg ctgctccctg ctggccggga tgccagtggt 360
gtctgaaacc aggggtagag tttacaggag gccgggctgc tcaggagagc tagaatgaag 420
ttctctgtcc tcatggtctc agatctgagc tcttccccaa agggtggtga cttccatcac 480
cctgcttctt tggggtcaca gtctggtctg ggtaatgtga acccccccagg ctttggacct 540
gggactaaga ggctctagga ggctccagcc tcatctgcct cctatccccct gccttgttca 600
naggcccaga gctggggccc ggaagtgatc atgaagatgg aaactgtggt ctggctcatg 660
atggtgcatc actgctgggt ctgtttgcaa gncgttgngc actntgggcc c 711

<210> 5260
<211> 823
<212> DNA
<213> Homo sapiens

<400> 5260
cctgttcctt ccatctaact gtatgttttg aaccattaac caacctctct ccataccccg 60
cctcccagcc tctggtgacc atcatatggt tctctactcc gttagatcaa ctttttttt 120
ttagctacca catttgagta aaaacatgcg atatttgcct atctgtagga ccttcttaag 180
actgtgaaac tgtacctagg aatccaactt acaagggatg tgaaggacct cttcaaggag 240
aattaaaaac cactgctcaa ggaaataaga gaggacacaa acaaatggaa aaacattccg 300
tgctcatgga taggaagaat cagtatcgtg aaaatggcca tactgcccaa agtaatttat 360
agattcaatg ctgtccccat caagctacca tcagctttct tcacagaatt agaaaaaact 420
actttaaatt tcatatggaa ccagaaaaga gcctatataa cgaagacagt cctaagcaaa 480
aacaacaaag ctggaggcat catgctgact tcaaactata ctacaaggct acggtaacca 540
aaacagcatg attctggtac caaaacagat acatagacca atggaacaga tcagaggcct 600
caaaaataac accacacatc tccaaccatc ttatctttga caaacctgac aaaaacaagc 660
aatgggggaa aggattccct atttaataaa tggtttggga aaactggcta gccatatgca 720
gaatactgaa actggcccct tccttacacc ttataccaaa actaactcan gnggataaag 780
acttaacctt aggacctaaa accataaaac cctagaagaa aan 823

<210> 5261
<211> 816
<212> DNA
<213> Homo sapiens

<400> 5261
tatagaccac cagatttctt ctggtgaaaa caccagatca gtgattccaa atgatatttc 60
aagtaatgct gcaattttag gaggacagcc gccaaatgtg acaagcaatt ctggaattct 120
gggagtccaa agaccaaatg tatcaagtaa ttctgaaatt cttggggtcc ggccatctaa 180
tgtttccagt agttctggga ttattgcagc ccaaccacca aatattctaa ataactctgg 240
aatattggga atacagccac ccagtgtgtc aaatagttct ggacttttgg gagtgctacc 300
cccaaatata cctaacaatt ctggacttgt aggagtacag ccaccaaatg ttccaaatac 360
tcctggactt ctgggaacac agccaccagc tggacctcaa aacttacccc ctttaagtat 420
ccctaatcaa aggatgccca caatgccaat gttagacatt cgtccgggac taataccaca 480
ggcacctggg ccaagattcc ctttaataca gcctggaatt ccaccccaac ggggaatccc 540
acccccatcg gtacttgatt cagctcttca tccaccaccc cgtggacctt ttcctccagg 600
agatattttt agccaaccag aaagaccttt tttagctcct ggaagacaaa gcgtagacaa 660
tgttactaac ccagaaaaaa ggataccact tgggaatgat acattcaaca ggaaggagat 720
agagattacc ggtttcctcc tatagaaacc agggaaagca ttantagacc ttcccctgng 780
gatgttaaaa atgtggttgg ccgnctatag atccaa 816

<210> 5262
<211> 777
<212> DNA
<213> Homo sapiens

<400> 5262
gtcgtgatca gacgagcggt gagcgatcga tactcctatg ctagcctctg gctcctcagg 60
ggacacagcc gagtggtcgg accaaacgca acgagtcttc gccagcccaa aggcgactcg 120
acaccgtccc agctgaagag aggcatggga ctgaaccagc tggtggtggc ccgatggctg 180
gagacaccca ctgccccgca gagcccctgg ccagagaagg cactttatgg gaggccctca 240
gggcgctcct gccgcacagt aaagaagacc tgaagttgga cctcggggag aaagtggaga 300
ggagcgtggt gacattgttg cagcgagcca ctgagctctt ctacgagggc aggagggacg 360
agtgtctgca gagcagcgag gtgatcctgg gctactcctg ggagaagctc aacacgggca 420
catggcagga cgtagacaaa gactggcgcc gggtctacgc catcggctgc ctnctgaaag 480
ccctgtgtct gtgccaggca cctgaggatg ccaacactgt ggccgcagcc ctgcgggtct 540
gtgacatggg cctgctgatg ggggcagcca tcctgggggа catccttctt aaagtcgctg 600
catccttcag acacaccttc ctggaaagag gcctgccgtg gctccttcca gagcaaccct 660
tgcacaaaga aagcaagggc ggaccatggt ttgattccag attgaagtta gaaaaaacag 720
tcccccggtt gaccgtccgt ccttcagatt tnagggacan nttttggttc agggaag 777

<210> 5263
<211> 732
<212> DNA
<213> Homo sapiens

<400> 5263
gagggcctca gggagctgca aaactcatcc aggagaaaaa ggcaggagca gcaagtgacc 60
cctcccaagc tcccatctat ggggcttagc aaaaaaaggg aggaagtggg ggctggatat 120
gcccacccct gccaaaagcc ctgaccccag ggaaggaggc tgctcaccca gccttggccc 180
tgcagggaat gttggggggc acagagggga gaagctcttt cccccactcc acattccttc 240
tgttgccaag atccttaatt ccctcctgcc catatcccta caggcgacgg cagacagtgc 300
aatggccctc ctgccacttc agcacacctt gccccacctg ggaccatcac acgtgaagca 360

ccaggctggg agatgaggtg cacacagttg cagctaggtc ggggccccag ttaagctgtg 420
ccccaccacc ctaggcaatg aggggcagga aaggggtaca gaatgaatgg tgaaagagag 480
tggagatacg gaaggggggag aggagaggag aaatgtggac agagggcttg aagacatggc 540
cgaataggct actgccaccc ggctttgggg agatgggcga taagtgttga ggtaggctcg 600
agaactgctc cccaaatcag tgagaattgc attaggagcc ctctggggaa agagcacagg 660
aactganttg ctgggcctca aaacaaaagg cttgcaggca catggntaga ctggccgntg 720
tcttgaagga cc 732

<210> 5264
<211> 765
<212> DNA
<213> Homo sapiens

<400> 5264
cacttcagaa acccatattc acacacatgt gcacgtgttc acatgaaaag acccccttgc 60
actcaggccc ccagagccga ggcattgtgc agccccacag cagccacctt cacagctgct 120
aacagcccct gtgccatgcc tgctgcaggc actgtctgct ctaggagggg ctcttgtttt 180
catggaaccc agtggtgaag agacacccca ctggcccttc tcttccccaa ttcctgtttc 240
ttcattcccc atcatttacc tgctctttct gtctggtcaa gaaagcatgt ctcagccagg 300
cccagtggct cagccaggca cagtggctca caccttctaa ccagcacttt gggagtctga 360
agtaggagga ttgcttgagc ccaggagttt gtgaccagcc tgggcaacat agggagatcc 420
catctctaca aataataata ataaagagta gctgggagtg gtggtacaca cccgcggtcc 480
cagctacatg ggaggctggg gtgggaggat tgcttgagcc tgggaggtca agggtgcaga 540
gagcaatgat tgcaccactg cactgtgacc tggatgacag agcaaaaccc tgtctccaga 600
aaaagaaaga aagaaagaaa gcaggtctca aaagcaatgg atgagtattc tttaactaca 660
atgtagcaga ctctttatta aaaatgaaat ttgatgntta tttttaatca tgttcaaccc 720
actttattct cagatatagn cttcctgnga ataactttct tttca 765

<210> 5265
<211> 854
<212> DNA
<213> Homo sapiens

<400> 5265
aatatctagt cctgtagcaa atttggaaaa taaagaaagg tataaggaag aaaattaaaa 60
tcactcctga gtctatccca cgttcatagc caccactgag gctgtagtcc tttgagcata 120
aatgtatatt cagcaacatt aagctcattc tctatgatta tgaatctgca tttttccaag 180
tgaaaagaga tgtcatgaat tgaaaagatc cttccaaagc accattgcta atggctcttc 240
cagttgtcac agatgtgtga catttgtcgc ctgttccccc cacttctgac ttatgatact 300
gcagttgttc gcatgtttcc ctcttgtgaa taacgcttca ggaacggcct catcatctca 360
aagctttgct cttgtcttta ggacgctgcc ctgtgagccg ctcgcccagc tactttgcac 420
agcaagacat caccttgtag ctgttcttga gcggtgcact ggcatccagg ccagtagtgt 480
ggttgcctca cccccagctc ctcctacaag ttctagaagg cctctctctg gttcagctct 540
tggcagctca gtaaagataa gacctgccca cagccctggg gatgggcgga gactgggggа 600
ttagaggagc cagaggtcac cttcaactgc catttanctc ttagtgggct cttcagctgg 660
atctggaaac cagattgaca gcaggcagat taataagaat agcataccaa ttgnattggg 720
tttacatata catnggggat cttctgcaag agaaccgaaa tgcaaagaag tgacccaagc 780
cagacgcttt tgnacttttg acaagaatga taaattggaa agaaacgacn gggcaaagaa 840

aattggcttg gaca 854

<210> 5266
<211> 685
<212> DNA
<213> Homo sapiens

<400> 5266
aattgtaatg ctttctggtt tgtttaagag tgaaagaaag ggactatagc atattggtta 60
agaacaagaa ctcatcttga ctccagcact tatcatctgt gttactttgg acaacttgct 120
cttacctaaa tttgttcctt tgtaaaatga aaataatagt agcatctacc tcgtagggct 180
gttgtgaggg tagaagatag atataggtat agatacagat agagcgagag agagagagat 240
ccttttttt ttttttttcc tgagatggag tctcactctg tcgcccaggc tggagtgcaa 300
tggcaccatc tcggctcact gcaacctcca cctcccgggt tcaagcaatt ctcctgcctc 360
agcctcccga gtagctggga ttacaggcgt gtgccagcat gcctggctaa tttttgtatt 420
tttagtanag acgggtttca ccatgttggc caggctggtc ttgaactcct gacgtcatga 480
tccacccacc ttggcctccc aaagtgctgg gattcctggc gtgaaccacc acacctggcc 540
aagagagaga tcttanaaca gtgctgggca cacattgcga gaaagaatca aagctggcaa 600
aggtgtgact tcagctattg acctgtgtcg ntaccatgga aacaaggcac tggaggccct 660
gganagcttt cctcctcggn ggcca 685

<210> 5267
<211> 843
<212> DNA
<213> Homo sapiens

<400> 5267
atgcgcttcc gcaggaagaa ggaagcggcg ccgccatcgc ctcccggcgc tccctccccg 60
actcctaagt ccttcggccg ccaccatgtc cgcctcggct gtcttcattc tggacgttaa 120
gggcaagcca ttgatcagcc gcaactacaa gggcgatgtg gccatgagca agattgagca 180
cttcatgcct ttgctggtac agcgggagga ggaaggcgcc ctggccccgc tgctgagcca 240
cggccaggtc cacttcctat ggaccaaaca cagcaacctc tacttggtgg ccaccacatc 300
gaagaatgcc aatgcctccc tggtgtactc cttcctgtat aagacaatag aggtattctg 360
cgaatacttc aaggagctgg aggaggagag catccgggac aactttgtca tcgtctacga 420
gttgctggac gagctcatgg actttggctt cccgcagacc accgacagca agatcctgca 480
ggagtacatc actcagcaga gcaacaagct ggagacgggc aagtcacggg tgccacccac 540
tgtcaccaac gctgtgtcct ggcgctccga gggtatcaag tataagaaga acgaggtctt 600
cattgatgtc atagagtctg tcaacctgct ggtcaatgcc aacggcagcg tccttctgag 660
cgaaatcgtc ggtaccatca agctcaaggt gtttctgtcn ggaatgccan acttgcggnt 720
gggcctcaat gacgcgtgct cttcgagctc actggccgaa caagacaaat catagactgg 780
aggatgtaaa aattcaccat gcgtgcnggt ntttgctttg aaacgaccga ccatttcttt 840
atn 843

<210> 5268
<211> 739
<212> DNA
<213> Homo sapiens

<400> 5268
taatagcaac ttatattatt ttactattta cagagagtgt ccacatatgt taacttcctt 60
gatcctcaca aacaccctat cccttgggta ttttctacca gccccatgag gctcagagag 120
atttacatga ctttttgagg gtttgaaccc aactctttgg tctcaaaaac atctcattcc 180
agtacacctc attgcctccc aagccctgta tccaggaaga cctgactcac cagcatgctt 240
tctgtgcgaa aggacaccag agctgagaag taaatcgaca ccacccccaa tccctgcaac 300
ttcctcttct ctgtcctgtc attgagaaca ccagcctaag ggcacgtttt tctccttcca 360
cgttctatta aagctcagta gtctaactcc tactattgaa aatgagagaa acaggaagga 420
aagtctcaaa ttccaacttt ggaaaccacg ttgaaagaag gtgctctcat ctggacatga 480
tggttcacgc ctgtaatccc agcactttgg gaggccgagg ctggcagatc acgaggtcaa 540
gagattgaga ccatcctggc taacatggtg aaaccttgtc tctactaaaa atacaaaaat 600
tagccaggtg tggtggcacg tgcctgtaga cccagctact tgggagtctg angcaggaga 660
attgcttgaa tncaggangc agatgttgca gtgagccaca tcatgccact acacgccagc 720
tgggcaacag agcaagact 739

<210> 5269
<211> 625
<212> DNA
<213> Homo sapiens

<400> 5269
gaatacttag ctttatgtaa cagatgcata ttcactgaat ttttctaaac tgaatcatat 60
tttaacctca tagaaggatc ttaacttact tatgaaagga acctgatgaa gaatcagctt 120
ataaaccttc aacttaactt tttaaaaatg tgactttccc tatgacaaac caacagttta 180
tcatagtttt aaagagtagc tattattcac ctgactctga ggtagatgct ggggttatta 240
accaaaggaa gacagttctc acgtggaagg attcactgat aatagattgg gaggttattc 300
taaattccac aagctaagag ggagtagcaa acagcattga atagttatgt tctagatggg 360
agtattcaaa ccaagaagac tcaggggagg gggtcttccc tacgatctag tggaagaagt 420
gcgatcaagc caggctttga aaggtagaga ggatttggac aggatttggg aatagcactg 480
ggtttggtag ccacagaatt cagcttgatt gagttcactt tttcctgaaa ccaaaggaca 540
gttctctgag ccaccttaaa cctggtttcc actaagactc ttgttccaca ttcaggaccc 600
caangacccn atgggcaanc tatta 625

<210> 5270
<211> 774
<212> DNA
<213> Homo sapiens

<400> 5270
ataaaaagat tgtaaacctg ttgtggaaaa caatgagttg tagtaagcat acctttgaca 60
ccacttttt atactcctaa ttcattatta gttgtgtatt ttatacttta tatatgtcta 120
gtttgggaat ttcattggga ttttcaaaac ttcaggggta gtagaaagag gggaaggtta 180
atttcaggac caaaaagctt tatggagttc taatactttc tgtgggcaaa caacacagag 240
taatgttcat agccctcacg ttgtacagcc tctacagtgt acaaggtgct ttctcttacc 300
agatctcctt tgaccttcac agcgactcca tgctgtggcc aggcagtgag cgatgggctt 360
tttacccatg aggaaatgga ggctgggaag tctcactgtg ggcgctctgg gcctggaccg 420
ccagtgctct gacagcagat agcctttcta gtttgttggt cagtcacggc tttctgttcc 480
catctgtttt agctacccag gtcacagaga ttactcatat aggggcaaga caaaaacatc 540

taagagtcat ccaggtttag tagaaagagg atgggctctg gaagagacag acatggagtg 600
aatccagcca gtggccctca ttggccatgt gacctggcaa gtaacatgtg ctgagctgag 660
cttcacggtg agcataggaa ccccctctga gggctcagtg cacttggcaa cattggaaga 720
gcctttaatc atttaatcca aggtggnggg tctggattac cttgggtttt tntn 774

<210> 5271
<211> 804
<212> DNA
<213> Homo sapiens

<400> 5271
tttattacaa agtgaagaaa acaagaactt ggatttagag ccatgtaccg ggttccaaag 60
aaaactaatt tatcagactt tgagctggaa gtatccgaaa ggcattcatg ttgagacttt 120
agaaactgaa aagaaggagc gatatatagt tatcagcaaa gtagatgaag aagaacgcaa 180
aagaagagag cagcagaaac atgccaaaga acaggaggag ctgaatgatg ctgtgggatt 240
ttctagagtc attcacgcca ttgctaattc gggaaaactt gttattggac acaatatgct 300
cttggacgtc atgcacacag ttcatcagtt ctactgccct ctgcctgcgg acttaagtga 360
gtttaaagag atgacaacat gtgttttccc cagactcttg gatactaaat tgatggccag 420
cacacaacct tttaaggata tcattaacaa cacatccctt gcggaattgg aaaagcggtt 480
aaaagagaca cctttcaacc ctcctaaagt tgaaagtgcc gaaggttttc caagttatga 540
cacagcctct gaacaactcc acgaggcagg ctacgatgcc tacatcacag ggctgtgctt 600
catctccatg gccaattacc taggttcttt tctcagccct ccaaaaattc atgtgtctgc 660
cagatcaaaa ctcattgaac ctttttttaa caagttattt cttatgaggg tcatggatat 720
cccctatcta aacttggaag ggccagactt gcagcctaaa cgtgacatgn tctcatgtga 780
cattncccaa agaatggaaa accn 804

<210> 5272
<211> 846
<212> DNA
<213> Homo sapiens

<400> 5272
cacccccccc cccccggcca ttaccgaagc ggatgaaaac aaacactaac gatggcggcg 60
ccgggaagcg accggctgct gggcttaagg cgggagtgac cgcttaacca gtgagggaag 120
cactgaagag cgccagtcga cgtgggtgcg acaactcgcg gagtcttagg agcaaaacgt 180
ctggggcctg cgagccagga cccttctgaa gccttaggtg tctatcggcg acgtgtacgg 240
tcactgcagc tccggagcgc ggaaccctca gccaggaggc gcggctggtc ggtcccaggt 300
cccggcctcc gtaatgagag cccggaacca ctctttgtgc cgcagcttcg cagtggaacg 360
acctgtggaa acctgtgatc cattctcatt aaataaatct ctggattcct ataggcaatg 420
gaaactgatc tcaattccca ggacagaaag gacctggaca agtttattaa atttttgcc 480
ctcaagactg tccaagtgat tgtccaggct cggcttggtg aaaagatttg cactcgttca 540
tcatcttctc caacgggttc agattggttc aacttagcaa tcaaagacat cccagaggtt 600
acacatgaag caaagaaggc actggcagga cagctgcctg cagtcgggag gtccatgtgt 660
gtggagattt cacttaagac ttctgaggga gattccatgg agctggaaat atggngtctt 720
tgaaatgaat gaaaagtgtg ataaagaaat caaaggttnc tacacggggg tacaacagaa 780
ctggcattgg ttgcttgaag tcccttcttg ctataactan ggtgacaccc agcctatagg 840
ctnttc 846

<210> 5273
<211> 810
<212> DNA
<213> Homo sapiens

<400> 5273
gcacgtcagc tgtcagatac gaaaggtaga tatcaggtaa gaatctggac ttaggaaata 60
gtcacaaaac tgtcataggt tgtaatttta tcaacattcg cttctagtaa aattaaagtc 120
aattaagaaa tagaacttgg gtcaaaattc tgttacaaag cttcataatt tgtcccgaag 180
catatggtgg agcattctga gaaatttgct ttttgtgtgt ttgacattcc taatttggga 240
gtccttcagc tgaattacta ttcttttaga agttgagaca gcaggtaagc aaaggaccta 300
gttcatgtaa acatggacat catgatggct atttaaaaaa tatttgttct acaccttctc 360
ccctgaggct tggggagtgt gttcagccgc tgcagtttct ctgctcatgg aggtcttgtt 420
tggatctgtg ctggcggctg agcatttagt gtgagccagt gacccatgaa cttgccgctc 480
tgtgagggcc agagtcaggg ccagtcatgg taatgggcct gaaggcactt ccagaacctt 540
ttatgtctct cgtgagccat ctgttaagaa cgttcttctt ggtgtggttt gtaggcctac 600
ctgtcgctat tctgggaaac cttcttgagt gctatgcaaa tgtgttcaca ggcaatgggg 660
gtggcctgag ccttggggtg ggcacctggn cagtgaagtg gcttgccctt tcccactggg 720
catacaagta ccttgctctt tctgggggca tcatctgctg ggatgaatga gggctaggaa 780
ataatttgca tgnggnnttg ggggacacac 810

<210> 5274
<211> 782
<212> DNA
<213> Homo sapiens

<400> 5274
catgtgaaat attcttttta aaagttagtc tgatttcttt tgcacagtcc tgtaccttca 60
attataagtt tgcctcaagc tctttgtggt aggagtctga gaataagtaa acaaaaccaa 120
ttctcagtaa ctattttcag acttaatttg cctgaattac atttcatgtc aaaagcatgc 180
attaaggaac aaagcaattt cagtaaagac acctatattc tctcctacat gttgcttaag 240
tagataacat atcttaagca gatttacaat attaaaagct tccaaggaaa ctcagtaaag 300
taccatgtga ctttttgccc ctattggcag ctagttcttc aatacttggc ttactttaaa 360
aaaaatacct tgcatcttgc ccctttttgtc cacctaggat agaaatcagc tttattcagt 420
gtgatcatat actgagaaac attggcttcc tctacataat tactggtttg agaaaataca 480
gtcagaagat tgcactggga ttgaataatt tggatgagaa gaaagtagtt ctctattgaa 540
tgtagttata gcttagtgct atttatgcag ataaaccaca tttttgtaac agtagtagca 600
ggtgtatttg attattaaag tgttacaagt tattgggttg caaaattaag cttttagagt 660
tatcagtttt gtgggtaagt tttncatagt attatgtana gcctgaagat ggtactctct 720
atcaaccact cttctatagt gggatttcat ttctaatggt agctcttgga nagcaggtct 780
gg 782

<210> 5275
<211> 666
<212> DNA
<213> Homo sapiens

<400> 5275

atttttaat ccattctgtg gcttgttcca tgcctgagaa cttttgacat cctgtgccca 60
gacttaaact cacccttca gtgtgtgggt ttaggggggag aagtgaaggt tgacacattc 120
atatcaacaa catagtctac tttaccatcc aacgatgtat tttgatatca gccaagtatt 180
tctctctaca actgtgagca atgctaatcc actccagcct tcttacactg taatgatacc 240
ttttctttgt cctctctgga agtttctagt agcatatctc caaataatta ttgaatttga 300
aagcctcagc tggacaagtc ttctctgtgg ttgaattgtg acaatgtctg tgttccttaa 360
aaaaataaaa aataacataa aaccaagtaa ggttagacaa aacagttgaa agtttaaaat 420
cccttggcct catctagttc agtggagaca aactttctaa atgggaggag ggccatgtaa 480
tgagaggaga ggagaggaga gaagtatttg atgcactcat ggcctcaggg tcagggagac 540
ctggaggagc agtggagatg gtggagagcc agagaacagg gccaccttcc aagaggcagc 600
ctttactcac ctctggctga ttggcggngt tggggatgtg ggtacaggca tatcanacct 660
ttanat 666

<210> 5276
<211> 840
<212> DNA
<213> Homo sapiens

<400> 5276
cacttccccg atcgggccgt gtccgccgcg gccctgcgag gtccgagggg caatagccct 60
ctggaacaag acaattcatg tgagataaga aagaagagcc cacaagacca aggatgtatt 120
ctcagtttac agaccactga ccagaggcca ctccagggtg tcaggactaa gagaagtcac 180
aaaacagcag atttcccaag agcagcggaa aatgacccag tcacagatat catttgagga 240
tgtggctgtg gatttcacgc tggaggaatg gcagctactt aatcctactc agaagaactt 300
gtacagagat gtgatgttgg agaactatag caatctggtt ttcttggaag tctggctaga 360
taatcccaaa atgtggctcc gagataatca agacaacctt aaaagtatgg agagaggcca 420
taaatatgat gtttttggaa aaatatttaa ttcaagcata aacattgttc atgtaggact 480
gcgatcccat aaatgtggca caggagaaaa aagtttgaaa tgtccttttg atttgcttat 540
tccaaaaaat aattgtgaaa gaaagaaaat tgatgaactc aataagaaat tattgttctg 600
tatcaaacct ggcagaaccc atggtgggat aaaatactgt gattgcagta catgtagaaa 660
atccagcaac gaagagccat ggctcactgc taatcacata acacacacag gagtctattt 720
atgcatggaa tgtggcagat ttttttaac aagaagtcac aacttggtat tcaccagaga 780
actcatacag gagagaagcc ctatcaatgc aatgagtgtg gnaaagcctt tttacagaag 840

<210> 5277
<211> 797
<212> DNA
<213> Homo sapiens

<400> 5277
gtttgggtgg tgaacaggga tacagcaggc ctcagtgacc aggcagagcc cagtgaggtc 60
aggcatggac aacgcacgca cattgggatg ggaaggcctg ctgttaactg ggagagagag 120
gaggaggagg tatggggatg actcccaagg aagggctttg cctaccttga tgggtttgct 180
gggctgcgcc tcagaaactg gaggtcagtg ccattcccat cagtgttcct actgccagga 240
aagtcttgca gtggctggct ggccttcctg ttcgactttc tttccttgct catcaaaaca 300
ctttctctcc cagcatcaac tctacctgct ccttctgctt accacgcatt ccagtgactc 360
tgcccggttc caccggaagc ggagttattt tggaaggctg gatggtgtac ggtagggtgg 420
agggagccag aacgggaagc cttggatggt ggaaactcct ctatcaccag ggaacttggc 480

tgcagcccca agccctggcc tcccaccaga gcggggccgt ccactttctc cttctttttt 540
tagtactatc ctctctgacc cgcccagggc tgggatgttg cagtgtgttt ttccaagaga 600
cccggcaaac agcaacttga caggttcaac ggttcccatt gacagcctga atggactcct 660
ctgaaaacta cgaaactgga cacaaaaaca gcccataaaa atcctgcctn ccgcangcgt 720
ctggacgctg ccttttccaa atgacccttc acacacggat gctgcatggg tggctaanca 780
catttttga gtgattt 797

<210> 5278
<211> 820
<212> DNA
<213> Homo sapiens

<400> 5278
gaaaaggaaa tcgcagctgt gatttctcct gaactggagc atctagataa aacccttccc 60
accatgaata atctcatcag ccaagataag cgtatcagct ctaaccctgt ggccaaaata 120
atatatggtg acccagtgac cttcctgccc cacctgcccc ggaaaagtgt ggtccattgc 180
tctaagattt ggagctgcag gaaaagaatt acagttgagt acctccagca cattgtggaa 240
cagaaaaatg gcaaagaaag agtgcccatc ctctggcatt tcctgcagaa ggaagcagag 300
ctgaggctgg taaagttcct gcctgagatt ttggccttgc aaagggatct agtgaagcag 360
ttccagaacg ttcagcaagt tgaatacagc tccatcagag gcttcctcag caagcacagc 420
tcagatgggt tgaggcagct gcttcacaac aggatcacag tctttctgtc cacatggaac 480
aaactgagga gatcgcttga gacgaacggt gagatcaacc tacccaaaga ctactgcagc 540
actgacttgg atctggacac tgagtttgag atcctcttgc cacgccgacg gggcctgggc 600
ctctgtgcta ccgctctcgt cagctacttg attcgcctac acaatgaaat tgtctacgcc 660
gtggaaaaac tctccaagga aaacaacagc tattccgtgg atgccgccga ggtcactgaa 720
ctgatgtcat cagttatgaa gtggagcggg acctgctnca ctgatctntc actgcagtac 780
cagtgganga ggcagaaaga cggcagagtc gatctggaga 820

<210> 5279
<211> 828
<212> DNA
<213> Homo sapiens

<400> 5279
ttcacagaaa acaaaattta ctcatatcca atgtacattt cctgaagata aaactgttca 60
tctcagggtc tgagtgggcc ctggagcctg agctggcctt gctcactgca tccgcaagga 120
gacaattagc acagcctgct gcctgtagct gagctgtgca gagccaggga acaggagtgc 180
tccaaaagcg agaagggttt ccggttgccc tttcaacctc agaagtcagg acttgactca 240
cagtcttctg gatttttgac aaacaaaatc ctatgcctat gcctagatcc ataggcacac 300
aaatggaaga cctaaataaa tcaaagtggg ggagtgaggc tgctggactc ctagagattc 360
atggctctgc cttgattagt caccattctt ttagcacata cgtccagata tcctacagaa 420
aagaatgcag tcaccattca ggcatgcttt gttttgaagc aatgatcatg aacttaatat 480
tctctgctgg cataaagagg aaaaaaatat aacacctggc agcttgtggg taagtccatc 540
acgggagccg gtcctaaaat tcttcaaaat accaactttc tgaggttgga agcagaccct 600
gagatgagat tttggtgcaa gtgatttatt aaggaaggga tcccaggaaa ggcagtaagg 660
gagtagggga aacaagttag ggatggggaa gaatccaagc aaaggttcaa cttcaaaagt 720
tctggcctca gtctaatccc gagtgtaaat taggcctcan agttggtcta ccttcaggca 780
aggaagcagg actgncatat tcttatatga agtcaagcat tnggttaa 828

<210> 5280
<211> 844
<212> DNA
<213> Homo sapiens

<400> 5280
gttcacatta gttgtgtctc tggttcttgt cacaatctat gctgattata ttgccccttt 60
atttgacaaa ttcacacctc tgcctgaggg aaagcttaaa gaagaaattg aagtaatggc 120
aaagagtatt gactttcctt tgacgaaggt gtatgttgtg gaaggatcta aacgctcttc 180
ccacagcaat gcttattttt atggcttctt caagaacaag cgaatagttt tgtttgacac 240
tctactagaa gagtactctg tactaaacaa agacatccag gaggattctg gcatggaacc 300
ccgcaatgag gaagaaggga acagtgaaga aataaaagct aaagttaaaa ataagaaaca 360
aggatgtaaa aatgaggagg tactcgctgt actaggccat gaactggggc actggaagtt 420
gggacataca gtcaaaaata tcattattag ccagatgaat tctttcctgt gtttttttt 480
atttgctgna ttaattggtc gaaaggagct ttttgctgca tttggttttt atgatagcca 540
acccactctt attggactat tgatcatctt ccagtttatt ttttcacctt acaatgaggt 600
tctttctttt tgcctaacag tcctaagccg cagatttgag tttcaagctg atgcatttgc 660
caagaaactt gggaaggcta aagacttata ttctgcttta atcaaactta acaaagataa 720
cttgggattc cctggttctg actgggtggt ctcaatgngg cattattctc atcctncact 780
gntagagaga cttcaagctt tgaaaactat gaacaccctg agatgtcaag aactgggctg 840
aaga 844

<210> 5281
<211> 665
<212> DNA
<213> Homo sapiens

<400> 5281
cactcaaatc atgaagaatc ctaaagcgaa gaccacagga atgggtgcca tctatggcat 60
ggcccagaca actgttgaca ggaatatggt tgcagaattg tcctcagtct tcttggacag 120
cttgtacagc accgacactg tcacccaggg cagccagatg aatggttctc caaaacccca 180
ctgaacttgg acccttttcta gtctcaaggg gattccagcc ttcagaaggt tcttgggata 240
tggaacaggc cgtgcacaac tttgacatct ggtcttgctc catagagcac aactcaagat 300
agaccatgag acagcttgag cctcaggatt cttgttcttc ctcttatctt ccttttgtgg 360
tttttaattt gaagacccca gagaattcca ttacataatg attttgccct tgttataaat 420
gttaccctag gaattgtttt aaccatttcc ttttctaaac tctctagctt tcaactttac 480
ttaaacattg tgtggtagct ctgacctgtc ctgattcttt agagaagctg gggtacagtt 540
tatgagatag ctagagcttc tttgttatct caggcaggag gcgtttacat aacagatgtt 600
tcctcagctg ggtgtgaggt atactctaag caggaggctt tttcagcctt ctctctcttt 660
ttnnn 665

<210> 5282
<211> 809
<212> DNA
<213> Homo sapiens

<400> 5282

tatttggcaa catctggtta tccatggcca gcctggtcat ctttatgcag ctgcgttacc 60
tgtttcatga ggtgcaacgt cgaattcgtc ggcacaagaa ctatctacgt gtggttggaa 120
acatggaggc caggtttgca gttgcaactc cagaggagct ggctgtcaac aatgacgact 180
gtgccatctg ttgggactcc atgcaggctg cgcggaaact gccctgtgga catcttttcc 240
acaaggtctc ggattgcgag ctggctgccg agtttttcgg ttgaagtgat gcacaccacc 300
aacattcttg gcattacgca ggccagcaac tcccagctca atgcaatggc tcatcagatt 360
caagagatgt ttccccaggt tccataccat ctggtactgc aggacctcca gctgacacgc 420
tcagttgaaa taacaacaga caatatttta gaaggacgga ttcaagtacc ttttcctaca 480
cagcggtcag atagcatcag acctgcattg aacagtcctg tggaaaggcc aagcagtgac 540
caggaagagg gagaaacttc tgctcagacc gagcgtgtgc cactggacct cagtcctcgc 600
ctggaggaga cgctggactt cggcgaggtg gaagtggagc ccagtgaggt ggaagacttc 660
gaggctcgtg ggaacccgct tcttcaagtc tgctgatgag agacagcgca tgctggtgca 720
gcgtaaggac caacttcttc agcaagctng caaacgttct ttgaacaaaa gttttgaana 780
tgatgcnggc ttaaaaaagc tttcttccc 809

<210> 5283
<211> 761
<212> DNA
<213> Homo sapiens

<400> 5283
gaaataacga tgagcgatga ggagcggatt cagctaatga tgatggtcaa agaaaagatg 60
atcacaattg aggaagcact tgctaggctc aaggaatacg aggcccagca ccggcagtcg 120
gctgccctgg accctgctga ctggccagat ggttcttacc caacgtttga tggctcatca 180
aactgcaatt caagagaaca atcggatgat gagactgagg agtcggtgaa gtttaagagg 240
ttacacaagc tggtaaactc cactcgcaga gtcagaaaga aactaattag ggtggaagaa 300
atgaaaaaac ccagcactga aggtggggag gagcacgtgt ttgagaattc gccggtcctg 360
gatgaacggt ccgccctcta ctctggcgtg cacaagaagc ccctttctt tgatggctct 420
cctgagaaac ctcccgaaga tgactcagac tctctcacca cgtctccatc ctccagcagc 480
ctggacacct gggggggctgg cccggaagtt ggtcaaaacc ttcagcaaag gagagagccg 540
gggcctgatt aagcccccca agaagatggg gacattcttc tcctacccag aagaagaaaa 600
ggcccagaaa gtgtcccgct ccctcaccga gggggagatg aagaanggtc tcgggtccct 660
aagccacggg agaacctgca gttttggang atttgcttgc gaatcgctct ntgcacgttg 720
gcagtataat tctgacccca tgggtnaaga aggggacttt g 761

<210> 5284
<211> 691
<212> DNA
<213> Homo sapiens

<400> 5284
ggaacagcgg cctctgacac cagcacagca aacccgccgg gatcaaagtg taccagtcgg 60
cagcatggct acgaaatgtg ggaattgtgg acccggctac tccacccctc tggaggccat 120
gaaaggtaat tgcccatggt ctgagagcca gcgccctact actgattcca cagctggggg 180
tggagggact tcagacctag cccccaccct ctggcacacc cagcacttcc cctacctttc 240
cttcccaccc tgccgtccct gctgcctgct ttctaccgtg caggacccag ggaagagatc 300
gtctacctgc cctgcattta ccgaaacaca ggcactgagg ccccagatta tctggccact 360
gtggatgttg accccaagtc tccccagtat tgccaggtta ggcggggctt gggcgccagc 420

tactttgaga ccatagctgc cctcatccct ggccctgggc ccccccttcc cagctccatc 480
cttcttggcc ctccctgggg atgcttgtgc acgctcaacc tgggacaagg ggagtgctga 540
aatccagcct gtgccgtgct tccaaaccaa aatgagtcca caggggcgcc tcttccaaaa 600
gtggacagag gcgtggcctg ggggagcacc acctnttccc gcatctangt catncaccgg 660
ctgccatgcc caacctgaag gacaactgga t 691

<210> 5285
<211> 721
<212> DNA
<213> Homo sapiens

<400> 5285
aagagaaatg ctcttcatac ccagtaggca gacagtccct acatataaaa agcttcctga 60
gaatgtacag cccaggttcc tggaagatga aggcctttac accggggtaa gaccagaggt 120
ggcacgcacc aatcagaaca tcatggagaa cagattgctg atgcaggacc ccgaaagaag 180
atggtttgga gatgacggca ggatcctagc tctgccaaac cccatcaagc catttccttc 240
aaggccgcca gtactaacac aggagcagag cattaaggca gagcttgaaa cactgtataa 300
aaaggctgta aaatacgttc acagtagtca gcatgtgatc agatctggag accctcctgg 360
aaatttccaa ctggacattg atatttcagg gttaatcttc actcatcatc cctgttttag 420
ccgagagcat gttttggcag ccaagctggc ccagttatat gaccagtacc ttgcaagaca 480
ccagagaaac aaggcgaaat ttcttactga taagctccaa gctttaagaa atgctgttca 540
gactggcctt gatccagaaa aacctcatca gtctctcgat accatccaaa aaaccatcaa 600
tgagtataaa tctgaaattc gacaaacaag aaaattccgt gatgctnaac aagaaaaaga 660
ttgaacattg cttaagacta tcattaaaag nttggaaaga gatgaaatnc ctttcaaagt 720
t 721

<210> 5286
<211> 780
<212> DNA
<213> Homo sapiens

<400> 5286
ttcaaatagt tgtagcaaga atgaaataga cattgatgct tttaggcatt atagcttttc 60
tgatcaacct aagtgttcac agtacatatc tgggctcatg agtgtacatg gactcctcgg 120
atgcggccgt cctgcagcag aagcctcgag agcctccggg tgggtgccaa gccgcctccc 180
ttccagcggt ggccgagcga cagctggatc aggtgcggcg cgcaccggga ctgggacgag 240
cccccgccac gtggaggcag gatggacggc tggagtgggg accgcgcccg ggcggctgca 300
cccaccggcc tccagcctcc aggctgcaag gaccacggct gctcctcggg aagcccttc 360
agggatccag cggggtcctc tgtgatacgc agtggcaaag gagaccgccc ggaaggcccc 420
tccttcctca ggccgccggc agtgacagtc aagaagctgc agaagtggat gtacaaaggg 480
cgtctgctgt ccctgggaat gaagggtcgt gcccgtggga cggctcccaa agtcacagga 540
acgcaggcag cctccccaaa tgtgggcgct ttgaaagtgc gtgaaaaccg tgtcctgtcg 600
gtgccttcag accaaagaat tacgctgaca gatttatttg aaaatgccta tgggtcttca 660
atgaaaggga agagaacttg aagagctgaa ggataatatt gaattcagan gncataagcc 720
acttaacagc atcactggtt tcaaagaaac cgcaattggc tatntcaagt actttgagg 780

<210> 5287
<211> 698

<212> DNA
<213> Homo sapiens

<400> 5287
tggaaatgaa tataaaatca gaatccaaca cataaaaaga aagttcagca aatgcaggac 60
tccagtctcc actgcttcac agtagggttt gtccttgtgt tttcttgttt tgtttgggaa 120
aataatgcaa aagagatttg ttgtaaaagc tttgaaattt aattatgatc agggagttct 180
aaaggaaatt aaacatagca tgagtacttt taaaaaatat gaatttaata tagcatctta 240
tcaaataatt catcccacac ggctagctca cttcccacca ggaaatagaa aagaattttt 300
gaggactctt aactaataat aatttctgaa tttctctgac accttcactg tttctaaaca 360
tttttttgg tcatgttaac ttacttgatt cttcagagtt tgcttattat agccatcact 420
ttctaatagt acatagtttg aaaagcactt ggccgtcttc tgcattctgg gaacatgtgg 480
cttcctgacc cacagaggat ggcttctcgc tgtgtcctca tgtggtggaa ggggtgaggg 540
gtctctctga agtgtctctg ctaagggcgc tagtcccatt cttgngggct ttattctcac 600
cacctaatca ctcccaaagt ccaccttcta acaccatcgc ttcangggaa aaatttcaaa 660
gtattgnatt tgggggaggg ggccggcatt naatagtc 698

<210> 5288
<211> 629
<212> DNA
<213> Homo sapiens

<400> 5288
gcttacagtt cctaaccccg accctgcgcg cagcccgcac tatggcagcc ccgccgcagc 60
taagggctct gctcgtagtc gtcaacgcac tgctgcgcaa gcgccgctac cacgctgcgt 120
tggccgtgct taagggcttc cggaacgggg ctgtctatgg agccaaaatc cgggcccctc 180
acgcgctggt catgaccttt ctcttccgga atggcagcct ccaggagaag ctgtgggcca 240
tactgcaggc cacatatatc cactcctgga acctggcacg gtttgtgttc acctacaagg 300
gtctccgtgc cctgcagtcc tacatacaag gcaagaccta cccagcacac gcattcctgg 360
cggccttcct cgggggtatc ctggtgtttg gagaaaacaa taacatcaac agccagatca 420
acatgtacct gttgtcacgc gtcctgtttg ccctgagccg cctggctgta gagaagggct 480
acatccctga acccaggtgg gacccgttcc cgctgctcac tgcggtggtg tgggggctgg 540
tgctgnggct ctttgagtat caccgatcca ccctgcagnc ctcgctgcag ncctccatga 600
cctacctcta tgaggacagc aatgtatgg 629

<210> 5289
<211> 817
<212> DNA
<213> Homo sapiens

<400> 5289
gcgactgcgc gcgcagggcc tgagcgggcg ccggagggaa ggggaagcgg cggggtagta 60
acagattatg ggcaacagtc cttttaatta atctaccgtc atcatggcta atgaggactg 120
tcccaaggct gctgatagtc ctttttcatc agataaacat gcccaactca tcttggccca 180
aatcaataag atgagaaatg gacagcattt ctgtgatgtg cagctgcaag ttggacagga 240
aagttttaaa gctcatcggc tggttttggc tgccagcagt ccttactttg cagctttgtt 300
cactggagga atgaaagagt cctcaaaaga tgttgtaccg attctaggaa ttgaagcagg 360
aatctttcag atacttctag atttcattta cacaggtata gtgaacatag gtgtgaataa 420

tgtccaggag ttgattattg cagcagacat gctacagttg actgaagttg ttcatctttg 480
ctgtgaattt ctgaaaggac aaattgatcc actgaactgc attggaattt ttcagttctc 540
tgagcaaatt gcctgccatg atctcttgga attctcagaa aactacattc atgtccattt 600
cttggaggtt catagtggag aagagttcct ggcacttacg aaagatcagc tgatcaaaat 660
tttgcgaagt gaagagctta ncattgagga tgaatccagg tcttcttanc tgcaatgcaa 720
tggatctgaa agatttggga aaaagaagaa acatgtggtg gnaatgctag acccaattcg 780
attnccttta ttacctctta aaaacttttt aaaggnt 817

<210> 5290
<211> 815
<212> DNA
<213> Homo sapiens

<400> 5290
tcctgcaggg ggcaccagag atcttggaca ggcaaactgc agcccttctg catggaacca 60
tcatcctgga ctgtgtcaac atggacctta aaattggaaa ggcaacccca aaggacagca 120
aatatgtgga gaaactagag gccctttcc cagacctacc caagagaaat gatatatttg 180
attccctaca aaaggcaaag tttgatgtat caggactgac cactgagcag atgctgagaa 240
aagaccagaa gactatctat agacaaggcg tcaaggtggc cattagtgca atatatatgg 300
atttggagat ctgtgaagtc ctggaacgct cccactctcc acccctgaag ctgacccctg 360
cctcaagtac ccaccctaac ctccatgcct atcttcaagg caacacccag gtctctcgaa 420
agaaacttct gcccctgctc caggaagccc tgtcagcata ttttgactcc atgaagatcc 480
cttcaggaca gcctgagaca gcagatgtgt ccagggagca agtggacaag gaattggaca 540
gggcaagtaa ctccctgatt tctggcctga gtcaagatga ggaggaccct ccgctgcccc 600
cgacgcccat gaacagcttg gtggatgagt gccctctaga tcaggggctg cctaaactct 660
ctgctgagcc gcttcgagaa gtgcagtcag atcttactgt cacagtctac cacagccttc 720
cttgtcccag aagtgactgn tgaaaagcca agaggtaatg ggtgaagcta cctgactcac 780
tttaaatgcc tggttttgag angnttggag aatca 815

<210> 5291
<211> 676
<212> DNA
<213> Homo sapiens

<400> 5291
ataaaaccta acattctgag ccagtattta ggacccgtaa aatttgactc tactgaatct 60
ttccaatctt atacccacta cagtgcaaaa acccctgatt tcattaagca gacgtagtag 120
ctgccctgga atatgctatt tcccttattg ttgttatgct tttgttaatg atctaccctc 180
cagtgaattt tggtttgtgt tctgaatctt aaatttacac agcatacaac ctcgaatgga 240
tattataatt tctctgagcc tgaaaattga aataataact tcatctttaa gggatgcaat 300
gagaaacaac tatgttccaa tatgaaacta cattacttgc agtgatcaat ctgagagatt 360
gtgctttgat aacctgactt caaaatacag accaagatac tttcctaatt tatcatttga 420
ggttttaaat aattatgata tacaaggggt aattttgntt tttgtttttt tttttgcttt 480
tgttagagaa ttttaagcaa tttacttggt tagctcaatg ctatataaat atgtttgcaa 540
ttattttaat ttaaaaactt aaaaaataca aatgtaaatt atgatcagat acctttgatc 600
ataacaccta aaagaaaang gaggaaacac tatcaaaatt tgattttctt atgnttcatt 660
ttctatacag ncttaa 676

<210> 5292
<211> 671
<212> DNA
<213> Homo sapiens

<400> 5292
ctaggtagga agggggcctg ctggttggtt ggggcttcat gatacttgca gtggtggagg 60
cagctgttgg gggttcttag aaatagagtc ctccagccag ctctaagggc ttcctgccct 120
ggcctcagcc ttagcaggcc agagtgagca gtgggcagaa accttgacct cacttaatat 180
ggccttcgtc caggtgaagc agaaagagct gtgtctgccc ttcgcttggg tccgtgtgag 240
agcaaggcct ttggcaagcc tgtgtcgtgc ctgtaccact ggggctgcct cccacaccct 300
cccctgcaca cccctagtgc cgcagtaagc acgcccacca ttaaagcaga ccaggagtta 360
ctaacctgcc tgccttcctc agaggctcag tgttgagttg gaagagaggg gttttacagt 420
gggccagtcc ttaaggtggt gtgggtgctg ggctgtggtt gtggccttag gtctgctggc 480
gggtgtgctg cacctccttg gcctcccctc tcctgggctc aaggaagtaa acaagtcctc 540
tgtatgatgg ggaggccagg acctctcgtc cctttaaggc agcttggtgc ctgccagtca 600
cctcaacggg cggcaagtca ntgggcttgt gngcatctgt aaactcagca ctttgggagg 660
ctgaagcang a 671

<210> 5293
<211> 710
<212> DNA
<213> Homo sapiens

<400> 5293
cgttattttt ttaatctgcc agaacataca tttttcttac ctgtcattat tattattatt 60
atttgaggtg gagtcctgct gtatcaccag gctggagtgc agtggtgcaa tctcggctca 120
ctgcagtccc tgcctcctga gttcaagcaa ttcttgtgcc tcagcctccc tagtagctga 180
gattacaggc gtgtggcacc acgcccagct aatttttcta tttctagtag atatggggtt 240
tcaccatgtt ggccaggctg gtctcgaact cctatcctca agcaatctgc ctgccttggc 300
ctcccaaagt gctgggatta gaggcgtgag tcacctcgcc cagcctctta cctgtcattc 360
ttgaggagcc cagtgtagga gggaagggct gtgtatctgt gagtgcgggt aaagcacacg 420
gaagctggcc atgttcgtca tcttggtttc atactgacaa gcaggagtca gtgtgcccca 480
tggcgtgggg gccctggaag gaagcctctg cagctgcaga aagacagacc ccacttggaa 540
aataaaacag cagcataagg acttgggctc taattacaga gttgtcaggt tgaagagaag 600
tggttgtggg ataacaggaa gagaaaatat tttggntctt ctcancataa tgaattttca 660
tcagtacgcc tatttccttg gttaactttt tgccaaatgg ggacctttng 710

<210> 5294
<211> 691
<212> DNA
<213> Homo sapiens

<400> 5294
atcgcttgaa cccaggaggc ggaggttgca gtgagccaag atcacgccac tgcactccag 60
cctggccgac agagtgagaa cccgtctcaa aaataaatta aaaaataata aaaaataaaa 120
caaagtaggc catagatcta aatgttagag ctgaaactac aaaacacttg aagtaaatac 180
aggagtaaat cttcatgacc tgagttaagc aaagccttct tagatgcaag accaaaagca 240

caagtagcaa aagaaaaaag tagacaaact ggacttcatc ggagattaag atttgtgctt 300
caaaggacac catcaaggaa gtaaaaagac aaaccacaga atggagaaaa tatgctgctg 360
ggactcgcca cctcctgccg tgctggtggg ggaagcgcca ggctgtaggt ggggtctggc 420
ctggtctctg cccagcaaac tggctgtgct ggcccgggca atccctctcc tcctgggtct 480
gtttctgggg ctatggagtt gagggtggag ccagcagcaa ggggacaggg ctcgctgggg 540
gacccgcctg cctgtgctgc tgccaggagc tctggaactt ccaatacctg gcagcttctt 600
tgcctctcag agttgcagcc cttgggtgat gttgcagctc acatttcccc atttctgatt 660
actgcttgcc ccacttnctn ctgngtccct g 691

<210> 5295
<211> 835
<212> DNA
<213> Homo sapiens

<400> 5295
tctaggcctg gtcggctggc ggcgatggca ggattttcat aatatatgta gtatgagttc 60
cacatcttgg cctcttaccc agcttcagca gtctcagctc caccagttag agaataaatg 120
ggatttgcat gaactccact ctgagctgaa atacagactg cggtgttaat atccttttct 180
tctgattgtt attaacaggt ccttatgtcg tcagaagatc gagaagctca ggaggatgaa 240
ttgctggccc tggcaagtat ttacgatgga gatgaattta gaaaagcaga gtctgtccaa 300
ggtggagaaa ccaggatcta tttggatttg ccacagaatt tcaagatatt tgtgagcggc 360
aattcaaatg agtgtctcca gaatagtggc tttgaataca ccatttgctt tctgcctcca 420
cttgtgctga actttgaact gccaccagat tatccatcct cttccccacc ttcattcaca 480
cttagtggca aatggctgtc accaactcag ctatctgctc tatgcaagca cttagacaac 540
ctatgggaag aacaccgtgg cagcgtggtc ctgtttgcct ggatgcaatt tcttaaggaa 600
gagaccctag catacttgaa tattgnctct ccttttgagc tcaagattgg ttctcagaaa 660
aaagtgcana gaaggacagc tcaagcttct cccaacacag agctagattt tggangaact 720
gctggatctg atgtagacca agaggaaatt gtggatgaaa gagcantgca ggatgtggaa 780
tcactgncaa atctgatcca ggaaatcttg gactttgatc aagctcaaca nataa 835

<210> 5296
<211> 729
<212> DNA
<213> Homo sapiens

<400> 5296
accctggctt ttcttcacct cttcaaccag gagccgagat ttctgttgct ctgaagccat 60
ccaggggtct ttaaccagaa gagagaggag agcctcagga gttaggacca gaagaagcca 120
gggaagcagt gcaatggctt caaaaatctt gcttaacgta caagaggagg tgacctgtcc 180
catctgcctg gagctgttga cagaaccctt gagtctagac tgtggccaca gcctctgccg 240
agcctgcatc actgtgagca acaaggaggc agtgaccagc atgggaggaa aaagcagctg 300
tcctgtgtgt ggtatcagtt actcatttga acatctacag gctaatcagc atctggccaa 360
catagtggag agactcaagg aggtcaagtt gagcccagac aatgggaaga agagagatct 420
ctgtgatcat catggagaga aactcctact cttctgtaag gaggatagga aagtcatttg 480
ctggctttgt gagcggtctc aggagcaccg tggtcaccac acagtcctca cggaggaagt 540
attcaaggaa tgtcaggaga aactccaggc agtcctcaag aggctgaaga aggaagagga 600
ggaagctgag aagctggaag ctgacatcag agaagagaaa acttcctgga agtatcaggt 660
acaaactgag agaccaagga tccaaacaga atttgatcag cttanaagca tnctaaataa 720

tgaggagcn 729

<210> 5297
<211> 828
<212> DNA
<213> Homo sapiens

<400> 5297
accaattaag gaaaaaaata acccacaaaa gaatggctgg gaattatctc tcatggcctt 60
tattttcttc atattagatc tccagaaatc tatttgaatt aattttgtta tcatttgcta 120
aatcactgga ggccatgtct acactgccaa gagaaaaaag ttcaaaaact catttcaaac 180
agcttcctac caaaccagtc ggggatattc tatacagtat accaatataa aaaatacaga 240
agaattattt gttctgatcc tattccaaat tatataagtt gataaccaaa tgttaccatt 300
ggaaaacgtc ttggaactat ttaagtcttt ctattgcact ttttcttcca actttaaaag 360
acaaaatttt aaaatctgac cccagccctt gtgattgttc agtatataat caatggtatc 420
ttacaaggac tattttattt ggaatcaatc aaatttgttt cctgccaaca ataagttaga 480
ttgtttttg cagttctcaa gtaacaaata tgaggaccga actctcattc aacatccaag 540
cccttgcagt ttgtgcaaat atatgtttag caacaaagga cagacagaat ccatcattag 600
tatggctttt tactggaatg ttttgcattt attcattgnt ctttgcttgg agagcaaatt 660
tagatatttc aaaaccactt ttcatgggtg tggtggaacg attctggatg cagagcaatg 720
cagtagtgcc gcctcgctgg cattggttgg ctgcagttgn gctgagacta accgagtgct 780
gaatagcaat gggcttcagt ggctggaatg ntttctgcac tcttttgn 828

<210> 5298
<211> 832
<212> DNA
<213> Homo sapiens

<400> 5298
atccctccct gcccaggccg cgagaatgac cactccactt gcaggcgaag cccctggccg 60
ctgtgctgaa ggaggtgtgc gacgcgtgga gcctgacgca ctctgagcgt tacgccctgc 120
agtttgcgga tgggcaccgg agatacatca ccgagaataa ccgcgcggag atcaagaatg 180
gcagcatcct gtgcctcagc acggccccag accttgaggc tgagcagctc ttgggtgggc 240
tgcagagtaa cagtcctgaa gggcgccggg aagccctgag gcgccttgtt ccgctggcct 300
cggacatgat ctttgccagg gaggtcatca gccgtaatgg gctccagata ctaggcacca 360
tcattgaaga tggggacgac ctaggagagg tgctggccct cagcctgagg gccttctcag 420
agctcatgga gcacggcgtg gtgtcctggg agactctgag catccccttt gtgaggaagg 480
tggtgtgcta cgtgaacatg aacctcatgg atgcctccgt gcctccctg gcccttgggc 540
tgctggagag tgtgaccttg agcagcccag ccctgggcca actggtcaag agcgaggtgc 600
ccctggatag gctgctggtg cacctacagg tgatgaacca gcagctgcaa accaaggcca 660
tggccctgct gacagccttg ctgcanggg ccagcccttg tggaacgcaa gcacatgctt 720
gactatcttt ggcagaagaa ccttcgccag tcatctataa gacatcattc acagtgcaac 780
accaatgggc gacaagatgg cttcatcacc tgacgtactg aagcttttat cn 832

<210> 5299
<211> 721
<212> DNA
<213> Homo sapiens

<400> 5299
agctttaggt tcacagcaaa atagaacata aattacagag ggttccccg cacccctggg 60
ctcagcatcc ccacaagagc ggccatttgt tatagtcgcg accgccctgg agacagtgtc 120
atcatcaccc acaggccgca cgacctcagg gtccaccggg tgctgtgcag tctatggttg 180
gatgaacgta tcctgatgtg gacccaccgt tgtggtatca tacagagtag tttcactgcc 240
ccaggtcccc cgtgttcctg ctgcacatcc ctccgtccct ccctctcccc agcccctggc 300
attcgctgat ctttgtgctg tctgcacggt tttgcccttt cctggatgtc agagtcggaa 360
ccgtacagcg tgtagtcctt ggagacgggc tgctttcact cagcagcatg cgtctatggt 420
ccttttttgt cttttcaggg cctggtaata ttctgttgtc tggatggacg ccgggtgttt 480
aatccactca cctatgagtg tcttgggtca cttgtagttg tctctctggg cttctcttac 540
ggataaatga agaataaaca aagccagcca ctggcccctg aactcggttc tgcctctgac 600
ttgtcttgat gaggaggtgt ccttgcgtgg actcgtgctg tgtcatcatg ctcctgctcc 660
gtgttcggag ccacctgggc tgtgacagga ngtcaagtgn tcanggatga tgcagtttct 720
g 721

<210> 5300
<211> 787
<212> DNA
<213> Homo sapiens

<400> 5300
agagcgacgc ggaaccccgg gcgcctgggt ccccagcatg atcctcggca gcctgagccg 60
ggcagggccc ctgcctctgc tacggcagcc cccgatcatg cagcccccac tggacctcaa 120
gcagatcctg cccttcccac tcgagccagc ccctaccctt ggcctcttca gcaactacag 180
caccatggac cctgtgcaga aggctgtgct ctcccacact tttgggggac ccttgctcaa 240
gaccaagcga cccgtcattt cctgtaatat ctgtcaaatc cgcttcaatt ctcagagcca 300
ggctgaggcg cactacaaag gtaatcgcca cgcccgacga gtcaaaggca ttgaggctgc 360
caagaccaga ggcagggagc ctggcgtccg agaacctgga gacccagctc ccccaggcag 420
caccccaaca aatggggatg gtgtagcacc ccgtccaggt actaagcaca agacaattct 480
ggaggcccga agtgggctcg ggcccatcaa agcttaccct cggctggggc ctcccacccc 540
gggggaacca gaggctcctg cccaggaccg aactttccac tgtgagatct gcaatgtcaa 600
ggtcaactcg gaggtccaac tgaaacagca catctccagc cggcggcacc gagacggcgt 660
ggccgggaag cccaacccac tacttgagcc gtcacaagaa gtctanggc gccggggagc 720
tggcgggcac gctgactttc tncaaggagc ttgccaagtc cctgcggcgg nctgttccca 780
ggccccc 787

<210> 5301
<211> 824
<212> DNA
<213> Homo sapiens

<400> 5301
agtccacgcg gattttcgaa gctggggctg gcaagaggcc gctggacacc acgctccagt 60
cgtcagccca cttcctagct gaacagcgcg aggcggcggc agcgagccgg gtcccaccat 120
ggccgcgaat tattccagta ccagtacccg gagagaacat gtcaaagtta aaaccagctc 180
ccagccaggc ttcctggaac ggctgagcga gacctcgggt gggatgtttg tggggctcat 240
ggccttcctg ctctccttct acctaatttt caccaatgag ggccgcgcat tgaagacggc 300

aacctcattg gctgaggggc tctcgcttgt ggtgtctccc gacagcatcc acagtgtggc 360
tccggagaat gaaggaaggc tggtgcacat cattggcgcc ttacggacat ccaagctttt 420
gtctgatcca aactatgggg tccatcttcc ggctgtgaaa ctgcggaggc acgtggagat 480
gtaccaatgg gtagaaactg aggagtccag ggagtacacc gaggatgggc aggtgaagaa 540
ggagacgagg tattcctaca acactgaatg gaggtcagaa atcatcaaca gcaaaaactt 600
cgaccgagag attggccaca aaaaccccag tgccatggca agtggagtca ttcatggcaa 660
cagccccctt tgtccaaatt ggcangtttt tcctctcgtc aggcctcatc gacaaagtcg 720
acaacttcaa agtccctgac ctatccaagc tggaggacct catgtggaca tnatttcgcc 780
gtggagactt tttctaccac aagcgaaaaa tnccaagtnt tcca 824

<210> 5302
<211> 806
<212> DNA
<213> Homo sapiens

<400> 5302
aatgcaagaa caagatatgc cattcttgcg aggagggcca ggcatgtaca aggtagtgaa 60
gacgggacct tcaggtcaca acatcagaag ctgccctaac cttanaggta tcccaattgg 120
aatgttagtt ctgggaaaca aagtcaaagc agtgggagag gtaaccaatt ctgaagggac 180
atgggtgcaa ctggatcaga acagcatggt agagttctgt gagagtgatg aangagaggc 240
atggtcctta gctagagaca gaggcggaaa ccagtacctc cgacatgaag atgaacaagc 300
tcttctggat catgaattct caaactcctc ctccaagccc tttctcagtg caagctttta 360
ataaaggggc aagttgcagt gcccaaggat ttgattatgg actcngaaat agcaaaggtg 420
atcgaggaaa catctcaaca tcttctaaac cagcctctac atcaggaaaa tcagagctgt 480
cctctaaaca cagcagatcg cttaaacctg atggacgtat gagccggact actgctgatc 540
agaagaagcc aaggggcaca gaaagtttat ctgctagtga atccctcatc ttaaaatctg 600
atgctgctaa nttgacgtca gattcccaca gtaggtcatt atnccccaac cataacacct 660
tgcagacatt gaaatctgat gggaggatgc cttctagctc cagagctgaa tccccaggac 720
caggttctcg gtggcatctc taagccaaag actnttccag cccataggtc tagcccatcg 780
gtgctagntc ttcacncttc ttctta 806

<210> 5303
<211> 730
<212> DNA
<213> Homo sapiens

<400> 5303
gtgctttttg tggggaaagt gaggtttttt tttatataca tatataattg atatctttaa 60
tttattggtt gttaactgtt gctgctgcct ggtgtgtcct cagctcccag ggctgcgggc 120
ccaccgttta catgtgcacg ccctgaccca cctgcccacg ccgacttggg aggatggtgg 180
cctgcagcgg ccaagaagcc aaaaaaattt ttttttttt canatactgt gcttgatttt 240
tggagagggg agaggtggaa attcctaaat ggctaatgca ctgttccctc cagcccgaat 300
gcctcctgcc aaacccctt tccctgctgc ctctgtcccc gcatccttgt tctcccctgg 360
gtccgtaaca ttttttccga ggatgaacag gggacatctt taggtttctc aactcttgct 420
ttggtgtttg ccgcagcatg gaaaacaggg cgcctaaggc tgggagctgg aagaaggggc 480
attgggtacc caggcagagt caggagaggt ggtctttgaa gtaagttagc agaaatcaag 540
gggaccccg cctccttggg ctggggaggg gatttcaaga tagttcatga ctctctcccg 600
ctctgccttc cctccttcct atctgctttt tccagtaaac tgcatggngt ccttncctgc 660

0082020-6946350

cttctcttgg ctcaaaggct gggagggaag gaaangagag aagagttcca ggcaatccca 720
tcaaatatag 730

<210> 5304
<211> 654
<212> DNA
<213> Homo sapiens

<400> 5304
ttgctttgaa ttaaatgaga gagaagcaac aatagagagc attcagggga acttacctac 60
acccccttacc tatcctgaca tcactctctc caggtctgat cccttgaaat accatcattt 120
gtcccctcag aaaccttggg cgtgaaggag tcctcctgag ccctgggccc actgtaccaa 180
agtcttctct ccagagaggg tcaggagcct gtcttctaac cacctccatg gcaggactta 240
gccagactgc cttgggaact gctgtcattc tcctcactca ccacctcttc ccacccaacc 300
actccatcaa agctgtgttt gcagaggact gaccctcagt gaagtctgga cactccccca 360
caaaaaataa gaggctccaa aactgacaag cacctagcta agtacctttg tgccttgaag 420
catggcaaac aatcctccac tgccctaaga gaacccactg agaatcctgt ggagcctctg 480
gggaagctgg ggtttatggg gccctggtaa atctgctaca gaatgccccc catggaatat 540
aatgaagtgg acatgatttt tgggcttctc ccacaacatt ttttttttt tgagacacag 600
tctcattctg ntgtccaggc tggantgcan tggtgaaggt gttggcttac agca 654

<210> 5305
<211> 790
<212> DNA
<213> Homo sapiens

<400> 5305
gctccagacg ctgagaggca ggaggcacta gggatcgtcc gcaggattgg gactgataca 60
gaggccgcca cggagcccgc cggagccacc gttcctgctg ctgccgccgc tgcccgaatc 120
ggaaccgtcg ggccgcagcc gccggcaatg ccgcgaagga agaggaatgc aggcagcagt 180
tcagatggaa ccgaagattc cgatttttct acagatctcg agcacacaga cagttcagaa 240
agtgatggca catcccgacg atctgctcga gtcacccgct cctcagccag gctaagccag 300
agttctcaag attccagtcc tgttcgaaat ctgcagtctt ttggcactga ggagcctgct 360
tactctacca gaagagtgac ccgtagtcag cagcagccta ccccagtgac accgaaaaaa 420
taccctcttc ggcagactcg ttcatctggt tcagaaactg agcaagtggt tgatttttca 480
gatagagaaa ctaaaaatac agctgatcat gatgagtcac cgctcgaact ccaactggaa 540
atgcgccttc ttctgagtct gacatagaca tcttcagccc caatgtatct cacgatgaga 600
gcattgccaa ggacatgtcc ctgaaggact caagcagtga tctctctcat cgncccaagc 660
gccgtcgctt tcatgaaagc tacaacttca atatgaagtg tcctacacca ggcttgtaac 720
ttttntagga caccttacag gaaaaccttg agagacattt ctncatctta ggatgcccac 780
tgnatcataa 790

<210> 5306
<211> 820
<212> DNA
<213> Homo sapiens

<400> 5306

09503.00200

gatggagtat cactctgttg cccaggctgg agtgtagtga ctcgatctca gctcactgca 60
acctccacct cccaagttca agtgattctc gtgcctcagc ctcctgagta gctggaacta 120
cagatgtgca ccaccacacc cggctaattt ttgtattttt agtagagacg gggtttcacc 180
atgttggcca agctggtctt gacctcctga cctcaggtga tctgcccgcc tcagcctccc 240
aatgtgctgg gattacaggc gtgagccacc gcgcctggcc tgtacatata actcttaaaa 300
tgctgccctg accctggggc tcactttcaa agatgtccac actctgtagg ccaggacccc 360
acctgtcccg taccettcct ggcagccctg tccctgctac atcgcccttc agctacacca 420
gctttctttg ggtccctgga ccacacctga taccttcccg cccagaagtg ttatctctgt 480
cctggcagtt gctcaacctt ttatggtccc taccaccaag gccatctgct tggttgacat 540
acccacccca actgtaatta aatcatcccc ggtgtctcct cactagacag ctccacataa 600
gcacagctgg tcctttaag gctgtgtccc cagcaccttc cacaaaggag gatgcagttc 660
atcangatgg gttggatgaa caagcccatt ttacagatga ataaactgag gcacaggcag 720
gtgcanaatt ttggcancac tgcacacctg tcctgggctt tgtcctnctc cctggggaaa 780
tgagcttgga gcacccctct aggaactggg atgccagcct 820

<210> 5307
<211> 674
<212> DNA
<213> Homo sapiens

<400> 5307
gaaggatgca tctagtgcag gacccattca tcaagagatg taagtacatt cttcagctta 60
gcttttcaag catcaagtag tgtttctatt ctgtatttca gaagatatta tggcatagtt 120
taaaggggtg ctagcatagg acttaggaag actttttttc aaatcattgc tttgatttta 180
tcttcataat tgtaaaaaat catgttattt ttctgttcct gttttctgaa ggaaaaaaac 240
atcttcttct aggtttgata taatgtttca gtgagaacag cacacagtgg gagtggccca 300
gtgcctggcc tttaaacatg cttaataaat gttacatgaa tactgtatcc tgctttgatc 360
accactggca ttttgtaatg gaattagttc ttctttttt ttttttcttc aacttttatt 420
ttaagttctg gggtacatat gcaggatgtg caggtttgtt acataagtga acatgtgccg 480
nggtggtttg ctgcacaggt catccatccc atcacctagg tattaagccc agcatccatt 540
cgctgntctt cctgatactc tccccaatcc accatccccc tgcctcctgc cacatgcccc 600
antgtgtgtt gtttcccccc atgtgtccat gngttctcat cattcagctc ccacttatta 660
gtganaacac ctgg 674

<210> 5308
<211> 774
<212> DNA
<213> Homo sapiens

<400> 5308
tgttaatatt caattaaaaa tatgcttata gtttttgtcc tctaaatttc ctctctcacc 60
ttcctcttat atagagtcaa aataaattaa agaggttatc ttttttctat attttctttg 120
cctggcaaga tctacatctt taactgatat ttatgaagtc ccctaaggaa tttaacgact 180
tcattggatt ttgcaatgtt acattcttag tgaagtaaat tattagtaag acagatatac 240
aagttagctt ccttgatctt taacttgact tataaagaaa cgtgttgatc cttctcctta 300
ttttttaaat ctttttttat ttctctgttt ctttttgttg ttactgtttc ccctgcttct 360
tctttacaat tcaaatcaaa ttcttattca cctgaagcac gagtaatttg gaagcttcta 420
tgctatttga ccagagacaa tccctttttt ttttttttttt tggtattaag ggtgtgctta 480

0050205.0050205

accatctatt agatagatat gggtagtaga caaagaatat tctagaaggt ttgatccaga 540
acatcctaaa aaagtagaat actaattgtt gagactgtca gttcattcat atctcatatt 600
tcctctgtca gagagagtca gctaagcaag gtcattggcc caaaaatatc ttgaagcaat 660
ggctgnaatt gaacatatgc aggagaagtt actgtaagta tgagtcaaca caatggtaag 720
aaggatgaaa atggctggcc aaaanggttg gcctgganaa aatccccnct tttt 774

<210> 5309
<211> 832
<212> DNA
<213> Homo sapiens

<400> 5309
aataaataaa accaccagtc ctttgaagaa cagtgaccaa gctattgtaa attgcaagta 60
atagttggag agagtttggg ctacggaatg gggaggactg agatgaacaa gggtgttggg 120
aggtgagcaa gagttccttt aatacattca gcaaatactt aaatgaccag catagtgatg 180
aagagtatgg gttctgggcc aggcacaatg gctcacgcct gtaatcccag cactctggga 240
ggctgaggcg ggcgtatcgc ctgaggtcag gagttcaaga ccagcctggc caacacgatg 300
aaaccctgtc tctactaaaa atacaaaatt agccgggaat ggtggcaggc gcctgtaatc 360
ccagctactc gggaggctga ggcaggagaa ttgcttgaac ccgggaggcg gaggttgcag 420
tgagctgaga tagtgccact gtactccagc ctgggtgaca gagtgagact ttgtctcaaa 480
aaaaaaagat acgggttctg actgggcgcg gtggctcatg cctgtaatcc cagcgctctg 540
ggaggccgag gagggcagat cacagcgtca ggagttcaag accagtctgg ccaacatagt 600
taaaccccgt ctctactaaa aatacaaaaa ttagccaggt atggtggcac atgcctgtat 660
ttccttaacg tgttagcctt ntncaaacct gcagtgaact tgcttggttc cgaatgggag 720
ccgtgctgcc aaaaactaaa ttagtaaaac ttgtgagcgc ctactggtgt catgcatgtc 780
tagaatatcg gggatacagt gatcctgata caccatcctg tcnggaggac aa 832

<210> 5310
<211> 834
<212> DNA
<213> Homo sapiens

<400> 5310
aacggccctt cgcagcgggc gcgctgtcag acctcagtct ggcggctgca ttgntgggcg 60
cgccgctctc gtctgatccc tgctggggac ggttgcccgg gcaggatcct ttacgatccc 120
ttctcggttt ctccgtcgtc acagggaata aatctcgctc gaaactcact ggaccgctcc 180
tagaaaggcg aaaagatatt caggagccct tccattttcc ttccagtagg caccgaaccc 240
agcattttcg gcaaccgctg ctggcagttt tgccaggtgt ttgttacctt gaaaaatggc 300
tactggacag gatcgagtgg ttgctctcgt ggacatggac tgtttttttg ttcaagtgga 360
gcagcggcaa aatcctcatc tgaggaataa accttgtgca gttgtacagt acaaatcatg 420
gaagggtggn ggaataattg cagtgagtta tgaagctcgt gcatttggag tcactagaag 480
tatgtgggca gatgatgcta agaagttatg tccagatctt ctactggcac aagttcgtga 540
gtcccgtggg aaagctaacc tcaccaagta ccgggaagcc agtgttgaag tgatggagat 600
aatgtctcgt tttgctgtga ttgaacgtgc cagcattgat gaggcttacg tagatctgac 660
cagtgctgta caagagagac tacnaaagct acaaggtcaa gcctatctcg gnagacttgn 720
tgccaagcac ttacattgaa gggttgcccc aaggcctaca acggcagaag agactgttca 780
gaaagaaggg atgcaaaaca aggcttattc aatggctcaa tctnttanat gata 834

0098250-950250

<210> 5311
<211> 767
<212> DNA
<213> Homo sapiens

<400> 5311
gcaggtggtt tcggttgcgg cagtcgcgtc ccgggagcgt cgctgcctgg tgaacgctag 60
aatgggtact aggaaaaaag ttcatgcatt tgtccgtgtc aaacccaccg atgactttgc 120
tcatgaaatg atcagatacg gagatgacaa aagaagcatt gatattcact taaaaaaaga 180
cattcggaga ggagttgtca ataaccaaca gacagactgg tcgtttaagt tggatggagt 240
tcttcacgat gcctcccagg acttggttta tgagacagtt gcaaaggatg tggtttctca 300
ggccctcgat ggctataatg gcaccatcat gtgttatggg cagacgggag ctggcaagac 360
atacaccatg atgggggcaa ctgagaatta caagcaccgg gggatcctcc ctcgtgccct 420
gcagcaggtt tttaggatga tcgaagaacg ccccacacat gccatcactg tgcgtgtttc 480
ctacttggaa atctataatg agagcctgtt tgatctcctg tccactctgc cctatgttgg 540
accctcagtc acaccaatga ccatcgtgga aaaccctcaa ggagtcttca ttaagggctt 600
gtcagttcac ctcacaagtc aggaggagga tgcattcagc ctccttttg agggtgagac 660
caacaggatt atagccttcc acactatgaa caaaaactct ttcagatcac actgcatttt 720
caccatctac ttaaangncc attcccggac cttatcagan gaaaagt 767

<210> 5312
<211> 469
<212> DNA
<213> Homo sapiens

<400> 5312
tagtagagat ggggtttcac catgttggac aggctggtct ccagctcttg acctcgtgat 60
ccgcctgtct cggcctccca aagagttggg attacaggca tgagacatca cgcccagact 120
ctttttttt cttaagacat aatctcactc tgtcgcccag gctggagtgc agtggtgtga 180
tctcacctca ccgcagcctc cgcctccctg gttccagcta ttctcgtgcc tcanccttgc 240
cagtggctgg gtctacagcg ggggtgccac cacgcctgtt taatttttgt atttttagtg 300
gagacgggga ttcaccatgt tggccaggct ggtctcgaac tcctgctcct gacctcaaac 360
agtcctcacg ccttggcctt ccaaagtgct gagagccagg cgcctggctc tatgtctttt 420
tttgggggggt atggagtctt gntctgntgc ctaggctgga gtgcagcgn 469

<210> 5313
<211> 724
<212> DNA
<213> Homo sapiens

<400> 5313
agtgtgatgc caccgccgct acggggaagt aatggtatcc ggccaattga gattcggagt 60
taaaacaggg atgtgcagat ggaggtcgga ggagacactg ctgccccggc ccccgggggc 120
gcggaggact tggaggacac gcagttcccc agtgaggaag ctagagaagg tggaggggtt 180
cacgcggtcc cgccggatcc cgaagacgag ggcctggagg aaacaggatc caaggacaag 240
gaccagccac ccagcccatc accaccgccc ctgtcagagg ccctgtcaag cacctctcgg 300
ctctggagtc ctgcagcccc tgagaatagt cccacatgta gccctgagag tagctctgga 360
ggccagggcg gggaccccag tgatgaggag tggcgcancc agcggaagca tgtgtttgtg 420

0 0 0 2 0 7 5 0 4 5 0 0 0 0

ctgagtgagg ctggcaagcc catctactcg cggtatggta gtgtggaggc gctgtcggct 480
accatgggtg taatgaccgc cctggtgtcc tttgtgcaga gtgcgggaga tgccatccgt 540
gccatctacg ctgaggacca caagctggtg ttcctacaac agggcccact gttgctcgtg 600
gccatgtcac ggacttctca gtcagcagcc canctgcggg gggagctgct actgtcacgc 660
acagatcgtg agcacactta cacnttgcaa gttgtcgccc gcatnttcgc acacaaccgg 720
aact 724

<210> 5314
<211> 729
<212> DNA
<213> Homo sapiens

<400> 5314
ttctttggtg ttttttggcc cagcgtttgt ggtgttttca ctgggcactg ggtcacgtgg 60
cctagcccat tgctgctggg tggaggcccc ttctcctgga tctgccccaa tcaggccttg 120
cccgcttcac tggtgccccc cccaccatgg ctgccactgt cctcccacag ccaacccagc 180
catcagttct cattgccccc ctcgcccatt gcctccggca caagcctggc ctgtgatgct 240
gcccccacac cgcctcctcc ccgccctcca ccttcagccc ctggtggggc tcctcgccac 300
ctgaccccgg aacggctggg gcagccttga ctgcttctgc cgacttactc tctgggcggc 360
agtgccatct ggatcggtgg ttcctcttca tccaggtttt ctgtgttctg ctctgatcct 420
cctgcctcag cctcccaaag ctctgggaat acaggcgtga gccactgcgc ccggccaagt 480
gtttctctta gaatttcctg aaatgatagg gtctctggag gggcaggtgc tgggcttgag 540
ccctgggtag gaccctgcag gggagaggtg gtcctgcagc ccacagagga cggctctgtc 600
ctgttcctca tggtgcagat ctccacaatg gaagttcgaa gcaagcaaaa gccacgcaaa 660
ccacaggccg atctgtctga accctaagat ttggcccggt tctgcttcaa ncaccaacac 720
cgnnttgct 729

<210> 5315
<211> 739
<212> DNA
<213> Homo sapiens

<400> 5315
ttgccatgtg gaaatggggc agagtgttgc caattttctg atttttgtg tggaaaaaaa 60
tctccaaatt gtagttttta aatttgggga atgcaaatat atatatatat acacacacac 120
acacacacac atacacatac aatccatata catatggagt atgtaagttg gcaataacag 180
tatacatcaa aaaatttaca aacactgcaa gacaaataaa atccaagcca tccatttgtg 240
accacagtca taagcattca cttagccagg ggcttttaga taattgtctg tgaagtctga 300
gaaaagacta agataaccaa gatgaacata atgtcaaagg acgaaatcat ggggacaatt 360
tggattttgt tccaaaagac aagtgttttt aaaaagaacc tttccatact tcgtgttctg 420
ttctatagag ttaaaccttt taacttccat ggccctttag atctctttca agcacattcc 480
attttcttct gatcatactt cctcagaaaa cctttttttg gctgggtgtg gtggctcatg 540
cctgtagtcc cagcactgtg ggaggctgaa gtggttgtat tgcttgaggc caggtgtttg 600
angccagcca gggcaacaca gcaagacccc atctctacaa agtgttaaaa cattagctag 660
gcatggtggt gcacgcctgt ggncctaact tcttgggaag ctgangcagg attgcttgan 720
ccccagaatt tgagccttc 739

<210> 5316

0050150.0020

0003703.60420.50

<211> 718
<212> DNA
<213> Homo sapiens

<400> 5316
gaaaaggggg cgccgggccg ctctagccgg tgaggccggc gggctctctg tggctgcggc 60
tgggaaaccg cgcggaggag gtgcccggcc ggggaccagc cctggtccag cgcctccctc 120
tctcagcatg gacgaggaga gcctggagtc ggccttgcag acctaccgtg cgcagctgca 180
gcaggtggag ctggccttgg gcgccggcct ggattcgtct gagcaggctg acctgcgcca 240
gctgcagggg gacctgaagg agctcatcga gctcaccgag gccagcctgg tgtctgtcag 300
gaagagcagg ttgttggccg cgctggacga agagcgcccg ggccgccagg aagatgctga 360
gtaccaggct ttccgggagg ccatcactga ggcggtggag gcaccagcag cggcccgtgg 420
gtccggatca gagaccgttc ctaaagcaga ggcggggcca gaatctgcgg caggtgggca 480
ggaggaggaa gagggagagg acgaggaaga gctgagtggg acaaaggtga gcgcgcccta 540
ctacagctcc tggggcactc tggagtatca caacgccatg gtggtgggaa cggaagaagc 600
ggaggatggc tcggcggtgt ccgtgtgctt tacctgtacc ccactcacaa gtcttttgaa 660
gcccgtgccc gtttctttca aggaagggaa agtgcccntt ttaaaggang aacttgna 718

<210> 5317
<211> 850
<212> DNA
<213> Homo sapiens

<400> 5317
tgtcttcatg cttgttgctt cagtaacaaa atagctgctg aggctgcagg catcacacca 60
cattcaaggc aagaaaaagg aagaagtgag aatggtgcca gccacatcat cttctcttac 120
caggaaaggc aaaagtcttc ctagatctcc cagcaggttt ctgcttatat gtcatttgct 180
agaactgtgt gccatgaaca ccctggatac aagcaaaaac ctggaaaagc acatattttg 240
cctgggtctg ggctcattgc catcctgaga gaaagcagac ttctggtagc aaagaaggtg 300
gaaataggta ttgggaagga agctaacggt gtctgctaca acacagctta ataaatagta 360
gttttatatg cataataaat agtagctact ccttggcata aagtaaaaat aatgataaca 420
aaaatactta cataattata ttgtgtaagt gcttactatg tgccaggaac tgttctgaat 480
gttttaaata tgttaactca tttaatcttc acagcaattt tgtgaggtaa atgttactat 540
ccttggtttt ttttttttc agtgttttta attctacttt atatacatac aattagattg 600
atcataatcc ctggttcatg acataccctc attggtccat gcatggctct cttttgntta 660
cttttaaat attagttatt gnaaataata tatagacacc ttcaaatccc ctggccaaaa 720
taaaattagg gctggtcaca atttgcatct gctggatggn acccccacca tttacttctc 780
cctggccang ngactcatcc aaattctgag ctcattatcc ttcactttgt tttcatacag 840
tttaaagttt 850

<210> 5318
<211> 665
<212> DNA
<213> Homo sapiens

<400> 5318
attttccccc atcttaagaa aatttgcttt gatttccatt ctcctactag cagcagctga 60
tatcacctgt agacctatga gcattttatc tattctatca ttgaagttac tgataaagat 120

ttttgttgtt gttgttgttg ttgggagaaa tggatttccc acaactaatc cctctggccc 180
accattagga gaaggtcata gagctgaata tatgactaca aggcctccaa atgttccccc 240
taagccccag aaacacagga agtccaggcc ccgctcacag tataatacta agttgtttaa 300
tggggatttg gaaacattcg tcaaggactc aggacaggtt attcccctca ttgtggaaag 360
ctgtattcgg ttcatcaatc tctatggnct tcagcatcag gggattttca gagtgtctgg 420
ttcccaggtg gaagtcaatg atattaaaaa ttcatttgag agaggtgaaa atcctttggc 480
tgatgaccag agtaaccatg atattaactc agttgctggc gttctgaagc tctatttccg 540
tgggctggaa aacccccctct ttcctaagga aagatttaac gatctgattt cttggatcag 600
aatagataat ctctatgaga gggcgcttca catccgcaaa ctnctnctga ctttgcccag 660
gncgg 665

<210> 5319
<211> 626
<212> DNA
<213> Homo sapiens

<400> 5319
actgggcggc ctgaggagcg cggaccccgg cgctcggctc ccggcgccat gtgagggggc 60
tcgggggccg cgggggggccg ggcgctcccc gccggaggtg tgaacccaca tccctgcccc 120
canggccacc tgcaggacgc cgacacctac ccctcagcag acgccggana gaaatgagta 180
ncaacaaaga gcagcggtca gcagtgttcg tgatcctctt tgccctcatc accatnctca 240
tcctctacag ctccaacagt gccaatgagg tcttccatta cggctccctg cggggccgta 300
nccgccgacc tgtcaacctc aagaagtgga gcatcactga cggctatgnc cccattctcg 360
gcaacaagac actgtcctct nggtgccacc agtgtgtgat tgtcancagc tccagccacc 420
tgctgggcac caagctgggc cctgagatcg ancgggctga gtgtacaatc cgcatgaatg 480
atgcacccac cactggctac tcaagctgat gtgggcaaca agaccaccta ccgtgtcntg 540
gcccattcca gtgtgttccg cgtgctgaag aagccccacg agtttgcaac cggacccctg 600
aaaccnggnt catcttctgg ggcccc 626

<210> 5320
<211> 823
<212> DNA
<213> Homo sapiens

<400> 5320
gaattagggg aggtggaggg cagggctggg ctcgaggagc aaggcaggcc cggcgccaaa 60
gacgtgctga tccagctgcc cgggcaggag gtctcccatg tggctgccga ccccgaggcc 120
cccgagatcc agatgttccc acaggcccag gagagcccgg ccgccgtgga ggtgctcacc 180
caggtggtcc atccctcagc agccatggcc tctcaggagc gggcacaggt ggccttcaag 240
aagatggtcc agggcgtcct ccagtttgct gtgtgtgaca cggccgcggc cggccagttg 300
gtcaaggacg gtgtcaccca ggtggtggtg agcgaagagg gtgccgtcca catggtcgcc 360
ggggagggtg cccagatcat catgcaggag gcgcagggcg agcacatgga tctggtggag 420
tccgacgggg agatctcgca gatcatcgtg acagaggagc tggtccaggc catggtgcag 480
gagtccagtg gcggcttctc cgagggcacc acgcactaca tcctgacaga gctgccccag 540
gggtgcaggg cgagccgggc ctgtactccc acaccgtgct ggagactgcg gactcgcagg 600
aactcctgca ggccggggcc acgctaggca caaaggccgg ggccccaagc agggcaaaac 660
agctggccag cgtnggtcat ctacacccag ganggcttct tgggccgcgg cggcaattca 720
gagcccaaga gaaagcancg gaacttcagg aagccttgaa accgccggga acctttttact 780

0000-0000-0000-0000

tcagcacaag ggcaaggttt tgggaaaggt tccaacnttt ngt 823

<210> 5321
<211> 857
<212> DNA
<213> Homo sapiens

<400> 5321
ggaatatttt gatctgaaga gacatgagct gtgtggagat tacattaaag acatcctttg 60
ccaggagtgc tcgccctacg cagcccacct ctacgacgcc gaaaacaccc agacgcctct 120
ccggaatctc ccgggcctct gctctgatta ctgctctgcc ttccattcta actgtcactc 180
agccatttcc ctgctgacca atgaccgcgg cctccaggag tctcatggaa gggacggtac 240
ccgcttctgc cacctcctgg accttcctga caaggactat tgcttcccta atgtcctgag 300
gaacgactat ctcaaccgcc acctgggcat ggtggcccaa gatcctcagg gctgcctgca 360
gctctgcctg agcgaggtgg ccaacgggct gaggaacccc gtctccatgg tccatgctgg 420
ggacggcacc catcgcttct ttgttgccga gcaggtagga gtggtgtggg tctacctccc 480
tgatgggagt cgcctggagc aacccttcct ggacctcaag aacatcgtgt tgaccacccc 540
atggatcggg gatgagagag gcttcttggg gttggctttt caccccaaat tccgccacaa 600
tcgcaagttc tatatttatt attcgtgcct ggacaagaag aaggtagaaa agatccgaat 660
tagtgagatg aaggtttctc gggctgatcc taacaaagct gacctgaaat caganagggc 720
atctttggag attgaagaac cagcctcaaa ccataatggc ggacaacttc tttttggnct 780
ggatggctat atgnacatat tcactgggga cgggggacag gctgganatc ctttggcctg 840
ttggaaatgc taaaaca 857

<210> 5322
<211> 781
<212> DNA
<213> Homo sapiens

<400> 5322
acagtttcac ccagcaagcg tgagaacagg tactgcttcc tgagcaccgc cagccaccgg 60
caccaagacc ggccacatcc cagcactgcc cacctctgct cccagccgcc agatgacgga 120
ggctctcgcc agaccctcag cacgcagagc tggcttctga tagaagtgct cgggaaagaa 180
agcaaagcgg gaggtgcctc tttagaaacc acgaagtgca cgcggcgtcg acagtgatca 240
cgccacctgg acagccagag tccaaggcat aaggaggaaa atgagtctcc tcaaagagcg 300
gaagccaaaa aagccacatt acatccccag gcctccagga aagcccttca agtataaatg 360
tttccaatgt ccctttactt gcaatgagaa gtcacatctt tttaatcaca tgaagtatgg 420
tctttgtaaa aactcgatta ctttagtatc agagcaggat cgagttccca agtgccctaa 480
atctaactca ctagacccca agcaaaccaa ccagcccgat gccacggcga agccagcctc 540
ttccaagtct gtcgcaaatg gactctctgc cttcgactcg aagcttcagc acagctctgc 600
cagggaagac atcaaggaaa acctggagct gcaagcccgg ggaacccaca ggtgcctggg 660
acagaagcca gcccttcaca gggcataccc tgcaagagcc cagcttccgg aagccggcct 720
cggtgcccaa cctgnttntg gaaggcgcaa gttcgggcct tctgcatttg gttccaantt 780
c 781

<210> 5323
<211> 854
<212> DNA

0090750.64250

0020040150 2004-06-24

<213> Homo sapiens

<400> 5323
agttggtccg agctgccgaa aggtctggtc gcagagacag gaacgtgtaa tcctcagcgt 60
gctccagccc acagcttcgc tctactgctc ggcagggcag ctggcctctg ggcaccggcg 120
gcccctctgc ctcgcggaaa agcctgatga agtcctccga tattgatcag gatttattca 180
cagacagtta ctgcaaggtg tgcagtgcac agctgatctc cgaatcgcag cgtgtggccc 240
actacgagag tcgaaaacat gcaagcaaag tccgactgta ttacatgctt caccccaggg 300
atggagggtg tcctgccaag aggctccggt cagaaaatgg aagtgatgcc gacatggtgg 360
ataagaacaa gtgctgcaca ctctgcaaca tgtcattcac ttcagcggtg gtggccgatt 420
cccattatca aggcaaaatc cacgccaaga ggttaaaact cttgctagga gagaagaccc 480
cattaaagac cacagcaaca cccctgagcc cacttaagcc cccacggatg gacactgctc 540
cggtggtcgc atctccctat caaagaagag attcagacag atactgtggg ctctgtgcag 600
cctggtttaa taaccctctg atggcccagc aacattatga tggcaagaaa cacanaaaga 660
atgcggcaag agttgctttg ttagaacaac tggggacaac cctggatatg ggggaactga 720
naggtctgaa gcgcaattac agatgtacca tctgcagtgt cttcctaaac tcaatagaca 780
gtatcatgcc catcttgaaa ggatctaaac accagaccaa cctgaanaat aagtantgaa 840
accttaatca ngac 854

<210> 5324
<211> 771
<212> DNA
<213> Homo sapiens

<400> 5324
taatgcatta tttgttgact gacttgctca tacagtttgc atgactttgc agttctttgg 60
aaaagaggta ttgctggaaa gggagtttta tctggaagtg tttcataaag cctactctta 120
tctccattgt gccccaggca aacttagcca ctgtgtcctc tgtgctcact ctctctctct 180
tacacacttc attgccctcc ttctttcagt ctttttttcct cagtatatct ccagtgttga 240
acacagggcc tggtagaccg tagacacttg gtacatcttt gtaaaagaat aaatgatgaa 300
tgaatgatat tgaggtctaa aagctcagga tgagaaagag aggcaaattc agttgcaagt 360
ctggcaagtg gctcagttgg aactcctcag caggcctggc ttgctagagg cctgtgttga 420
gtttgtctgg gacaggcctc ctgtgaagac tcacatctat gatccagcag taacagcttt 480
cactgtcagg cacaaacttc ttggctgact gaaagagcaa cgtgttagtc tctagaagtg 540
gagtggactg gtgtctgagg tgagtatagc ccacttggat acagatgccc agtatttggt 600
tacctgccct ggggagagga ctggnttctc cctggtgtat agactcatag gctggctaca 660
gacatatata cacacacacc caactactga tttgccttgg gagtacactg ngcttactta 720
atattgnaca agctggtgac cagattacct tatgagaagg cncatgatgt a 771

<210> 5325
<211> 773
<212> DNA
<213> Homo sapiens

<400> 5325
aaaaagagtg gtaacttgat gaattccagt tattctaagg ttctttgcct agtaaatgtt 60
tatttctcta ataaatcaga acttattgca actaactgct ttgtgctttc atataccatc 120
cccaccccaa gaattttgaa agcttttagc aaatactaat gtatttgctt ccccttcata 180

agttaaaagg ataaatattg atactttcat attacattat gagggcagct gcagcctgtg 240
tggagcggcc actgagaaga cgccaactgc agcggggtag gcacagctgg ggctgcgcgc 300
tccacagagc cagttggagc caggaacagg caggagccca gccctttca gagttggagg 360
ggtgggggcc tccccctcct gggtgcaact gtgcagccac ccagcagtga cctgggtttc 420
cctgtgcttt caggggctgg gaagtgtccc tctccagccc tggcccccac aggctcagaa 480
gtgcctgccc ccactgtctg gcctctccct gttcccggtg tccactctga ttttagagca 540
aagttgaggc tgagcctagg cactgtcgcg acccagctgc atgcacttac ggcagggctg 600
acaggccagc cctctgcccc ctcagcaccc cctctggact ttgggtgccc gtgagcatgg 660
gagggaggct gaaggggcac tgaggcagct cgatgtgggc ctgcangctc tgtggacgac 720
atgatcaatg gtggcaggaa gcagacaggc ttctgggcag aaangggtan ggt 773

<210> 5326
<211> 695
<212> DNA
<213> Homo sapiens

<400> 5326
gtatttgtgt tagatgttgt tagatgtgtt gttttttgt gtgtgttttg tttcgttttc 60
tgagacaggg tcttgctctg tcacccaggc tggagtagtg gcgcgatctc ggctcactgt 120
aacctccacc tcccaggttc gagcaattct cctgcatcag tctcctgagt agctggcgtt 180
ataggcacct gccaccacgc caggctaatt tttgtattct tagcaaagac agggtttcac 240
catgttggcc aggctggtct cgatctcctg actcaggtga tctgcccgcc ttcgactcac 300
aaagtgctgg gattacaggt gtgagccacc acacctggcc agcctgtgag agctttaaac 360
catgagatag acatatggtt ttgcaaaagt ttctacataa atcagaatgg ttcccagaac 420
agaaaggctc ctctgtcact ttttttatct ggttgcttaa ccataagatg ccaacccaat 480
taacagtcac acccatattt gcattatatc tgtttcatat gttccgtgta actgcctcct 540
ttcaaagtgt tggtatattt ttcaagtcaa ctgnaaccaa aagtatagag aaactgaatg 600
caagccagct ttctgcatat gtaacagtgt aagaatccag gttgtataga tgggttnttg 660
nttgacacag atgtttctnc cagtaaagag aggat 695

<210> 5327
<211> 745
<212> DNA
<213> Homo sapiens

<400> 5327
gcgctcctgc aagtgttctt tctggtgttc cccgatggcg tccggcctca gccctcttcc 60
tccccatcag gggcagtgcc cacgtctttg gagctgcagc gagggacgga tggcggaacc 120
ctccagtccc cttcagaggc gactgcaact cgcccggccg tgcctggact ccctacagtg 180
gtccctactc tcgtgactcc ctcggccccc gggaatagga ctgtggacct cttcccagtc 240
ttaccgatct gtgtctgtga cttgactcct ggagcctgcg atataaattg ctgctgcgac 300
agggactgct atcttctcca tccgaggaca gttttctcct tctgccttcc aggcagcgta 360
aggtcttcaa gctgggtttg tgtagacaac tctgttatct tcaggagtaa ttccccgttt 420
ccttcaagag ttttcatgga ttctaatgga atcaggcagt tttgtgtcca tgtgaacaac 480
tcaaacttaa actatttcca gaagcttcaa aaggtcaatg caaccaactt ccaggccctg 540
gctgcagagt ttggaggcga atcattcact tcaacattcc aaacacaatc accaccatct 600
ttttacaggg ctggggaccc cattcttact tacttcccca agtggtctgt aataagcttg 660
ctgagacaac ctgcangagt tggagctggg ggactctgtg ctgaaagcaa tcctgcagtt 720

0088705.0045250

tnctaaagag taaaagtnca acttg 745

<210> 5328
<211> 712
<212> DNA
<213> Homo sapiens

<400> 5328
tctttaatta tgtcacagtt tgttgatgaa tacattgcct ttgcttcagt taaatcaagt 60
aggatgcagt gactccaagt ctgaggggtg cttcccagga agagccaccc cccacagcca 120
tttgcagagc attggagtaa gttttacctt catcccttag atgtgaattt gttatcctca 180
ctgtgacaat cccttatcac atggctttta gaaggattct caaaaagcta gactctcaca 240
ttcaactttg caattgcctg gctgggtgtt acgtttcttt gcctcctatt agagacccta 300
tcagcatcta aaactagcgt tgtttgagga tgttggagcc aacggttctt tgccagatag 360
aactttgtgt gtccaaataa atggttcaaa atcatcaagc aaataaatac cctggaataa 420
gagaagcctc atgaggattt gactccaaat tgacttcctc tgttctgcag taagaagtta 480
ggaattaaac caaaccttgc ctgaggttca ggtatactca aaagcaatga ggtgtggctc 540
angtgtgcgc tggcaaggtc actgtgaagt tcagccagag gctttgcaag cctgggcctg 600
agaagccaga cctcttagat ccagaagggc caatggagct gggctggcct gctgccactc 660
acaggcagag actctgncag cagaagggac tctgctgcaa anctggangg ca 712

<210> 5329
<211> 570
<212> DNA
<213> Homo sapiens

<400> 5329
gaattggagt cactgccaaa atgggtttgt atttcaggta atcagagccc agttgatcga 60
ataccttcag agaataagca cctgtactcc tgggtctggc ggaggagggg ctggggaact 120
ggactcctgg gtctgaggga ggaggggtgg ggcccgtact cctggatgta agggaggagg 180
gtctgaggcc tggactccag ggtctgaggg aggaggggct gggggcccag acttcgggtc 240
tgagggagga ggcagctaga gtctggactc ttacttaggt ctgaaggagg cgggcctggg 300
gtctgcaccc ctgagctctg ggggagcagg acctgtcggt ccttggtctt ctaaggcctg 360
tcagcacttg ggtacccgga ggccttcact tacctgtgtg ccttccctgg ttgntttctt 420
gtctgagctg atttccaggc tgcgaccaaa ggtctctggg gtgggaggcg cttgcgtttg 480
actttgccgc acatggagga nggggccggg agctgactca nctctttcca gcgagccctc 540
gtcagggcan ggaggggact tggccttctt 570

<210> 5330
<211> 746
<212> DNA
<213> Homo sapiens

<400> 5330
agggccgtcc gctctgctgc cgccgctgtt gcagccaccg ccgttgccgc ctccctgccg 60
gcaagtgtgt ggaagctgag cgttgtcgcc gccgctatgg ggagaaagtc aagcaaagcc 120
aaggagaaga agcagaagcg gttggaggag cgagcagcca tggatgccgt ttgtgccaaa 180
gtggacgctg ccaacaggct tggagaccct ctggaggctt tcccagtgtt caagaaatat 240

0082720 6946250

gatagaaacg ggttgaatgt ctccattgaa tgtaagcgag tgtctggact ggagccagcc 300
accgtggatt gggccttcga cctgaccaaa acgaatatgc aaaccatgta tgagcagagc 360
gagtggggct ggaaggaccg agagaaacgg gaggaaatga cagatgaccg agcctggtac 420
ctcatcgcgt gggaaaacag ctccgtccct gttgcctttt ctcacttccg gtttgacgtg 480
gagtgtgggg atgaagtcct gtactgctat gaagtgcagt tggaaagcaa ggtgcggcgg 540
aaaggcctgg ggaagttcct catacagatc ctgcagctca tggccaacag cacacagatg 600
aagaaggtta tgttaacagt atttaaacac aatcatggtg cctaccagtt cttcagagaa 660
gcgttgcaat ttgaaattga tgactctttc cccaacatgt ccggttgctt gtggggaaga 720
ttgctnctat ganatcctga nccgga 746

<210> 5331
<211> 710
<212> DNA
<213> Homo sapiens

<400> 5331
ttttttttt ttgagacaga gtctcactct tgcccaggct ggagtggagt ggcataaaca 60
cagctcacta cggcctcaac cttctgggct cggatgattc tcctgcctca gcctcctgag 120
tagcaggaac tgcaggtgtg agtcatcaca ctcagctaat ttttttttt ttttttttac 180
tttttgtaga gatggggttc tcactgcatt gcccaggctg gtcttgaatt tctgggctca 240
ggtgatcttc ccacctcagc ctcctgagta gctgggacca caggtgcatg ctaatttta 300
aaatttttg nttttaaatg ctggtcttca actcttgtcc ccaagtagct gggattgggg 360
catgaggcac tgtgctaact tcatgttgaa attgaattgc cattctaaca gtgttaagag 420
atggggcctg taagaggtga ttaggctgtg agggctccac tctccaaggg cggagttaat 480
gttatgaaag ggtaagtcca gcccgcttgt gcctctcttg ccctccagtg ttcaaagcac 540
catnttggag gtggaattcc caagtcggnc agttcctgga tcttggactg tccggtctcc 600
agaaccgtga gccaataaac ctctgttcct tgtaaatgag tcagcctcag gtattctctt 660
gtagcagcac aaatggaggc agacacttcc ttcaccaatc tcatgnnggg 710

<210> 5332
<211> 644
<212> DNA
<213> Homo sapiens

<400> 5332
taaaggtaca aaaattagcc gggcgtggtg gcgggcacct gtaatcccag ctactgaaga 60
gcctgaggca ggagaatttc ttgaacccgg gaggcagagc ttgcggcggt gagccgagat 120
tgcacgccat tgccctccag cctgggcaac aagagcgaaa gccagtctca aaaaacaaag 180
aaagaaagaa aagcacctgg ggtgcgtctg gagccgcgtt ctgggagccg cgcttcactc 240
gctggtggta cagctccaag gctggagctt acttggcatt tttgttgcca cagaagcaga 300
tgggaaaatt ctaggtctgt accttgtgtg aaaaaaggct aagtaaaatt ttgcatttac 360
gtgacttctg tgtggagagc agcgtcggct tttgtttgtc tttggttctg tttggagcac 420
aactagggta gagaggggtt tggaaggtta ggacagcgcc ctcggacgcc agtgagaccc 480
agaggcgcca ccaggccctg aacctcatga acctgcgcgg ccctaggcat gcggtgaaaa 540
cgggacgttg ccctcgtnct agcaccagag caggcagggg caccgctgct gganagcgcc 600
aggtggctcc tgcggangac ggtggcccag atcctacccc tgac 644

<210> 5333

CD56-6450

<211> 431
<212> DNA
<213> Homo sapiens

<400> 5333
caagttcgag cagttttcct gcctcagtct tctctgagta ggtgggacca cagtggcaca 60
ccaacacacc ttgctaattt ttcttttaat aagagacggt ggtctcagcc gggcgcaatg 120
gctcatgcct gtgatcccag cactttggga ggccgaggcg ggtggatcac gaggtcagga 180
gttcgagacc agcctggcca atatggtgaa accccgcctc tactaaaaaa atacaaaaga 240
gtagccgggt gtggtggcgg tcacctgtgg tcctagctac tcgggaggcc gaggcagaag 300
aatcgctcga acccaggagg cggaggttgc agtgagccga ggttgtgcca ctgcactcca 360
gcctgggtgg cagagcgaga ctctgtctca aaaaaaaaaa gggcggcggn ggngaaggtg 420
gtctcactgn g 431

<210> 5334
<211> 840
<212> DNA
<213> Homo sapiens

<400> 5334
attcaaatag aacatgggga agttcgctcc cagttcaaat tacgggcctg taattcagtg 60
tttacagcat tagatcactg tcatgaagcc atagaaataa caagcgatga ccacgtgatt 120
cagtatgtca acccagcctt cgaaaggatg atgggctacc acaaaggtga gctcctggga 180
aaagaactcg ctgatctgcc caaaagcgat aagaaccggg cagaccttct cgacaccatc 240
aatacatgca tcaagaaggg aaaggagtgg caggggttt actatgccag acggaaatcc 300
ggggacagca tccaacagca cgtgaagatc accccagtga ttggccaagg agggaaaatt 360
aggcattttg tctcgctcaa gaaactgtgt tgtaccactg acaataataa gcagattcac 420
aagattcatc gtgattcagg agacaattct cagacagagc ctcattcatt cagatataag 480
aacaggagga aagagtccat tgacgtgaaa tcgatatcat ctcgaggcag tgatgcacca 540
agcctgcaga atcgtcgcta tccgtccatg gcgaggatcc actccatgac catcgaggct 600
cccatcacaa aggttataaa tataatcaat gcagcccaag aaaacagccc agtcacagta 660
gcggaagcct tggacagagt tctagagatt ttacggacca cagaactgta ctccccttca 720
gctgggtacc aaagatgaag atccccacac cagtgatctt gntggaagcc tgatgactga 780
cngcttgaga agactgtcag ggaaaccaag tatgggttac ttaagaatgt gccccanagc 840

<210> 5335
<211> 794
<212> DNA
<213> Homo sapiens

<400> 5335
agcgcagcgg cgtncgaggc aacaagatgg cagctgcgga gccgtntccg cggcgcgtgg 60
gcttcgtggg cgcgggccgc atggcggggg ccatcgcgca gggcctcatc agagcaggaa 120
aagtggaagc tcagcacata ctggccagtg caccaacaga caggaaccta tgtcactttc 180
aagctctggg ttgccggacc acgcactcca accaggaggt gctacagagc tgcctgctcg 240
tcatctttgc caccaagcct catgtgctgc cagctgtcct ggcagaggtg gctcctgtgg 300
tcaccactga acacatcttg gtgtccgtgg ctgctggggt gtctctgagc accctggagg 360
agctgctgcc cccaaacaca cgggtgctgc gggtcttgcc caacctgccc tgtgtggtcc 420

US 2005/0250000 A1

aggaaggggc catagtgatg gcgcggggcc gccacgtggg gagcagcgag accaagctcc 480
ttgcagcatc tgctggaggc ctgtgggcgg tgtgaggagg tgcctgaagc ctacgtcgac 540
atccacactg gcctcagtgg cagtggcgtg gccttcgtgt gtgcattctc cgaggccctg 600
gctgaaggag ccgtcaagat gggcatgccc agcannctgg cccaccgcat cgctgcccag 660
accctgctgg ggacggccaa gatgctgctg cacgagggcc aacacccagc ccagctgngc 720
tcagacgtgt gcacccccgg gtgggaccac catctatgga ctccacgccc tggaacaggg 780
ccgggctgnn acag 794

<210> 5336
<211> 708
<212> DNA
<213> Homo sapiens

<400> 5336
tctttccgcc agcgcccgca ggacccggat gagagcgcac gcttcggggt ctccgggaag 60
tcgcggcgcc ttcggatgtg gcggatgcgg ccgtgagccg gcgggggagg tgctgctgct 120
gcctccactg tactcagacc caggtagcac aggattgtcc atcctccagc agcccagtgc 180
aacggtgtga actcagcctg tttcagagcc tccacaccat gacctccaag aagctggcga 240
actcggtggc tggctgtgct gatgacgctc ttgctggcct ggtggcctgc aaccccaacc 300
tgcagctcct gcagggccac cgcgtggccc tccgttctga cctggacagc ctcaagggcc 360
gggtggcact gctgtcgggt gggggctctg gccatgagcc tgcccatgct ggtttcatag 420
ggaaggggat gctgactggg gccatcgcgg gagctgtgtt cacctccccg gcagtgggca 480
gcatcctggc agccatcagg gccgtggccc aggccggcac agtggggacg ctccttatcg 540
tgaagaacta cactggggat cggctcaact tcggcctggc ccgggagcag gcccgggctg 600
aaggcatccc ggtggagatg gtggtgattg gggacgacaa gcgccttcac tgtcctgaag 660
aangcangcc cggcnggggg cttgtgccgg aaccgtgctt atacacaa 708

<210> 5337
<211> 728
<212> DNA
<213> Homo sapiens

<400> 5337
agtgctggca gtgacagcag caccagcggg agtggcgggg cgcagcaaag ggagctggag 60
cgcatggctg aggtcttggt caccggggaa cagctacggc tcaggctgca cgaagaaaag 120
gttattaaag atagacgtca tcatctcaag acctacccaa actgttttgt cgcaaaagaa 180
ctgattgact ggctgattga acacaaagag gcttctgaca gagagacggc aattaaactc 240
atgcagaaat tagcagaccg gggcattatt caccatgtgt gtgatgagca taaggaattc 300
aaggatgtca aactcttcta ccgctttaga aaggatgacg gcaccttccc attggataat 360
gaagtgaagg cctttatgag aggacagagg ctatatgaaa agctgatgag ccctgaaaac 420
acactcctgc agcccaggga ggaggaaggg gtcaagtatg agcgcacctt catggcatct 480
gaattcctgg actggctggt tcaggaaggt gaggccacca cgaggaaaga ggcagagcag 540
ctttgccacc ggcttatgga gcatggcatc atccagcatg tgtccaacaa gcacccattt 600
gtggacagca atcttctcta ccagttcaga atgaacttcc ggcggangcg aagactgatg 660
gagctgctca atgaaaagtc ccccttcttc cangaaactc atgacagtcc cttctgnctg 720
aggaagca 728

<210> 5338

09/503,503

0020070045960

<211> 872
<212> DNA
<213> Homo sapiens

<400> 5338
gaagcctgtt atgtaaaata catggaagtg gatctgctcg gggataagga gcttggagtt 60
tcttctgccc tccaaccccc aacctctgag gtacctcagc gattccatgg agcctaattt 120
gaaaaacaca agtatagggt ctgtgttcag tacttagcat ccaaatgcca gcttctaatc 180
ctggctcatt tcactctgat agagttgaaa ctttggccaa agcaatttaa aaggcctgag 240
attaataaaa attggataat ctttgcccat tagaagttgg tgattatttc aaggtttgca 300
tcagagataa tatttttgaa aatacttggt aaggttgtaa agcaatatgt aagccaacgt 360
aaagtacttt ggctatgtaa aatgttgtat atttaattat aaatctttaa aattaagaaa 420
cccagttttg cattgacagg actgtgtgct gaagaggttc atttgtgtgg agaacctgct 480
gctattgacc tggtgatgga gcttatgtac acaacggggg aggaagtgga ggtattcgat 540
tagatgcttt gttctccagg tggcatatca aatagtccag agtacctagg cagtggcttc 600
agaggcccta gataatgcca gcgtcagaac ttaactaaaa agaaagcttc attttcttgn 660
gatcaactag accatatata tttgattgaa cctcatgatc tgaagttctg acagagtggt 720
catcacaccc taagtcttnc aagagtacag gaaattcttc acctcttgac aaaaccttgt 780
ggggcttgag tagatctctt cgaattaaat aaatcagact cttagaantt ggagacccca 840
ncaggttggc cgttttcaaa gngtggatgg ca 872

<210> 5339
<211> 837
<212> DNA
<213> Homo sapiens

<400> 5339
tagactatta gacattccag ttttaagcat tttctaattc tctcaattgc tttttcttca 60
aaacagcata gtttgcaagc tcaggcatgt ttattgtttt taacaaaggc ttatcgaaat 120
gaacttggca gtttttcagt cgtatacagc caaagaaaag tattcagtgc cgcttttggg 180
gttgtttatg cattcctcac ctaaccagtt gctttgcttt taaaaattgc caatttggaa 240
gctattttct tatgagtacc tttccagtgt atataaaaag tcacccattg aaatgatata 300
ataatttaat tgatgaaaac taaatacaca gttgaagagg ttgggggatt ttgaacagaa 360
agattttccc tctgataata tttttaatgt gctctacatc aaaggacatc agaaagtgtc 420
attatctaac aatgtcctgt ttgaaggtgg tgtctgttga acatttgggg aacagtcaca 480
atttctgatg catgctaggc acctggagta gctgattttt ttttttcttc attcacccac 540
cactgtgccc catcagatac atatccttcc ttcatttacc gcgcattgac gagtagggtt 600
aattgctgta gccaggtaag atgttgcatg aaattaatta attatttaat tagtgtgctc 660
attcatttat taatttaatg aatatttatt gaacttctac ttcttattaa aagatttgga 720
taanggattt gtgtgaaaac tgngttttga gcatctcttt tctggtgctg gtgacancag 780
gacgtgtaaa gacccagaac atgcctctga tgcacttaca tctggtatgg aaaaang 837

<210> 5340
<211> 761
<212> DNA
<213> Homo sapiens

<400> 5340

tccatttata aggagcctcc tccaggaatg ttcgttgtac ctgatactgt tgacatgact 60
aagattcatg cattgatcac aggcccattt gacactcctt atgaaggggg tttcttcctg 120
ttcgtgtttc ggtgtccgcc cgactatccc atccacccac ctcgggtcaa actgatgaca 180
acgggcaata acacagtgag gtttaacccc aacttctacc gcaatgggaa agtctgcttg 240
agtattctag gtacatggac tggacctgcc tggagcccag cccagagcat ctcctcagtg 300
ctcatctcta tccagtccct gatgactgag aacccctatc acaatgagcc cggctttgaa 360
caggagagac atccaggaga cagcaaaaac tataatgaat gtatccggca cgagaccatc 420
agagttgcag tctgtgacat gatggaagga aagtgtccct gtcctgaacc cctacgaggg 480
gtgatggaga agtcctttct ggagtattac gacttctatg aggtggcctg caaagatcgc 540
ctgcaccttc aaggccaaac tatgcaggac ccttttggag agaagcgggg ccactttgac 600
taccagtccc tcttgatgcg cctgggactg atacgtcaga aagtgctgga gaggcttcat 660
aatgagaatg cagaaatgga ctctgatagc aagttcatct gggacagaga ccggaccttc 720
atggggancc ctganggtta aaacccttgn ttccatttcc c 761

<210> 5341
<211> 758
<212> DNA
<213> Homo sapiens

<400> 5341
aatggaatgt gtctcctgct gggggccacg ggcgtcggga agacgctgct ggtgaaacgg 60
ctgcaggagg tgagctcccg ggatgggaaa ggcgacctgg gggagccgcc cccgacacgg 120
cccacggtgg gcaccaatct tactgacatc gtggcacaga gaaagatcac catccgggag 180
cttggggggt gcatgggccc catctggtcc agttactatg gaaactgccg ttctctcctg 240
gtgggttgta atcctatatg ggcttccttt agggaagtgt gtctacattt ctgtgacgtc 300
cagtccccaa ccttgctgtg tgtagaaagg ggtttgggtt atttagtgac tatactactc 360
atggaaatag gtcttagcta gtgttgcttc ctgctgggca ccctgtctgg tttctggtgc 420
ttgcgctccc aggcccccgg taggagctca cagagggctt gctgagggca gggctgctgc 480
tccgcagaga acagacttgg ccctctgtgt cactccccgg tacgtctgtg tttatgttgg 540
acttatacgt acctctggtt ggtctcatct tgataaggcc tgtgccgcgg ataccagtat 600
ggagaactga tggccacatg angacagaga ccagtgacac caggtcgtct tcataaaact 660
cgattnctc tgcttctgct tggtcccaaa ctttggttaa agctactttg gccgggcnca 720
atggcttact cctgtaatcc cagcactttg gaaactna 758

<210> 5342
<211> 886
<212> DNA
<213> Homo sapiens

<400> 5342
gaaattaggg ctcagggaag tctggtgggg aaagcacaga gctgtttaaa tagaattgta 60
gtgtccagag taagggaagt gaaagcctca cttctctccc atgtgcttgg agtaggatgt 120
agactcttca ggtctggcca ccctactata cggggagaca ttgacacagc agttccaaag 180
agagcagcca gggaggtaaa aaggccaatc cccacttttt ttttttttt tttagagaag 240
accaagacaa agaaaaagga taattgattt ggaaaagact tgaagaggga tcggtgtctt 300
tacctaatta aaagatttgc tcaggaaaga gaaattagac caactctgtc gttttggaag 360
tagaatctag ggccagcggg tgggagatga gaacacatgg agctgggaat aaaacgggca 420
gcttcctcaa tggtgagcaa agccaaggga agcagggctg gggaagtgct gctgaggaaa 480

0000-0000-0000-0000

cctcaaggat tggaccggat ggcctccgag tcccttccca ctctcagagt ctgtgatcct 540
aatcagggga ctcaacagaa acttaaggga aacccctga cttctcgact cgatgtatct 600
attggagctg gatttttaca ccccgtgtta gcagtaacag attggcaaag caatagaaaa 660
caaatgcacc aattcatgtt tttcanaaac ttaacaaaag ttagcccctg aagtcatttc 720
tgggttatgt gtgtggagga acacttgncg gaggaccctt gccagctntg ccactctttt 780
ttttcttttt ttggatctca ctctggcatt caggnctgga atgcatggca caatcacggg 840
ttacgggctt aaactttcca aagtgctgga attccggtgt ganccn 886

<210> 5343
<211> 801
<212> DNA
<213> Homo sapiens

<400> 5343
tccctaaaaa cagttgtttt ttttctgaag tgaaatacag gtggagacta acacatcccc 60
tctgcttgtc ataagctcat tatctggacc tcaggtcctt ttgagagagc ccaccaaggc 120
cttgggctct gagcccaggt gaccagcaga catctcaggt gtgtcagggc ctgagagcac 180
tggacatgga catggtggaa ggactgtcca gccagtgtcc tggaaatatt tgaacacagt 240
ggggagacct agcagggttt tcccttgaag tagttgactg aaaatctgca ttccttttgg 300
acacaggtgg aagataatga agtaaaattg tctgagaaaa cccagcaagc agtgaggggg 360
gatgagtctt tcctgggcac ttatctaaca ggaggagaag gagcatatct ttattccagc 420
aatctacagt cctggcctga ggaagggaat gttcatttct tctctagtgg ccttctgttt 480
tctcactgtc gtcatggaag tatcatcata tccaaggatc acatgaattc catttccttc 540
tatgatgggg attccaccag tactgttgct gctcttctca tagacttcaa aagctcattg 600
cttnctcacc tccagttcat ttccatggat caagcaattt tctgatgatt gccctttnc 660
ccaaatcgaa gatataccaa gcattttact tcagangtct tctnccctctg gaaacagcag 720
gatacttagg gatctcttta aaagtgatcc aggaagatgg attatctgtg gacaaaagaa 780
aattgnaagt ggcttgcttn a 801

<210> 5344
<211> 724
<212> DNA
<213> Homo sapiens

<400> 5344
acacacacac acacacacac acgtgggaat gtaaggctta ttttcttggc acatggatat 60
tcaattgctt ctttaccatt tattgaaaag actgtccatt ctgcattgaa ttgcctttgt 120
acctttgtca aaaatcattt gtctctagaa aaatcaggtt tccaggaaaa aaaagactaa 180
tgtgttccac tagtgttctt atttttcagt tgtgttggct tttgtagatt ctttgcattt 240
ccatataaat tttagaatta gcgtatcaat ttcttaaggc ttggtgggat ttccattggg 300
attgtattga gtctatataa ataaataaaa ctgagagaga attaacattt tattttattt 360
ttttgagatg gagtctcact ctgttgccta ggctgtcgtg cggtggtgcg gtctcggctc 420
actgcaacct ctgcctccga gattcaagca attctcctgc ctcagtctcc caagtagctg 480
ggattacaaa tgcctgccac tacactcagc ttaatttttt tatttttaat acagacaggg 540
tttcaccagg ttggccaggc tgttctcgag ctcttgactt caagtgatca gccctcctca 600
gcctcccaaa gtgctgagat tacgggtgtg agcccccgcg cctgactgag aattaacatt 660
ttaatattga gtgttttgat taaagtcttc tctaatttcc ttcataaatg nttngnagct 720
tttg 724

0050205-0050705

0060-0356-0000

<210> 5345
<211> 835
<212> DNA
<213> Homo sapiens

<400> 5345
actgcgccat ttcctgtcca aagctgggcg aatcagggat tccggttcac aatggatgct 60
gataaagaga aagatttgca gaaatttctt aaaaatgtgg atgaaatctc caatttaatt 120
caggagatga attctgatga cccagttgtg caacagaaag ctgtcctgga gacagaaaag 180
agactactgc ttatggagga agaccaggag gaggatgaat gcaggaccac cttgaacaag 240
actatgatca gtcctccaca aactgctctg aagagtgcag aagaaataaa ctcagaggcc 300
ttcttggcat ctgtggagaa ggatgcaaag gaacgagcca agagaagaag ggaaaacaaa 360
gtcttggcgg atgccctaaa agaaaaaggg aatgaagcat ttgctgaagg caattatgaa 420
acagctatcc tgcgctacag tgagggtttg gagaagctga aggacatgaa agtgctgtac 480
accaaccgag cccaggctta tatgaaactt gaggactatg agaaggcact ggtggattgt 540
gagtgggctc tcaagtgtga tgaaaaatgc acaaaagcat attttcacat gggaaaagcc 600
aacctggccc tgaagaacta cagtgtgtct agagagtgtt ataagaagat cttagaaata 660
aaccccaagc tgcaaaccca ggtgaaaggt tacctgaatc aagtagatct tcaggaaaaa 720
gcagaccttc agaaaaggaa cccacgactg tggttcagga agacacagcg gaccccagac 780
tctgaccttc agctgcagtc cttgtttntg gggatgactc tgatgtatat ncnac 835

<210> 5346
<211> 813
<212> DNA
<213> Homo sapiens

<400> 5346
gtttgcacat tgatgaacac atttaaaatt ttcttaaatc agttatgctc cgaaaaatcc 60
tgttcctaca acttaaagca catgtgtgat ttttttttcct taggttatcc ttccagaaat 120
agaactgttg agtaaggaat atgcatgtta aaatttctag tattggtccg gcgaggtggc 180
ttacgcctgt aatcctagca ctttgggagg ccgaggcggg cggatcacct gaggtcagaa 240
gtttgagacc agcctggcca acatggtgaa acccagtatc tactaaaagc acaaaaatta 300
gctgggcgtg gtggctggta cctgtaatcc ctgctactca ggaggccaag gcaagagaat 360
ctcttgaacc cggcaggtgg aggttgcagt gagccgagat tgcgccattg cactgcaacc 420
tgggggacta ggttgagact gtctcaaaaa aaaaaagaat taaaaaaata ttaataacat 480
ggtcaagtct ccctccaaaa aaggccaacg taggaggatt attttttctc acattctttt 540
ttacactatc ttgagtcttt aaatgacaga caatatctta tttttttca tttggatttt 600
cttggatact ggtaaaggtg ttcgttttta tgaacatctt ttaaattatc ttttaggact 660
ttttcgnatc ttgctctttg gtctttttt gatgtanagt ctcagtctca ctcaggttgg 720
aatggcactg gtgggatatc ataaaaggtt cttgggagaa attggnggag ttnaaaggaa 780
tatgtaggga tctgggaccc cggattttna aaa 813

<210> 5347
<211> 717
<212> DNA
<213> Homo sapiens

<400> 5347
gatgatcatc tgttttcctg caagtggaag atttcatcat gtttgtattt ctttgtttta 60
catttcttat gatatagttg ataattaaga tgcctacaga agctacaaag cacccacaaa 120
gcaggaaatt agcaactctg cctctaccac ttgtagtaaa gcttgaagac attatcactg 180
acttctccag ctgaatgtat tgttctgtgg ctttagttaa atgtgtcagt gactctcagg 240
gtttagaatc tctcccaaga ctgtttagga aggtgcatca ccctttgaag tgtagactgt 300
gatggaaaac tacttaattg catattctaa tattgtttta gattaaaaga ccattctgtc 360
ctctgcttaa aacaattgag gatattatat ttgagggcat ccctactggt taatatcatc 420
attacatttg aaaatgttca aatttacttt ccatcactaa gtatgagttg aacttttgg 480
agtagaaaat gcactctaag gccgggcgta gtggctcaca cctgtaatcc taccactttg 540
ataggccaag gcgggtggat cggttgagat caggagtttg agaccagcct ggccaacatg 600
gtgcaaccct gtctctacta aaaataccaa aaattagctg ggcgtggtgg cacatgcctg 660
tagtcccagc tctcgggagc tgagggagga gaatnccttg aaccctggan gcngagg 717

<210> 5348
<211> 767
<212> DNA
<213> Homo sapiens

<400> 5348
aaagccgttc gagtgtcctg tggaaggatg ttgcgcgagg ttctccgctc gtagcagtct 60
gtacattcac tctaagaaac acgtgcagga tgtgggtgct ccgaaaagcc gttgcccagt 120
ttctacctgc aacagactct tcacctccaa gcacagcatg aaggcgcaca tggtcagaca 180
gcacagccgg cgccaagatc tcttacctca gctagaagct ccgagttctc ttactcccag 240
cagtgaactc agcagcccag gccaaagtga gctcactaac atggatcttg ctgcactctt 300
ctctgacaca cctgccaatg ctagtggttc tgcaggtggg tcggatgagg ctctgaactc 360
cggaatcctg actattgacg tcacttctgt gagctcctct ctgggaggga acctccctgc 420
taataatagc tccctagggc cgatggaacc cctggtcctg gtggcccaca gtgatattcc 480
cccaagcctg gacagccctc tggttctcgg gacagcagcc acggttctgc agcagggcag 540
cttcagtgtg gatgacgtgc agactgtgag tgcaggagca ttaggctgtc tggtggctct 600
gcccatgaag aacttgagtg acgacccact ggctttgacc tccaatagta acttagcagc 660
acatatacca caccgacctc ttcgagcacc ccccgagaaa atgccagtgt ccccggaact 720
gctggctnca atcaaggtgg aacccggact cgncttcttg nccaaga 767

<210> 5349
<211> 803
<212> DNA
<213> Homo sapiens

<400> 5349
ggactctggc tgccttctcc tgagagtcgg agccacagcc agagccctgc ccaggccgag 60
ccggagctgc agcccgagcg cggtggtgcc ctcagccccg tcctcttgtc ctcctcagcc 120
tcgatctgcc ggaggcgctg ggcaatgacc ccgggactcc aggccagagg ggtctgaagc 180
tgtttgggaa agcagcggga ctccttggga agatggccat ggccccaagc ccttccctgg 240
tgcaggtgta caccagcccc gcggctgtgg ccgtgtggga atggcaggac gggctgggca 300
cctggcaccc ctacagtgcc accgtctgca gcttcatcga gcagcagttt gtccagcaga 360
agggccaacg ttttgggctt gggagcctgg cccacagcat ccccttgggc caggcagacc 420
cctcgctggc cccttacatt attgacctcc ccagctggac ccagttccgc caggacaccg 480

0560503.0050

gcaccatgcg ggctgtgcgg agacacctgt tcccccagca ctcagcccct ggccgaggtg 540
tcgtctggga gtggctgagc gacgatggct cctggactgc ctatgaagcc agcgtctgtg 600
actatctgga gcancaggtg gccaggggca accaagctcg tggacttggc ccccctgggg 660
tacaactaca ctgtcaacta caccacccac acgcagacca acaagacttt cagcttctgc 720
cgaacgtgcg gcgccaacan ggccggctta cccggtgacc accatcatcg gttccgccgg 780
gccaaaaaca ggcgtngcct gnt 803

<210> 5350
<211> 736
<212> DNA
<213> Homo sapiens

<400> 5350
gcttttcaga ttttgaagcg tgtttgtggg ctgaatcttg cccttatcac ccatttctag 60
gatgcttttt gctccactca ttctttgtct tgcttcactt gactttgaac tgtatacttt 120
tttccatcgt tttactttca gtatcttcat acatgtatgt ttttgtacgc ctctcttaga 180
acagtgtatg gttttgtaaa aattcagcct gtagctttta cctgcctcct tcatgacctt 240
tataatcccc ttggttctca gcctgccact cacaggactt ttccctgtgc tgcgttccca 300
gtgccccctc cccgccccca cctgtgcttt ttgttggatt agtagaattg cttttgtcat 360
tccattgttt tcatatattt gtttgggaca ttttactttt ttctgttaac gcttacccta 420
gaaattagaa atgacaccac gtattcttag cgaagtccag ttttcagcat tttgtcctta 480
ttggacaata gcaaggatat tagaacgtgt tggttccgcg tgcttccgnc ttgagttatg 540
tgctgctatt ggcggatatt ttgncttaga tgtacgtact ttcctgtcat tggggnatgt 600
gtaatttgcg ttactttgaa tttttacttt ctttggctct catcacttac tgcttttggg 660
acccccccca tcggggntca cattcccttt tcctagagca cacttccttg ggatttcctn 720
gantgggggt ctggct 736

<210> 5351
<211> 676
<212> DNA
<213> Homo sapiens

<400> 5351
gctttactgg gtcccttctc tcttcattca caggggccc tccctttaga tctctgtcta 60
ttcagacagg cggccctttc tcagatggga tatagacaga tgatcttttg aaataagtga 120
gaagattttt aagattagaa taatatgaag aatatctttc tggccgggcg acgtggctta 180
tgtctgtaat cccagcactt tgggaggctg aggtgagggg attgcttgaa cccaagagtt 240
caagaccagc ctgggcaaca tggcgagacc ctgtctcgaa gaaaatacaa aaattagctg 300
catgtggtgg tgcatgcctg tagtcccagg tactgaggag gctgaggcag gaggatcctt 360
tgagcccagg aggtcgaggc tgcagtgagc cgtgatcaca ccagtgcact gcagcctggg 420
caacagcatg agaccctgtc tcagaataaa aaagtgtttc tttctcagaa gacagagtac 480
agaagatgtt tgtttttgtt ntttctctct ctgtgctaca ggggaaggtg tggctcattg 540
actttaatcc atttggtgaa gtcacagatt cactgctgtt cacctgggaa gaactgatat 600
ctgagaacaa cttaaacggc gattttagtg aagttgacgc tcaagagcag gnacaacatt 660
tttaagacag atncng 676

<210> 5352
<211> 850

US09/510,000

<212> DNA
<213> Homo sapiens

<400> 5352
atttggggtt tcggttcccc cccttcccct tccccggggt ctgggggtga cattgcaccg 60
cgcccctcgt ggggtcgcgt tgccacccca cgcggactcc ccagctggcg cgcccctccc 120
atttgcctgt cctggtcagg cccccacccc ccttcccacc tgaccagcca tgggggctgc 180
ggngtttttc ggctgcactt tcgtcgcgtt cggcccggcc ttcgcgcttt tcttgatcac 240
tgtggctggg gacccgcttc gcgttatcat cctggtcgca ggggcatttt tctggctggt 300
ctccctgctc ctggcctctg tggtctggtt catcttggtc catgtgaccg accggtcaga 360
tgcccggctc cagtacggcc tcctgatttt tggtgctgct gtctctgtcc ttctacagga 420
ggtgttccgc tttgcctact acaagctgct taagaaggca gatgaggggt tagcatcgct 480
gagtgaggac ggaagatcac ccatctccat ccgcagatgg cctatgtttc tggtctctcc 540
ttcggtatca tcaagtggtg tcttctctgn tatcaatatt ttggctgatg cacttgggcc 600
aggtgtggtt gggatccatg gagactcacc ctattacttc ctgacttcag cctttctgac 660
agcaagccat tatcctgctc catacctttt ggggaantgg gttctttgat gcctgtgaaa 720
agagacggta ctggctttgg gcctggnggt tggaagtacc tactgacatc ggaatgaatt 780
ctgaaccctg gataagcagc tgtgcattat cagcntgttc atggcttggc ttataagtga 840
gtctcaaatn 850

<210> 5353
<211> 643
<212> DNA
<213> Homo sapiens

<400> 5353
aacccattta caaaatggat cactggccag actcctcact agccgtgtct atgagagagt 60
gcttgcccat ccccgaggta gaagaacagc accctgaggt gccgctgccc cagccggcct 120
ggtgctgaca ggctggaaga agtgagttgc cctctgtaga gacccccaga gcagatgtga 180
gaagacggcc ctagtgggag tgccatctga caagggtcgg ggagcttttt atggacaagg 240
gatgccacta aaaattaggg atcctctgtt ttatcctgga ctgctagctc cttttaaata 300
ataagtctta tcgagttctt ttttttgag gcagagtttc actttatcat ccatgctgga 360
gtgcagtggc gcaatctcgg ctcactgcaa cctctgcctc ctggattcca gcgattctcc 420
tccctcagcc tcctgagtag ccgggactac aggtgcctgc caccacgcct ggctaatttt 480
tgtattttta gtagagatgg ggtttcacca tgttggccag ggtagtctca aactcctgac 540
ctcaggtgat ccgnccacct aacctnccaa atttctggga ttacaggcat gagcctctag 600
gcccagccag agtttcattg ngttttaatc aaagactggc ttg 643

<210> 5354
<211> 784
<212> DNA
<213> Homo sapiens

<400> 5354
caagatccaa ttatagctcg gatgtccatt tgttcagaag acaagaaaag cccttccgaa 60
tgcagcttga tagccagcag ccctgaagaa aactggcctg catgccagaa agcctacaac 120
ctgaaccgaa ctcccagcac cgtgactctg aacaacaata gtgctccagc caacagagcc 180
aatcaaaatt tcgatgagat ggagggaatt agggagactt ctcaagtcat tttgaggcct 240

agttccagtc ccaacccaac cactattcag aatgagaatc taaaaagcat gacacataag 300
cgaagccaac gttcaagtta cacaaggctc tccaaagatc ctccggagct ccatgcagca 360
gcctcttctg agagcacagg ctttggagaa gaaagagaaa gcattctttg agaaaaacaa 420
gcaaaggaga agagtgttac tgtaccctta tgacagaatt gtcctggatt ttgactccat 480
ccacgcccat caccttttcta cattttgctg acagataact aaccgatgat gaggccgagg 540
taaaagagac atctgcagtg tgacagaagg gagcatgaga agcatggctc accagccagc 600
ctctgtggtc tttgtaatta gaagcttcag aactcactaa tactactgna cctttcattg 660
gcgcattacc ccataaaact ttttgagacg aggtgagatc tgagtataaa gataggtcag 720
aagtatttta aagggcttaa tgngcccaaa aggaaaaaaa gctngagacc ccttttggna 780
aacc 784

<210> 5355
<211> 607
<212> DNA
<213> Homo sapiens

<400> 5355
cttgcggctg cgttttcaat ctgcttcctt gtgagtcagg tgggtcctgg gcccaggaac 60
cggcccggag ccgtggacgc cctacagctg agaaggggac ccaaggggtc ggccgcggcc 120
aaggccccta ggaccgccgc cccagctcac gctgccgacg gcagctatag acattctgcg 180
tcaggtccgg gctcctggac ttcgcctttc ccgagccctg gaggtgggga gaaaaggtga 240
gcagttcgtg cctgcagcgc agagccccaa acccgcggtt ttagaaatcg aaaaagccct 300
gccgggcgcg gtggctcacg cctttaccgt aatcccagca ctttgggagg ccgggggcg 360
gggtggggcg ggggaggatc acgagttcgg gagttcgaga ccagcctggc taacatagtt 420
gaaaccccgt ctccactaaa aatacaaaaa ttagccaggt gtggtggcgc gcgcctgtag 480
tcccagctac tctggaggct aaggaaggag aatcgcttga atccgggagg cggaagttgc 540
agtgagccga gatcgcacca ctgtacacct gggtgacaga gtgagactct gtctcaaaaa 600
aaaannn 607

<210> 5356
<211> 753
<212> DNA
<213> Homo sapiens

<400> 5356
ggaagtggat cgtgcggagc aagcatcaca ccatggcgta tgagtgttcc tctgtgtaga 60
ctcaacctgc gcctcgccgt cccccattcg cacacccgat gcccgggggt cgctacggac 120
ttaaaatctc cgcaccgcac cctccacctc agatatctct tgtaaatgtg taaacacgga 180
tttgccacca aaggggaaga acaatatggg agaagcgttc tacacggtga agttggagag 240
acttgaaagc tgtgacactg caggcttgtc cttccaggaa gttcagaaaa atacatacga 300
ctttgagtgt cagtggaaag atgatgaagg aaattataaa acagtactta tgttgcaaaa 360
agaaaatctc cctggtagaa gagctcaacg tgatagaagg gctgcaggaa acaggcatat 420
tgaaaatcag cttggagtaa gctttcagtc acatctccct gaactgcagc aatttcaacg 480
tgaagggaaa atttatgaat acaatcaagt tgagaagtct cctaataatc gaggaaaaca 540
ttataaatgt gatgaatgtg gcaaggtctt cagtcaaaac tcacggctaa caagtcataa 600
gagaattcat actggagaga agccttacca gtgtaataag tgtggcaaag cctttactgg 660
tcgntcaaac ctaacaatcc atcagggcat ncatactgga gaaaaacctt accaatgtaa 720
tgaatgtgga aanggcttta gtcaaacttt aaa 753

0506204.0020

0508503.00005

<210> 5357
<211> 831
<212> DNA
<213> Homo sapiens

<400> 5357
atggcggggg ccgtgccggg cgccatcatg gacgaggact actacgggag cgcggccgag 60
tggggcgacg aggctgacgg cggccagcag gaggatgatt ctggagaagg agaggatgat 120
gcggaggttc agcaagaatg cctgcataaa ttttccaccc gggattatat catggaaccc 180
tccatcttca acactctgaa gaggtatttt caggcaggag ggtctccaga gaatgttatc 240
cagctcttat ctgaaaacta caccgctgtg gcccagactg tgaacctgct ggccgagtgg 300
ctcattcaga caggtgttga gccagtgcag gttcaggaaa ctgtggaaaa tcacttgaag 360
agtttgctga tcaaacattt tgacccccgc aaagcagatt ctatttttac tgaagaagga 420
gagaccccag cgtggctgga acagatgatt gcacatacca cgtggcggga cctttttttat 480
aaactggctg aagcccatcc agactgtttg atgctgaact tcaccgttaa gcttatttct 540
gacgcagggt accaggggga gatcaccagt gtgtccacag catgccagca gctagaagtg 600
ttctcgagag tgctccggac ctctctagct acaattttag atggaggaga agaaaacctt 660
gaaaaaaatc tccctgagtt tgccaagatg gtgtgccacg gggagcacac gtacctgttt 720
gccagccatg atgtccgtgc tggccaggaa gagcaggggg cttcgttgtg cccagatcgc 780
cagaatcacg ctttgccaga aaagncatga cgcngcaata cactanctgg c 831

<210> 5358
<211> 745
<212> DNA
<213> Homo sapiens

<400> 5358
ctgaaaatga agccacctca ggcagtgggc ttcgattggc tacaattgtg cccttcttac 60
tttagcactt tggcaaacat tgagaaaatt attattatgg aaattttctt tctgttttga 120
gacaggatct cactctgttg accaggctgg agtgcagtgg tgttgtcata gcccactgca 180
acctcgatct cctatgctta agcaatcctc ccacctcagc ttcctgagta gctagggcca 240
caagcacatg ccataactcc gtggatgccg aaagtagata acgagaccta ctggatcaga 300
atgaggcaga ttagtacaca tcgcacagca aatagcagga atatcagcat gaaagtgctg 360
gtgcccctga cctcaagtct cgtggggtga catgatgggc ccagatgatg tctatgcatg 420
aattgggttt gcctacagct gaggaaccaa ggaccaccaa ggacttagca ctttcctttc 480
ttttttttctt tctttttttgt ttttttgaga tggagtttcg agtttcactc ttgttgccca 540
ggctggaata caatggtgca atctcggccc actgcaacct cctccgcctc ctgggttcaa 600
gcaattctct tgcctcagcc tagcgagtag ctgggattac aggcatgcac caccatgccc 660
ggctaatttt tatttttagt agagacgggg ttctncatgt tgcangctgg ctcgaactct 720
gacctcggtg atctgctgct nggct 745

<210> 5359
<211> 767
<212> DNA
<213> Homo sapiens

<400> 5359

aaatgtgccc tgctctctcc cctcttaaaa atagcagcaa cccatctttg caaagaagct 60
tgcctataga gctggcactc tgtgaatgga ctgtgctttt acgaccctac agggtatcaa 120
gatactgtgc agctcgccaa caaggattaa ttgcaaggac tggtagatcg aatttactga 180
agacttggag ctcgcttctg agaacaaacg caaaaggaca gtaaactgtg gaccttgaag 240
ttagcagggt ttcactcttg ttgcccaagc tggagtgcaa tggtaaaatc tcggctcacc 300
acagcctccg cctcccgggt tcaagcagtt ctcctgcctc agcctcctga gtagctggga 360
ttacaggcat gtgccaccac gcccagctaa ttttgtattt ttaggagaga tggtgtttct 420
ccatgttggt cacgctggtc tcaaactccc gacctcaggt gattcactca ccttggtctc 480
ccaaagcgct gggattacag gcatgagcca ccgctatgcc gtctttgntt taagatcttt 540
gcctncctttctgcccaaat gngtagattc aatctgctcc acccccttc ctttcttctc 600
tggtgatttg taaaatgccc atccatgagt catggcccct gcactctggg aattttcang 660
cttcttttaa atagattcta ccctactaga tatatccaca ttttactatc actttacacc 720
attatttaaa atcttggata acannacctg gacttacaca cacncac 767

<210> 5360
<211> 705
<212> DNA
<213> Homo sapiens

<400> 5360
caaaagctcg gcatggctga cgacgcgggt ttggagaccc cgctgtgttc cgagcagttc 60
ggctccgggg aggcacgggg ctgccgcgcc gccgcggacg ggagcctgca gtgggaggtc 120
gggggctggc gctggtgggg gctctccagg gccttcacgg tcaaacctga aggacgagat 180
gcgggcgaag tgggggcttc cggggccccc tcaccgcccc tctccgggct ccaggccgtg 240
ttcctgcctc agggcttccc tgatagcgtc agcccggact acttgcccta ccagctgtgg 300
gattccgtgc aggcgtttgc ttccagcctc tccggctccc tagccaccca ggcagtcttg 360
ctgggcatag gggtggggaa cgcaaaagcc actgtttcag ctgccacggc cacctggctc 420
gtgaaagatt caactggcat gctgggccgc atcgtctttg cctggtggaa agggagcaaa 480
ctggactgca atgccaagca gtggaggctt tttgcggaca tcctcaatga cgtagccatg 540
ttccttgaga ttatggctcc tgtataccca atctgtttca ccatgaccgt cttcaccagc 600
aacctancca agtgcatcgt gagtgttgct ggtggggcca ctcgggctgc cctgaccgtg 660
caccaagctc ggaggaacaa catgctgacg tgtnacccaa ggana 705

<210> 5361
<211> 762
<212> DNA
<213> Homo sapiens

<400> 5361
agcagctccc aggatgaact ggttgcagtg gctgctgctg ctgcgggggc gctgagagga 60
cacgagctct atgcctttcc ggctgctcat cccgctcggc ctcctgtgcg cgctgctgcc 120
tcagcaccat ggtgcgccag gtcccgacgg ctccgcgcca gatcccgccc actacaggga 180
gcgagtcaag gccatgttct accacgccta cgacagctac ctggagaatg cctttccctt 240
cgatgagctg cgacctctca cctgtgacgg gcacgacacc tggggcagtt tttctctgac 300
tctaattgat gcactggaca ccttgctgat tttggggaat gtctcagaat tccaaagagt 360
ggttgaagtg ctccaggaca gcgtggactt tgatattgat gtgaacgcct ctgtgtttga 420
aacaaacatt cgagtggtag gaggactcct gtctgctcat ctgctctcca agaaggctgg 480
ggtggaagta gaggctggat ggccctgttc cgggcctctc ctgagaatgg ctgaggaggc 540

Doc. 3 of 5 - 2/2/2010

ggcccgaaaa ctcctcccag cctttcagac ccccactggc atgccatatg gaacagtgaa 600
cttacttcat ggcgtgaacc caggagagac ccctgtcacc tgtacggcan ggattgggac 660
cttcattggt gaatttgcca ccctgagcaa gctnactggt gacccggtgn tcgaagatgt 720
ggccagaatg gctttgatgc ccctttttggg aaaacccggn ca 762

<210> 5362
<211> 802
<212> DNA
<213> Homo sapiens

<400> 5362
aacatcaaga gcaggaaaat ggactcatta gggaggcagg cagtcattac cactcacact 60
gtacttccag ggagacaccg attataagaa gagaaactca gcgctgggga agaaggcact 120
gccaggactt accgtacaac actccttggc ttctggaatt ttatctctgc tcacagtcta 180
cattacaaca ttagttcatt ctgggcactt tagcttcctt gaatctccag ttgatctcac 240
acccatgcct atgatattct tctcctggtt aatcaagaat tctctatttc tgctccgtca 300
tccatgccac tacaaataaa aagaagtgtt aagaattgcc tttgggactc tgaaggctga 360
agaattgatg aattgcaagt ttgtgcccca tagctgcaca gactgcctga agttacattt 420
agagactgaa atcactgcac cttaaaaaca aaagattgag ctgcactgta ttcctaatgt 480
ttcatcatta ctaacaggat attcctcatg acattgctgt ctgatctttg accatcagtc 540
tgtgacctgc cccttctctt tacatgcagc cgctctctgc tccctgcccc aatgaacatc 600
tgcactaggc ccaagccttg gagtaattta cctgaagagt gacaccattg attttgaaac 660
tactgaagaa acccaagaca gctgaaaacc agaaggcatc tgaggagaat gagattactc 720
ancccgggtg gatccagcgn cnagcccggg cctttcctgc ctgaactttt gaagctggtt 780
tggcttcaga cccagccctt at 802

<210> 5363
<211> 712
<212> DNA
<213> Homo sapiens

<400> 5363
ccctcatccg gcacctgcgt gcactctccg gcgtcccaag tgagtggagg ggggatcccg 60
actccagtcc ggggccttgg ccagcggagc cgcggtattc ggaagcggga atcccactca 120
gagcccgggc ctgtaggggc ggggcgtccc gggcacccgg gattggggcg tctcccgtcg 180
tgcaccgggg caccggcgac tcacccggaa ggagaagccg tgatctggct atatggtggg 240
gcgcgggcgg tgtcgctgtg gggagctggt gctgttctca ggagccagcc tggatcattt 300
gttggcagta catattggct gaagtcagtt ttcatttcaa gatgtttcct tccaatgggc 360
ttttggtgta ggatgtcgga gaaccaagaa caggaggagg tgattacagt gcgtgttcag 420
gacccccgag tgcagaatga gggctcctgg aactcttatg tggattataa gatattcctc 480
cataccaaca gcaaagcctt tactgccaag acttcctgtg tgcggngccg ctaccgtgag 540
ttcgtgtggc tganaaagca gctacagaga aatgctggtt tggtgcctgt tcctgaactt 600
cctgggaagt caaccttctt cggcacctca natgagttca ttgagaatcn acgacaaggt 660
ctgcagcact tncttgaaaa ggtcctgcat aatgtggttc tcctgtcaaa ca 712

<210> 5364
<211> 866
<212> DNA

0020050450

0050205.0050450

<213> Homo sapiens

<400> 5364
aagacagtct cgatctctgt cctgtggtat acagcatcca gggaagtgcc cagggaccag 60
ggcaggcaga ggtcttcctg cctttacccc acctgggccc agttcctgcg caggggcttg 120
gccagtcctg gtcagctttc cctctgatga ctgcaggaag agagtcagac gcggaactcc 180
cagggtgcag aggcctgcgg ggtctgaagg gcctcctccc tctccagtgt ggtgactggg 240
ctgaggagat gctgggactg agagtgtcat ggtggagcct ccgtccctgc tcatcctctc 300
cgcatgttgc ttctgctccc gatggctctc tctgaaatgc agcacaacct cctaggccaa 360
tggaagaagg cccagagctg gctccctgcc tggaagcacg aggagacccg cacaggcatc 420
ctgagaaggc gtggagagca ggctgccttc atggggggag tgccagggcc tgggcaccca 480
cacccgctga cccaagaggg cccgggcacc tgcgtgctgg cctcttcact gaccttcgct 540
ctgtctgctc tctttgtgtc tctctctgac ctccagaggc ctcctttctc tctgccagga 600
acagtagccc ccctgcaagg ccctnctttt cctccagccc gcagcctgcg gcctctccgg 660
tctgctccac agcccggntg ccacacactc gcctctctnt tcaggccccc cgggtttcct 720
tccggctctc ttggctgcct ggtctctcct ttttgcaagg ttgcggttta attggcttaa 780
tcttcttggg gggtttgggn gcttcttncc ctttgggttt nccattggga aaacttgggc 840
cttgggcccc ccaaggaaag ggcccc 866

<210> 5365
<211> 763
<212> DNA
<213> Homo sapiens

<400> 5365
tttccccctg ccccatcaat atgttctctt gcatatattg gcgtgctgcc atataaagta 60
aaaatactgg agatattcta tattttatat ataggtttat gtgttgttgg ggatgttttc 120
attgtgctct tttggacata ataaataatt ctctattgag gctacattct ttttttttt 180
ctttttttt aaaagaatgg catctcactc tgttgcccag gctggagtat agtggctaag 240
tcatagctca ctgcagcttc gaactcctgg gctcaggcca ttctcctgcc tcagcctctt 300
gagtatctag gattataggc atgctccacc acacctggtt aacttcattt ttatttttg 360
tagagatgag gtctcactat ggtgcccagg ctggtcttga actcctagac caagtgatcc 420
tcctcctttg gcctcccaga ctgctgggat cactgcaccg gccaaggctg cattcttaac 480
ccaactagat tgtttactga atcccatatg acagcgatac attgtcctta catatttatt 540
tttagacatt gcaaagttat taaaaacagt taactatagt ttttacacaa cgtaggcaac 600
aatgaagagt atagactgta agattttcat ctatgactca taaatctggg aaaaaaaaat 660
tattaagact aatgagaaac tgaaaacctt aaactaatga atattatttc tgctgctaaa 720
aatatgaaac tttctgggct gnanttgaaa tttggatgan cct 763

<210> 5366
<211> 807
<212> DNA
<213> Homo sapiens

<400> 5366
aattattgtt cacttttcc tttgtgtata aaattataaa tattaatcat attattactt 60
tgtcttctac taaacatact gtttaaaaca attgcaaaag aagtatttta cagcgagagg 120
gaaatgaatt tgaatgttta cagaagacca cctttgaata attgcagttt gcttgtgttg 180

tagagctgtt tacgatctgt gctggaacaa atagcagcat atggccaggt tgtgtttcga 240
ctccaggagt tcattgatga agtcatggga cacagttctg agagcatgct gcctggaagt 300
gggtctgttc ctaagaagtc aactgaagct ccctttagaa cctaccaggc tttcatgtgg 360
gccctgtaca aatatttcat tagtttcaaa gaggaacttg cagaaattga gaagtgcatc 420
atcaataatg gtattaaatg ttcttcatct ttactcatac tacacgtaac tcataatttg 480
aatgccactt agagttttta ttatataaga tttgaaagtt gcctagcaga taagtagttc 540
tcgtgaatgc ttcttttaaa attattttaa atttatattt ttaagccatt catatctcta 600
aaaatcaaaa aactacagaa gatttagaat gaaaaatcta aattattctt cctgcaccag 660
taccccagcc agtcagttct cctctccaga gacagccagg tccttggctc ttacgcatcc 720
ttncagaaag agtttcaaca tacntgagca gtgcatatac atatacgcat cctagcagtc 780
attacactgn tcttcttcaa aattttt 807

<210> 5367
<211> 786
<212> DNA
<213> Homo sapiens

<400> 5367
aacatcctat gctcagctcc ttgcagcaac atgtctttca aaacttgtca gccgagtcag 60
tcctttacct gttgagcaga ggatggacat cagaaactac attctgaatt acgtggcatc 120
acagcccaag ctggctccct ttgtcatcca agctcatatt caagtcattg ctaaaatcac 180
taagttgggg tggtttgagg ttcagaaaga ccaatttgtc ttcagagaaa ttattgctga 240
tgtgaagaag tttctccagg gtactgtgga acactgcata ataggagtaa taatcctttc 300
tgaattgact caggaaatga acctggttga ttattctaga ccttcagcaa aacacaggaa 360
aatagctacc tcatttcgtg atacttctct caaagacgtt ttagtgctag catgctctct 420
tttaaaagag gcgtttgcca aacctttaaa tcttcaggat caatgtcagc aaaatctggt 480
aatgcaggtc ttgaaactgg tccttaactg ccttaacttt gacttcattg gcagttcagc 540
agatgaatct gcagatgatc tttgcacggt gcagattcca acaacttgga gaacaatttt 600
cctggaacca gaaacattgg atcttttctt caatttggat cattcacttt caccactact 660
atctcagtta gcactttcat ggttagttca antttgcttc gacaagaagg ccttatttaa 720
cagtcctgac gtgccaagtc cttggtaatt taattnangg agtaaaagga tccttgaaaa 780
ccctta 786

<210> 5368
<211> 767
<212> DNA
<213> Homo sapiens

<400> 5368
tttcatagag atggggtctc actatgttgc ccaggctgtt ctcaaactcc tggcctcagg 60
cgatccacct tggcctcctg aagtgctggg gttacaggtg tgagccactg cgcctggact 120
gagtgtttgt ttctttaaag gatcttatat ttttcctgtg ctacatacca ccacagcagc 180
ccagcttctg tggggagaga agttgaagga tcccgaagct ttagaaaaag gatctcagct 240
gtggcacagg cagtgttatg cgcctcactg ccacattggt gctgttgtat tgaaggtggt 300
gcttctggcc ttggcccttt tgagttggtt tccatttggg ctgcaggtga ctcagtgact 360
ccctcctcaa gctgtcctcc tgctaagacc agcagtcaca aacccatggc aagggtgagt 420
gtgaaggcct aaccctgtgc ctatgtaata ggctccaagc atcgactccc atcctgagag 480
gaccggccct tttgacactc accaaccaaa tctgttcatt cgatagagtg accaggcctn 540

US 6,455,260 B1 Sep. 24, 2002

cctcacctgc ccaggtgtat gatcctacag ttcctgcctt ctctcctacc ccgcacagct 600
gccaactggt cctacatcct cagcccctct gccaccacct taaataggac tttactgatt 660
ccccaacttt ggtttttgg aggatgagat ttccttttta tcccaccccc ccacacccca 720
aacagacatt gctgganggc anactggaag gaaggggaan gcatgcc 767

<210> 5369
<211> 860
<212> DNA
<213> Homo sapiens

<400> 5369
tgccaccggc tggtaagcat cactgtgggc caggcactgt ttacctatgg gaccacgtgt 60
aacaactcag acctttgctg agtcaagata gactaggctt tgggtctaaa ttttggctct 120
gctactttct aactgcacag tggtcaaaaa ggtactgagc atatcaaagt ctcagtattc 180
ccatttgtag gaaaggggcg cagtgagact cccttcctaa caggattctt gactggatga 240
atagagacaa ggtatgcaaa gtgcttaata aggtggcaga tacgtgataa gcactcagta 300
aatgtagctc tccataaatc atcaatcctc tcaacaatcg ttggagcttg gcattataat 360
ccccactgca cagatatgga aactgaggcc taagaggttg tcagttgtcc aaagtcacat 420
gattaggaag tggccaaagg gatttcctct gatcctcctt tctccagccc acggtcccat 480
tcagtgaggg aaaggggcta gagctcccgg cttgcagaat attcaggaaa cagatctttg 540
ctctctgatg ctggtaagtt tgggggaccc tgaaactggc tcctgaagag ctcatggcag 600
gaagcctggg ttcagtgaag ccacaggagg ctgtccagga accagctgcc acttgacctg 660
ntgcatttct ttccttggct tcangagctg agtgaccagc gggttcggag ttcgagaact 720
ctgatgtcag atgggcatca cggtgcctgg catctggaag cagccggcca gcagtcatga 780
gacaactgct accagtgagg ganagcaggc ggtggaancc gaggaaaggc tcagattcca 840
ggggggntga gcccgccagt 860

<210> 5370
<211> 751
<212> DNA
<213> Homo sapiens

<400> 5370
atttggagtc aggcctggct gttgctcagg tgaccagctt gtgtctctgg gagggcgctg 60
ctttccccgg ccacccggcg cgatgatcca gaatgtcgga aatcacctgc gacggggctt 120
ggcctctgtg ttctccaacc gcacatcccg gaagtcagcc ttacgtgcgg ggaacgacag 180
tgccatggca gacggcgagg gataccggaa ccccacggag gtgcagatga gccagctggt 240
gctgccctgc cacaccaacc aacgtggtga gctgagcgtc gggcagctgc tcaagtggat 300
tgacaccacg gcttgcctgt ccgcggagag gcacgctggc tgcccctgtg tcacagcttc 360
catggatgac atctattttg agcacaccat tagtgttgga caagtggtga atatcaaggc 420
caaggtgaac cgggccttca actccagcat ggaggtgggc atccaggtgg cctcggagga 480
cctgtgctct gagaagcagt ggaatgtgtg caaggccttg gccaccttcg tggcccgccg 540
agagatcacc aaggtgaagc tgaagcagat cacgccgcgg acagaagagg agaagatgga 600
gcacagtgtg gcggctgaac gccggcgcat gcgccttgtc tatgcagaca ccatcaagga 660
ccttctggcc aactgcgcca ttcaaggcga tctggaaaag canagactgt aaccgcatgg 720
tgccggctta naaaaaccct gtngaaaatg t 751

<210> 5371

0050250.00000

<211> 680
<212> DNA
<213> Homo sapiens

<400> 5371
agtattgact gttaatgctt tgcttgaagt gttacctgtg atcagacccc gacagtgttt 60
aaggtaaagc gtggcctgta gatcccggga cgctcccagt ttggccccaa tcattcgtta 120
ccctcctggt tctcagatcc ttcgaaatgt gcagatttgc agccctgcat cctgcttgtc 180
actcagcgtg gcccaagttt tgtttcagaa aataggagcc ctattaggtc atccccagct 240
tgttaagtct cattattgtg tgttttcccc tgggttgttg gaatttgaca cagttttacc 300
tgatgtgatg cttgaaggcg accctatgac tctttttaaa ggaagagttt gcaggacggt 360
tttggactgg ggcttgtggg aatggaggag gggaggtggg cacatggccg gggaaacagc 420
tccaggctgc acgaccagac cagcgttccc accctcaaga gccagtgaga aaccttgggg 480
agaaaaagca aggatgggca aggcttccct gttcgtctcc actcatatca aaatttccag 540
cctgagctgg gtgtggtggc tcacatctgt aatcccagcg tcatgggagg ctgaggcaag 600
aggatttctt gaagccagga gttggagatc aagtttggcc aacatagcaa gacccccat 660
ctctaaacag tananaaaan 680

<210> 5372
<211> 762
<212> DNA
<213> Homo sapiens

<400> 5372
ttaccggctt tacttcactg cagaatctga ctgcggtcag atctatatga cagattgttg 60
tattcgtttt ctgcgggtac gtcactatcc agtctacttt ttccattgac gtggctgagt 120
catatgtagt atgactgtca gagacgttgg aacctgaagc gaccccattt tgagtgaggg 180
ctagaaaaat gaggccggga cttacgggcc tgcattctca gaaggatatt cctagctttc 240
agatgcttac ggttaaggga acaaattaat gtttactgaa gagacccgag cgtccagata 300
gctggatatc tggagaacaa aggcgttcct aattttgctt taaaggtagt aatagggatt 360
cttgcaaaat gtaataatta aagttaattc tttatcacaa acccttgtag cagagcacct 420
ctccccatgt atacaagcat tgtacctagg gtggatacgt tccttctctt agtttcggga 480
acgcccttct ctgtctatgg agtagctgtt ctttcaccac tttactttct tgataaactt 540
gcttttattt tgcaccgcgg actcgccctg agttatttct tgcgcgagac ccaagaaccc 600
tctctttggg tctggatcgg ggccctttc ctgtgacgta tttctggcca ccacagatgg 660
gactatagtg ctttggggaa gtggtggggc ctataacata tttctgggcg aacgacggaa 720
ggggcnatct gaagaactnc ccaacccaaa ggaagtanac tg 762

<210> 5373
<211> 679
<212> DNA
<213> Homo sapiens

<400> 5373
gtgctgtttt tgttgttggt gaaaggtgag gggaacagct gatccgtctg ttgggaggac 60
agatatctca aggccaggat ggaagaatca ccactaagcc gggcaccatc ccgtggtgga 120
gtcaactttc tcaatgtagc ccggacctac atccccaaca ccaaggtgga atgtcactac 180
acccttcccc caggcaccat gcccagtgcc agtgactgga ttggcatctt caaggtggag 240

0050050.00000

gctgcctgtg ttcgggatta ccacacattt gtgtggtctt ccgtgcctga aagtacaact 300
gatggttccc ccattcacac cagtgtccag ttccaagcca gctacctgcc caaaccagga 360
gctcagctct accagttccg atatgtgaac cgccagggcc aggtgtgtgg gcagagcccc 420
cctttccagt tccgagagcc aaggcccatg gatgaactgg tgaccctgga ggaggctgat 480
gggggctctg acatcctgct ggttgtcccc aaggcaactg tgttacagaa ccagctcgat 540
gagagccagc aagaacggaa tgacctgatg cagctgaagc tacagctgga gggacaggtg 600
acagagctga ngagccgant gcaggagctc gagagggctc tggcaactgc angcaggagc 660
acacggagct gatggaaca 679

<210> 5374
<211> 738
<212> DNA
<213> Homo sapiens

<400> 5374
gtttaggccc aaagtggtgt cggagcagcg cctattagtg tcatcctcac cgtcacggcc 60
ggcgcctcct cctggattca ttcacccgct cttttcattc acgaaggtag tgaggcctag 120
tggaaagcca tggagagcgc tctccccgcc gccggcttcc tgtactgggt cggcgcgggc 180
accgtggcct acctagccct gcgtatttcg tactcgctct tcacggccct ccgggtctgg 240
ggagtgggga atgaggcggg ggtcggcccg gggctcggag aatgggcagt tgtcacaggt 300
agtactgatg gaattggaaa atcatatgca gaagagttag caaagcatgg aatgaaggtt 360
gtccttatca gcagatcaaa ggataaactt gaccaggttt ccgtgaaata aaagaaaaat 420
tcaaagtgga gacaagaacc attgctgttg actttgcatc agaagatatt tatgataaaa 480
ttaaaacagg cttggctggt cttgaaatcg gcatcttagt gaacaacgtg ggaatgtcgt 540
atgagtatcc tgaatacttt ttggatgttc ctgacttgga caatgtgatc aagaaaatga 600
taaatattaa tattctttct gnttgtaaga tgacacaatt ggtactgcct ggcatggtgg 660
aaagatccaa aggggctatt ctgaacattt catntgcaat ggcatgctcc tgtcccactc 720
ttgaccatct attntgna 738

<210> 5375
<211> 706
<212> DNA
<213> Homo sapiens

<400> 5375
tgaattatta atttttgcgg ctggacgcgg tgactcatac ctgtaatctc aacactttgg 60
gaggccgagg tgggcagatc acctgaggtc aggagtttga gaccagcctg gccagcatgg 120
tgaaactctg tctctactaa aaatacaata ttagctgggg tgtggtggca cgcacctgta 180
atcccagcta ctggggaggc tgaggcagga gaatctcatg aacccaggag gcagaggtgg 240
cggtgagctg agattgcacc actacactcc agactgggat ttaagaaaat gtgtagttaa 300
atattgccta aaatgctcga atgtaggtta taaacaatga gaatagggcc catgaagaga 360
ttttcgtttt tcacagaggt gagacttaaa aaggccttga aggataaata gaaatagaag 420
cagagtagaa gggttattcc aggagaatat tagtttggat gagggcacag aggcaggaag 480
atggagctta gcttgaggga atggaggtca ctggtgctgt gaatatttgc agacagccat 540
atccagagct gagaggtgaa agaacagact ggaatagttc ttttcttttt cactctccta 600
ccttatttgc ttttggttta gcaaggagga tcgaaagtaa accaagagaa atggtggggg 660
gcacanaagg angtgggagg gaaactncag gatgagttat ggcacc 706

0050750.0050750

0088230.0946250

<210> 5376
<211> 506
<212> DNA
<213> Homo sapiens

<400> 5376
agacatacag aaaagtgcac ataagtggac agctccatgg atttcacaaa gggagcacag 60
tcacataatc agcatccagg tcgggaaaca gcataaccag caaagccccc tgagcctcct 120
accagttacc acccagtccc ctcccaaggt agccaacatc ctcgcatcca gatggctttc 180
actctccctg gttacaaact gcttttctta acaagctttt ttttttttt ttttttgaga 240
cagagtcttg ctctgtcatc caggctagag tgcagtggcc caatcggctc actgcaacct 300
ccgcctccgg ggttcaagtg attctcctgt cttaggctcc cgcctgtaat cccagcactt 360
tgggaggccg aggcgggtgg atcacttgag gncagagacc agtctggcca acatggtgaa 420
accctctctg ctgggagtac aagaattagc cgggcatggt ggcacgtgcc tgtaatccca 480
gctactnggg gctgangcag ganagt 506

<210> 5377
<211> 851
<212> DNA
<213> Homo sapiens

<400> 5377
gttggaaggc agacagatct gtgttcccta tttgtccctc tgggaatatg acataatctt 60
agggggtagg acacaggcca agaatgtcac taactgattt gggacatgag tctctcacca 120
acaaaatggt aatagaccat tcattcattc atcaggaaat agctattaaa cacctactat 180
gtgctaagca cgttggtatt attgggaata cagtgatgaa taaatcatat tcttttccct 240
aaagtcactg ttactctttc cattttacag atgaagaaac ttgggctcaa agaagttaag 300
caactggccc aaggttctac tcccataagt ggcagagaag ggttttgaag ccagataccc 360
tagttttcaa tctctgcttt actcttgtgc tgtctgcctc cccggcatca tgcatttggc 420
aggggacatg atatggacct gttacgtggg cccacagcat ccaggtccag cctaagctgg 480
gaagatcaag gaaggctccc tggaggaggt gacgcctata cgaattctaa agaatttggc 540
caggcagcag ggagtgtgtt tggctggtgt cataggcaga cagcagcatg cccaaagaca 600
agaaggaggg agggtttgat gccttcagga accaaaataa ttgaacatgc ctgaacccaa 660
tttcttaacc agtgagcatt gtaagggtag actaaaangg gctgccttgt gacttgctga 720
cacaaaccct tttccgggaa gagtgcctga caatactatt taatggattt cctggncaga 780
caactttcac catttcctta ggagacaggt ggtcaggaag caggaaagac taanatgatg 840
gggactnttt g 851

<210> 5378
<211> 682
<212> DNA
<213> Homo sapiens

<400> 5378
gaccgtggat cggctggagc ggggccgccg ccggctgcag caggagctgg acgacgccac 60
catggacctg gagcagcagc ggcagcttgt gagcaccctg gagaagaagc agcgcaagtt 120
tgaccagctt ctggcagagg agaaggcagc tgtacttcgg gcagtggagg aacgtgagcg 180
ggccgaggca gagggccggg agcgtgaggc tcgggccctg tcactgacac gggcactgga 240

ggaggagcag gaggcacgtg aggagctgga gcggcagaac cgggccctgc gggctgagct 300
ggaggcactg ctgagcagca aggatgacgt cggcaagagc gtgcatgagc tggaacgagc 360
ctgccgggta gcagaacagg cagccaatga tctgcgagca caggtgacag aactggagga 420
tgagctgaca gcggccgagg atgccaagct gcgtctggag gtgactgtgc aggctctcaa 480
gactcagcat gagcgtgacc tgcagggccg tgatgaggct ggtgaagaga ggcggaggca 540
gctggccaag cagctgagag atgcagaggt ggagcgggat gaggagcgga agcagcgcac 600
tctgcccgtg gcttgccgca agaagctgga nggagagctg gangaactga angcttaaat 660
ggccttttgc cggccagggc aa 682

<210> 5379
<211> 791
<212> DNA
<213> Homo sapiens

<400> 5379
agttaaagca gcgttcagag ggaaatgttt agctgtaagc atctaccttt aaaaataaga 60
aagccagcag tggtggctca tgccaacatc ccagtatttt gggaggctga agcgggagga 120
tcccctgagg tcaggagttc aagaccagtc taaccaacat ggcaaaagcc catcgctact 180
aaaaatacaa aaattagcca ggcatggtga tgcaggcctg taatcccagc tacttgggag 240
gctggggcag gagaatcgct tgaacctggg agagggaggt tgcagtgagc cgagatagca 300
ccactgcatt ccagcctggg tgacagagtg agactcttat ctcaaaaaaa atcaataaaa 360
ataaaaaata aaagtaagaa agatctcaaa ttagtcacct cactataccc tctaaaggat 420
ctagaaaaag aagagctaac cccaacctag cagaatacca gaaacaaaga ttagagtgga 480
aataaataaa ggaaattaag agaatagata aaattaaaag ttttttttac agttcagcaa 540
aattgacaaa tttttagcta gattgactaa gaaacacaag aagactcaaa tatccaaaat 600
cagaaatgaa aatgaggcca ttactgngac tttacaacaa ttaagggtat cgtaagagaa 660
tactataaac atatgtacac cagcaaattg aataaccaaa tgaaatggca aatctctaga 720
aacacaaacc tacccaggac tggatcacaa aggaaattaa aaaatatggg tnaaacccaa 780
ncnaggtgca a 791

<210> 5380
<211> 851
<212> DNA
<213> Homo sapiens

<400> 5380
gagttcgacg ttctctggag gcttgggaga tgcagccagg gcgcagagtt ggcagtggct 60
gcagacatct cttttcaatg tggacctcct gccacagcca cgagattcaa ggattttcta 120
ggaaaatgaa cgccagtgga tgtgtggaat tttttcacaa agtaagtgac gggggtccct 180
ttgcacttct catgccccca tggttaattg tgtgtgtgtg ctggaagtgg aggagggcgg 240
tgggtggtgc agctgtttga ggactcaccc ttcttcggaa ggctggggtc aatggggtgc 300
tgtttccccg agtcagttga aacgcccatg gctaaagcct gtggatcatc tcacccctgc 360
atttcctatt tggctctcac tttggtcgaa agacagcgga gcgcagaaaa tctgtcataa 420
ttgtgaaagt aggacctgtc atcctctaag ggtcattctt cctggcccac cgggcttgtt 480
gacacctgga gttgggtagc agagagaggg atgtcgggac cgtgaattaa cagtggccac 540
cacttcatgg tgaatggcat ccagacaaca ccttcacctg tctggggaag aacataggct 600
aggcctggga gaggctgtct actgaagtcc ctgcaggggt ccaggctgga ctatacccct 660
tcagcttggc cagagagcca aggaccacaa ggggaagtga tgtacgctga gaacccgtcc 720

0088705.0045350

gggccgccca acacgggtca aggcctttgg cttacangct gggtttattt ctgagcaacc 780
ctatgcagtg gcattacatn ctaccggtnc cactagccac ttgggactca accgataagt 840
actggctact g 851

<210> 5381
<211> 840
<212> DNA
<213> Homo sapiens

<400> 5381
caaaacaatt tttttaagag caaagttgga ggatttatag aacctgattc caaaactgtc 60
agtaaaacta caataattac aaagtatcag ccaggtgccg tggctcacat ctgtaatacc 120
agctctctgg gaggctgagg cgggtggatc acttgaagtc gggagtttaa gaccagcctg 180
gccaacttgg tgaaaccttg tctctactag aaatacaaaa aattagccag gcatgatggc 240
acacacctgt aatctcagtt actcaggagg ctgaagcaga atagcttgaa cccaagagag 300
tccagctcaa aaacaacaac aagaacaaaa gtatcacatt ggcataagaa tagacatgta 360
aatcaaataa caaaatagag aattcaggta taaatcttca tatttatggc tgattgactt 420
tgaacaaagg tgacgaggca agtcagtata gcagcatatt cttttcaaca aatggtgctg 480
gcagaagaaa aaaaaagtac ttggatcctt acctcacacc atgcacaaaa attagctcaa 540
cgtggactat atcagggttt ctcaacatca gcagtgttgg cgtttgctgg ggtggataat 600
tctttcctgt ggagagctgt cctgtgcact gtagaatgtt tagctgcatc ctggcctctg 660
cctattagat gccagtggca tccctccccc gacacacacc tagttttgac aatctctgct 720
ncagatattc ccaaatgtgc cctggagagc aaaactggtt ncagttgaga ccattgacct 780
aatgtaaaaa aataaaatgt ccagaagaaa gccttgccag gaaatcattc tganctcang 840

<210> 5382
<211> 815
<212> DNA
<213> Homo sapiens

<400> 5382
atttaaagga gtcgggtctc taactgttga tctgtttttt tcccttctga gcaatggagc 60
ttaccatctt tatcctgaga ctggccattt acatcctgac atttcccttg tacctgctga 120
actttctggg cttgtggagc tggatatgca aaaaatggtt cccctacctc ttggtgaggt 180
tcactgtgat atacaacgaa cagatggcaa gcaagaagcg ggagctcttc agtaacctgc 240
aggagtttgc gggcccctcc gggaaactct ccctgctgga agtgggctgt ggcacggggg 300
ccaacttcaa gttctaccca cctgggtgca gggtgacctg tattgacccc aaccccaact 360
ttgagaagtt tttgatcaag agcattgcag agaaccgaca cctgcagttt gagcgctttg 420
tggtagctgc cggggagaac atgcaccagg tggctgatgg ctctgtggat gtggtggtct 480
gcaccctggt gctgtgctct gtgaagaacc aggagcggat tctccgcgag gtgtgcagag 540
tgctgagacc gggaggggct ttctatttca tggagcatgt ggcagctgag tgttcgactt 600
ggaattactt ctggcaacaa gtcctggatc ctgcctggca ccttctggtt gatgggtgca 660
acctgaccag agagagctgg aangccctgg aacggccagc ttctctaagc tgaactgcag 720
cacattcagg ccccactgtc ctgggagtgg tgcgccctca tatctatgga tatctgggaa 780
anntgtgagc tgcagttaaa ncttgaaggc ttaaa 815

<210> 5383
<211> 768

0090204950

<212> DNA
<213> Homo sapiens

<400> 5383
gatgtgtaaa aaattggaga caatctattt gataggtatt ttagttttcg attgcagaat 60
atcaaattac caaaaactta gtgaatcgaa atgacacaca tgtattatct cacagtttac 120
ctgcatcagg agtccaggct aggttgctgg gtgctctgcc tagggtctca caaggcagaa 180
actgaggcgt catttggggc tgaggcttgt tggcagaatt tgtttttttg cagtggtacg 240
atggaggttt ctgggttttt ttttctggct attaactggg ggctgctttc atccctggag 300
gtcttctact gctccctggc atgggggtcc cctctacaac aagcacttgt ctttttaagg 360
caggagaatc cctctccctt caactctcca acgttaagtg cttgcctcat tatatcagac 420
ctgcccagga aaatctctct tttcatgaac ccaaagtcat ctgattaggg actttaattg 480
cagctgtaaa atgagtcatg ggataatatc ccatcatagt cacaagagcc actcatgatc 540
aaggagaggg attatgcagg gtgcatatac caggggtggg aatcttggag gccactcaga 600
attctttcta ccaccagggc atgaggcaga tcataattat attataatat gagacatcct 660
gacaagcata ttttttgaga tgaagtctca ctctatcgcc caggctggaa tgcatgggtg 720
cgacccggtt actgnacctn cgcctctggg ttcagcggtc tcgngcct 768

<210> 5384
<211> 811
<212> DNA
<213> Homo sapiens

<400> 5384
tttgtcactt ccagtgccct gcccagccct acagaaaata cgtgattatt taagggtgaa 60
gaagccaaag ctgggagagt tttagtcacc tatctagggg aaagtgtgaa gatttcaaag 120
cccagggtcc ttcacggagc cacacggctc tccttggcac ttaatcttca agctctcctc 180
agcccacact tgacccttaa caggggagac aaaggcagac tccaggtaag ttgtcagggt 240
tagcataagc agctcagggc aactggtggg tagggagctg tacagcccag ggattgcagc 300
ctcttgtttt gcatttcctg gagtcaaggc taaactcatg gtctcctcag gggtcaaagc 360
aggcctgact ttcagtgtca tcttcaggac acacacacgc acgcgcacac acacacacac 420
acacacacac acacacacac acacacagga ttatacatgc aactaaccaa tcacacagag 480
ctggaccatc tagcctggta gaaggtctgc cgagttctgc gggtcaccat gaaccaggct 540
tgtgagccct cttagtcata tgtaaagggc tgtgtttgag acccggtagc ccacaaagct 600
cttttctgcc caagccttgg nttttccgta tgttagtggg gacagattgg aactaaacag 660
accttgagtc ttttcanggt cagtctcaac tctcttagat gctagaggga tataggcagg 720
gctagcacag aacagaagcc agaaatagtc aaaatgaata ttttggactg gatanactca 780
anaatgngct ttacttgggc acccaaggct t 811

<210> 5385
<211> 774
<212> DNA
<213> Homo sapiens

<400> 5385
ggaaagaggt ttaattgact cacaattcca catggctgta ggtcagggca gtggggttca 60
caatcatgga ggaaggcaag gatgagcgaa gtcatgtctt acacggtggc aggcaagaga 120
gcatgtgcag gggaactgcc ctctataaaa tcatcagatc ttgtgacata tattcactac 180

0503503.0001

cacgagaaca gcttgggaaa gatgcacacc cgtgattcga ttacctccct ccaggtccct 240
ctcatatcac acgggaatta tgggagctac aattcaagat gagatttggg tggggataca 300
gccaaaccat atcattcatc atctgaggga actgtggtct cagacagctg ggcactgaga 360
gtgcacgctg ccccctagaa ttccacacct acatcacaga gagacagaac agtctcaaag 420
gattcttaag gttaatgtgg ggagccaaag gaggagatga attcacagct tgtgccttac 480
cttctggtct aactaaaact acttttgtcc tggcccaaca agattcccag actcttttct 540
gggttgcacc aggggtaatt cagaaagaca aaaagttatt aatgcccctc cattccccac 600
agctcctgag gtctaagttg ttcattccct gggttttagg ttggtggtct ccctctgctt 660
ccacagaatc agtgtgcccc attccagtac ctatgatttc acctgnattc ttggcacttc 720
ctactttctt ctanacattt tatctaacag agccnggtga acagagacca ggat 774

<210> 5386
<211> 759
<212> DNA
<213> Homo sapiens

<400> 5386
ctgcagtccc catcacagcc cttccttcca tcccactccc tgcccttgtt caagccccag 60
tgtccagccc agcccaaccc attatctcag cctttgccct catctctgtg tttacccaag 120
tctctccctc tagtcccccc tatctctcat actctgcccc tctcccagcc tagactcaag 180
tctgggtttc agctgccgcc agccctattg ctgctgttgc tgttctctgt ccttggccca 240
ggggctggta tttccggtcc ggggcacccc ctgtcatcaa tcccctgcat acacacttcc 300
caggggacac agctgtgcct ggggttttct cactgaccct cagctggaca ctgcccaacc 360
gcacctcagg catctttaac gtcagcagcc ccttacctgg ggactggttc ttggctgccc 420
accttcccca ggcccacggc cacatctctg tcaagggtct ccaggatgag tgtcagtacc 480
tccttcagcc gcagctgatt gtccggcgtt tgctggacgt cgctgtgctg gttcctggcc 540
ggccttcaga gcaaaccctc tccccacaca atcgctcagc cctgtacaag gtctttgtgc 600
ccagcttcac ttacagggtt tcagcacaag ctggtgtgtg tgggggggccg tggggtatct 660
gcctgccccc tgtcactgcg tctgggtccc aaaagcccca cccctgnaca acttaaagct 720
tntgnggcct gtggaagtgc cttaaggatg ccaactgga 759

<210> 5387
<211> 739
<212> DNA
<213> Homo sapiens

<400> 5387
aaacagtttg atgatggtgg ctctgatgag gaagatatat gggaggaaaa gcacatcgca 60
ttcacaccag aatcccaaag acgatccagc tcggggagta cagacagtga ggaaagtaca 120
gactctgaag aagaagatgg agcaaagcaa gacttgtttg aacccagcag tgccaacacg 180
gaggataaaa tggaggtgga cctgagtgaa ccacccaact ggtcagctaa ctttgatgtc 240
ccaatggaaa caacccacgg tgctccattg gattctgtgg gatctgatgt ctggagcaca 300
gaggagccga tgccaactaa agagacgggc tgggcttctt tttcagagtt cacgtcttcc 360
ctgagcacaa aagattcttt aaggagtaat tctccagtgg aaatggaaac cagcactgaa 420
cccatggacc ctctgactcc cagtgcggct gccctggcag tgcagccaga agcggcaggc 480
agtgtggcca tggaagccag ctctgacgga gaggaggatg cagaaagtac agacaaggta 540
actgagacag tgatgaatgg cggcatgaag gaaacgctca gcctcactgt agatgccaag 600
acagagactg cggtcttcaa aagtgaggaa gggaaactgt ctacctctca agatgctgct 660

0956250-050800

tgtaaagacg cagaggagtg tcccgagact tgcanaagcg aagtgcgccg nngcccaagc 720
cttccagcag cagtcccga 739

<210> 5388
<211> 798
<212> DNA
<213> Homo sapiens

<400> 5388
gcgtcattcc tcttggatat agatgttttc ctggacacac cagctacaca ataagccagt 60
aaatctaagt ttgacctgct tgttattatt gggagcccta ggtatgtcaa aggcttttca 120
ccaagccagg gttattaatc aaagctgact ccctcgtatt gatcagacct caaatggtcg 180
tgttccatgc caccctgttt atatattgct gtttaatttg cagccaccct gcgtgcactc 240
tatctaagtg acaacgattt tgaaatcctg ccgccagata ttgggaagct cacaaagttg 300
cagatagtaa gtaatttatc taaattctta gaaaatcaat tcactgctgc agccttgtag 360
gggtagaatc aagtcaattt gagcaggagt aaggtttgtt ttgtgggaat aaaccactac 420
tcctgatagt gtttcttgat tatccgccgg cacttgtaaa tacatggaaa ggattgagct 480
ttagtagaag agaggacata gaggatgaga gtttctgtgg agcacctttt aatgtgtaaa 540
tatgttgaca acttgttttc ttctgtttag ctcagcctta gggataacga cctgatctcg 600
ctgcctaagg aaatcgggga gcttacccag cttaaagagc tccacattca ggggaaccgg 660
ctnccgtctg cccccagaac taggtaaggt tgctgatgaa tgaacttagt tctgggtttc 720
atgaataaca attatcctaa tgtancaatt ctgaacaanc tctgtctctt cttggcaact 780
actntccact aggcacac 798

<210> 5389
<211> 701
<212> DNA
<213> Homo sapiens

<400> 5389
gtttaataat gattatccaa ccattctctt ttcctttgaa atatccataa caaaagggaa 60
ctactgactt ggctttgtga caagcttaaa ataaaacttc aacacatgct tataattaat 120
ttttgtgaaa aaatgtaaaa cagtcattat agagatagga cataaaaata gtagctaaca 180
cttattaagt acttgttgct tgtcacatgt tatattaaat gcccaaaaac tctttataat 240
gaattgggtt ataatacctc tgtttgactt aaaagatgct gatacagttt gaatatttgt 300
cccctccata tctcatggtg aaatgtgatc cctaatgttg gacatggagc ctgctgggag 360
gtgtctgggt cattgggata gatccctctt aagtgacttg gtgccctccc catggtaatg 420
agtgagttct tgctgttagt tcacgagaga gccggttgtt taaaggagcc tgcacctcct 480
cctctctctc tttgctccct ctcttgctat atgatgcgcc tgctcttcct ttgccttctg 540
ccatgatcgg aagcttctga ggcctcacca gaagctgagc agatgctggt gccatgcttg 600
tacagtctga agaactgtga gccaaataaa cctctttttt aaaatttaat ttaatttttt 660
ttttttgaga cggagtcttg ctctgtcgcc cccanggnnc a 701

<210> 5390
<211> 775
<212> DNA
<213> Homo sapiens

0020020.0050250

0030050-0000

<400> 5390
gttttgcaga tcacgttact agaaggacac atttatagtt gtgggcggat gtggaatcag 60
agggaaattt acactggaca ccaccaccaa gcccaaatta ttataattta gtcttgaatc 120
actttaatca acactttaaa atattttggt attcttagcc ataatttatt ttgttctctt 180
acaagtgctc tttagcagtt ttctggatca tcaaataaga gttcagtaaa atttactttt 240
gggtcaatta gttggaatga cacttttgga attatcaatt actttatttc tgatgaattt 300
tgaacaggac tcaccaacct catttcttag tttagccgtt ttgagttaca taaagacaaa 360
aacatggcaa ggattttaca gcaggaaaat gatttgtttt tgtttttcaa cattcctata 420
atccagagag ctgaagaaat ctttgatcta gaaagcttgg aaattcaaag cccctcaagg 480
cacttctttt ttttttttca aattaaagaa gaattaaaaa cagtatttgt aatggaaaat 540
tttggtgcca ttaagtacat aatggctttt actttagtct gtaattcatc ctgtggattt 600
aagattttgg ccaagagtaa gttttaggtg tgatataaca taagtgcctc caaggtttgc 660
tagtgttact gacattctag agtggtggaa aaacactggc attaatgcag aattggagtg 720
actagtccca ggaatcaagt cagaaaaaaa gaccactggn caaantggag ntaat 775

<210> 5391
<211> 842
<212> DNA
<213> Homo sapiens

<400> 5391
gtaaagacaa aaaactatat gtatggtttt gtggattatg tgtgttttgc taaaggaaaa 60
aaccatccag gtcacggggc accaaatttg agacaaatag tcggattaga aataaagcat 120
ctcattttga gtagagagca agggaagtgg ttcttagatg gtgatctggg attaggccct 180
caagaccctt ataaaaataa gccaggtgtg gcggtgggtg cctgtaatcc cagctactca 240
ggaggctgag gcaggagaat tgctggaacc caggaggcag aggttgcagt gagccgagac 300
tgtgccactg cactccagcc tgggagacaa gagcgagact ccctctcaaa aaaaaaaaaa 360
aaaaaagcaa atactctatt cccacatctc tcagtgtcca ttttgattct tttaaatgca 420
tttcatttcc atctataaga agcaactata ttctcttcag gggaaaaaac tcaagtgtgt 480
gatgctttgt ggcttactaa atatggtggc agatagttgc agaatttgtc caaatataaa 540
ttgttaatga ctacttcccc ccccgccctc aatctgtggt cagatttttc ttattagtcc 600
taggggacaa gcatgggtgt ttgatttcag aaatcagtac ctggcgagat ttttgnctca 660
aaacgactat ttgaatttca agaactgtgc tgcgaanacc tctgagacat ttgcaagtca 720
ngggcatttt ccttgccctt gactgatgct atgccggaga ctgatacatt ttcttaatgg 780
gncatggtca agccaggtcc catgcctgaa ctggcttnac accagacctt cctcatatta 840
aa 842

<210> 5392
<211> 352
<212> DNA
<213> Homo sapiens

<400> 5392
cttagatggc acaatccagg ctgttgcacc ccttctttc atcagtgaga tgtaaagtct 60
ttatcaggga cttcaaattt gcatttgtcc tagaactcac tgctaggtaa atctgctaac 120
tatgcgagac agagagctac ttattctctg ctttgagatt cccggaaaca gcatctacag 180
ccttggacaa ggccatagtc tgttttaccc ctattagctt aacaggtcct accttctgcc 240
ttgctttggt ttctcctact gtatttttt ttttttttt tttgagatgg agtctcgctc 300

tgtctcccag gctggagtgc ggtggcacaa nctcggntna ctgcaacctc cg 352

<210> 5393
<211> 720
<212> DNA
<213> Homo sapiens

<400> 5393
tttggaggaa cgggccatga ggcagtttgc catggatgcg gctgccactg cggctgccca 60
gcgagacacc actctcatca gacactcccc ccagccctcg cccagcagca gtttcaacga 120
aggcctgctg gcaggcaacc acaggcacca ggagatggag agcaggttga aggtgctcca 180
tgcccagatc ctagagaaag acgcagtgat caaggtcctt caacagcttt ccaggaaaga 240
ccctggcaag gctacccagg gcaccctacg gcccgccaag tcggtgccgt ccatctttgc 300
agctgcagtg gggactcagg gctggcaagg gttctcaacc agcgagcgac aaactgatgc 360
acctgcccga cagacagtag accgtggacc agcagaagag cccccggcca cacctcctct 420
ccctgcccac accaaacatg gcagcagaga cgggagcacc caaactgatg gccctgcaga 480
cagcacctct gcctgcttgg cctcagaacc cgacagcctc ctggggtgca acggtagcca 540
gaggcaacct ctctggactc tatagctgca accagagtcc aggatctgtc agacatggtg 600
gaaatactga tctgaaggaa ggaggccttg gggaccctga agcctgctcc cccatggcat 660
tccagcaatt gtcttcaaat gctgacctna cttncttcaa ccagcaatgg gntttgtgca 720

<210> 5394
<211> 744
<212> DNA
<213> Homo sapiens

<400> 5394
gcatcaccat ggagccgagg gcaggtgtct ccaaacagga catacgtgaa caaatttggg 60
gctacatgga atcacaaaat ttagctgact ttccccgacc tgttcatcac aggataccca 120
actttaaggg gtcttatctg gcttgccaaa acatcaaaga cctagacgtt tttgccagaa 180
cacaggaagt taaagtggac cctgataaac cactggaagg cgttcggctg ctggtgctgc 240
agagcaaaaa aacattgttg gttccaacac cacgactgag aacgggattg tttaataaga 300
tcacaccacc ccctggggca actaaagaca tcttgagaaa atgtgccacc tctcagggtg 360
tgaggaacta cagtgtcccc ataggcttgg actccagagt cctcgtggat ttagttgtgg 420
tgggatccgt cgccgtttct gaaaaaggct ggagaatcgg gaagggagaa ggctacgccg 480
atctggaata tgccatgatg gtatccatgg gcgccgtcag caaggagacg ccggtggtca 540
ccatcgtcca cgactgccag gtcgtggaca tccctgaaga gcttgttgag gagcacgaca 600
tcactgtgga ctacatcctc actccaacca gagtcatcgc cacaggctgc aagcgcccaa 660
agccaatggg aatcacctgg ntcaagatca gcctggagat gatggagaaa atcccatact 720
gaggagcctt cgngcccnaa aaca 744

<210> 5395
<211> 781
<212> DNA
<213> Homo sapiens

<400> 5395
gacagagatg gcactgatgc aggaactgta tagcacacca gcctccaggc tggactcctt 60

0082760.0450

cgtggctcag tggctgcagc cccaccggga gtggaaggaa gaggtgctag acgctgtgcg 120
gaccgtggag gagtttctga ggcaggagca tttccagggg aagcgtgggc tggaccagga 180
tgtgcgggtg ctgaaggtag tcaaggtgag ctccttcggg aatggcacgg ttctcaggag 240
caccagagag gtggagctgg tggcgtttct gagctgtttc cacagcttcc aggaggcagc 300
caagcatcac aaagatgttc tgaggctgat atggaaaacc atgtggcaaa gccaggacct 360
gctggacctc gggctcgagg acctgaggat ggagcagaga gtccccgatg ctctcgtctt 420
caccatccag accaggggga ctgcggagcc catcacggtc accattgtgc ctgcctacag 480
agccctgggg ccttctcttc ccaactccca gccacccccc gaggtctatg tgagcctgat 540
caaggcctgc ggtggtcctg gaaatttctg cccatccttc agcgagctgc agagaaattt 600
cgngaaacat cggccaacta agctgaaaac cttctgcgcc tggtgaaaca ctggtaccag 660
cagtatgtga aagccaggtc ccccagagcc aatctggccc ctntctatgc tcttgaactt 720
ntaaccatct atccttggga aatgggtact tgaanaagac cagaatttca tgttggacca 780
a 781

<210> 5396
<211> 775
<212> DNA
<213> Homo sapiens

<400> 5396
tcatgaactg ctgacctcaa atgatctgcc cgccttggcc tcccaaagtg ctgggattac 60
aggcatgagt cactgcacct ggcctggagc ttggattcta actcctgtgt gttttctcca 120
aaaactgtat ttcagccact attttcattg tgtcatgcat atatcatttt ggatcctgtt 180
attttattag tattttacca gaaatgttca tcctcatttt ctcaatgatc atattaaatt 240
ttatttataa tatcatccag tatacagtcc ctttcactaa ataatagtct gagttcattc 300
cctaggatat tttatattta ctataaatta tatgcacatg ctttgtaaag ttttcttttt 360
tgaatgttgg aactaaaaaa agtcaataaa tattctaaaa agtctaactt ttttccccat 420
gtcaatacac tgcaggactt gtatattctt tttcaaatat tcataatgtg tcactctagt 480
ggtaaagtat aaaatagcct attgccttga ggaacttcag atgggcacgc attttatacc 540
taagccaggt tagaagcttt taatcaagag aatatttgaa agttaaatca agccaggcgt 600
ggtggctcac acttgtaatc ccagcatttt gagaggctga agtgggtgga tcatttgang 660
tcagcagttc atgaccagcc tggccaacat ggtgaaacct tggcgctact aaaattccaa 720
aaaattancc cagtggtaat ggtgcatgcc tgnaatccca nctacttggg aagct 775

<210> 5397
<211> 670
<212> DNA
<213> Homo sapiens

<400> 5397
agagcggatg tgaggggcgc cgatggcgga gggaacggcg gaggctcctc tagagaatgg 60
tggtggtggc gactcgggag ccggagcttt ggaacgagga gtggcgccca ttaagcgtca 120
atacctcacc accaaggagc agtttcacca attcctggaa gccaaagggc aggagaagac 180
ttgccgggaa accgaggtag gagaccctgc tggcaatgag ctggctgagc ctgaggctaa 240
gcggatccga ctggaggatg gacagacggc ggacgggcag acggaggagg cagcagagcc 300
cggggagcag ctacagactc agaagagggc ccggggacaa aacaagggcc ggccccatgt 360
gaagcccacg aactacgaca agaacaggct gtgtccctcc ctaatccagg agtcggctgc 420
taattgtttc ttcggtgatc gctgccgctt tctgcacgac gtggggcgct acctggagac 480

0050150.00200

caagccggcc gacctgggcc cccgctgcgt gctcttcgag accttcggcc ggtgccccta 540
cggcgtgacc tgccgcttcg ctggggccca cctgaggccc gagggacaga acctggtgca 600
ngaggagttg gcggnccgcg ggacccagcc cccgtncatt cgcaacggct ggacaaagcc 660
ctgcacaaca 670

<210> 5398
<211> 770
<212> DNA
<213> Homo sapiens

<400> 5398
tccctttta aaataaccat ttaaaaattt tctaccctga attgcatttt gaaagggatg 60
gttcctaggt aacacaaggt agaaaattta catctcaaag gcagagaact tacatttcag 120
gcctaaatat tgttatttgc caagacagaa agttgatgct aagaagccca gttcagacaa 180
aatggttgaa ggtgagttta tttggactaa tgctctcacc tattgtaaga atttctactg 240
attttccttt atagatacac gtttttacaa agagtttcaa aataactggc taaataccag 300
aaacgcaaat tttggagact gatttaattc aataggcggt cttttcaact tagcttctgt 360
ttcttaacta gattactgag ttcagggcag agcccattag caaatagagc agacaaaggg 420
tttcctattt ctggatgcag atggatagtt ctgaaaatgc aaatctgctt cacccaaggg 480
cctaattttt ataaatatta cctagctttc tttttccctt tggagtaaaa cagtaactaa 540
gtgaaaagat tggcagattc aattttctta taaactagtt gcttaaactt ttcatttgcc 600
ttctacatga gctcttttaa agagacaaac atttttgaaa tcttttttana agcttttgca 660
catcaatagg tatccctagg anggcctgat tcagaagccc tcatttttaa actcaattct 720
tanatgaaca gtcttattca tctggaaggt ncacataatg ggcatcataa 770

<210> 5399
<211> 792
<212> DNA
<213> Homo sapiens

<400> 5399
tccccagtgc ctaactctgc tgtctgctat atttcagcct ttcatccgct gtagtttaca 60
atgcagggat ctggttgatg aagcaaagaa gtttcatctg aggcctgaac ttcggagtca 120
gatgcaggga cccaggacaa gggctcgcct aggagccaat gaagtgcttt tggtggttgg 180
gggctttgga agccagcagt ctcccattga tgtggtagag aaatatgacc ccaagactca 240
ggagtggagc tttttgccaa gcatcactcg taagagacgt tatgtggcct cagtgtccct 300
tcatgaccgg atctacgtca ttggtggcta tgatggccgt tcccgcctta gttcagtgga 360
atgtctagac tacacagcag atgaggatgg ggtctggtat tctgtggccc ctatgaatgt 420
ccgacgaggt cttgctggag ccaccaccct gggagatatg atctatgtct ctggaggctt 480
tgatggaagc aggcgtcaca ccagtatgga gcgctatgat ccaaacattg accagtggag 540
catgctggga gatatgcaga cagcccggga aggtgccgga ctcgtagtgg ccagtggagt 600
gatctactgn ctangaggat atgaccggct tgaatatctt aaattcaagt tgagaaatac 660
gacccttata caggacattg gactaatggt acaccaatgg gcaccaagcg tctgatatga 720
tgggaattnc ctgctaatag cattgaatgg tatgacctat catcgacagg ttgggaancn 780
gacattcatg gg 792

<210> 5400
<211> 778

US 6,506,559 B1

<212> DNA
<213> Homo sapiens

<400> 5400
cccctcggcc ccccgcacac cccggtcctc gatgacccct ctccgcagga tggtttcccg 60
gtcctctggc gaggatcctc caaggcgtct cacatgaacc ggctcagaaa cgccaaaatc 120
tacgtggaga gagctgtcaa gcagaagaag atctttacaa tccaaggctg ctacccggtg 180
atccggtgtc tcttgcgccg gaggggctgg gtggagaaga agatggtcca tcgctcaggc 240
cccaccctgc tgccacccca gaaggatctg gatagctcag cgatgggtga cagtgacacc 300
actgaggatg aggatgaaga tgaggacgag gagttccagc catcacagct gttcgacttc 360
gatgatttac tgaaatttga tgacctagat ggaacacatg ctctgatggt gggtctatgt 420
ctcaatctcc ggaatttgcc gtggtttgat gaggttgatg ccaactcctt cttcccacgc 480
tgctactgcc tgggggctga ggatgacaaa aaagccttca tagaggactt ctggctgact 540
gctgcccgca acgttctcaa gctggtggtg aagtctgagt ggaagtcata ccctattcag 600
gcagtagagg aagaggcctc aggagacaag cagcccaaga aacaggagaa aaacccagtg 660
ttggtgtccc cagagtttgt ggatgaagct ctgtgtgcgt gccangagta ccttacaact 720
tggcccacat ggacatngac aanggacctg gaaggccccg ttgtacctta acccccga 778

<210> 5401
<211> 623
<212> DNA
<213> Homo sapiens

<400> 5401
gtctgtgtgg agacgaaagc tgcccacaag ggagcgaggg agctgggagg gggtggtaag 60
agatgaggtg ggaaggatgg gttgggtgaa ccttgaaata attgtagttg tactttgtga 120
aaaaaaactt tatcatcaag gctttgtcct gatccaacct gaccttcccc tcagttaatc 180
cgaattactg aggtttgact ccatgttcag tttctctgag atttgctttg atttctctta 240
gaagtggagc tgctgtttat tctcccggtg gctctgtgta cacgctctgc ccgtggagct 300
gcctgggatg agccgtgagt cctctgagaa ctgcttcctg tttcgtctgg taactcctaa 360
gcctgccttt ctttcctaca gtctgcattt gtggaaatct gcagtatttg aagtttggag 420
gagatcaatt tttcatcctt tccttcgtgg gataaagaat atttcaacca cctctggaga 480
ccaaagagtt ctgagaagtt ttgaaatanc ttgggaaata caccacgtgc ttcacacttc 540
atttttctcc tctctctttc attgtttgac ttaattaaaa tattgtaatg caagaaggan 600
agatgangca aacgtttana gaa 623

<210> 5402
<211> 873
<212> DNA
<213> Homo sapiens

<400> 5402
cattcttatt tctttttttc ttgaatttag aatattttct atttatattt aatagatcca 60
aattaagtat gttgctattg tacccgtgaa cccttaaaac tgggataagc cttgatgtgg 120
gtgtctggga actctttaaa catgtattgg cagtgtgcac ctttttttttc cttttgagtg 180
gatttgaaat tgttcattta taaatccctt tcaagcctcc ctggctgaga tcgacacatg 240
agaagttatt tccaaggggt gtttggaaat ggcagactct gcgcacacca tgcggcctct 300
ccctcacccc accgcctctc acctcggcct gcctgtgttc ccttctcttt tgtcttgact 360

0000-0000-0000-0000

tcctgagctg cagactcctg gcatctttga ctccctttc ttcgctcccc agggcaacct 420
ggtatcctgg agggcttctt gcctacccag aaagtatacc cttggtaaac cagtggtgac 480
tgcccgagca tccatttgtg caggaagcct cctgcctttc ggtgcccgag aacctcttca 540
gaagtctctc ctttgagcat ggaatattta tttgtgtggc catgcatatt tgggtgcctt 600
cttaatctgt agaatggggc tagccctgcc agcctcacgg gccatgcact agcatggtgt 660
catgtgaggt gttaataagt gttccaaggg taaaatgggt tgctctgtca agtaagttgg 720
caaagaacac cgtancatac taaagggtct gggatgccct tagtaaaaca cttaactcaa 780
gtttcctgac atgcttggcc taagaacact tntctttgga gaacacttgg gacaccctga 840
ggctttaggg acacacttca gtggtattac nna 873

<210> 5403
<211> 727
<212> DNA
<213> Homo sapiens

<400> 5403
gaggagagct aaaaaagaac tcaggcctga atggttgtca ggaatttact tgggtgacta 60
tcttctcatc tcagaacata aaatgtagga attaccacag ttgcaaaggg agatgtttat 120
gttggagata aaaatgctcc tcccttcaaa aatgagacag tattttagat aggaaaggtt 180
atttatctga ttacatgttt taaaattctg agcgtaaggt tatatgtcaa atcctgtcca 240
tgggctgggc acagtggccc acacctgtga tcctagcact ttggaaggct gaggggggagg 300
attgattgag cccaggaggt caaggctaca gtgaactatg atcacaccac tgcacttcaa 360
cctgggcagc agagcgagac cctgtctcaa aaaataaaaa taaattaaca aaaaaatctg 420
gtccatgtcc atctcctctt agctgctaat tcaattttag attagacaca gtggacaagg 480
acaagtatgg tgagagtcct gtgatttctc accagcttcc tttccacata ggccactgct 540
tctcttcttc caaggttttt ccccgctttt gcctcctgga ggttgtatcc tgggtgttag 600
gagactgggt tccggacaca ttccccacag aaggatagca ggaccttaga agatcttttt 660
ctttctttc ctggnttcct cttggttgca agaaggttga atanggatgg gctctaaaat 720
cctggng 727

<210> 5404
<211> 780
<212> DNA
<213> Homo sapiens

<400> 5404
atatacttgc gcgccgacgc cgccgctcgc ttgtgaaact ggaaggctgc catggctagc 60
ccagccgcct cctcggtgcg accaccgagg cccaagaaag agccgcagac gctcgtcatc 120
cccaagaatg cggcggagga gcagaagctc aagctggagc ggctcatgaa gaacccggac 180
aaagcagttc caattccaga gaaaatgagt gaatgggcac ctcgacctcc cccagaattt 240
gtccgagatg tcatgggttc aagtgctggg gccggcagtg gagagttcca cgtgtacaga 300
catctgcgcc ggagagaata tcagcgacag gactacatgg atgccatggc tgagaagcaa 360
aaattggatg cagagtttca gaaaagactg gaaaagaata aaattgctgc agaggagcag 420
accgcaaagc gccggaagaa gcgccagaag ttaaaagaga agaaattact ggcaaagaag 480
atgaaacttg aacagaagaa acaagaagga cccggtcagc ccaaggagca ggggtccagc 540
agctctgcgg aggcatctgg aacagaggag gaggaggaag tgcccagttt caccatgggg 600
cgatgacaat gtttgccaca gcctctgcct ggaacctggc tcgtgctgtg accagaaggg 660
aaaggcggct gtttggctct ttctcccccg caaggacccg ntgacccgct ggatggagag 720

0068270.6456.0

caaaggagac cccttccgag cccgntcaca gtcctgattt ngcaggttgg gacctgaggg 780

<210> 5405
<211> 797
<212> DNA
<213> Homo sapiens

<400> 5405
ttcttagaag tggaaatgtg tgtagcaata ggaacggttc ctaaggccaa gaataaatgg 60
attgcggttg tgggtctttt ggtagcacta agctttctgt tgcagtgtgt gagaggaccc 120
ggggagagcc caatcttcga agggacagat gaggggtatg acctggggag cccacaaccg 180
cctttgcttt tcgcagatgc tgggaacgca gctctgctgc cggcggggtg gacagaccct 240
cccccagcca ttgctgccca cctgctgcgt cagggcctcc cctgcccagc tcagtcttgg 300
ccaagcccag tctggaggag catgcaccgc ctgtgagcgg tctgggcagc gcttcccagg 360
ttgcccatca gatgagcccg tcccaggtgt cgaggaggag atctcctgag cggcagtctc 420
ggaaatcctt ccccgtggaa ggacacgtta acctctcgtg cttcccattt caaaattctg 480
tttccaacac gatttgatga aagattgaaa tatctgaaaa ctcatttcga gcacagggtc 540
tggcattgtg attctcaggt gaactgggcg tatggttgag gtaggacttc aaaaaagtgt 600
tcgaacgtca tttgcagcat ttaaactgag ctccaaatga cgttcaaaca cccctctcgg 660
gtagagtttt catggtggaa cggttgcgcc caccaaacag aagcttatgg ttttggcaca 720
naaggnctgg gccatttca tggacacctg gctggaacct cggtggaagt gaactccgna 780
ggttgttgcc gtcactg 797

<210> 5406
<211> 840
<212> DNA
<213> Homo sapiens

<400> 5406
tgcaacatga ggacatagga ctctttaatt ccaaaggctc ttccaaccca gagaacccat 60
ctgcccccat gaccttctcc cagagcttga gacatggcct gagccccctg ctgccatagg 120
acttggggcc tatctgccat tgcaggacct gatttaacag ctctcttctt ccaatactgg 180
gcagtagagt ttcggaaact gacaaatgtg tggtctcttc agtgcccagt gtgtaacctg 240
gcatggtttg ggtgtgctag gagtttgtga aatgaatgtt ttcaagacgc aaacgctgct 300
atgcccatca ggtgtgcaca gcaggcctga ggatcatgat gagactccct ttttatgcag 360
caaagcacaa agtgtgacag tcgtggcctt cctggtggcc agacttctag caactttagc 420
cacccaccaa atgacatcac atacagaagg cctcagaaag ggaggaggtc gtaaggacac 480
acagctgatg aagggtcagt gctcagctat caaggtcatc ttctggcctg gttgcctccc 540
acagcccagg atgcattcaa ggctgcacat caggagcata ataagggtg gtcagctcag 600
gcccactggc tgcaacaagt agccactgac agggagtctg gggccatttg gtgcagaaca 660
acccccaacc cagtggccat cttcacaact gcagcacagt gctggcccta atgccaggtg 720
agccgtgcaa aagtcctggt tctttggctt tacatangga ccgggcaatc gctttaaaga 780
aattccctat tantttacag gaaaggagct ntgaaaagga aaaggcaggt ttggaaccaa 840

<210> 5407
<211> 782
<212> DNA
<213> Homo sapiens

0090760-0470360

<400> 5407
tttcagctgt tatggctaag tcagttaacc tcatcaacaa ttttttcttc tgtaaattga 60
ggacaatttt tgcttttatg aatgaagtct taaccagcag gaagaaatat aaacaaagga 120
acatattttt aatttaatga agcaaaattc catacatcat tttgaaaata gtgtttcttt 180
ccctgatagg cctgttctgc atcattcttt tagcttcctt ctgccctgtt tatcacttgg 240
tcccactttt atatttttcc tcttcggtcc agaatttctt atttagtttc ttgtattttg 300
cctactccct cccttctcca tgattcagcc tagtctttcc gtcctctgtg gacttgggtg 360
tgccttcctc tgggccacct cgtcttttgc tgctgttagc cctcccgcct gcgcacctgc 420
cacttcaccc tcgcctgtgg tccacttacg ttccactcag cccggtcagt cctgctttgt 480
tcttctccac cgccttggtc tcccgtgtgt cttatctagc tctggntcct tctcgtctcc 540
acatttattt tgntttcttc ctgtgcttgt tagtccttgt gcacttggtc cttgagctct 600
ttttctatta ataggtatta ctagatggat ttgttgtctg cctttacata gaacacacat 660
ccttactgng catttcctgg gtagccagga tgaatcaatt attattaact tcccttcgaa 720
cattgagctt nctctggttt ctggttctaa gaattagatt agnattctng aagactaata 780
ct 782

<210> 5408
<211> 601
<212> DNA
<213> Homo sapiens

<400> 5408
atacccacca tcgcatttcc agggagatga gagtggaaag accctgggcg ctggtaggac 60
tacaccctgg gataccagtg cagaagccgt gtcctggtgc agaaaggatt ttggtaggga 120
gcagaggagg cagaagtctg ggctctggac cagttacctg aaggcattgc gaagtttctc 180
tcccactggg tatgtccggt ccttcttctc aaactcatcg tcgaagaggg ctggagtgca 240
gtggtgcagt cacggatcac tgcagcttgg aactcctggg ctcaagccat cctccggcct 300
caacctcctg agtagctggg actacaggga tggtgatgaa ggaccccaga agcgctgcct 360
gtacacccca aaccaggctc cagtgggtgc cacttgtccc ggcctgaagt cacagcctcc 420
agatgctgcc tccctctgcc aattcctata cctgctgggg tggacactga gggccagtcc 480
cagacttggg agcagggtgg gagtgggatg ggggtggtgc gtaanggagg acctctatgt 540
ggccctgatt gntggctcag tttcctctgc ctgggggatg ggttgagatg tcccctggnt 600
g 601

<210> 5409
<211> 803
<212> DNA
<213> Homo sapiens

<400> 5409
tttctgctac agacaggcca gggacttaga cacaaatggc gagggatgag gagcttgatg 60
acgtgtcaag ggggattaga tatcaagtgt gggggatgaa aagcaggatt cttgctggaa 120
ctgagcttgc cacggttgga cgtggaaggc caatgttgag gcctagtgga gaagagggct 180
tggaggagcc tggctaaggt ttggtcaagg agagtctgtc acaagataga cccatctgta 240
tccaggctaa cgcaataggg tgaccaaatg cagcccgcac gcttctctgt gtttctctcc 300
aggtcctttg ggcacttagt ttataatttt ttattttcta ttttttattt ttatgggtac 360
atagtatagg tgtgtatgga gtacatgaga tgttttgata caggcatgca atgtgtaata 420

0056204.0002

atcacatcat ggaaaacagg gtattatggg cacttagttt agccataagg cttccgtgcc 480
aagtggcctg ggagccagct ggggccagct tctgccacag gcatccttca cccacccttc 540
tcacaaacaa gcgattcttc aataaacaat aaacagaata cacaaaaagc aaaccaaaac 600
atctctagat ttattaatag atgggtgaat taaaggagtc ttttncaaat aatgtgacta 660
acagaagcca agggggatga atgcccaaac ttgggcttgg caaaactgct ggaccgaagc 720
tgattgctga atgtgaggaa tttgggagcc antgcaccat tgcacttgat ctgcaggcgg 780
attgttcncn cggattacca cgt 803

<210> 5410
<211> 777
<212> DNA
<213> Homo sapiens

<400> 5410
ctttttgct gtcgccgccc ccactgaagc aagagctccc cggctccact gaaacaccag 60
ctcatttaag ctttccccaa cgaccggccc tccgggacga tacctaacaa cgaccggcgc 120
ccgcatctgg aataggctgg cgagatactt agtatccgag ggctcgggac ttggcgccat 180
cgaggtcatg gggacccagg atccagggaa catgggaacc ggcgtcccag cctcggagca 240
gataagctgt gccaaagagg atccacaagt ttattgccct gaagagactg gcggcaccaa 300
ggatgtgcag gttacagact gtaagagtcc cgaagacagc cgacccccaa aagagacgga 360
ctgctacaat ccggaggact ctgggcagct gatggtttcc tatgagggta aagctatggg 420
ctaccaggtg cctccctttg gctggcgcat ctgtctggct catgagttta cagagaagag 480
gaaaccctt caagctaaca acgtctccct aagcaacatg ataaagcata taggcatggg 540
cttgaggtac ctgcagtggt ggtaccggaa gacccatgtg gaaaagaaga caccttcat 600
cgacatgatc aattctgtac ccctaagaca gatttatggt tgtcccttgg gtggcatcgg 660
gggangcact attacccgtg gctggagaag ccagttctgt cgttggcaag cttaccctgg 720
aatgtattaa caccggacag tcatcggttg accaatttac agtgtgnctg cnttngg 777

<210> 5411
<211> 739
<212> DNA
<213> Homo sapiens

<400> 5411
gaagatatgg cggcgtctgc gtctgcagct gcaggggagg aggactgggt ccttccctct 60
gaagttgaag tattggagtc catctatcta gatgaactac aggtgattaa aggaaatggc 120
agaacttcac catgggagat ctacatcact ttgcatcctg ccactgcaga ggaccaggat 180
tcacagtatg tctgcttcac tctggtgctt caggtcccag cagagtatcc ccatgaggtg 240
ccacagatct ctatccgaaa tccccgagga ctttcagatg aacagatcca cacgatctta 300
caggtgctgg gccacgtggc caaggctggg ctgggcactg ccatgctgta tgaactcatt 360
gagaaaggga aggaaattct cacagataac aacatccctc atggccagtg tgtcatctgc 420
ctctatggtt tccaggagaa ggaggccttt accaaaacac cctgttacca ctacttccac 480
tgccactgcc ttgctcggta catccagcac atggagcaag agctgaaggc acaaggacag 540
gagcaggaac aggaacggca gcatgctaca accaaacaga aggcagtcgg tgtgcagtgt 600
ccagtgtgca nagagcccct cgtgtatgat cttgcctcac tgaaagcagc ccctgaaccc 660
caacagccca tggagcttgt accagcccaa tgcanaaaag cttgcgccag caagaagaac 720
gcaagcnggt tttaccana 739

0000270-6946250

0003203.0050+0503

<210> 5412
<211> 642
<212> DNA
<213> Homo sapiens

<400> 5412
ccctcgcgct actgcgggag cagcgtcctc ccgggccacg gcgcttcccg gccccggcgt 60
ccccggacca tggcgctctc cgggctcttc tctagctctc agcggctgcg aagtctgtaa 120
acctggtggc caagtgattg taagtcagga gactttcctt cggtttctgc ctttgatggc 180
aagaggtgga gattgtggcg gcgattacag aaaacatctg ggaagacaag ttgctgtttt 240
tatgggaatc gcaggcttgg aagagacaga agcaattcca gaaataaatt ggaaattgaa 300
gatttaaaca atgttgtttt aaaatattct aacttcaaag aatgatgcca gaaacttaaa 360
aaggggctgc gcagagtagc aggggccctg gagggcgcgg cctgaatcct gattgccctt 420
ctgctgagag gacacacgca gctgaagatg aatttgggaa aagtagccgc ttgctacttt 480
aactatggaa gagcagggcc acagtgagat ggaaataatc ccatcagagt ctcaccccca 540
cattcaatta ctgaaaagca atcgggaact tctggtcact nacatncgca atactcaatg 600
tctggtggac aacttgcttg aanaatgact acttttggg cc 642

<210> 5413
<211> 706
<212> DNA
<213> Homo sapiens

<400> 5413
tgtgtctctc ccgaccatgg agggggtcgc ggtggtgacg gcgggcagcg taggcgctgc 60
caaaaccgag ggagctgcag ccttgccgcc tccgcctccg cctcctgtct ccccgcccgc 120
cctcacccct gcacccgcag cgggtgagga gggaccggcg cctctgtctg agacgggggc 180
tcccggctgc tccggctccc ggccccctga gctggagccg gagcgcagcc tgggccgctt 240
cagaggccgc ttcgaggacg aggacgagga gttggaagaa gaagaggagc tggaggagga 300
agaagaggag gaggaggagg acatgagtca cttctcgttg aggctggagg gaggccggca 360
ggactcggag gacgaggagg agcgcctgat taatctctct gagctgaccc catacatctt 420
gtgttccatt tgcaaaggtt acttaataga tgcaactacc atcacagaat gtcttcatac 480
cttttgtaaa agctgcatcg taagacattt ttactacagc aacagatgtc caaaatgcaa 540
tatagtagta catcagacac aacctcttta taacataagg ttggaccgac agttacaaga 600
catagtgtac aaattagtga tcaatctaga ggaaatctgg ggtttaatca ttttttagga 660
agaaaccncc ccnnatcctt gaattctttt aaggaaagaa ggtctt 706

<210> 5414
<211> 673
<212> DNA
<213> Homo sapiens

<400> 5414
acacctccct ttctcctgca gccatggatg ccgctctgct cctgaacgtg gaaggggtca 60
agaaaaccat tctgcacggg ggcacgggcg agctcccaaa cttcatcacc ggatcccgag 120
tgatctttca tttccgcacc atgaaatgtg acgaggagcg gacagtcatt gacgacagtc 180
ggcaggtggg ccagcccatg cacatcatca tcggaaacat gttcaagctc gaggtctggg 240
agatcctgct tacctccatg cgggtgcacg aggtggccga gttctggtgc gacaccatcc 300

acacgggggt ctaccccatc ctatcccgga gcctgaggca gatggcccag ggcaaggacc 360
ccacagagtg gcacgtgcac acgtgcgggc tggccaacat gttcgcctac cacacgctgg 420
gctacgagga cctggacgag ctgcagaagg agcctcagcc tctggtcttt gtgatcgagc 480
tgctgcaggt tgatgccccg agtgattacc agagggagac ctggaacctg agcaatcatg 540
agaagatgaa ggcggtgccc gtctccacgg agagggaaat cggctcttaa gctgggccgt 600
tccaagaggc ctnttcaagt ccaggaggnc atcatctgct aaggaacctg cnaccaagga 660
gaaccctgga agt 673

<210> 5415
<211> 728
<212> DNA
<213> Homo sapiens

<400> 5415
atgctgccgg cgggctgctc gcgccggtga ggcctgcgcg gcaggagggg gtgggaggat 60
gcgggcgggc cggtagccag gcgcggggcc cgaggcccga cgctggccga ggtgctgagc 120
cgccggtgcg tcccccaggc tggtggccga gctgcagggc gccctggacg cctgcgcaca 180
gcgacaattg caattggagc agagcctgcg cgtttgccgt cggctgctgc atgcctggga 240
accaactggg acccgggctt tgaagccacc tccagggcca gaaactaatg gagaggaccc 300
ccttccagca tgcacaccca gtccacaaga cctcaaagag ttggagtttc tgacccaggc 360
actggagaag gctgtacgag ttcgaagagg catcactaag gccggagaga gagacaaggc 420
cccagcctg aaatctaggt ccattgtcac ctcttctggc acgacagcct ccgccccacc 480
gcattcccca ggccaagctg gtggccatgc ttcagacacg agacccacca agggcctccg 540
ccagaccacg gtgcctgcca agggccaccc tgagcgccgg ctgctgtcag tgggggatgg 600
gacccgtgtt gggatgggag cccgaacccc cagcctgggg cgggcctcag ggaccagcaa 660
atggccccat ccgntgctnc tnagccccag aagccttcac acttaaagga gaaaggggca 720
cctgctgc 728

<210> 5416
<211> 791
<212> DNA
<213> Homo sapiens

<400> 5416
ctcccccag tcggcggcgc ttggtgccgc ccgggagaac caggtcatcg gtcggttccc 60
gtgaaaacaa aaacaatcgg ccgcgccgtc gcaggcaccc gaacgtcgcg agcggggcct 120
ggggacgcgg agccgagtgc agcgagcgaa cgggagcagc ggcgactcgc cgggggcta 180
gggcgccatg ggcaggcgg gctccggctg cgcggggctc ccccggcgcc gcggctagtg 240
cgcccgccgc ctcggccgcc tcagcctccc gcgccgcccg cttggggaac gaggagcagg 300
acgcggcctc ggtggggccc gggccgaacg gctgcggaca cctggcgcc gaggagccga 360
gcgccgccgt ctccggcatg gatcagtgcg tgacggtgga gcgcgagctg gagaaggtgc 420
tgcacaagtt ctcaggctac gggcagctgt gcgagcgcgg cctggaggag ctcatcgact 480
acaccggcgg ctcaagcacg agatcctgca gagccacggc caagatgctg aattatcagg 540
gacactttca cttgttttga cacagtgctg taaaagaata aaggatactg ttcaaaaatt 600
ggncttcgac cacaaagaca tccacagcag tggttctcgg gttggaaaag ccattgataa 660
gaattttgat tctgcattag cagtgtggga aatagatggc tgctggcagg cagacaagcc 720
caaagnttct ttaaatgaag tgatggtgga agactttttt cgacaaggaa tgcttgattg 780
gntnaagact t 791

0090420050.20050802

<210> 5417
<211> 829
<212> DNA
<213> Homo sapiens

<400> 5417
actgagtgag caactgtatg atgtgggcta tcgggatata gtgaacatcg acatcagtga 60
ggttgtcatc aagcaaatga aggaatgtaa tgccacccga cggccccaga tgagcttctt 120
gaagatggac gtgacgcaga tggagtttcc tgatgcctcg ttccaggtgg tgttggacaa 180
gggcaccctg gatgctgtcc tgacagatga ggaagagaag accttacaac aggtggacag 240
gatgctggct gaggttggcc gtgtcctgca ggtgggcggt cgctatctct gcatctccct 300
ggctcaggct cacatcctga agaaagcagt gggccacttc tcccgggagg ggtggatggt 360
gagggtgcac caagtggcca acagccagga ccaggtgttg gaagcagagc ctcagttctc 420
cttgcctgtc tttgccttca tcatgaccaa gttcaggcca gtccctggct ctgcccttca 480
gatctttgag ctgtgtgctc aggagcagcg caagcctgtg cggctggaga gtgccgagcg 540
gctggccgag gcggtgcagg agcgacagca gtatgcctgg ctgtgcagcc agctgcgccg 600
caaggccagg ctggggagtg tgtctctgga cttgtgcgat ggggacacgg gggagccacg 660
ctacaccctc cacgtggtgg acagccccac ttgtgaaacc atcgcgggac aatcattttg 720
cgattttcat catcccttaa ggcccgggaa gaccgagtgg gctctttggc atggatgaag 780
gcccggaaac aagctggccg gccagtngct tggctttnan gaaggttga 829

<210> 5418
<211> 787
<212> DNA
<213> Homo sapiens

<400> 5418
aagccggagt ctagagctcc gggcgcgggg aggcgcggcc atggcagctc cngagccgct 60
gtccccggcg ggcggtgcgg gcgaggaggc gccggaggag gacgaggact aagcggaggc 120
cgaggaccct gagcggccga atgcgggagc gggcggtgga cgcagtggcg gcggcggcag 180
tagcgtcagc ggaggaggcg gcggcggcgg ngccggagcg gggggctgcg gcggncccgg 240
gggcgcgctc accaggcgcg cggtcacact gcgggtgctc ctcaaagacg cgctgctgga 300
gcctggcgcc ggggtgctgt ccatctacta cctggggaag aagttcctgg gctacctgca 360
gccagacgga aggatcatgt ggcaggagac cggtcagacc ttcaactcac ccagcgcctg 420
ggccacccac tgcaagaagc tggtgaaccc tgccaagaag tcgggctgtg gctgggcctc 480
tgtcaagtac aaaggccaga aactggacaa gtacaaggcc acctggctcc ggctgcacca 540
gctgcacacg cctgccacgg ctgctgatga gagcccagcc agtgaagggg aggaggagga 600
gttgctgatg gaagaaaagg aggaggacgt tctggcgggg gtctcaacag aggacaagag 660
tcggagacca ctggggaaga gcccttaaa accttgccac ccngaggcca caaccccagg 720
gaaaccggtt ggacaagcaa agaatcccgg gtttccggtc cgctaattgn atgcttgggc 780
aagccnc 787

<210> 5419
<211> 791
<212> DNA
<213> Homo sapiens

0005605.0002

<400> 5419
gtccggctcc ggcggcggcg gtcggtgctg cgagagcggc ggcggcggcg cgggtcggca 60
gcgggagggc gcgcggccga gcggaggcgg agtcggcgcc gagaacatgg ctggaggcaa 120
agctggaaag gacagtggga aggccaaggc taaggcagta tctcgctcac agagagctgg 180
gctacagttt cctgtgggcc gcatccacag acacttgaag actcgcacca caagccatgg 240
aagggtgggt gccactgctg ccgtgtacag tgctgcgatt ctggagtacc tcactgcaga 300
ggtgctggag ctggcaggta atgcttctaa ggatctcaaa gtaaagcgta tcactccgcg 360
tcacttgcag cttgcaatcc gtggtgatga agagttggat tctcttatca aggctaccat 420
agctgggggt gagaagagaa ggtgttctta gatcagaaga tgccattgta ttaggtgacg 480
gcaaggtttt gctgatttag tggaacaaga ttctactggg atgtgtgctg agctgaacca 540
aggaactgcc cgaatgtgct gaacaaggac atttgcttct cagatacgtg aattcaattt 600
taagcaagat tcttgatctg cttcagagca gctttgattt aaagtaattt cagagcactt 660
ttccttgcat gagtaatttt ctgaatgtat aaaatattct atttatgttt tgacctttg 720
gataaactgt gttgctgcan tgntggtcca cactaccatn ctaagtgaag acttaataag 780
tctgaggatc t 791

<210> 5420
<211> 841
<212> DNA
<213> Homo sapiens

<400> 5420
ttttcctgac cccaaccatc ctgcccagtc tccgcttccc cgtcttgtac acccctaact 60
cctgaggctc ctccgaatca cgcgagtgga agcggagaag ctcaagtggc cgccatgtca 120
gaggcttatt tccgagtgga gtcgggtgcg ctggggcctg aggagaactt tctttctttg 180
gacgacatcc tgatgtccca cgagaagctg ccggtgcgca cggagaccgc catgcctcgc 240
cttggcgctt tcttcctgga gcggagcgca ggcgccgaga ctgacaacgc ggtcccacag 300
acttttatcg gacgttttcg ccgcatcatg gactcctcac agaatgctta caacgaagac 360
acttcagccc tggtagccag gctagacgag atggagaggg gcttatttca aacagggcag 420
aaaggactga atgactttca gtgttgggag aaggggcagg cttctcagat cacagcttcc 480
aacctcgttc agaattacaa gaagagaaaa ttcactgata tggaagactg aaagccggaa 540
gaacacagaa tggctcctca cagacgtatc cctccgtgtg tccttgatag gagctggttg 600
accttgtaca gaaccagaat cctgtcccat ttcatggctt atttcctgtg gccatagaga 660
attataggga actggacatg ctggangatg tggtgtccct ggctctgtga gtcttccagg 720
acgtccaccc tgctgaccca cagccagccc tttaacccaa gacccatggg caaggagaaa 780
tcaaagtcct tctaataaga atcatgcntt taattntcca gtnagtgcac tggaatcctt 840
g 841

<210> 5421
<211> 834
<212> DNA
<213> Homo sapiens

<400> 5421
gatagtttat ggaaagaatt tgaaactcca gagaaagcaa acaaaatagt aaagctaaaa 60
cattttgaga aatttcagga tacagcagaa gcattagcag cattcacagc tctgatggag 120
ggcaaaatca ataagcagct gaaaaaagtt ctgaagaaaa tagtaaaaga agcccatgaa 180
ccgctggcag tagctgatgc taaactagga ggggtcataa aggaaaagct gaatctcant 240

tgtatccata gtcctgttgt taatgaactt atgagaggaa ttcgttcaca aatggatgga 300
ttaatccctg gggtagaacc acgtgaaatg gcagctatgt gtcttggatt ggctcacagc 360
ctgtctcgat atanattgaa gtttagcgct gataaagtan acacaatgat tgttcaggca 420
atttccttgn tagatgactt ggataaagaa ctaaacaact acattatgcg atgtanagaa 480
tggtatggct ggcatttccc tgaattagga aaaattattt cagataattt aacatactgc 540
aagtgtttac agaaagttgg cgataggaag aactatgcct ctgccaagct ttctgagttg 600
ctgccagaag aagttgaagc agaagtgaaa gcagctgcag agatatcaat gggaacagag 660
gtttcagaag aagatatttg caatattctg catctttgca cccaggtgat tgaaatctct 720
gaatatcgaa cccagctcta tgaatatcta caaaatcgaa tgatggccat tgnacccaat 780
ggtacagtca ccggttgggg naattagttg gaaccccggt ttattgctca tgcn 834

<210> 5422
<211> 803
<212> DNA
<213> Homo sapiens

<400> 5422
acttccggtc gtgggccatg ccgggggcgg gcccggaacc gncacggcta gaagaagtct 60
tcacttccca ggagagccaa agcgtgtctg gccctaggtg ggaaaagaac tggctgtgac 120
ctttgccctg acctggaagg gcccagcctt gggctgaatg gcagcaccca cgcccgcccg 180
tccggtgctg acccacctgc tggtggctct cttcggcatg ggctcctggg ctgcggtcaa 240
tgggatctgg gtggagctac ctgtggtggt caaagagctt ccagagggtt ggagcctccc 300
ctcttacgtc tctgtgcttg tggctctggg gaacctgggt ctgctggtgg tgaccctctg 360
gaggaggctg gccccaggaa aggacgagca ggtccccatc cgggtggtgc aggtgctggg 420
catggtgggc acagccctgc tggcctctct gtggcaccat gtggccccag tggcaggaca 480
gttgcattct gtggccttct tagcactggc ctttgtgctg gcactggcat gctgtgcctc 540
gaatgtcact ttcctgccct tcttgagcca cctgccacct cgcttcttac ggtcattctt 600
cctgggtcaa ggcctgagtg ccctgctgcc tgcgtgctgg ccctagtgca nggtgtgggc 660
cgcctcagtg cccgcagccc ccatcaacgg acccctggcc cccgctcgac ttncttgagc 720
gttttccgcc agcaccttct tctggcactg actggccttc ttggtcgctt caactgnttg 780
cctttcangg tcttctgctg ctg 803

<210> 5423
<211> 790
<212> DNA
<213> Homo sapiens

<400> 5423
ctctgccagc cccgggctgg gaagaagcag ctacctcgga ggcagggcgc gcaggcgggc 60
ggcgatgaga gggggcgcag ccgcagcccc gcgctgggga gcccaccgct aaccctgcac 120
cccacccacc cctgcacaaa agagctggcg ggcgctggcc acgtcgccct gggtgacctt 180
cctcggatgc agaatccgcc cctgcgagca tcctcttcct cctaggctct gaaggcccgg 240
ggagcgtgag cgatgcccag ctgcacccgg gcagggctcg cctttgtttg ccagtaagga 300
ggagaggctg tctcggctgc agaggggtca tccctgcttc aagccagtgc ctcttcccag 360
ctcccatggg gaccaccgaa gccacgctcc ggatggaaaa cgtggacgtg aaggaggaat 420
ggcaggacga agatcttccc aggccactcc cagaagagac gggggtggaa ctgcttggca 480
gcccggtgga agacacatcc tctcctccca acacgctaaa tttcaacgga gcgcatcgta 540
agaggaagac gctggtggcc ccagagatca acatttctct ggatcagagt gaggggtccc 600

0050450.0007

tgctgtccga tgacttcttg gataccccctg atgacctgga tattaacgtg gatgacatcg 660
agaccccccga tgagaccgac tcgctggagt tcctggggaa tggcaacgaa ctggagtggg 720
aagacgacac ccccgtggnc accggccaag aacatgcccn gggaacaagn gccggatcta 780
ttttggggac 790

<210> 5424
<211> 753
<212> DNA
<213> Homo sapiens

<400> 5424
cctcgatccc ctcgccgcgg tcccatggag gaggaggcga gccgcagcgc cgcggcgacg 60
aacccaggga gtcggcttac ccgctggccg cctcctgaca agcaggaggg atccgcggtg 120
gacccaggga agcggaggag cctggcggcc accccctctt cctcacttcc ctgtactctc 180
atcgctctcg gcctccgaca cgaaaaggaa gcaaatgagc tgatggaaga tctgtttgaa 240
actttccaag atgagatggg attctccaac atggaagatg atggcccaga agaggaggag 300
cgtgtggctg agcctcaagc taactttaac acccctcaag ctctacggtt tgaggaacta 360
ctggccaacc tactaaatga acaacatcag atagcgaagg aactatttga acagctgaag 420
atgaagaaac cttcagccaa acagcagaag gaggtagaga aggttaaacc ccagtgtaag 480
gaagttcatc agaccctgat tctggaccca gcacaaagga agagactcca gcagcagatg 540
cagcagcatg ttcagctctt gacacaaatc caccttcttg ccacctgcaa ccccaatctc 600
aatccggagg ccagtagcac caggatatgt cttaaagagc tgggaacctt tgctcaaagc 660
tccatcgccc ttaccatcag tacaacccca agtttcagac ccttgttnca acccttgtaa 720
cttgatggga gctatgcanc tgantgaaga ctt 753

<210> 5425
<211> 762
<212> DNA
<213> Homo sapiens

<400> 5425
aagagacgcc gccgctgccc ggatgttgcg atggctgatc gggggaggcc gagaaccgca 60
gggactggcc gagaaatctc ctttacagac aataggtgaa gaacaaaccc agaatcccta 120
cactgaactg ctagtactga aggctcatca tgatattgta cgatttctgg tacagttaga 180
tgactacaga tttgcatctg ctggtgatga tggaattgta gttgtgtgga atgcccagac 240
aggggaaaaa cttttagaac tgaatggaca cactcaaaag ataacagcta ttattacatt 300
tccttccttg gaatcttgtg aagagaaaaa tcaactcatc ttgacagcct ctgctgatag 360
aacagttatt gtgtgggatg gtgatactac cagacaagtt cagagaatat catgcttcca 420
gtctactgta aagtgtttaa ctgttcttca gagactagat gtttggcttt ctggtgggaa 480
tgacctgtgt gtgtggaacc gaaaattaga tctcctgtgt aagactagcc acctttctga 540
tacaggtatt agtgctttgg ttgaaatacc taagaactgt gttgtggcag cagttggcaa 600
agaactgata attttcaggt tggtagcacc cacagaagga tcactagaat gggatattct 660
tgaagttaag cgccttcttg atcaccagga taatattctc tcattgatta atgncaatga 720
tttgagtttt ggcaccggnt tccacgtngg aaagctgatc at 762

<210> 5426
<211> 727
<212> DNA

<213> Homo sapiens

<400> 5426
aacacgattc ctctggccag gccaagggga gggcgacact gacaggcgcc ccccacccag 60
gggccgtggc gaagcaaggg gccggctgct cagaaaagga taagaagtgg tttctcctcc 120
cctcttccct tcctcatcct gcagcccgcg cctcccccct cgccgcgctg cgcacggatg 180
gcggcgggag ccgcagagcc accatgttca gccagcagca gcagcagcag ctccagcaac 240
agcagcagca gctccagcag ttacagcagc agcagctcca gcagcagcaa ttgcagcagc 300
agcagttact gcagctccag cagctgctcc agcagtcccc accacaggcc ccgttgccca 360
tggctgtcag ccgggggctc cccccgcagc agccacagca gccgcttctg aatctccagg 420
gcaccaactc agcctccctc ctcaacggct ccatgctgca gagagctttg cttttacagc 480
agttgcaagg actggaccag tttgtaatgc caccagccac gtatgacact gccggtctca 540
ccatgcccac agcaacactg ggtaacctcc gaggctatgg catggcatcc ccaggccttg 600
cagcccccag cctacacccc cacaactggc cactccaaat ttgcaacaag ttctttnccc 660
angccacttg ccagtccttg gttgggacct tcttctgttg ggggtcccca tggaacccct 720
tnccaag 727

<210> 5427
<211> 693
<212> DNA
<213> Homo sapiens

<400> 5427
tcaatgaagc ccaagaagct gcatcaagtg ataatattat ggtccagtac catgcattgg 60
gagtcctgta tcaccttaga aagaatgatc gacttgctgt ttccaagatg ttgaataagt 120
ttactaaatc tggtctcaag tcacagtttg cttactgcat gctgatccga attgccagtc 180
gcttactaaa agaaactgag gatggccatg aaagtccact gtttgatttc attgagagct 240
gcttgcgaaa taaacatgaa atggttattt atgaagctgc ttcagctatc atccatcttc 300
ctaactgcac tgcaagagag ttggcacctg ctgtttcagt tcttcagctt ttctgtagtt 360
ctcctaagcc agccttgaga tatgcagctg tgaggacctt gaacaaggtg gcaatgaagc 420
acccctctgc tgttactgcc tgcaatctgg acttagaaaa cttaatcaca gactcaaaca 480
gaagcattgc taccttagcc attactacac tcctcaaaac aggaagtgag agcagtgtgg 540
accggctcat gaagcagata tcttcttttg tgtctgaaat ctcagatgag ttcaaggtgg 600
tggttgtcag gcaattagtg ctctctgtca gaaataccct cgaaagccca gtgtcatgat 660
gactttnctc tncacatgct cccanatgat gga 693

<210> 5428
<211> 781
<212> DNA
<213> Homo sapiens

<400> 5428
gtcacgtgct cgctgccgcc gctgccgccg ccgaagcgga gaccggagcc gcgagcgcca 60
ccagggcagc agccgccgca gccgccgccg ctgggcagag gagccggaga cgcgagcggg 120
cgaggtggcg gcggcggcgg agcgggagcg ggtaccgggc gcgggcagag cgcggcggcg 180
cgggtgtgtt ccagagaaca agccttcaga catttgctat attgacgctg agctgtcagg 240
ggactcaggc ttatgaggag gtattgttac acaaaacagt gtctagtgaa gacgacaaga 300
aagaggggaa aggatcggaa aaagaagcta aaatactata gaaaaccatg agatctattc 360

CO2007050850

gatcttttgc taatgatgat cgccatgtta tggtgaaaca ttcaacaatc tatccatctc 420
cggaggaact tgaagctgtt cagaatatgg tatctactgt tgaatgtgct cttaaacatg 480
tctcagattg gttggatgaa acaaataaag gcacaaaaac agagggtgag acagaagtga 540
agaaagatga ggccggagaa aactattcca aggatcaagg tggtcggaca ttgtgtggtg 600
taatgaggat tggcctggtt gcaaaaggct tgctgattaa agatgatatg gacttggagc 660
tgggtttaat gtgcaaagac aaacccacag agaccctgtt aaatacagtc naagataatc 720
ttcctattca gattcagaaa ctcncagaag agaaatntca agtggaacaa tgtgtaaatg 780
a 781

<210> 5429
<211> 817
<212> DNA
<213> Homo sapiens

<400> 5429
gggttggaag atggcgtctc ccacagacgg gacagatctg gaagcatctt tgctaagttt 60
tgaaaaactt gaccgtgcct caccagatct ttggccagaa caattaccag gtgttgctga 120
atttgcagct tccttcaaaa gtcctattac tagttctcca cccaaatgga tggctgagat 180
agaacgtgat gacatcgaca tgttgaaaga actggggagt ctcaccacgg ctaatttgat 240
ggagaaggtt cgaggcctac agaacctagc ctatcagctg gggctggatg agtccagaga 300
gatgacacgg gggaaattcc tcaatattct agagaagccc aagaagtagc agctgcttgc 360
ggacaggatg tcctggggtc cgaaaccaag ctcccttccc ggtgcacctc taacaatgca 420
cacctcactg cttgcttggg agaggccaga gggtgtacct ccaggactgc cctctcccct 480
gctcctggca ctctacacgt ctgaggacat tcagcagcaa gagaagaatc tgctctaccc 540
aaggatcatt gcagttactc aatcaacttt cagacttgaa ccttcttagc ctcggatatt 600
ggtaacagct gagggcatat cattcttaaa ggtcgaagtc ctgctttctc atttctggaa 660
gtgattcagg agccccagga tcttacnggt gatttgactc aatcatggca agtcagttgt 720
gacatgttga ttggatgggt cttttgaatg gtcttgactc ttaaaaaggg ttaccatgtg 780
aggagaccng agaccagtnn atttggacca aaccttc 817

<210> 5430
<211> 649
<212> DNA
<213> Homo sapiens

<400> 5430
gagttgtggc tgaggacccc ggcggcagac gcaggttcgg gaccatgagt tggattcctt 60
ttaagattgg gcagcccaag aaacagattg tgcccaaaac agtggagaga gactttgaaa 120
gggagtatgg aaaacttcag cagctggaag agcagacccg gaggctgcag aaagacatga 180
agaagagcac cgacgcagac ctggccatgt caaaatctgc cgtgaagata tccttggact 240
tactctccaa tcccctctgt gagcaagacc aggaccttct gaacatggtg acggccctgg 300
acacggccat gaagcggatg gatgccttca atcaggaaaa ggtgaaccag atccagaaga 360
ctgtgatcga gcccttaaaa aagttcggca gtgtcttccc gagcctcaac atggctgtga 420
agaggcggga acaggccttg caggactaca ggaggctgca ggccaaggtg gagaagtatg 480
aggaaaagga gaagacgggg ccagtgctgg ccaagctcca ccaggcacga gaggagctgc 540
ggcctgtgcg ggaggacttt gaagccaaga acaggcagct gctggaggag atgccgcgct 600
tctacggcag ccgnctcgac tacttncagc ccagctttga gtnccttat 649

0603203-020200

0003250.0052

<210> 5431
<211> 828
<212> DNA
<213> Homo sapiens

<400> 5431
cagggccagt gaggcaaata gactatctga catatttgac tttatgaaaa catattgcct 60
gatggcagaa tcaactttat aagtggtcaa cttctacaca agcgtatgaa atactggtca 120
gtagaacagc cattgtgatt ggactggttt ctctgcaatg gcgccaaccc caggcttgcc 180
aatactgcct atgtaaaggg caagtgtgag aagctattct catttcgctg acatacaggt 240
aggactatgg gggatgggac atttgagtgg gactgagata ggaaaggctt gaaaagaacc 300
cagaaacacc accaggaagt tggcaaagta aaagaaaatg acttcccct caaagggcaa 360
tgagagggag agaaacaaac caaaatagaa gaactagact ttttagaaaa tgagtattgc 420
tagggaattc aactacctaa tcttccctta ttcttatata taagcagaga atttttgcaa 480
ggtatttatt ttttaatatg ccctgaatgt cttttgctat tatgtgtaca ttttgcatat 540
gaaagtctaa aacgaaactt cctttacttt ttatactgta gtgaaaattt tctattcttc 600
ccaagaatgt tgtcccaaat ctgaaattac tggttcaatt tcctgatata aacatttaca 660
attagaagct agatagtact ggcagagtct gcaaatcaga acacttaaat atatcatggc 720
agcaaaaaga ccaagggaaa caaaatgacc aatgtattta tcagaaagca agcaatgctg 780
actgcttggt agaaacccct ctagctatct tangtcccan aactttan 828

<210> 5432
<211> 486
<212> DNA
<213> Homo sapiens

<400> 5432
aagcaaaatc cttttaaaca cagaaatcct gagttcttct cattggtgga ctcaagcaat 60
tctgtagcaa ataaatcctt tgaaagagct ccaaattggt ggcattatcc tttcaaaatc 120
tcagggattt gggatgaagt gaagaggtca aattactttt tagaagaagg gaatctaaaa 180
accatctctc ctaaacaaat ggtagactgg ctttacttaa gggatatttg tctttatagg 240
agtacataaa tttatcttaa tgatatttaa gtagtttttt ttttttttt ttgggacgaa 300
gttttgctct tgttgcccag gctgtatcgc aatggcgcgg tctctgctca ctgcagcatc 360
cgcctcccgg gttcgggcgg ttctcctgcc tcagcctccc gagtagctgg gattacaggc 420
gcccgccacc acacccagct aatttttgt atatttggna nagacggggt ttcaccgngt 480
tgacca 486

<210> 5433
<211> 651
<212> DNA
<213> Homo sapiens

<400> 5433
gcgcgccgct ttctgttgcc gggcgcaatg gcggatacgc tggagtcctc gctggaggac 60
ccactgcgga gctttgtgcg agttttggag aagcgggatg gtacagtgct acgactacag 120
cagtatagct ccggtggcgt gggttgcgtt gtgtgggact ctgccattgt cctttctaaa 180
tacctggaaa cgcccgagtt ttctggcnac ggggcccacg cgctgagccg gcggtcggtg 240
ctggagctgg gttcgggcac cggggccgtg gggctcatgg ctgctaccct cggggctgat 300

gttgtagtca ccgatcttga ggaattgcaa gacttgctga agatgaatat taatatgaac 360
aancatcttg tcactggttc tgttcaagcc aaggggggaa gaaatagaag gctttccttc 420
tccacccgac ttcatactga tggccgactg catatactat gaagagtctt tggagccatt 480
gctgaaaact ctaaaagata tcagcggatt tgaaacttgt attatatgtt gttatgaaca 540
acgaacaatg gggaaaaatt cagaaattga naaaaaatat tntgagctcc ttcagctaga 600
ttttgacttt gaaaaaattc ctttggaaaa acgtgatgaa gagtatcgaa n 651

<210> 5434
<211> 704
<212> DNA
<213> Homo sapiens

<400> 5434
aaaatggcgg cggcggcgac ggccgggcgc tcctgaagca gcagttatgg agcttccctc 60
agggccgggg ccggagcggc tctttgactc gcaccggctt ccgggtgact gcttcctact 120
gctcgtgctg ctgctctacg cgccagtcgg gttctgcctc ctcgtcctgc gcctgtttct 180
cgggatccac gtcttcctgg tcagctgcgc gctgccagac agcgtccttc gcagattcgt 240
agtgcggacc atgtgtgcgg tgctagggct cgtggcccgg caggaggact ccggactccg 300
ggatcacagt gtcagggtcc tcatttccaa ccatgtgaca cctttcgacc acaacatagt 360
caatttgctt accacctgta gcacccctct actcaatagt ccccccagct ttgtgtgctg 420
gtctcggggc ttcatggaga tgaatgggcg gngggagttg gtggagtcac tcaagagatt 480
ctgtgcttcc acgaggcttc cccccactcc tctgctgcta ttccctgagg aagaggccac 540
caatggccgg gaggggctcc tgcgcttcag ttcctggcca ttttctatcc aagatgtggt 600
acaacctctt accctgcaag ttcagagacc cctggtctct gtgacggtgt cagatgcctn 660
ctgggtctca naactgctgn ggtcactttt cggcctttc acgg 704

<210> 5435
<211> 857
<212> DNA
<213> Homo sapiens

<400> 5435
gtgacagatg gcacagaaac cgctgcgcct cttggcttgt ggagatgttg aaggaaagtt 60
tgatatttta ttcaatagag ttcaagcaat tcagaagaaa agtggaaact ttgatctgct 120
gttgtgtgta ggaaatttct ttggctccac ccaagatgct gaatgggagg agtataagac 180
tggcatcaag aaagggagaa gtggatacca aaaaatgtgg ttctgctttg gtttccagtc 240
ttgccacggg cttgaaacca agataccatt ttgctgcttt ggaaaagacc tattatgaga 300
ggcttccata tcgaaaccat atcattctac aggaaaatgc acagcatgcc acccggttta 360
tagctctggc aaatgttgga aatccagaaa agaaaaagta tctttacgcg ttcagtattg 420
ttcccatgaa gctaatggat gcagcagaac tggtaaaaca gcctccggat gtcactgaaa 480
acccttacag aaaatctggg caggaagcat ccataggaaa gcaaattctt gcccctgtgg 540
aagaatcagc ctgtcagttt ttctttgatt taaatgaaaa gcagggaang aagcgttcat 600
ccacaggtag agatagcaaa tcttctcctc atccaaagca gcctcgcaaa cctccctcca 660
ggaccctgct ggttttgcct tgctagccct gaagtggaaa aacatttggt ggtcaacatc 720
ggcacacatt gctaccttgc cctgccaaan gagcttatct gatgaccatg tcctcatcct 780
gcctattgga cctacccagt cagtggtgga actttcanca naagtggtag aagaagtgga 840
gaaatttaag gccctnt 857

0020070054350

<210> 5436
<211> 498
<212> DNA
<213> Homo sapiens

<400> 5436
tggcttgtgt atctgtattc aacaagaata acgtttttgt gggggattag agtcgggaga 60
gtgagtgtgg ttttctccag agtgggagtt aaccagtatg taggaggaag ggtgtttcag 120
ggccatagat gtgtcctgct ataacttcgt agtcctggat gctgtaataa ggcctcctgc 180
agaccttcgt tctattccac agctgcccgg ggtgtttata aaagtgcaac ttcaaggttt 240
attccagagc taaagtcaga aaaacttttg gcccttctct gtatctcagc acttgcaagg 300
ctgtcctggt ccaaggtaga gagtgtgcaa ctgaaaatag ggacgctgtg gactttctgg 360
gccaagttcc ccgtctagat gtgttgggcg cctttctttt ttttttttt ttttttgag 420
acactttcgc tctgttgccc actctggttg caatgagctg agattgcacc actgcactct 480
aaccngggng acncagca 498

<210> 5437
<211> 829
<212> DNA
<213> Homo sapiens

<400> 5437
agtctgagga acataatgac aaagaacatt cttctgataa aggaagagag cgactaaatt 60
catctgaaaa tggtgaggac aggcacaaac gcaaagaaag aaagtcatca agaggcagaa 120
gtcactcaag atctaggtct cgtgaaagac gccatcgtag tagaagcagg gagcggaaga 180
agtctcgatc caggagtagg gagcggaaga aatcgagatc cagaagcaga gagaggaaga 240
aatcgagatc cagaagcagg gaaagaaaac ggcggatcag gtctcgttcc cgctcaagat 300
caagacacag gcataggact agaagcagga gtaggacaag gagtaggagt cgagatagaa 360
agaagagaat tgaaaagccg agaagattta gcagaagttt aagccggact ccaagtccac 420
ctcccttcag aggcagaaac acagcaatgg atgcacagga agctttagct agaaggttgg 480
aaagggcaaa gaaattacaa gaacagcgag aaaaggaaat ggttgaaaaa caaaaacaac 540
aagaaatagc tgcagctgca gctactggag gttctgttct caatgttgct gccctgttgg 600
catcaggaac acaagtaaca cctcagatag ccatggcagc tcagatggca gccctgcaag 660
ctaaagcttt ggcagagaca ggaatagctg tnctagctac tatacccagc ccgctgttaa 720
tccaatgaaa tttgcttgaa caagagaaaa aaanggaaaa tgctttggca gggccaggaa 780
agaaagggga ncaaatccca atctgnttga aattttggga aaaaatgga 829

<210> 5438
<211> 735
<212> DNA
<213> Homo sapiens

<400> 5438
gcggagagcg cgggccgttt tctttcctgg tgtcccgtcg cggcttggga cccggcaaga 60
tgggcaagaa gggcaagaag gagaagaagg gccgcggcgc ggagaagacg gccgccaaga 120
tggagaagaa ggtgtctaag cgctcgcgga aggaggagga agacctggaa gcgctcatag 180
cccatttcca gacactcgat gccaagagga ctcagactgt ggaacttccg tgccccccac 240
cctcaccaag gttaaatgcc tccctctcgg ttcatcctga gaaagatgag ttaatccttt 300

US 2003/0224361 A1

ttggaggtgg atatttcaac ggccaaaaaa ctttttgta taacgagctc tatgtctaca 360
ataccagaaa ggacacctgg accaaagttg acatacccag tccacctccg aggcgctgtg 420
ctcaccaggc ggtggtagtg cctcaaggtg gcggacagct gtgggtcttt ggaggggagt 480
ttgcctctcc caacggagag cagttctacc actacaagga tctctgggtc ctgcatttgg 540
ccaccaagac ctgggaacaa gtcaaatcaa caggcggtcc ttcgggtcgg agtggacatc 600
ggatggtggc ctggaagaga caattgatcc tgtttggtgg cttncatgaa agtcacngga 660
ttacatctac tacaacgacg tgtatgcctt taatctggac accttcacat ggagcaagct 720
gtccccgtca nggac 735

<210> 5439
<211> 782
<212> DNA
<213> Homo sapiens

<400> 5439
gtggttaggc ggctccccgg cggctcctcc gcggcggtga cggcgaccgc actccccgct 60
tcccgctccc cgcgctcctc cgcccgggtc cgccagccga ggccgctccc gagcgtcgga 120
agatgccggc cgtgtccaag ggggacggga tgcggggcct ggcggtcttc atctcggata 180
cccgcaactg taaaagtaaa gaagcagaaa taaaaaggat aaacaaggaa ctggcaaata 240
tcagatcaaa atttaaaggt gacaaggctc ttgatggcta tagtaaaaaa aagtacgtct 300
gcaagttgct cttcatcttt ctccttggtc atgacattga ctttggacac atggaggctg 360
tgaacctgct gagttcaaac agatacacgg aaaagcagat cggctacctt ttcatctctg 420
tgttggtgaa ctcaaacagt gagctgatcc gcctgatcaa caacgccatc aagaatgacc 480
tggccagccg caaccccacc ttcatgggcc tggccctgca ctgcatcgcc agcgtgggca 540
gccgggagat ggccgaggcc ttcgccgggg agatccctaa ggtcctcgta gcccggagac 600
actatggaca gcgtgaagca nagcgcggcc ctgtgcttgc tgcgcctgta caggacgtcc 660
ccgatcttgt ccccatgggc caactggaca ttccgagtgg tgcacctgct caatgaccag 720
cacttgggtg tggtaactgc anccncaagt ctgatcaccc acttttagcn cagaagaacc 780
cc 782

<210> 5440
<211> 660
<212> DNA
<213> Homo sapiens

<400> 5440
agtgcagctt tcagagggtc cgggctcaga ggggctatga ttcggagggt tctgccgcac 60
ggcatgggcc ggggcctctt gacccggagg ccaggcacgc gcagaggagg cttttctctg 120
gactgggatg gaaaggtgtc tgagattaag aagaagatca agtcgatcct gcctggaagg 180
tcctgtgatc tactgcaaga caccagccac ctgcctcccg agcactcgga tgtggtgatc 240
gtgggaggtg gggtgcttgg cttgtctgtg gcctattggc tgaagaagct ggagagcaga 300
cgaggtgcta ttcgagtgct agtggtggaa cgggaccaca cgtattcaca ggcctccact 360
gggctctcag taggtgggat ttgtcagcag ttctcattgc ctgagaacat ccagctctcc 420
ctcttttcag ccagctttct acggaacatc aatgagtacc tggccgtagt cgatgctcct 480
cccctggacc tccggttcaa cccctcgggc tacctcttgc tggcttcaga aaaggatgct 540
gcagccatgg agagcaacgt gaaagtgcag aggcaggang gagccaaagt ttctctgatg 600
tctnctgatc agcttcggaa caagtttccc tggataaaca caganggagt ggctttggcg 660

0 0 3 5 0 2 5 4 . 0 1 7 5 0 2 0 0

<210> 5441
<211> 796
<212> DNA
<213> Homo sapiens

<400> 5441
ctcaggtgct tgcgaggtga tcagaaggca aagatgtcgg agcgaaaagt attaaacaaa 60
tactacccgc cggactttga cccatcaaag atccccaaac tcaagctccc caaagaccgg 120
cagtacgtgg tgcggctgat ggccccttc aacatgaggt gtaagacgtg cggagaatac 180
atctacaagg ggaagaaatt caatgctcgg aaggagacgg tgcagaacga ggtctacctg 240
ggcctgccca tcttccgctt ttacatcaag tgcacgcgct gcctggcaga gatcaccttc 300
aagacagacc ctgaaaacac agactacacc atggagcatg gagccacgcg gaatttccag 360
gctgagaagc tcctggagga ggaggagaag agggtgcaga aggagcggga ggacgaggag 420
ctgaacaacc ccatgaaggt gctggagaac cggaccaagg actccaagct ggagatggag 480
gtgctggaga acctccagga gctgaaagac ctgaaccagc ggcaggcgca cgtggacttc 540
gaggctatgc tgaggcagca ccgcctgtcg gaggaggagc ggcggaggca gcagcaggag 600
gaggacgagc aggagaccgc ggccctgttg gaggaagcca gaaagcgaag actgctggag 660
gacttccgac tcagaggatg angctgctcc ctcgcccctt gcaagcccag ccctttggg 720
cccaacccca ccggcattcc tggattgaag ccccaaaagc cccaagangg aaaggtggaa 780
ggtnccggga accana 796

<210> 5442
<211> 640
<212> DNA
<213> Homo sapiens

<400> 5442
ctactgggag aggctcctgc taggctcagg cagtgggcaa gccagcgtca gcctgcgact 60
gacctccccg cttaggcctc ccgagggcgt ccggcttagg gaaaagacac tcacagagca 120
tgcgttgctg gggaggcagc ccaggacgcc tgagcggcag aaaccatgtg cacaggaggt 180
ccctgggaga acctttggga gcgcccagga cctggaggct gccggcggtc ggggacatca 240
ccgaatgggt gcagtttggc aggagcctca tagtctcctc ggtggccagg agccctcgac 300
ctgggacgag ctgggcgagg ctcttcacgc tggggagatg tccttcgaat gcagggcgtg 360
cagcaaagtg ttcgtgaaga gctccgacct cctcaagcac ctacgcaccc acaccgggga 420
gcggccctac gagtgcgccc agtgcggcaa ggccttcagc cagacgtcgc acttgacgca 480
gcaccagcgc atccacagcg gcgagacgcc ctacgcgtgc cccgtgtgcg gcaaggcctt 540
ccggcatagc tcctcctggt gcggcaccag cgcatccaca cggccgagaa gncctttcgc 600
tgctccgagt gcggnaaggc ttcaccacgg ntcaacctca 640

<210> 5443
<211> 903
<212> DNA
<213> Homo sapiens

<400> 5443
atgcaaataa ccgtttgctg ctcacaggca cacctgtaca gaacaatctg ttagaactca 60
tgtcgctgtt gaattttgtt atgccacaca tgtttagtag tagcaccagt gaaatacgaa 120
gaatgttttc ctctaagaca aaatcagcag atgagcaaag catatatgaa aaggagagaa 180

Docket No. 50800-2150

tagcacatgc aaaacaaatt ataaagccat ttattctcag aagagtaaaa gaagaggttc 240
tcaagcagtt acccccccaag aaagatcgaa ttgagttgtg tgcaatgtcg gagaagcagg 300
agcaactcta tttgggtctt ttcaacagat tgaaaaaatc tatcaataac ttggtcacag 360
aaaaaaacac agaaatgtgc aatgtcatga tgcagttgag gaaaatggcc aatcatcctt 420
tattacatcg ccaatattac acagctgaaa aactcaagga aatgtctcag cttatgctaa 480
aggaacctac acattgtgag gctaaccctg acctgatctt tgaagatatg gaagttatga 540
cagacttcga actacatgta ctttgtaaac agtaccgaca cattaataac tttcagttag 600
acatggactt gattttagat tctggaaaat ttcgagtttt aggatgcatc ttgtctgaat 660
tgaaacagaa gggtgataga gttgtgttat ttagccaatt taccatgatg ctggatatct 720
tagangttct attaaaacat catcagcata ggtacctcag attagatgga aagactcaga 780
ttctgaaang gattcatcta attgatgagt ttaataccga tatggatatc tttggggttc 840
tgntttcaac aaaagctggt ggantaggaa tagactgact tcagccaaag gtggtatact 900
tcn 903

<210> 5444
<211> 845
<212> DNA
<213> Homo sapiens

<400> 5444
atggacgcct gggtccgctt cagtgctcag agccaagccc gggagcggct gtgtagggcc 60
gcccagtatg cttgctctct tcttggccat gcgctgcaga ggcatggagc cagtcctgag 120
ttacagaaac agattcgaca actggagagc cacctgagcc ttggaagaaa gcttctacgc 180
ctgggtaact cagcagatgc ccttgagtca gccaaaagag ctgttcacct atcagatgtt 240
gtcctgagat tctgcatcac tgttagtcac ctcaatcgag ccttgtactt cgcctgtgac 300
aatgtcctgt gggctggaaa gtctggactg gctccccgtg tggatcagga gaagtgggcc 360
cagcgttcat tcaggtacta tttgttttcc ctcatcatga atttgagccg tgatgcttat 420
gagattcgcc tactgatgga gcaagagtct tctgcttgta gccggcgact gaaaggttct 480
ggaggaggag tcccaggagg aagtgaaact gggggacttg ggggaccagg gactccagga 540
ggaggtctgc cccaactggc tctgaaactt cggctgcaag tcctgctcct ggctcgagtc 600
cttagaggtc atcccccact tctgctagac gtggtcagaa atgcctgtga tctcttcatt 660
cctctggaca aactangcct ctggcgctgt ggccctggga ttgtggggct ttgtggnctc 720
gtgtcctnca tcctgctatt ctaccctaat ctatccctgg ctacgactca agccctgact 780
ttcggtacag gataaggang ggacctgaat tgtgaaatgg aatcttanat cgnccccatg 840
tgcca 845

<210> 5445
<211> 856
<212> DNA
<213> Homo sapiens

<400> 5445
gtgtatgaac gcagcggcgg acctgtgagg ggatccgact tgccggcaga acttacgctg 60
cgggaccccg ggcactgttg ctgctgcggg agactgtggg ctgtttagtg ccatgcaccc 120
tttacagtgt gtcctccaag tgcagaggtc tctggggtgg ggaccattgg cctctgtgtc 180
ttggctgtcg ctgaggatgt gcagggcaca cagcagtctc tctagtacca tgtgtcccag 240
tccagagagg caggaggatg gagctcggaa ggatttcagc tccaggctgg ctgctggacc 300
gacttttcaa catttttaa aaagtgcctc agctcctcag gagaagctgt cttcagaagt 360

0050205.0050205

ggaagaccca cctccctatc tcatgatgga tgaacttctt ggaaggcaga gaaaagtcta 420
cctcgagacc tatggctgcc agatgaatgt gaatgacaca gagatagcct ggtccatctt 480
acagaagagt ggctacctgc ggaccagtaa cctccaagag gcagatgtga ttctccttgt 540
cacgtgctct atcagggaga aggctgagca gaccatctgg aaccgtttac atcagcttaa 600
agccttgaag acaaggcggc cccgctcccg ggttcctctg aggattggaa ttctaggctg 660
catggctgag aggttgaagg angagattct caacagagag aaaatggtag atattttggc 720
tggcctgatg cctaccggga ccttccccgg ctgctgctgt tgctgaatcg gccagcaagc 780
tgccaacgtg ctgtctnttn tggacgagac tatgctgatg tcatgccagt ccaaacaacc 840
ccantgccac gttctg 856

<210> 5446
<211> 713
<212> DNA
<213> Homo sapiens

<400> 5446
ataacccctc attgttcgca gctgatgtca ctcgcagttg tgagcggccg cctctcccgg 60
ggacaatgtg ggactgagcg gcccagccgc cgtgccgccg ccgccgccgc cgcaggacag 120
ccccagcgag agccggccag gttgcagcgc ggacacactc gcaggtcgct gtggccccag 180
cctcgcctga cagaatgagc ggctcggacg ggggactgga ggaggagcca gagctcagca 240
tcaccctcac gctgcggatg ctgatgcacg ggaaggaagt gggcagcatc atcgggaaga 300
agggcgagac tgtaaagcga atccgggagc agagcagtgc ccggatcacc atctccgagg 360
gctcctgccc tgaacgcatc accaccatca ccgggtctac agcagctgtc ttccatgcag 420
tctccatgat tgctttcaaa ctggatgagg acctttgtgc tgctcctgca aatggtggaa 480
atgtctccag gcctccagtg accctgcgcc ttgtcatccc tgccagtcag tgtggctcac 540
tgattgggaa ggctggcacc aagatcaagg agatccgaga gactacgggt gcccaggtac 600
aggtggcagg ggacctgctc cccaactcca cagagcgagc tgttacngna tctggggtgc 660
ctgatgccat catnctgtgt gtgcgccaga tcttgcgctg gtattcctgg agt 713

<210> 5447
<211> 794
<212> DNA
<213> Homo sapiens

<400> 5447
agcacacagc tgagccctgc agatctcaca gaagggaaac ccacagatcc ctctaagctg 60
gaaagtccgt cattcacagg aactggtgac acagaaatag ctcatgcaac tgaggattta 120
gagaataatg gcagtaagaa agatggcgtg tgtggtcctc ctccatcaaa gaaaatgaag 180
ttatttggat ttaaagaaga tccatttgta tttattcctg aagatgaccc attatttcca 240
cctattgaga aattttatgc tttggatcct tcattcccaa ggatgaattt gttaactcgg 300
actacagaag ggaagaaaag gcagctctac atggtttcta aggagttgcg gaatgtgctg 360
ctgaataaca gtgagaagat gaaggttatt aacacaggga tcaaagtctg gtgtagaaat 420
aacagcgatg aagagtttga ctgtgctttc cggctggcac aggagggaat atatacattg 480
tatccattta ttaactcaag aattattact gtatcaatgg aagatgttaa gatactgttg 540
acccaggaaa atccctttt tagaaaactc agcagtgaga cctacagtca agcaaaggac 600
ctggcaaagg gaagcatcgt gctgaagtat gaaccagatt ctgcgaatcc agacgctctg 660
cagtgtccca tcgtcttatg cggatggcgg ggaaaggcct ncattcgaac ttttgtgccc 720
aagaatgaac ggcttcatta tctcaggatg atggggctgg angtattggg agaaaagaag 780

0020070050302

aanggaaggg gtat 794

<210> 5448
<211> 815
<212> DNA
<213> Homo sapiens

<400> 5448
aaaaaaaaaa acacaggctt gatgctcgct cccgtttcta caggaggttt tgacggctgg 60
atgctgcagg gcatcccctc gcctggagga ggttcacttg tggccaggtt cccagcacac 120
ccacttgctc actggggccc tggggacacc gccacactcg agcccatcct acggcctcaa 180
tccttaccag tccccaggcc atggactgcc acactgtagg tcttcaatca aggtttagtg 240
gagtttcgaa tgtacacaca ccctgaaaga cagcgaggcc acctcagaaa acaacgcgcg 300
cccagctggc tcccctccga cagggcccac ggctactggg tcggcctcct ccggaccctg 360
agcacagcct ggtatgcgtg cgggctcgga atacggatct gagcagaaga aatgcgagtg 420
gagagcggtt ctgcgcagga aagaggaatt ttgttggaaa gcctgtcgac gttgctagaa 480
aagaccacag catctcacga ggggcgtgcg ccgggaaacc gggagttgac ggacctcctg 540
ccccccgagg tctgcagtct cctgaaccca gcagccatct acgccaacaa cgagatcagc 600
ctgcgtgacg ttgaggtcta cggctttgac tacgactaca ccctgcccag tatgcagacg 660
cactgacccc gagatcttaa taccgccgtg aatcctgatc gaacactaca agtcccanaa 720
nggattcgga agtatgacta caacccccagc tttgccatcc ggggccttca ctatgacatt 780
cagaaanagc cttttgatga aaaatggacg ccctt 815

<210> 5449
<211> 847
<212> DNA
<213> Homo sapiens

<400> 5449
taatccacac ctactactca atacctcaga aaatcttcgc ttccctaata atgttgaacc 60
agttacaaat cattttatta cacagtggct taatgatgtt gactgtttct tggggcttca 120
tgacagaaag atgtgtgttc tcggactctg tgctcttatt gatatggaac agatacccca 180
agttttaaat caggtttctg gacagatttt gccggctttt atcctttat ttaacggatt 240
gaaaagagca tatgcctgcc atgcagaaca tgagaatgac agtgatgatg atgatgaagc 300
tgaagatgat gatgaaaccg aggaactggg gagtgatgaa gatgatattg atgaagatgg 360
gcaagaatat ttggagattc tggctaagca ggctggtgaa gatggagatg atgaagattg 420
ggaagaagat gatgctgaag agactgctct ggaaggctat tccacaatca ttgatgatga 480
agataaccct gttgatgagt atcagatatt taaagctatc tttcaaacta ttcaaaatcg 540
taatcctgtg tggtatcagg cgctgactca cggtcttaat gaagaacaaa gaaaacagtt 600
acaggacata gcaactctgg ctgatcaaag aagagcagcc catgaatcca aaatgattga 660
gaacatggag gatacaaatt cagtgctcca gttgtgccaa gttctttcaa ttttggaggc 720
ccacacccag ggatgaattg agttatctct ttctttcctg ctgggngcct tgtagtgaaa 780
aagctggggt ccctcctaat agngggttcc anaactgggt catggtatct attctaaact 840
aataatc 847

<210> 5450
<211> 721
<212> DNA

0050450.00200

<213> Homo sapiens

<400> 5450
gtgggttggg tagtgcgggt tggggcgggg gctgcggaga gggtgcttaa ctgaggggca 60
tgatggggga ggcggccgtg gccgcggggc cttgtccgtt gcgcgaggac agcttcacgc 120
gcttctcgtc gcagagcaat gtgtacgggc tggcaggcgg cgccggcggg cgcggggagc 180
tgctggccgc cacccttaaa ggcaaggtgc tcggcttccg ctaccaagac ctccgacaga 240
aaatccggcc agtggccaag gagctgcagt tcaactacat tcccgtggat gcggagattg 300
tctccatcga cactttcaac aagtcacccc ccaagcgggg tctggttgtg gggatcacgt 360
tcatcaagga ttcaggggac aagggcagcc ccttcctgaa catttactgc gactacgagc 420
ccggctctga gtacaacctt gactctattg cccagagctg cctgaacctg gagctccagt 480
tcactccgtt ccagctgtgc catgcggagg tccaggtcgg ggatcaactt gagactgtgt 540
ttctcttgag tgggaacgac ccggccattc atctctacaa ggagaacgag gggctgcatc 600
agtttgagga acagcccgtg gaaaacctct tcccagagct gacgaacctg accagtancg 660
tcctctggct tgacgtncac aactttcccg gcacgtcccg gcgcctntca ctcttggctt 720
g 721

<210> 5451
<211> 807
<212> DNA
<213> Homo sapiens

<400> 5451
gtaaccgaac cctgagccgc ctgcgcggat cggcgtccgc agcgggcggc tgctgagctg 60
ccttgaggtg cagtgttggg gatccagagc catgtcggac ctgctactac tgggcctgat 120
tgggggcctg actctcttac tgctgctgac gctgctggcc tttgccgggt actcagggct 180
actggctggg gtggaagtga gtgctgggtc acccccccatc cgcaacgtca ctgtggccta 240
caagttccac atggggctct atggtgagac tgggcggctt ttcactgaga gctgcagcat 300
ctctcccaag ctccgctcca tcgctgtcta ctatgacaac ccccacatgg tgccccctga 360
taagtgccga tgtgccgtgg gcagcatcct gagtgaaggt gaggaatcgc cctcccctga 420
gctcatcgac ctctaccaga aatttggctt caaggtgttc tccttcccgg cacccagcca 480
tgtggtgaca gccaccttcc cctacaccac cattctgtcc atctggctgg ctacccgccg 540
tgtccatcct gccttggaca cctacatcaa ggagcggaag ctgtgtgcct atcctcggct 600
ggagatctac caggaagacc agatccattt catgtgccca ctggcacggc agggggactt 660
ctatgtgcct gagatgaagg agacagaatg gaaatggcgg gggcttgtgg angccattga 720
cacccaagtg gatggcacan gaactgacac aatgagtgac accaattctt gtaaccttgg 780
aaatgaaccc ctggcaancc gggaaac 807

<210> 5452
<211> 737
<212> DNA
<213> Homo sapiens

<400> 5452
tgaaagcact agtggcttgc cagattgtcc taccagaccc aggtattgca ggctttactg 60
tcattgacta cttccatcaa cttttgcaga cttttaattt caggaaactt cagtgtgact 120
ctcaggcacc taacaatcac ttacttgctt tagatcactc aaatagtgat ctcagcagca 180
tatatacttc tgacagcact tctgattttt tcaagtcctg cagcaaggat acttttttcaa 240

aattctggca gccatcactt gaattcactt gcattgtttc acaactaaca gataatgatg 300
atttttcagc ttcagaacaa agtaaggcct ctggtactct tcagcagaac agaaagtcca 360
tctccattgc agaggccact ggttccagta gctgccatga tcccattcag gattcatgga 420
gccttgtttc atatatggat aaaaagagta cagcagaaaa gttgggtaaa gaacttggct 480
tacaagctaa ggagctgagt gcagttcaca gcagtcatca tgaaattgga gttaatgact 540
ctaatttatt ctctttggaa atgcgagagc cccttgagtc aagtaataca aaatccttcc 600
acagtgcagt ggaaattaaa aataggtccc agcatgagct accatgtttt cagcatcatg 660
gtatagatac cccaactagc cttcagaaga gatctgcatg ttggccacct tcgntactta 720
nacttgaaga gacagnc 737

<210> 5453
<211> 720
<212> DNA
<213> Homo sapiens

<400> 5453
tatgctttaa ctggacagaa gaaatatttc tcagacaatg tcgatgctgc tgatgacaac 60
tgagatgcct ggagctcacc cttgatggag acttccttgg tgattggaga tgggggactc 120
tggtggcaga aatggctttg gggtaggtgt gaagtcgctt cagtccctct gagttgcctc 180
ttctggatgg aacgtgtgta tcaacaacaa tgaaatgcac ctccgtgtgc atggaggcgg 240
ctgatgagaa tacagatagg ccagtcctcg ctcttccctc cagaaccggc cgctcccggt 300
ctgacgttgg agcacgtgaa ctaagagtga caatttttc tacttgcttc tgtgaataaa 360
gtgttctaca gtcagcccag cactaaactc accagaaaag aggagggaac agcacggagc 420
cattcatctg gaattactcg atgtgcagag gctgcccctt ggccgcactt gggaacatcg 480
tggacatctt ccttcctctc aggctcctcc tgacagactc ctggcagcac tggagacctc 540
aggactatgg agatcagaat tgtaatggct ttgtcatctc agtgtggcca ctcctgaggc 600
aagaggctcc tcctgggagc aggagagaga gagtttgtga tgttggttgg aaaataggat 660
ttatggatgc aggaaggccc gtgctangcc cctctgnccg cttctctccc tgctggtngc 720

<210> 5454
<211> 805
<212> DNA
<213> Homo sapiens

<400> 5454
agcggccgca cgccgcggag caggggctcg gaggtcccgg gattacggtg ctcgagcacg 60
ctggtgggaa aggacccggg acttgaacag tgttgtgcgg cgccatgcag gtctccagcc 120
tcaatgaggt gaagatttac agcctcagct gcggcaagtc ccttcctgag tggctttctg 180
ataggaagaa gagagcgcta cagaagaaag atgtagatgt ccgtaggaga attgaactta 240
ttcaggactt tgaaatgcct actgtgtgta ccactattaa ggtgtcaaaa gatggacagt 300
acattttagc aactggaaca tataaacctc gggttcgatg ttatgacacc tatcaattat 360
ccttgaagtt tgaaaggtgt ttagattcag aagttgtcac ctttgaaatt ttgtctgatg 420
actactcaaa gttctgaagt ttataggtta aacttagaac aaggacgata cctgaatcct 480
ctacaaactg atgctgcgga gaataatgtt tgtgacataa attcagtgca tggcttgttt 540
gccacaggaa ccatagaggg tagagtggag tgctgggacc caagaactcg aaacagagtt 600
ggcctgttag actgcgcctt aaacagtgtc acagcagatt cagagataaa cagtttacca 660
acaatctctg ctttgaaatt taatggtgcc ttgaccatgg cagttggaac aaccacaggg 720
caggttttat tatatgacct tcgatctgat aagccattgc tagttnaaga tcaccagtnt 780

0002570.0946950

nggctggcca ttaagtccgt cattt 805

<210> 5455
<211> 765
<212> DNA
<213> Homo sapiens

<400> 5455
atcatcagga agtgcacagg cgtccggcgt gctcctccct ccctgcagcc ccgggcagca 60
tctcccagag gctccgcggc ccaggctcct ggtgtgtctg cagtgcaggt ggctcctgga 120
agaccctcag cctgcctgct gaggccatgt cggactacga gaacgatgac gagtgctgga 180
acgtcctgga gggcttccgg gtgacgctca cctcggtcat cgacccctca cgcatcacac 240
cttacctgcg gcagtgcaag gtcctgaacc ctgatgatga ggagcaggtg ctcagcgacc 300
ccaacctggt catccgcaaa cggaaagtgg gtgtgctcct ggacatcctg cagcggaccg 360
gccacaaggg ctacgtggcc ttcctcgaga gcctggagct ctactacccg cagctgtaca 420
agaaggtcac aggcaaggag ccggcccgcg tcttctccat gatcatcgac gcgtccgggg 480
agtcaggcct gactcagctg ctgatgactg aggtcatgaa gctgcagaag aaggtgcagg 540
acctgaccgc gctgctgagc tccaaagatg acttcatcaa ggagctgcgg gtgaaggaca 600
gcctgctgcg caagcaccag gagcgtgtgc agaggctcaa ggaggagtgc naggccggca 660
gccgcgagct caacgctgca aggaggagaa ctacgacctg ccatgcgcct ggcgcaccan 720
aatgaggaga agggcgccgn gcttcatgcg gaaccgtgan ctgca 765

<210> 5456
<211> 824
<212> DNA
<213> Homo sapiens

<400> 5456
gtctctgccc atccgcgcac ccgggcttcg gctggagagg gccagctcgc ttcaggaggc 60
cgaaccccgt tcccaccaac cctctcagct cagacgcggg gtgctgagtc acgggggggg 120
ggtggttctg tggatagttg gaatgcatac acagaggaaa gggggatgcg gcaccagcag 180
acagagagac aagaccccag ccagcccctg tccaggcagc atggcacata ccgccagatc 240
ttccatccag agcagctcat cacaggcaag gaagatgctg ccaataacta tgcctggggc 300
cactacacca ttgggaagga gttcatcgac ctgctactgg accggattcg gaagctggct 360
gaccagtgca caggacttca gggcttcctg gtgttccaca gccttggtcg gggcactggc 420
tctgacgtca cctcattcct gatggagtgg ctttctgtta actatggcaa gaaatccaag 480
ctgggattct ccatctaccc agccccccag gtgtctacag ccatggtcca gccctacaac 540
tctatcctga ccacccacac caccctggag cactcagact gtgccttcat ggtggacaac 600
aaagcaatct atgacatctg ccaccgcaac ctagacattg agcgcccaac tacaccaacc 660
tcaatcgcct cattagccaa attgtctcct tcatacagct tctctgcgct ttgacgggcc 720
ctcaatgtgg acctgacaga gttncagacc aacctggggt cctaccttac atncactttc 780
cccttgggca cctatgcccc aatcattttt tgcanaaaaa gttt 824

<210> 5457
<211> 745
<212> DNA
<213> Homo sapiens

0002050450

0508050.0000

<400> 5457
aagagaaccc tcggcggcaa gatggcagcg gcgggcgagg gcaccccgag ctcccgcggg 60
ccgcgtcggg acccgcctag gcggccgccc cggaacggtt atggtgtcta cgtataccca 120
aattccttct ttcgatatga aggagaatgg aaagcaggga ggaagcacgg tcacgggaag 180
ttgttattta aagatggcag ttattacgaa ggggcgtttg tggacggaga gatcacggga 240
gaaggccgcc ggcactgggc ctggtcagga gacaccttct ctggacagtt tgttctggga 300
gagcctcaag gctacggcgt catggagtac aaagccggcg gatgttatga aggggaggtc 360
tcccacggca tgcgggaagg acacgggttt ctggtggacc gggatggaca agtgtaccag 420
ggctccttcc atgacaacaa gaggcacggc cctgggcaga tgctctttca gaacggtgac 480
aagtacgacg gcgactgggt ccgggaccgg cgtcagggac acggggtgct gcgctgcgcc 540
gacggctcca cctacaaggg acagtggcac agcgacgtct tcagtggact gggcagcatg 600
gcccactgct caggggtcac ctattatggg ttgtggatca atggccaccc agcagaacaa 660
gctacnagga tcgtgatctt gggtcccgag gtgatgaagt ggcccaaggg tctccttntc 720
ggtgaacgtt cactgctgan gacac 745

<210> 5458
<211> 802
<212> DNA
<213> Homo sapiens

<400> 5458
gaaacaattg ctgccatgaa agaagaagag aagctcaaag tggacaaaat ggcccatgac 60
ttagaaatta agtggactga aaatcttaga caagagtgtt ctaaacttcg tgaagagtta 120
aggcttcaac atgaagagga taagaagtca gcaatgtctc aacttttgca gttgaaagat 180
cgagagaaaa atgcagcaag agattcatgg cagaagaaag tagaagatct cttaaaccag 240
atttccttgc tgaaacagaa tctggagata cagctttccc agtctcagac ttctttgcaa 300
caactgcaag cccagtttac gcaagaacga cagcggctta cgcaagagct tgaagaatta 360
gaggagcaac atcagcaaag acacaaatca ttaaaagaag cacatgtcct tgcatttcaa 420
actatggaag aggaaaagga aaaggagcaa agagctcttg aaaatcattt acaacagaag 480
cattctgcag agcttcaatc actaaaagat gcacacagag agtcaatgga gggcttccgg 540
atagaaatgg aacaggaact tcagactctt cggtttgaat tagaagatga aggaaaggct 600
atgcttgctt ccttgcgctc agaactcaac catcaacatg cagctgcaat tgatttgtta 660
cggcataatc atcatcaaga attggcagct gctaaaatgg aattagagag aacatagaca 720
tcagcagaaa gacagagtaa nggagcccca tatgtaggaa ttacnggatc taccaggang 780
gaattaagga ccccggagag cc 802

<210> 5459
<211> 867
<212> DNA
<213> Homo sapiens

<400> 5459
atccaccgct gagctgggag aaagatggcg gcagccgtgc gacaggattt ggcccagctc 60
atgaattcga gcggctctca taaagatctg gctggcaagt atcgtcagat cctggaaaaa 120
gccattcagt tatctggagc agaacaacta gaagctttga aagcttttgt ggaagcaatg 180
gtaaatgaga atgtcagtct cgtgatctcg cggcagttgc tgactgattt ttgcacacat 240
cttcctaact tgcctgatag cacagccaaa gaaatctatc acttcacctt ggaaaagatc 300
cagcctagag tcatttcatt tgaggagcag gttgcttcca taagacagca tcttgcatct 360

atatatgaga aagaagaaga ttggagaaat gcagcccaag tgttggtggg aattcctttg 420
gaaacaggac aaaaacagta caatgtagat tataaactgg agacttactt gaagattgct 480
aggctatatc tggaggatga tgatccagtc caggcagagg cttacataaa tcgagcatcg 540
ttgcttcaga atgaatcaac caatgaacaa ttacagatac attataaggt atgctatgca 600
cgtgttcttg attatagaag aaaattcatt gaagctgcac aaaggtacaa tgagctctct 660
tacaagacaa tagtccacga aagtgaaaga ctagaggcct taaaacatgc tttgcactgt 720
cgatcttagc atcagcaggg cagcagccgt tctcggatgc tactactctt ttaaggatga 780
aaggtgccac aacttgctgc ctatgggatc ctagagaaaa gnatctagat aggatcatca 840
gaggaaatca cttcaagaat ttgctgc 867

<210> 5460
<211> 762
<212> DNA
<213> Homo sapiens

<400> 5460
attgggctgt cagtcangag gcggcgtgga gatcgctggg agcggttgcg gcgtgccggg 60
agctgagtta tagctgtgac ttctgccctg ccaggccgca cacaagctgg ctgacccggt 120
ttgtaaaaat ggaatttcaa gcagtagtga tggcagtagg tggaggatct cggatgacag 180
acctaacttc cagcattccc aaacctctgc ttccagttgg gaacaaacct ttaatttggt 240
acccattgaa cctgcttgag cgtgttggat ttgaagaagt cattgtggtt acaaccaggg 300
atgttcaaaa ggctctatgt gcagaattca agatgaaaat gaagccagat attgtgtgta 360
ttcctgatga cgctgacatg ggaactgcag attctttgcg ctacatatat ccaaaactta 420
agacagatgt gctggtgctg agctgtgatc tgataacaga cgttgcctta catgaggttg 480
tggacctgtt tagagcttat gatgcatcac ttgctatgtt gatgagaaaa ggccaagata 540
gcatagaacc tgttcccggt caaaagggga aaaaaaaagc agtggagcag cgtgacttca 600
ttggagtgga cagcacagga aagaggctgc tcttcatggc taatgaagca gacttggatg 660
aagaactggt cattaaggga tccatcctac agaagcatcc tagaatacgt ttncacacgg 720
gtcttgngga tgcccacctn tactggttga aaaaatacat cg 762

<210> 5461
<211> 505
<212> DNA
<213> Homo sapiens

<400> 5461
agtctcgggc ggggagtgga gccacggtcc ccgccctgca gctcgccccg ccctgctaat 60
gggaccggcc agcccgggag gcccctgacc cttggggaag cccgctgggc gatggggacc 120
ctcgcctncc gccaagtgag ctgtgaacca cgtcctgcgc aacctctcgc tctccaaaac 180
tgtttgtaat atttaaacga tatttggctt aggagaattt cataaagtta gccagatctc 240
gggtctcaat ttagactcgg ggtgctgggg ggcatagcat ccctggagta cattggacag 300
caaaagtcca atcgttgcct gccgagtgga cctgcagtgc ttaaaccccg tcacccggct 360
ggcggggtcc caggccctgg ggtttctttc gcccgggagt ccacgccctg atgctggggt 420
ggcccggtcc ccccgcgggt ggctgggggc ctggggctgc ctcacacnac ngtcccagca 480
gggaatntct cgccgtcccg acctt 505

<210> 5462
<211> 776

0052469.0002

<212> DNA
<213> Homo sapiens

<400> 5462
tttgaaaagc tacagttttt gctccaacag aatcoctttc ctccagagac ttttggcaac 60
ctgttgctgc tctactgtaa atatgagtat tttgacctgg cagcagatgt cctggcagaa 120
aatgcccatt tgacgtataa gttcctcaca ccctatctct atgacttctt agatgccctg 180
atcacttgcc agacagctcc tgaagaggct ttcattaagc ttgatgggct agcagggatg 240
ctgactgagc agcttcggag actcaccaag caagtacagg aagcaagaca caacagggat 300
gatgaagcta tcaaaaaggc agtgaatgaa tatgatgaaa ccatggagaa atacattcct 360
gtgttgatgg ctcaggcaaa aatctactgg aatcttgaaa attatccaat ggtggaaaag 420
atcttccgca aatctgtgga attctgtaac gaccatgatg tgtggaagtt gaatgtggct 480
catgttctgt tcatgcagga aaacaaatac aaagaagcca ttggtttcta tgaacccata 540
gtcaagaagc attatgataa catcctgaat gtcagtgcta ttgtactggc taatctctgt 600
gtttcctata ttatgacaag tcaaaatgaa gaagcagagg agttgatgag gaagattgaa 660
aaggaggaag agcagctctc ttatgatgac ccaaatagga aaatgtacca tctctgcatt 720
gngaatttgg tgatanggaa ctctttattg ngcccaaagg aaactatgaa gtttgg 776

<210> 5463
<211> 812
<212> DNA
<213> Homo sapiens

<400> 5463
aagcgcgggg gagggagtgt aaatagagcg aaggctgctc tgtgtcagcc ccgtcaccgc 60
cgggcggccc gcgcggagtc tgagggagat ggaagttgag caagagcagc ggcgcagaaa 120
ggtggaggcc gggaggacga agcttgctca cttccgacag agaaaaacaa aaggtgacag 180
ttcgcattcg gagaaaaaga cggcgaagag gaagggctcg gctgtcgatg cgtctgtcca 240
ggaggagagt ccggtaacca aggaggacag cgcactctgt ggaggagggg acatttgcaa 300
aagcacatta tgtgacgaca cccctgatgg ggcaggaggg gcctttgcag ctcagccgga 360
ggactgtgat ggagagaaga gagaggactt ggaacagctg cagcagaagc aagtcaatga 420
ccatcctcca gagcagtgtg ggatgttcac agtcagtgac cacccaccag aacagcatgg 480
gatgttcaca gtcggtgacc acccaccaga acagcgtggg atgttcacag tcagtgacca 540
cccaccagaa cagcgtggga tgttcacaat cagtgaccac caaccggaac agcgtgggat 600
gttcacagtc agtgaccaca caccagaaca gcgtgggatc ttcacaatca gtgaccaccc 660
acagaacagc gtgggatgtt cacaaaggag tgtgaacaag aatgtgaact ttgccattac 720
ttgacctgga gagcggccgt gaagatgaag ctggccttgc attcagagtc agangncttt 780
tcttccgccg naagccgtgc atgggccttg aa 812

<210> 5464
<211> 820
<212> DNA
<213> Homo sapiens

<400> 5464
acgaataaca actgcagccg ctctgtctct caataaggct acacgctcca atgtccgggt 60
gacagtgaca gcaacagcag tcatcatcaa cctcgtggtc atcctcatcc tggacgagat 120
ctacggcgct gtggccaagt ggctcaccaa aattgaggtt ccgaaaacag aacagacttt 180

0050250-0050400

tgaagagcgc ctgatcctca aagctttctt gctcaagttt gtcaatgcct actcccccat 240
cttctatgtg gccttttttca aagggaggtt tgtgggcagg cctggaagct acgtctatgt 300
attcgatggt taccgcatgg aagagtgtgc tccaggggggc tgtctcatgg agctctgcat 360
tcagctcagc atcatcatgt tggggaagca gttgatccag aacaacatct ttgagattgg 420
agtcccgaag ctaaagaaac tatttcgaaa gctgaaagat gagaccgaag ctggagaaac 480
tgactctgcc cattcgaaac atccagagca gtgggaccta gactacagct tggaaccata 540
cacaggactg actccggagt acatggaaat gatcatccag tttggttttg tcaccctctt 600
cgtggcctcc tttcccctgg cacctgtgtt tgccctcctc aacaacgtca ttgaagtgcg 660
gctcgatgca aagaagtttg gtacagagct gagacggccg gatgctgtaa gaaccaaaga 720
tatcggaatc tggnttgaca ttctctctgg aattggcaag ttctctggta tcagcaacgc 780
ttttgncatt gcgatcacct tcgactttat ncccccgctgg 820

<210> 5465
<211> 768
<212> DNA
<213> Homo sapiens

<400> 5465
gacggcgaga ccccgcccca tccccgactg cctgaaccgc gccaggagac ggaccgcaag 60
tccagcgtac ccacagacga ctcaggcggg agacgagcgg tgtcatggcc gccgacagtg 120
acgatggcgc agtttcagct cccgcagctt ccgacggtgg tgtcagcaaa agcacaacat 180
ctggggagga gctagtagtc caggttcccg tagtggatgt gcaaagcaac aacttcaagg 240
agatgtggcc atccctcctg ctagccataa agacagctaa tttcgtggct gtggacacgg 300
agctgagtgg gcttggggac aggaagagtt tgctgaacca gtgcattgag gaacgttaca 360
aggccgtgtg tcatgctgcc aggacccgtt ctatcctttc cctgggcctc gcctgcttca 420
agcggcagcc agacaagggt gaacattcct atctggctca agtgttcaat ctcactctgc 480
tgtgcatgga ggagtatgtc atagaaccaa agtctgtgca gttcctgata cagcatggct 540
tcaacttcaa ccagcagtat gcccaaggca tcccctacca taagggcaat gacaagggtg 600
atgagagcca gagccagtca gtacggaccc tattcctgga gctaatccga gcccgccggc 660
ctctggtgct acacaatggc cttatagact tggtggtcct gtaccagaac ttntatgcnc 720
accttccttg agagtctggg aaccttnacc ggttacctgt gtgagatg 768

<210> 5466
<211> 771
<212> DNA
<213> Homo sapiens

<400> 5466
gctaagaagg ggagactgag gctgaggctg gggaacatcg ggcagcatga gcggctgcgg 60
gctcttcctg cgcaccacgg ctgcggctcg tgcctgccgg ggtctggtgg tctctaccgc 120
gaaccggcgg ctactgcgca ccagcccgcc tgtacgagct ttcgccaaag agcttttcct 180
aggcaaaatc aagaagaaag aagttttccc atttccagaa gttagccaag atgaacttaa 240
tgaaatcaat cagttcttgg gacccgtgga aaaattcttc actgaagagg tggactcccg 300
aaaaattgac caggaaggga aaatcccaga tgaaactttg gagaaattga agagcctagg 360
gcttttggg ctgcaagtcc cagaagaata tggtggcctg ggcttctcca acaccatgta 420
ctcacgacta ggggagatca tcagcatgga tgggtccatc actgtgaccc tggcagcgca 480
ccaggctatt ggcctcaagg ggatcatctt ggctggcact gaggagcaga aagccaaata 540
cttgcctaaa ctggcgtccg gggagcacat tgcagccttc tgcctcacgg agccagccag 600

0083203.5465.5

tgggagcgat gcagcctcaa tccggagcag agccacacta agtgaagaca agaagcacta 660
catcctcaat ggcttcaagg tctggattac taatggagga ctggncaata tttttactgg 720
ggttgcnaag actgangtcg tgattctgat ggatcagtga aagacaaaat c 771

<210> 5467
<211> 787
<212> DNA
<213> Homo sapiens

<400> 5467
tatgcatgtt ttttgacagt tgtagtcaga aagcagaatt aagtttgggg attagatcat 60
aatcccaaaa catacaatca caaatgttga aatcctgaca tccaaattct ggggaagtga 120
ttagtgtgtt ttgggttgca tgcaggatag ttgcatcatg tcagttgtat catgttaggc 180
acaactatta ccatgttatt gtctttattt ggaaattaaa tatggcttaa ggagatgcgt 240
atgagtgcca agctgacaag gggtggactt gtggacctaa ttttaggtat cagcttgacc 300
agattaagga atatcagaaa cctggtaaaa cattgttttg ttttacacat tgagggtgtg 360
tctatgagag tgtttccaga agagattagt gtataaatct gagtgtacta ggtggagact 420
atctgccctc aatgttggcg ggcaccatcc aatcagccag tggccaggag agaacaaata 480
cttaagacaa aatgggctgg gatcggtggc tcatgcctgt aatcctagca ctttggaagg 540
tcgaggtggg tggatgacct gaggtcagga gttcgagacc agcctgacca acatggcaaa 600
accctgtctc tgctaaaaat acaaaaatta gccaggcgtg gtggtgcaca cctgtggtcc 660
cggctacttg ggaggctgag acaggagaat tgcttgaacc caagaggcag angtcgcagc 720
agtgagccga gatcacgcca ctgtattcan cctgggtgat aagctgagac tctgctcaaa 780
aaaaaan 787

<210> 5468
<211> 796
<212> DNA
<213> Homo sapiens

<400> 5468
gctccgggag agttagggct ccgagccgag cgcgcggagc agctggggcc ggggcgcgga 60
tgctggaagt tcacatcccg tcggtggggc ccgaggccga ggggcccagg cagagcccgg 120
agaaaagcca catggtgttc cgagtggagg tgctgtgcag cgggcgcaga cacacggtgc 180
caaggcgcta cagcgagttc cacgcgctgc acaagcggat caagaagctg tacaaagtgc 240
ccgacttccc ctcgaaacgc ctgcccaact ggaggaccag agggttggaa cagcgccggc 300
agggcttgga ggcttacatc cagggcatcc tgtacctgaa ccaggaggtg cccaaggagt 360
tactggaatt cctgagactt cggcacttcc ccacagaccc caaggctagc aactggggca 420
ccctgaggga gttcctgcct ggcgacagca gctcccagca gcaccagcgg cctgtcctga 480
gcttccatgt ggatccctat gtttgcaacc cctccccaga gtcgctgccc aacgtggtgg 540
tgaatggtgt gctccagggc ctctacagct tcagcatcag cccagataaa gcccagccaa 600
aggcggcctg tcaccctgct cctctgcact gatgccctga tcagtccaga gcctttggct 660
tgctnctaag aaagtcatgt gcctctgtcc tatgaactca tataaggctg gtcctctttg 720
gctgacccag gacttaatac catgccagtg tgcaattcca tcagntanac tggtcgatgt 780
antgagggag attgat 796

<210> 5469
<211> 828

0099259 5467.5

<212> DNA
<213> Homo sapiens

<400> 5469
agcggaggag gaagctgagc agggcggcgg cggcggtgga acctgcgggg ctggggcgcg 60
cgccatgggc cgcctgcact gcactgagga cccggtgccg gaggccgtgg gcggcgacat 120
gcagcagctg aaccagctgg gcgcgcagca gttctcagcc ctgacagagg tgcttttcca 180
cttcctaact gagccaaaag aggtggaaag atttctggct cagctctctg aatttgccac 240
caccaatcag atcagtcttg gctccctcag aagcatcgtg aaaagcctcc ttctggttcc 300
aaatggtgct ttgaagaaga gtctcacagc caagcaggtc caggcggatt tcataactct 360
gggtcttagt gaggagaaag ccacttactt ttctgaaaag tggaagcaga atgctcccac 420
ccttgctcga tgggccatag gtcagactct gatgattaac cagctcatag atatggagtg 480
gaaatttgga gtgacatctg ggagcagcga attggagaaa gtgggaagta tatttttaca 540
actaaagttg gtggttaaga aaggaaatca aaccgaaaat gtgtatatag aattaacctt 600
gcctcagttc tacagcttcc tgcacgagat ggagcgagtc agaaccagca tggagtgttt 660
ctgctgattt ctgtccctgc atctcccctg ccccgttccc tgccttctcc ttcctgggtg 720
actgctctga aaagcacttc actcacaggc ctgtgggatg cttccatggg gncctgctt 780
ggcttccatg ggggcccagg tgccaaaggg tttnttgaaa aaccagcn 828

<210> 5470
<211> 852
<212> DNA
<213> Homo sapiens

<400> 5470
aaaaaccttc agaggagtct cagaaaggac acggctggct gcttttctca gcgccgaagc 60
cgcgccatgc tcgtcctcag aagcgccctg actcgggcgc tggcctcacg gacgctggcg 120
cctcagatgt gctcatcttt tgctacggga cccagacaat acgatggaat attctatgaa 180
tttcgttctt attaccttaa gccctcaaag atgaatgagt tcctggaaaa ttttgagaaa 240
aacgctcatc ttcggacagc tcactctgaa ttggttggat actggagtgt agaatttgga 300
ggcagaatga atacagtgtt tcatatttgg aagtatgata attttgctca tcgaactgaa 360
gttcagaaag ccttggccaa agataaggaa tggcaagaac aattcctcat tccaaatttg 420
gctctcattg ataaacaaga gagtgagatt acttatctgg taccatggtg caaattagaa 480
aaacctccaa aagaaggagt ctatgaactg gccacttttc agatgaaacc tggtgggcca 540
gctctgtggg gtgatgcatt taaaagggca gttcatgctc atgtcaatct aggctacaca 600
aaactagttg gagtgttcca cacagagtac ggagcactca acagagttca tgttctttgg 660
tggaatgaga gtgcagatag tcgtgcagct gggagacata agtcccatga ggatcccaga 720
gttgtggcag ctgttcggga aagtgcaact acctagtatc tcagcagaat atgcttctga 780
ttcctacatc ggtttcacca ctggaatagt ttctactgga aatccaaaca tttcattact 840
gntttnggat cg 852

<210> 5471
<211> 798
<212> DNA
<213> Homo sapiens

<400> 5471
agcaaatctc cctgagagcg ggaccggcct cagctccaac acagcctcca ctgtgattaa 60

0050050.00120

aaataaaaat tgctagagca gccctcactc gccacatcta ctttgatagc tggctatttg 120
gaatttaaag gatatttgac tttttctaac ctcccatgag gctgtaagga ttgtaggaaa 180
cttgaaagtt ccactgctcc aaacccaccc accaaggact ctgaacctgt ccaccccggg 240
cgcatcaaga tcttccagct gggtaccccc gatttgggcc gactttgcac ctccaaacaa 300
ccttagcatg atgtcttatc ttaagcaacc gccttacgca gtcaatgggc tgagtctgac 360
cacttcgggt atggacttgc tgcacccctc cgtgggctac ccggccaccc cccggaaaca 420
gcgccgggag aggacgacgt tcactcgggc gcagctagat gtgctggaag cactgtttgc 480
caagacccgg tacccagaca tcttcatgcg agaggaggtg gcactgaaaa tcaacttgcc 540
cgagtcgagg gtgcaggtat ggtttaagaa tcgaagagct aagtgccgca acaacagcaa 600
caacagcaga atggaggtca aaacaaagtg agacctgcca aaaagaagac atctncagct 660
cgggaaagtg agttcagaga gtggaacaag tggccaattc actcccccct ctagcacctc 720
agtcccgacc attgccagca gcaatgctnc tgngnctatc tggagcccaa ctttcatctc 780
ccactgtcag atccctgg 798

<210> 5472
<211> 669
<212> DNA
<213> Homo sapiens

<400> 5472
agtgcgcacg ctccgactcg gccgtggcgg acctgactaa aggaggccgc ggacctgact 60
gaaggaggcc acggccactt ctggttggcc tcggggcgcg ctggctcggc tcttcctccg 120
ccctcgaggc ccccgcagtc ccatcattca gttccgtagg gtcaccggcg cggcagtggc 180
ctcgcagggc gctgggtccc tctccccagc tctcctcccc ctggccccgt cgccccgccc 240
tcgccgggct gggctgcggg gtcaggggcc gagcggagag ggttatcatt taacatggaa 300
gaagatgagt tcattggaga aaaaacattc caacgttatt gtgcagaatt cattaaacat 360
tcacaacaga taggtgatag ttgggaatgg agaccatcaa aggactgttc tgatggctac 420
atgtgcaaaa tacactttca aattaagaat gggtctgtga tgtcacatct aggagcatct 480
acccatggac agacatgtct tcccatggag gtgaagtctt gctctgtcac ccaggctgga 540
gtgcagttgc gtgatctcag ctcactgcaa cctncgcttc tgggttcaag cagttctctg 600
cctnaccttn cgagtaactg ggactacagg ggttaccact acacctggct aatttttggg 660
attttagta 669

<210> 5473
<211> 749
<212> DNA
<213> Homo sapiens

<400> 5473
atttagcaac aacagtgtga ggctccactt ccgttgaata tgagcggctg tcacacccat 60
gagcaagttt ccttgatgga agatgctgtt tctccggcag aaccaaccct ccaggacgaa 120
gtttcagaat tggctgatgg tcgtgagtgc aggtgtccct gttgtaattt gcagggaaat 180
tgactgcagg cgatagtgtt gacgtccgac gtctgacaac ctcctatgtg catgtctaaa 240
tagtcacaat gaagatgaaa ataaggatga tggggacggg gtccaggagg gccactggga 300
aggcactatc cagaaatagt ggacagaggt ctggcatgtg gaaaccttgg atctcggtca 360
cagggaggaa ggcagctaga aatgggaggg aagcttctgg gtaggcacca tagtagggga 420
atgtctaaag acccactgct ctgagatgtg gtcagagagg tttctgtgga ctgcagatga 480
ggcctgagcc ctgcctatgc tcaaagccat cagggttggg ggtccgcctc ctcactgctc 540

09645207.080800

ctcaacagct gtaacccttt cctgagggcc ccgacttttc agaataggag cagagagaag 600
cccagacttc cttccctgga gtgtagacct gtgtgtggga cctgctccag gctgatccct 660
gtccgcacag gtgggtgatg tccttggctg ctgccgtcag angcagnccc ctgcacangg 720
agggggctga tcctgcctta actgtgtgg 749

<210> 5474
<211> 554
<212> DNA
<213> Homo sapiens

<400> 5474
agctggacgg ccccgggagg ccgcagaccg ccgggctccc cgaggacacc tcgcaccgga 60
ggaggagagg aggcagcgcc cggccaggct gggagcacct acggccgcgc gggggcggga 120
gccaggtggc ctcggcgcgc ccgcctcgcc cgggcaccga gcaggaagtg gctgcggcgc 180
ggcctcctcg cggtgcaaca gggcggggag gcggccgcag cccgagccgg agcccgagcg 240
ccgggagcga gacctcatgg cagcggtggc gcccgcgggc cccggggact ccgcctcggc 300
cgccctggac gagctgtcac tgaatttcac gtacggggca ccaggcgccg gcaacggctc 360
cctctcgggc gactggtacc gcaggaacca gattcacctt tttggagttt tgctggctat 420
tttaggaaac ttggtgatca gtatttctct aaatattcag aaatattctc accttcagct 480
ggcacaacaa gagcacccaa ggccatactt caagagtgtg ctgtggtggg gtggngtctg 540
tgatggncgn ggga 554

<210> 5475
<211> 855
<212> DNA
<213> Homo sapiens

<400> 5475
taggtggtgg ggggtcgcca gcaggttccc tctccccggc cccagctctg gacgctcacc 60
ccagtgcaac gccctgagtg acggaaagag gtctggcggc ttctctgttg acaactcagc 120
tggttccaca ccctggcaat tgtgaagagc tggccaaatg tttgtccact gagctgatct 180
cctctctgga gcaccggggc caccaggagg gagccaagac aatgcaaact ccagtgaaca 240
ttcccgtgcc tgtgctccgg ctgccccggg gccctgatgg cttcagccgt ggctttgccc 300
ctgatggacg cagagccccc ttgaggccag aggttcctga aatccaggag tgtcccatag 360
ctcaagaatc cctggaatcc caggagcagc gggcacgagc cgcccttcgg gagcgttacc 420
tccgcagcct gctggccatg gtgggtcatc aggtgagctt cacgttgcac gagggtgtgc 480
gtgtggccgc cactttggag ccaccgacct ggatgtggcc aacttctacg tgtcacagct 540
gcagactccc ataggtgtgc aagcagaggc gctgctccga tgtagtgaca ttatttcata 600
taccttcaag ccataaagat attgngttca cttttctgct tgangctaag gcactgtatc 660
ccaagccttc caatgttccc gagccaggaa ctctgggccc catggagtta tgagctcctt 720
ggaattttga gccaagcttt aaacaagtct tggacttctg agacttctgg ggtctagtca 780
gtaaaactnt tgcactttag gaattctaaa atcccttgga aggaatgctn tacttacaaa 840
actntgaacc ctaca 855

<210> 5476
<211> 766
<212> DNA
<213> Homo sapiens

0052050 2005-12-30

<400> 5476
gggtttcgtt gacccgcggc gttcacggga attgttcgct ttagtgccgg cgccatgggg 60
tcggagctga tcgggcgcct agccccgcgc ctgggcctcg ccgagcccga catgctgagg 120
aaagcagagg agtacttgcg cctgtcccgg gtgaagtgtg tcggcctctc cgcacgcacc 180
acggagacca gcagtgcagt catgtgcctg gaccttgcag cttcctggat gaagtgcccc 240
ttggacaggg cttatttaat taaactttct ggtttgaaca aggagacata tcagagctgt 300
cttaaatctt ttgagtgttt actgggcctg aattcaaata ttggaataag agacctagct 360
gtacagttta gctgtataga agcagtgaac atggcttcaa agatactaaa aagctatgag 420
tccagtcttc cccagacaca gcaagtggat cttgacttat ccaggccact tttcacttct 480
gctgcactgc tttcagcatg caagattcta aagctgaaag tggataaaaa caaaatggta 540
gccacatccg gtgtaaaaaa agctatattt gatcgactgt gtaaacaact agagaagatt 600
ggacagcagg tcgacagaga acctggagat gtagctactc caccacggaa gagaaagaag 660
atagtggttg aagccccagc aaaggaaatg gagaangtag aaggagatgc cacattaaac 720
cacagaaagg atgaagaatc ttgacnccng gaatttttga aagaat 766

<210> 5477
<211> 523
<212> DNA
<213> Homo sapiens

<400> 5477
acggcggcgc atgctagggg attctgccgg gtagaagagc tgggcctgga acccagccct 60
gaggacatcc tgcggcccat gggcaagtga cacctgctga gagaggccca ngatggtgga 120
ggctgaggaa ctggcacagc tgcggctgct caatctggag ctcctgaggc agctgtgggt 180
ggggcaggat gctgtgcggc ggtcagtggc canggcagcc tcggagtcaa gcctggaatc 240
cagcancagc tacaactcag agactccatc gaccccagag acgttctcaa cttccttgag 300
cacctnctgc ccacggggcc ggtccttcgt gtggggccca ccagatgcct gtcgagggga 360
cctccgtgat gtggccagat cgggggtggc ctctctccca cctgccaagt gccagcacca 420
ggagtccctg ggccgaccga gaccccactc agnaccctca ctgggcacct caagcctgag 480
ggacccagag ccctcatgga tgctgngtga tccaggaccc can 523

<210> 5478
<211> 776
<212> DNA
<213> Homo sapiens

<400> 5478
tccaccgccg ccacagtctt ccagctccac atcctgagag gacgcctctg gagccgcgac 60
tgcccggggt tgtgccggcc gccgctgccg cccaggccgc ctcagctctc ctctgcgccg 120
gcccgctcac tccgcccggc cccagcccta gcgctggccg cgaccccggc gcctttgaaa 180
cttctgctgg tgtgagtgcc ctcaggggtt ccccaggaat atcgatacaa caccaacagg 240
agatcatgaa tcagacagat aaaaatcaac aagaaatccc atcatacctt aatgatgaac 300
caccagaagg ttcaatgaaa gatcacccac agcagcagcc aggcatgttg tcccgtgtga 360
ctgggggtat cttcagtgtt acaaagggag ctgttggtgc caccattggt ggtgtggctt 420
ggattggtgg aaagagtctg gaagtgacca aaacagctgt tacaactgtg ccttccatgg 480
gaatagggct ggtgaaaggg ggtgtctctg ctgtggctgg aggtgttaca gctgttgggt 540
ctgctgttgt aaacaaagtg cccttaacag gaaagaagaa agacaaatct gactgaaata 600

tagagataca cttgcgctcc acagcactgt aatgccagtg gcattgaatt gctaaattat 660
ggactacaac caagtcaact gttttggacg tttatcttct aaactgctgn gttgaaagta 720
ttgatgactg gctttcatct aaaagaagag accaatacga gcncagtnta tgaagg 776

<210> 5479
<211> 800
<212> DNA
<213> Homo sapiens

<400> 5479
agggagggga tcaacatggc cgctgcaccc cggactgtgt tgatctccgg ctgctcatca 60
ggaattggtc tggaacttgc agtgcaactg gcccatgacc ccaagaagcg ctaccaggtc 120
gtggccacca tgagggacct ggggaagaag gagacactgg aggcagctgc tgggaggctc 180
tggggcagac cctcaccgtg gcccagctgg acgtgtgcag tgatgagtcg gtggcccagt 240
gtctcagctg tatccaggga gaagtggacg tgctggtgaa taatgctgga atgggcctgg 300
tggggcccct ggaggggctc agccttgctg ccatgcagaa tgtctttgac accaactttt 360
tcggagctgt ccgtctcgtc aaagctgtgc ttccaggcat gaagaggagg cggcagggcc 420
acatcgtggt gatcagcagt gtcatgggcc tgcagggtgt catcttcaac gatgtctatg 480
cagcttccaa gttcgccctg gagggattct tcgaaagcct cgctatccag ctgctgcagt 540
tcaacatctt catctccctg gtggagccag gccccgtggt caccgagttt gaggggaagc 600
ttctggcgca agtttctatg gctgagttcc caggcactga ccctgaaccc tgcactactt 660
ccgggacctt atctccagcc ttcaggaact gtttgctccg tgggacagaa cccacaggac 720
gtggttcang ccattggcaa cgtcatcagc ttngacttga acacccctg ngcccgacag 780
aaccaacatt ccggttactt 800

<210> 5480
<211> 780
<212> DNA
<213> Homo sapiens

<400> 5480
ggatacgtcg acaatagatg acggggctca cgttgtacgt tcacatcagg tcccggcccg 60
ccggaacctg ggcgatccac gatgccgagt ttgccacgct gcgacagccc ataggcttgc 120
ccccccgggc attcgggtgg actacgaaca caaactgaag ccctaggact tgtcgcccgt 180
ttgcgctctc gccgaggcac aggctgctcg cggaccaccc tgctccgaaa actaagaagg 240
ggaccagtag acggggtgga ttcgaggtgg ggacatggga cgcagcggtc ggagccgcct 300
ggaggggtac ccggtggtcc cgatggagct atcatctttg agaggtaggt ggtagcccat 360
tcatctggtt actgatactg gccggcatca gtggactgtc ggcaggtcct tgagcaactg 420
gtgtgtgaaa tgggacggac gtcaaaggac aagcgggatg tctactaccg cctggccaag 480
gagaatggct ggcgtgctcg cagcgccttc aaactgctac aactggataa ggaattccaa 540
ctcttccaag gcgtgacacg ggcagttgac ctgtgtgcag ccccaggcag ctggagccag 600
gtgctgagcc ggaagatcgg gggccaaggg tccggccacg tggtggctgt ggacctgcag 660
gctatggctc cactaccagg tgtggtacag atncaggggg gacatnaccc agcttgtcca 720
ctggcaagga gatcatncag gcacttttaa gggcttgcct tgcggaccta atggtgtgtt 780

<210> 5481
<211> 827
<212> DNA

0050-0050-0050-0050

0080376.0003

<213> Homo sapiens

<400> 5481
aataacaggc ggagggtcgg cgtaggtact ttgaacccaa gtaaacaaaa gggaagattt 60
tctcgttgat actggagact gcacaacaat ggggccacga aagaaaagtg tgaaaacatg 120
tatcatgaat aatgaaattc cagaagaaat gacagcagat gaaacaaagg actatatgaa 180
tcaactttca catgaagtac tttgccatat ttttaggtac ctccctctgc aggatatcat 240
gtgtatggaa tgtctttccc ggaagctaaa ggaagcagtg accctatatc tgcgagttgt 300
gagagttgta gatctctgtg cagggcggtg gtgggaatac atgccaagtg gctttacaga 360
tgccagtttt ctaacactat taaagaagat gccagatgtt gaacagctat atggccttca 420
ccctcgatac cttgagaggc gaagagtaag gggccatgag gcttttagca ttccaggagt 480
cctagaagct ttgcaggcat gcccaaactt agtgggtgtg gaaacttctc atttggagtt 540
ggtagaatcc atttggacat atatgcccca tgttcatatt ttggggaaat ttcgtaatcg 600
taatggagct tttccaattc ctcctgaaaa taaactgaaa attcctatag gagccaaaat 660
tcaaacttta catttagttg gggtgaatgg tcctgaaatt ccttggatcc caatgctaag 720
gcacctttat atgaagtggg taagactcct taaccccagc catttaaaga cttnctttgg 780
atcancttaa gactttcgca tgaggaactg gccggancca caaattc 827

<210> 5482
<211> 788
<212> DNA
<213> Homo sapiens

<400> 5482
aacgccagcg cctgcgcact gagggcggcc tggtcgtcgt ctgcggcggc ggcggcggct 60
gaggagcccg gctgaggcgc cagtacccgg cccggtccgc atttcgcctt ccggcttcgg 120
tttccctcgg cccagcacgc cccggccccg ccccagccct cctgatccct cgcagcccgg 180
ctccggccgc ccgcctctgc cgccgcaatg atgatgatgg cgctgagcaa gaccttcggg 240
cagaagcccg tgaagttcca gctggaggac gacggcgagt tctacatgat cggctccgag 300
gtgggaaact acctccgtat gttccgaggt tctctgtaca agagataccc ctcactctgg 360
aggcgactag ccactgtgga agagaggaag aaaatagttg catcgtcaca tgatcacgga 420
tacacgactc tagccaccag tgtgaccctg ttaaaagcct cggaagtgga agagattctg 480
gatggcaacg atgagaagta caaggctgtg tccatcagca cagagccccc cacctacctc 540
agggaacaga aggncaagag gaacagccag tgggtaccca ccctgcccaa cagctcccac 600
cacttagatg ccgtgccatg ctccacaacc atcaacaggg accgcatggg ccgagacaag 660
aagagaacct tccccctttg gtgtggatgc atcggtgcac tcacccttcc gtgctgattc 720
cgcttagntc ttccactttg atgaaccatt gacccanctt gtgaatccat tgaggaacgc 780
attttnaa 788

<210> 5483
<211> 830
<212> DNA
<213> Homo sapiens

<400> 5483
gcaatgcact gagtaacggg gcgggccgag agcagtcacc aacccctctc gttgaggctg 60
ctcggttgtg gccagaaacg ctggctctgg cattaactgt ctacacccct ccccttactt 120
gggacaggac cgcatagccc tcccctcccc ccgtcctgca agatcttatg cggctaggtg 180

cctgggaagt aacagcaaga ggtttgattt aattttggat gagatcgttc ttgcagcaag 240
atgttaataa gacaaaatct agactaaatg tgttaaatgg gcttgccaac aatatggatg 300
atttgaagat aaacaccgat attactggtg ctaaagaaga actcctagat gacaacaatt 360
ttatctcaga caaagagagc ggagttcata agccaaaaga ttgtcaaaca tcatttcaga 420
aaaataatac gttgactctg cctgaagaac tgtcaaagga caaatctgaa aacgccttaa 480
gtggaggcca gtctagtcta tttatacatg ctggtgctcc tactgtttct agtgaaaact 540
ttatcttgcc taaaggagct gctgttaatg gaccagtttc acactcctcc ttaactaaga 600
cttccaatat gaataaaggc agtgtttcat taaccactgg acagcctgtg gatcagccaa 660
caacagaatc ttggtcaact ttgaaggtag cagctgatct tcagctgtct acaccacaga 720
aagcaagtca acaccaagtt ttatttttgg tatcagatgt acacatgcta agaatccacc 780
cattncaata aaaaactacc tacctntgct tnagttggtt gggacattca 830

<210> 5484
<211> 813
<212> DNA
<213> Homo sapiens

<400> 5484
agcatttaat catgaggcgc tccaaagaat atgagatana aggggagggg taggaggaga 60
gggaggaggg taggaagaca gtttgcattc ttgcaacatt aaaccaaagg gacttggagt 120
gcagatggca tccttcggtt cttccagaca agctgcaaga cgctgaccat ggccaagatg 180
gagctctcga aggccttctc tggccagcgg acactcctat ctgccatcct cagcatgcta 240
tcactcagct tctccacaac atccctgctc agcaactact ggtttgtggg cacacagaag 300
gtgcccaagc ccctgtgcga gaaaggtctg gcagccaagt gctttgacat gccagtgtcc 360
ctggatggag ataccaacac atccacccag gaggtggtac aatacaactg ggagactggg 420
gatgaccggt tctccttccg gagcttccgg agtggcatgt ggctatcctg tgaggaaacc 480
gtggaagaac caggggagag gtgccgaagt ttcattgaac ttacaccacc agccaagaga 540
ggtgagaaag gactactgga atttgccacg ttgcaaggcc catgtcaccc cactctccga 600
tttggangga agcggttgat ggagaaagct tcccttccct ccccttcctt ggggctttgt 660
ggcaaaaatc ctatggttat ccctgggaac gcagatcacc tacatcggac ttcaattcat 720
cagctttctt ctgttctaac agacttgcta ctcactggga acccttgctg tgggcttcaa 780
actgancgcc ctttgctgnn tggttccctc tgg 813

<210> 5485
<211> 684
<212> DNA
<213> Homo sapiens

<400> 5485
actgggctct aatttcactt tgcaactggt gactgtgatg cttgtcggtg gacgtttcta 60
tggaatgcca acaattcttc aggaagcaaa atctgctgtc cttccagtct ctgagaaagc 120
tgccaattct caggtcggat ttgaatccac tgcttttcaa ctcatgaaca tcactgctgg 180
cacaagccac gttatgattt ctaggagagg cacatatgga gctctctcgg ttgcctggac 240
cactggatat gctcctgggt tagaaattcc tgaattcatt gttgttggca acatgacccc 300
aacactgggg agcctttcat tttcccacgg tgaacaaagg aaaggagttt ccctgtggac 360
gtttcctagc cctggttggc cagaggcctt tgntcttcac ctatcaggag tgcagagcag 420
tgctcctggc ggagctcaac tccgatcagg tttcattgnt gctgaaattg aaccaatggg 480
cgtcttccaa ttttccacta gctcaagaaa tatcatagtg tcagaagata cacagatgat 540

0050250-0050350

cagattacat gtacaaagac tatttgggtt ccacagcgat cttattaaag nttcttatca 600
gaccactgca ggaagcgcca agccactgga agattttgag cctgttcaga atggggaact 660
gnttttcaa aaattncaaa ctga 684

<210> 5486
<211> 675
<212> DNA
<213> Homo sapiens

<400> 5486
cgcacaacgt gaacctgcag cagaagcctt gcgcctacca cccgggcgat aaatacccgg 60
agccgtcggg cgccctgccc ggtgacgacc tgtcctctag ggccaaggag ttcgccttct 120
accccagctt cgccagctcc taccaggcga tgcccggcta cctggacgtg tcggtggtgc 180
ccgggatcag cgggcacccg gagccgcgtc acgacgccct catccccgtc gaaggctacc 240
agcactgggc tctctccaat ggctgggaca gtcaggtgta ctgctccaag gagcagtcgc 300
agtccgccca cctctggaag tctcccttcc cagacgtggt tcccctgcag nccgaggtga 360
gcagctaccg gcgcgggcgc aagaaacgcg tgccctacac taaggtgcag ctgaaggagc 420
tagagaagga atacgcggct agcaagttca tcaccaaaga gaagcgccgg cgcatctccg 480
caccacgaac ctctctgagc gccaggtaac catctggttc cagaaccggc gggtcaaaga 540
gaagaaggtg gtcaagcaaa tcgaaagcgc ctcatcttca cttcaccttg accacccacc 600
cgatgcttgc cccatctatt tatgtctccg ctttgtacca taaccgaacc cacggaaaga 660
cctnngcngg gtgca 675

<210> 5487
<211> 747
<212> DNA
<213> Homo sapiens

<400> 5487
tatgaggccg ccgtggagca gctcaagagc gagcagatcc gggcgcaggc tgaggagagg 60
aggaagaccc tgagcgagga gacccggcag caccaggcca gggcccagta tcaagacaag 120
ctggcccggc agcgctacga ggaccaactg aagcagcagc aacttctcaa tgaggagaat 180
ttacggaagc aggaggagtc cgtgcagaag caggaagcca tgcggcgagc caccgtggag 240
cgggagatgg agctgcggca caagaatgag atgctgcgag tggagaccga ggcccgggcg 300
cgcgccaagg ccgagcggga gaatgcagac atcatccgcg agcagatccg cctgaaggcg 360
tccgagcacc gtcagaccgt cttggagtcc atcaggacgg ctggcacctt gtttggggaa 420
ggattccgtg cctttgtgac agaccgggac aaagtgacag ccacggtggc tgggctgacg 480
ctgctggctg tcggggtcta ctcagccaag aatgcgacag ccgtcactgg ccgcttcatc 540
gaggctcggc tggggaagcc gtccctagtg agggagacgt cccgcatcac ggtgctggag 600
gcgctgcggc accccatcca ggtcagcccg gcggttctca gtcgacccca ggacgtgctg 660
gaaggtgttg ngcttantcc caacctggaa gcacggtgcn cgacattggc cttacaacca 720
ggaacaccca gaagaaccgg ggcctgt 747

<210> 5488
<211> 789
<212> DNA
<213> Homo sapiens

0050305-0050305

0030703.0045250

<400> 5488
aaaaacaggt ggaatccggg ctggagccgg agctccggcg gcgcgggtgg cggcacgtcc 60
ctccagacag taccacaggc acctggagta ccggcatcgg tcgctgtggc ccccgagtgt 120
ccgtcagagc ctaggggagc ctgccctccc gcgcctcgtc ggggcccggc caggcacctt 180
ggccgccggc gcacggacgc gggcacgagc actagatcac ggctgctgga cctcggcacg 240
ttgacaagat ttctctgggg taccgcggag gattactttg aatttcggtg gtcgcctgtg 300
gtctggcata tttagaactt aagtctatta tttcgggcac catgactttg aggcttttag 360
aagactggtg caggggatg gacatgaacc ctcggaaagc gctattgatt gccggcatct 420
cccagagctg cagtgtggca gaaatcgagg aggctctgca ggctggttta gctcccttgg 480
gggagtacag actgcttgga aggatgttca ggagggatga gaacaggaaa gtagccttag 540
tagggcttac tgcggagact agtcacgccc tggtccctaa ggagataccg ggaaaagggg 600
gtatctggag agtgatcttt aagccccctg acccagataa tacatttttt aagcagatta 660
aatgaatttt tagcgggaga aggcattgac agtgggtgag ttgancaaaa gctctttgga 720
catgaaaatg gnttccttaa acccagaacc agggcattga atcccnggaa atgggggccc 780
ccctatgtt 789

<210> 5489
<211> 689
<212> DNA
<213> Homo sapiens

<400> 5489
gtgctgccga gtagtcccgg aagcgaagca gcgatggcgg agagtccgac tgaggaggcg 60
gcaacggcgg gcgccggggc ggcgggcccc ggggcgagca gcgttgctgg tgttgttggc 120
gttagcggca gcggcggcgg gttcgggccg cctttcctgc cggatgtgtg ggcggcggcg 180
gcggcagcgg gctcccgccc tcagccgctg cccacggggc cgcgctgctt agccactggg 240
accccacgct cagctccgac tgggacggcg agcgcaccgc gccgcagtgt ctactccgga 300
tcaagcggga tatcatgtcc atttataagg agcctcctcc aggaatgttc gttgtacctg 360
atactgtcga catgactaag attcatgcat tgatcacagg cccatttgac actccttatg 420
aaggggttt cttcctgttc gtgtttcggt gtccgcccga ctatcccatc cacccacctc 480
gggtcaaact gatgacaacg ggcaataaca cagtgaggtt taaccccaac ttctaccgca 540
atgggaaagt ctgcttgagt attctaggta catggactgg acctgcctgg agcccagccc 600
agagcatctt ctcagtgctc atctctatcc agtccctgat gactgagaac ccctatnaca 660
atgagcccng ctttgaacan gagagacat 689

<210> 5490
<211> 804
<212> DNA
<213> Homo sapiens

<400> 5490
gataacagct cgatgtcctc tggccatgac tgaagaactt ctccaagacc tggctcagta 60
taaaacacac aaggataaga atgtaatgat gtctgctaga actttgattc acctcttccg 120
aacactgaat cctcagatgc tgcagaagaa attccggggt aagcctacag aggcctccat 180
agaagcaaga gtacaagaat atggagaatt agatgctaaa gattacattc caggagcaga 240
agttctggaa gttgagaaag aagagaatgc tgaaaatgat gaagatggat gggaaagtac 300
cagtctcagt gaggaggagg atgctgatgg tgaatggatt gatgtgcaac actcttccga 360
tgaagaacag caagaaatct ccaagaagct gaacagcatg cccatggagg agcggaaggc 420

caaagctgca gccatcagca ctagccgagt tttaactcag gaagacttcc agaaaatccg 480
catggcccaa atgagaaaag aacttgatgc tgcccccggg aaatcccaga agaggaaata 540
cattgaaata gacagtgatg aagagcccag gggtgaatta ctttctcttc gggacattga 600
acgccttcat aaaaagccaa agtctgacaa agagacagga ctagcaactg caatggctgg 660
aaagacagac cgaaaagaat ttgtgaggaa gaaaaccaaa acaaatccat tttccagttc 720
gacaaataan gagaagaaaa aacngaagaa ctttatgatg atgcggnata gcccgaatgt 780
ccgggccaaa aaataagccg ttcc 804

<210> 5491
<211> 844
<212> DNA
<213> Homo sapiens

<400> 5491
cgcagcgcgg cctgggctcc cgcgtgttta aaagtgcgct tgtggctgct gctgtcttaa 60
ctcctgtgct tggcggacag acaggcgaga tggcggcgga ggtgttgccg agtgcgaggt 120
ggcagtattg tggggcgccc gacgggagcc agagagctgt actggtccag ttctccaacg 180
ggaagctaca gagtccaggc aacatgcgct ttaccttgta tgagaacaaa gattccacca 240
accccaggaa gaggaatcaa cggatcctgg cagctgaaac agataggctc tcctatgtgg 300
gaaacaattt tgggactgga gccctcaaat gcaacacttt gtgcaggcac tttgtgggaa 360
ttttgaacaa gacctctggc caaatggaag tatatgatgc tgaattgttc aacatgcagc 420
cactattttc agatgtatca gttgagagtg aactggcgct agagagtcag accaaaactt 480
acagagaaaa gatggattct tgtattgaag cctttggtac caccaaacag aagcgagctc 540
tgaacaccag gagaatgaac agagttggca atgaatcttt gaatcgtgca gtggctaaag 600
ctgcagagac tatcattgat acgaagggtg tgactgctct ggtcagcgat gctatccaca 660
atgacttgca agatgactcc ctctaccttc ctcctgctat gatgatgcag ccaacctgaa 720
gacgtgtata aatttgaaga atcttctttt ccctgcggag tattgaaagc tcttcaaagc 780
ccattttgaa cttttcaagg aaccgttacc gtcannaaga aaatacttga aanaatgaat 840
tgga 844

<210> 5492
<211> 828
<212> DNA
<213> Homo sapiens

<400> 5492
tggaactcca gctttgttct taattcaatt aattttcaac aatttcttgg aatgtggtgt 60
atcagatgaa aggttctttc tcagtttgga atcacttgta ggctgtgttc tttctggtcc 120
aacttcacca ctagctttca gtgactcagt tttaaatgtt attaatcaaa atgcaaagca 180
gttggaaaat aaggagcatc tctggaaaat gtggagtgtt atagtcaccc cattaactga 240
attgattaat cagaccaatg aagtaaatca aggtgatgcc ttagaacata attttagtgc 300
catctatggt gcattgactt taccagtaaa ccacattttt tcagaacaga gatttccagt 360
ggccaccatg aagactttgc ttagaacttg gtcagaatta tatagagcat ttgctcgttg 420
tgctgctttg gtggcaacag cagaagagaa cttgtgctgt gaggaacttt cttccaagat 480
aatgtccagt ttggaagatg aaggcttttc taatttgttg ttcgtggata gaattattta 540
tattattact gtaatggttg attgcattga cttctcacca tataatatta aatatcagcc 600
caaagttaaa tcaccacaga gaccttcaga ttggtccaaa aagaagaatg agcccctang 660
gaaattgact tctttattta aacttattgn gaaagtgatc tattctttnc acacactgag 720

cttcaaggga acacattctg atccctcttc actattggca actcaatcac cagcattatt 780
ttcagtgact tgggcatatt ctttgncttc tatgatcccn aaaatatt 828

<210> 5493
<211> 705
<212> DNA
<213> Homo sapiens

<400> 5493
aaaaaattaa ctgggcatgg tggtgggcac ctgtagtccc agctactcgg gaggctgagg 60
caggagaatc tcttgaaccc angaggcaga ggttgcagtg agccaagatc atgccactgc 120
actccagcct ggcgacagag cgagactcca tttaaaaaaa aaaacaccag ggcatctgta 180
agccactttg ggagtcaaaa gaatgtagag ctgggctgga ctccttagaa gaaagttaag 240
ttctgagtgt gggaggaagt gcctgcaccc ccacatccag acagcccgtc actcctgctg 300
ccgaagactg acttgctgat tcgggctctg cctccatagt gggggcacag agccagggag 360
agtgcccaca ggcccaggga tcctgggtgt gggaccaggg agaatgccca caggccccag 420
ggccttttg agcccagggc gctctctgca caggcctgct acaacttcat ccgaagcatg 480
gccgcctaca gcctcctgct gttcctgctg cagatcaagg acagacacaa cggcaacatt 540
atgctggaca agaagggcca tatcatccac atcggtcagc cagccacagc gccacccttc 600
tctcccttac cccggcaccc aggggtggat agggatcccc accccacaga gaggagaatg 660
cccaggacca cccttgccag gaatgtcang gtccagctnt gangt 705

<210> 5494
<211> 772
<212> DNA
<213> Homo sapiens

<400> 5494
aagatgcacg caacccacaa gtcaatgacc aggtccctct gtgttggttg ctgctctggg 60
ctctccgtta gccccctcc acctgctcca ctcgctcctg cctgggtggc aggaatttga 120
gtttgctatt cctgttttat aacctgttct gcagaaacct atttttatta aagatttta 180
taagaaaggg aaacctccat gtcttcagct tgttccctgg gccaacggct ctgaggtgac 240
agtggcatta ggatgtgacc agtcactaag gggcactgcc ttcctgcagg ggagtccctg 300
aagccccagc cccaagtgtg gcaaagacag gaccagatcc caggagtcta ggtgggagtg 360
agccgaccca ccatggcgtc cgtggccaca gctgtagaca gggctccttg cagtgggctg 420
caccgtggcc tgctgaaagc acacagtgga cacgagctga gtccagagct tcctctgaac 480
tggggcttag ctctccagtg gggaaccatg gtcagcggct gtagcccctg ggcaagatgg 540
tgcctggctt cctgccctct gcagggtcat gggagtgtct gggaactcag ggtcagggcc 600
agatggctgt tcctggggcc tggggctcca gctcaagctg tttgggaata ggaggaactc 660
ttggcttgga gaacccatca cacagcgggg aggcctggga tggttggtct gcggggagca 720
cttaaactgg gggtggcana nccgtgtgtg gctgtgtgtn ggccaatcgg ga 772

<210> 5495
<211> 804
<212> DNA
<213> Homo sapiens

<400> 5495

0080705-0545950

0508168.0002

ccttgttcc ccgccgccgc cgtcgctgac ccagcccgcc aggcgctcct gaccgtcgct 60
tcctccggtc ccaggtcccc ggccctcgcc tcagccccgg cccctggtcc ccagccctcg 120
tcgcagcccc ggccgtccgc cgccgccatg tccaaggagg agcgccccgg tcgggaggag 180
atcctggagt gccaggtgat gtgggagcct gacagtaaga agaacacgca gatggaccgc 240
ttccgggcgg ctgtgggcgc cgcctgcggc ctggcgctgg agagttatga tgacttgtac 300
cattggtccg ttgagtcata ttcagacttc tgggcagagt tctggaaatt cagtgaaatt 360
gtcttctcac gtgtgtatga tgaggttgtg gacacatcga aaggaatcgc agatgtcccc 420
gagtggttca aaggcagtcg gctcaactat gcagaaaacc tcctgcggca caaagagaat 480
gacagagttg ccctttacat tgcaagggaa ggcaaagagg aaattgtgga ggtgactttt 540
gaagagctga ggcaagaagt ggctttgttt gcagcagcaa tgaggaaaat gggtgtgaag 600
aaaggagatc gggttggtgg ttatttaccc aacagtgagc acgctgtcga ggcgatgctg 660
gctgcggnaa agcattggtg ccatctggac ttcacgtccc cggacttcgg tgtgaatggt 720
gtgctggacc ggtttttttaa atttanccca aagcttatct tctctgngaa gcttgtggct 780
atatggcaaa aacccaacnc ctgg 804

<210> 5496
<211> 784
<212> DNA
<213> Homo sapiens

<400> 5496
gtccgctccg tccgccctta gacctgttgc ccagcatccc tgcagttcgc ggtacagtct 60
ctattagagc gcgtgtatag aggcagagag gagtgaagtc cacagttcct ctcctcctag 120
aggtagaagg ggcgcgggga aacgacctgg tatcggtttt ccgcttgctg atcaagagct 180
ccctttaatg ccgcacgcag gccggcgccc ctcactgata aacgattggg gctgggcctc 240
ggcctggagg gcgttcgtcc tctcagtgcc ctcagctcgt aaaggaggaa accgaggcgt 300
ggggttgggc gagaacccag gggtcctcct gcacccccgc cgccgtgtgt ctcgtgtcca 360
gcgctggctg gagcgcctca gccctggcgc ggtgtagtcg tgagctggaa cttctgacac 420
tgccccttcc ttccccgtcc agcctgccga ccatgcccgc gggcgtgccc atgtccacct 480
acctgaaaat gttcgcagcc agtctcctgg ccatgtgcgc aggggcagaa gtggtgcaca 540
ggtactaccg accggacctg acaatacctg aaattccacc aaagcgtgga gaactcaaaa 600
cggagctttt gggactgaaa gaaagaaaac acaaacctca agtttctcaa caggaggaac 660
ttaaataact atgccaagaa ttctgngaat aatataagtc ttaaatatgt atttcctaat 720
ttattgcatc aaactacttg nccttaacac ttagtctaat gctaactgca agaagangtg 780
ctca 784

<210> 5497
<211> 741
<212> DNA
<213> Homo sapiens

<400> 5497
gtgcaacggc cgttagagga gctgagggag ggaaccaccg ctcaccgcag acgtagtggc 60
tgcagtcagt cttcccgagt gagggatttc gccgcccgct ttcaggcccg tttggcttaa 120
ataactgtga ttgatggcca tgcaggagaa atatccaact gaggggatct ctcacgtcac 180
ttcaccgagt tccgatgtga ttcagaaggg cagttccctg gggactgaat ggcagacccc 240
agttatctcg gagcccttc ggagccgctt cagccgctgt tcaagtgtag ccgacagtgg 300
ggacacagcc attggtacat catgctcaga tattgcggag gatttttgca gctcaagtgg 360

cagtcctcct ttccagccca tcaaaagcca cgtaaccatt ccaacagccc atgtgatgcc 420
ttctacttta gggacctctc ctgccaagcc aaattctaca cctgttggac cctcttcctc 480
taaactccct ttgtcagggt tggctgaaag tgtgggaatg acaagaaatg gagacctcgg 540
tgcaatgaaa cattctccag gcctatctag agatctcatg tatttctctg gtgctactgg 600
agaaaatgga attgagcagt cctggtttcc agcagtgggc catgaaagac aagaagaggc 660
gangaagttt gatattccta gcatggaatc tacccttaat cagtcngcaa tgatggagac 720
actttattca gatcctnacc a 741

<210> 5498
<211> 811
<212> DNA
<213> Homo sapiens

<400> 5498
tcctcgtgct cctcccgggg tgcttggcac agcctcggat tcctccctct cgctgctcga 60
gtcagtttcc ctatcggcgg cagcgggcaa ggcggcggcg gcggcggcgg cagccgcggt 120
ggcggcgtgg ggaacatctc ggcagccacc gcgcttctcc cgctggagcg ggcgtccagc 180
ttggctgccc tcggtccttc cctgccacgt ttcgggtcgc cctgcacccc ccacccaggc 240
tcgcttctct tcgaagcggg aagggcgcct tgcaggatcc tgccgccccc ccaaccggat 300
cctgggtcta gagctcccca gagcgaggcg ctcgccagga ctcctgcccc gccaaccctg 360
accgccgggg ggtgcccccg ggacgtagcg ccgcggagag gaagcggcaa aggggaccat 420
gcggcgcctg actcgtcggc tggttctgcc agtcttcggg gtgctctgga tcacggtgct 480
gctgttcttc tgggtaacca agaggaagtt ggaggtgccg acgggacctg aagtgcagac 540
ccctaagcct tcggacgccg actgggacga cctgtgggac cagtttgatg agcggcggta 600
tctgaatgcc aaaaagtggc gcgttggtga cgaccctat aagctgtatg ctttcaacca 660
gcgggagagt gagcggatct tcagcaatcg gccattccgg aactcgcatc tgagtgnatt 720
aaaccgaccc ctacgcatct gatccgggaa atatattant ggatgacttc acaatgacct 780
gatgctgtaa acagttatca aatgccaagn g 811

<210> 5499
<211> 728
<212> DNA
<213> Homo sapiens

<400> 5499
gtgcaagggg agccgtggcc cgggcccggg gcgtgcgaga cggcggaagc agcccagggc 60
cttgctgccg ccatgactga ggaatcagag gagacagtcc tgtacattga gcaccgctat 120
gtctgctctg agtgcaacca gctgtatgga tcactggaag aggtgcttat gcaccaaaac 180
tcccacgtgc cccagcagca ctttgagctg gtgggcgtgg ctgatcccgg agtcactgtg 240
gccacagaca cagcttcagg cacgggcctc tatcagaccc ttgtgcagga gagccagtac 300
cagtgcctgg agtgtggtca actgctgatg tcacccagcc agctcctgga gcaccaggag 360
ctgcacctga agatgatggc accccaggag gcagtgccag ctgagccatc acctaaggca 420
ccacccctga gctccagcac catccactac gagtgtgtgg attgcaaggc tctctttgcc 480
agccaggagc tctggctgaa ccaccggcag acgcacctnc gggccacacc caccaaggct 540
cctgcccctg ttgtcctggg gtccccagtt gttctagggc ctcctgtggg ccaagcccga 600
gtggctgtgg agcactcata ccgaaaggca gaagaaggtg gggaaagggc gactgtccat 660
ctgccgntgc acaccactga ngtagtgact gangtggact gttctttaca gtgctctgat 720
gctccagt 728

0088-0-0-0-0-0-0-0-0

0062969-000288

<210> 5500
<211> 788
<212> DNA
<213> Homo sapiens

<400> 5500
tcatggccgg ctcctaccct gaaggtgcac ctgcaatcct cgccgataag aggcagcagt 60
tcggaagccg gttcctgagc gatccggcgc gggtcttcca ccacaatgcc tgttgattat 120
gagatcaatg cccacaaata ctggaatgac ttctacaaaa tccacgaaaa tgggtttttc 180
aaggatagac attggctttt taccgaattc cctgagctgg cacctagcca aaatcaaaat 240
catttgaagg attggttctt ggagaacaag agtgaagtat gtgaatgtag aaacaatgag 300
gatggacctg gtttaataat ggaagaacag cacaagtgtt cttcgaagag ccttgaacat 360
aaaacacaga cacctcctgt ggaggagaat gtaactcaga aaattagtga cctggaaatt 420
tgtgctgatg agtttcctgg atcctcagcc acctaccgaa tactggaggt tggctgtggt 480
gtgggaaaca cagtctttcc aattttacaa acgaacaatg acccaggact ctttgtttat 540
tgctgtgatt tttcttccac agctatagaa ctggtccaga caaattcaga atatgatcct 600
tctcggtgtt ttgcctttgt tcacgacctg tgtgatgaag agaagagtta cccagtgccc 660
aagggcagtc ttgatattat cattctcata tttgtctttc agcaattgtt ccagacaaga 720
tgcagaangc tatcaacagg ctgagcaggc ttctgaaacc tgggggggatg gacttntgcg 780
aaatacng 788

<210> 5501
<211> 724
<212> DNA
<213> Homo sapiens

<400> 5501
atgtctgtcc ctagcggagg cgcgggtgcc gtgctgagag cgcctgcctg tgcgccccga 60
gcggggctgg gactcttcca agatgcccac gttcgcacag agaccccgga tcgcggaagc 120
tcgcgtctcg aaaggcggtc tcacgccctg cccgtcctgg gttcacggtt tttcatcacc 180
tgcggctgtc ctgcgatcga ccacagctgt gcaggagggg caggaggtat ctgttgctgc 240
agttaccgga acctttgcca ggactagtac aggaccacgg gctggtagct cagggatgtc 300
tcgtctgtga gttacagctg cacgctctcc aggaaagaag gaatttcctc ttctctggaa 360
accccaccac acagctggtt tctcattggt gctgcttgcc cattccctga gctgtgactg 420
ccagaggagt gggaggttgg tggtgcctcc agcccatcag gggcaggccc tgggaccgcc 480
tgggaacagg aggactatgg cacaaaccga gtgagtgatg ggagcaaccc gcagggctct 540
gccacatccc tgtcttcctt cactgacatg aaacgcagaa aaggcagctt tgccacaaca 600
caggagcacg caccgaatgt ggccgcccaa ggctctgtcc ttgaccctgt tgtccangac 660
tgtttaccaa nggctgacan gcactgaatg ccccgtgcac ctggccagac acttgactca 720
tgca 724

<210> 5502
<211> 741
<212> DNA
<213> Homo sapiens

<400> 5502

agagctcgca gctccgccgg cgcctggtcc cagcgcccgc ggcgccgcgt ccccggccca 60
accatggcgt cctccgcggc cggctgcgtg gtgatcgttg gcagtggagt cattgggcga 120
agctgggcca tgctgtttgc cagtggaggc ttccaggtga aactctatga cattgagcaa 180
cagcagataa ggaacgccct ggaaaacatc agaaaggaga tgaagttgct ggagcaggca 240
ggttctctga aaggctccct gagtgtggaa gagcagctgt cactcatcag tggttgtccc 300
aatatccaag aagcagtaga gggtgccatg cacattcagg aatgtgttcc agaagatcta 360
gaactgaaga agaagatttt tgctcagtta gattccatca ttgatgatcg agtgatctta 420
agcagttcca cttcttgtct catgccttcc aagttgtttg ctggcttggt ccatgtgaag 480
caatgcatcg tggctcatcc tgtgaatccg ccatactaca tcccgctggt tgagctggtc 540
ccccacccgg agacggcccc tacgacagtg gacagaaccc acgccctgat gaagaagatt 600
ggacagtgcc ccatgcgagt ccagaaggag gtggccggct tcgttctgaa ccgnctgcaa 660
tatgcaatca tcaacgangc ctggcggcta gtggaggaag gaatcgtgtc ttctaatgac 720
ctggaccttg tcatgtcana a 741

<210> 5503
<211> 702
<212> DNA
<213> Homo sapiens

<400> 5503
atgcgccctc cgtcccgcgc tttgttgcga aagcgagggg gcgaggtgct gcggtgctag 60
agcgcggcgc gaccggacgc tgcgggcggg gaagaggatg gagactgtgg cgtccgctgc 120
aacggttggg gctgcgcgtg agaaggtggc ggtgtaggca cctgcgctcg gggaaggctg 180
gcggcggcgg ccgagccatg gcgggagacc cccttctctg ggctccctga agtctcgggg 240
agccgtgacc catgggatcg ttgagcagcc gggtgctgcg ccagccaaga ccagcccttg 300
cccagcaggc gcagggtgcc agggcggggg gctcggcccg gaggccggac actggagacg 360
atgcggcggg ccacggattc tgttactgtg cgggcagcca caagcgcaag cggagcagcg 420
ggtccttctg ctactgtcac cctgactcgg agacggacga ggatgaggag gaggggggacg 480
agcagcagcg gctcctcaac acccctcgaa ggaaaaaatt aaagagtaca tctaaatata 540
tttatcaaac attatttttg aatggtgaaa acagtgacat taagatttgt gctctaggag 600
aagaatggag cttacacaaa atatatttat tgncaatctg gctacttttt ctagtattgt 660
tcagtggntc ttgggaaaga atncagcatt gaatattatt tg 702

<210> 5504
<211> 839
<212> DNA
<213> Homo sapiens

<400> 5504
cttgatgcag cacatcatcg acactggcct ggagtattga aggtggtatc aggatgccac 60
atatccttat ttcagattcc attaccagaa gatggaatgc aatttggagg atcaatgagc 120
ttacatggaa atcatatgac actggcatgt tttcatggtc caaattttcg ttcaaaatct 180
tgggcccttt ttcatttaga agaaccaaat attgcttttt ggactgaagc tcagaaaatc 240
tgggaagatg gctccagtga tcattctaca tatattgtac aaacactaga ttttcacctg 300
ggtcataata ctatggttac caaaccatgt ggtgctttgg aaagtcctat ggcaacaata 360
accaagataa caaggcgtcg ccatgaaaat ccaccccatg gagtagcaag tgtgaaagaa 420
tggttcaatt atgttacagc tacaaggaat gaagagctaa atctgcttcg taatgttgat 480
gctaacaaca ctgagaatag cactactgtg aagaattcta gtttgttgag tggattcaga 540

0000-0000-0000-0000

ggaggttcta gctacaacca tgaaacagag actatctttg cattaccaag gatgcagctt 600
gactttaaat ccattcatgt tcaagaacca caggagcctt cattacagga tgccagcctg 660
aaccaaaagt agaatgtant gtggtgacag agttcactga ccacatttgt gtgactatgg 720
atgctgagct catcatggtt cttcatgaat taatatcagc ttatcttaaa gaaaaagaaa 780
agccatcttt tcacctcgga tttatctact ngacnggaca aaaaagtcca attttatnc 839

<210> 5505
<211> 740
<212> DNA
<213> Homo sapiens

<400> 5505
tacctgctgc tgcacacgga tggtcccttg gccagctcct ggcgccacta cattgccatc 60
atggctgccg cccgccatca gtgttcttac ctggtaggct cccacatggc cgagtttctg 120
cagactggtg gtgaccctga gtggctgctg ggcctccacc gggcccccga gaagctgcgc 180
aaactcagcg agatcaacaa gttgctggcg catcggccat ggctcatcac caaggaacac 240
atccaggcct tgctgaagac cggcgagcac acttggtccc tggccgagct cattcaggct 300
ctggtcctgc tcacccactg ccactcgctc tcctccttcg tgtttggctg tggcatcctc 360
cctgaggggg atgcagatgg cagccctgcc ccccaggcac ctacaccccc tagtgaacag 420
agcagccccc caagcaggga cccgttgaac aactctgggg gctttgagtc tgcccgcgac 480
gtggaggcgc tgatggagcg catgcagcag ctgcaggaga gcctgctgcg ggatgagggg 540
acgtcccagg aggagatgga gagccgcttt gagctggaga agtcagagag cctgctggtg 600
accccctcag ctgacatcct ggagccctct tcacacccag acatgctgtg ctttgtggaa 660
gaccctactt tcggatatga aggacttcac tcgganaagg ggcttcangc acccccctaac 720
ctttcngggc ccagggatta 740

<210> 5506
<211> 713
<212> DNA
<213> Homo sapiens

<400> 5506
tgaagaaaag gaagtccctg aggactcact ggaggagtgt gccatcactt gttcaaatag 60
ccatggccct tatgactcca accagccaca taggaaaacc aaaatcacat ttgaggaaga 120
caaagtcgac tcaactctca ttggctcatc ctctcatgtt gaatgggagg atgctgtaca 180
cattatccca gaaaatgaaa gtgatgatga ggaagaggaa gaaaaagggc cagtgtctcc 240
caggaatctg caggagtctg aagaggagga agtcccccag gagtcctggg atgaaggtta 300
ttcgactctc tcaattcctc ctgaaaggac atcggtggga tcaagtgaaa aaggaggacc 360
aagaggcaac aggtcccagg ctcagcaggg agctgctggc tgagaaagag cctgaagtct 420
tgcaggactc actggataga tgttattcaa ctccttcagt ttatcttgga ctgactgact 480
catgccagcc ctacagaagt gccttttacg tattggagca acagcgtgtt ggcttggctg 540
ttgacatgga tgaaattgga atccccggcg gcagtggggc tgttgctgnt gctgtggctg 600
tcgctgcccg tcaggctgcc ttcttttgtc gnttcccagc gcttgcgcag gacttctnct 660
ggcggcgctg cggatccagg gggtcggctt gccangtaca ggacttgcaa ttg 713

<210> 5507
<211> 837
<212> DNA

<213> Homo sapiens

<400> 5507
gcgtgaagcg cggacctttc aacaagggct ttattaattc tcacgctgcg gccccggaaa 60
gcgatggagg tggcggctaa ttgctcccta cgggtgaaga gacctctgtt ggatccccgc 120
ttcgagggtt acaagctctc tcttgagccg ctgccttgtt accagctgga gcttgacgca 180
gctgtggcag aggtaaaact tcgagatgat caatatacac tggaacacat gcatgctttt 240
ggaatgtata attacctgca ctgtgattca tggtatcaag acagtgtcta ctatattgat 300
acccttggaa gaattatgaa tttaacagta atgctggaca ctgccttagg aaaaccacga 360
gaggtgtttc gacttcctac agatttgaca gcatgtgaca accgtctttg tgcatctatc 420
catttctcat cttctacctg ggttaccttg tcagatggaa ctggaagatt gtatgtcatt 480
ggaacaggtg aacgtggaaa tagcgcttct gaaaaatggg agattatgtt taatgaagaa 540
cttggggatc cttttattat aattcacagt atctcactgc taaatgctga agaacattct 600
atagctaccc tacttcttcg aatagagaaa gaggaattgg atatgaaagg aagtggtttc 660
tatgtttctc tggagtgggt cactatcagt aagaaaaatc aagataataa aaaatatgaa 720
attattaagc gtgatattct ccgtggaaag tcagtgccac attatgctgc tattgacctg 780
atggaaatgg tctaatgatt ggatcctaca agtctttaac attggttang ctgggca 837

<210> 5508
<211> 817
<212> DNA
<213> Homo sapiens

<400> 5508
cttgttcccg aagaagtaga agcatcgaaa gcgttggaga ggtgttaccg gaacggcggc 60
gacaagggtg ttcccgaact agagtggggc atacataatc ttgctgctat gcttcgaagc 120
tgtagtctga atcaacctaa gttttaaaca gaaggtgaac ctctgagata gaaaatcaag 180
tatattttaa aagaagggat gtgggatcaa ggaggacagc cttggcagca gtggcccttg 240
aaccagcaac aatggatgca gtcattccag caccaacagg atccaagcca gattgattgg 300
gctgcattgg cccaagcttg gattgcccaa agagaagctt caggacagca aagcatggta 360
gaacaaccac caggaatgat gccaaatgga caagatatgt ctacaatgga atctggtcca 420
aacaatcatg ggaatttcca aggggattca aacttcaaca gaatgtggca accagaatgg 480
ggaatgcatc agcaaccccc acacccccct ccagatcagc catggatgcc accaacacca 540
ggcccaatgg acattgttcc tccttctgaa gacagcaaca gtcaggacag tggggaattt 600
gcccctgaca acaggcatat atttaaccag aacaatcaca actttggtgg accacccgat 660
aattttgcag tggggccagt gaaccagttt gactatcagc atggggctgc ttttggtcca 720
cccgcaaggt ggatttcatt cctcctttat tggccaaccc aggaccttcc aggacctttc 780
aagcaccttn ccccagaaat ccggaanaag aaaangg 817

<210> 5509
<211> 827
<212> DNA
<213> Homo sapiens

<400> 5509
attttggtgc gagagaaaca ataggacgga aacgccgagg aacccggctg aggcggcagc 60
agagcatcct ggccagaaca agccaaggag ccaagacgag agggacacac ggacaaacaa 120
cagacagaag acgtactggc cgctggactc cgctgcctcc cccatctccc cgccatctgc 180

0888760.0450

gcccggagga tgagcccagc cttcagggcc atggatgtgg agccccgcgc caaaggcgtc 240
cttctggagc cctttgtcca ccaggtcggg gggcactcat gcgtgctccg cttcaatgag 300
acaaccctgt gcaagcccct ggtcccaagg gaacatcagt tctacgagac cctccctgct 360
gagatgcgca aattcactcc ccagtacaaa ggtgtggtat ctgtgcgctt tgaagaagat 420
gaagacagga acttgtgtct aatagcatat ccattgaaag gggaccatgg aattgtggac 480
attgtagata attcagactg tgaaccaaaa agtaagctcc tgaggtggac aacaaacaaa 540
aaacatcatg tcttagaaac agaaaagacc cctaaggact gggtgcgtca gcaccgtaaa 600
gaggagaaaa tgaagagcca taagttagaa gaagaatttg agtggctaaa gaaatctgaa 660
gtcttgtact acactgtaga gaagaagggg aatataagtt cccagcttaa acactataac 720
ccttggagca tgaaatgtca ccagcaacag ntacagagaa tgaaggagaa tgcaaagcat 780
tggaaccagt acaaaattat cttactggna aancttgact ttccgct 827

<210> 5510
<211> 750
<212> DNA
<213> Homo sapiens

<400> 5510
tcttctctgt gctgcgagtg gctagctggg cagagccctg ggggcgcggt gctgccgcct 60
ccaggtctcc gccccgtgtg tgcgccctgc acttagggat ccctccctca ctgccccggt 120
actcacaagc ttctcggccc cgaccttcgc cctgggaggt tctggccagg tgccgggagg 180
ggcgctgtgt cgagggcgat ccccccaaag cagcgtcccg tgctaaagaa acagagcctc 240
actctgtcac ctaggctgga gtgcagtggt gcaattatgg ctcactgcag tttcaacctc 300
ccagattcca gtcatcctcc tgcctcagcc acccaagaag ctgggaccac agggatcaca 360
tgcagtggtc taaggaagaa gaagcagcag ccagaaaaaa agtaaaagaa aactcagctg 420
tgcgagtcct tctggaagag caagttaagt atgagagaga agctagtaaa tactgggaca 480
cattttacaa gattcataag aataagtttt tcaaggatcg taattggctg ttgagggaat 540
ttcctgaaat tcttccagtt gatcaaaaac ctgaagagaa ggcgagagaa tcatcatggg 600
atcatgtaaa aactagtgct acaaatcgnt tctcaagaat gcactgtcct actgtgcctg 660
atgaaaaaaa tcattatgag aaaagtctgg gtcttcanan ggtcaaagca aaacagaatc 720
tgatttttnc aacctagact tttgaaaaac 750

<210> 5511
<211> 821
<212> DNA
<213> Homo sapiens

<400> 5511
cctgcagaga ggaggaaagc ctgcctcgga acagccctgg acaaaggggc tcagatgccc 60
catcatactg caggctccaa gctccacagc acctgttgcc ttcattagca gcttttcctc 120
ctcttccctg cacttcccag aaccaaagaa tgtgaagggg gtccatggag ggctcacgtc 180
cccgcgcccc gagcggccac ttagcgccgt cgccgccggc tttcgacggc gagctggatc 240
tgcagcgata ctccaacggg ccagccgtga gcgcagggtc gctcgggatg ggagcggtga 300
gctggtctga gagtcgtgca ggcgaacggc gcttccctg ccctgtatgc gggaagcgct 360
tccgcttcaa ctctatcctt gctttgcacc tgcgggcgca cccaggagcc caggccttcc 420
agtgccctca ctgcggccac cgcgcggcgc agcgggctct gctgcgctcg cacctgcgca 480
cacaccagcc cgagcgccca cgtagtcctg ctgcacgcct gttgctggag ttggaagagc 540
gcgcgctact acgcgaggcc cgactgggga gagcccgaag ctcaggggc atgcaggcca 600

0088270-960750

cccctgcact gagggtctgg cgcggcccca ggctccttca tcgtcccgnc ttccgttgcc 660
cctactgcaa aggcaaagtt tcgcaccttc ggcgggaacc gcgaacgcca cctggaacat 720
cctgcatang cccttggaaa gtgccggcct gtgcaatttc gggtttccag cccaggaagg 780
aaggaacttg cttgnaccca naagcccttg acgggcccca c 821

<210> 5512
<211> 753
<212> DNA
<213> Homo sapiens

<400> 5512
aagagcagcc attgtcccgc gcgcggacgc ttgctgtcgc cgagcagctc ggcccttcag 60
acttaacccc cagcggcctt gcggatgctg actaggagag gggaccgaac tagcttaacc 120
cgagtcggcc gtgttgcaga atcggggcag ggggttgcct aacccgagtt cgtcctgccg 180
cagagccgtg ctaggcactg aggcggtgac aggcccagcc tgggctgcgg gccagcggac 240
gcccagtgca gctcaggacc tcagcaccct gctgtgcctg gaggagagca tggaagagca 300
ggatgagaag cccccagagc ccccgaaggc ctgtgcacag gattctttcc ttcctcaaga 360
gattatcatc aaagtcgagg gagaagacac tgggtctctg accatcccat ctcaggaagg 420
agtgaacttc aaaattgtga ctgtggactt cacacgggag gaacagggta cttggaaccc 480
tgctcagagg accctggaca gagatgtgat cctggagaac cacagggacc tagtctcttg 540
ggacttggca actgcagttg gaaaaaaaga ttcaacttca aagcagagga tttttgatga 600
agaaccagct aatggagtga agatagaaag gtttacaagg gatgatcctt gggtatcttc 660
atgtgaagaa gtggatgatt gtaaaagacc agttggagaa ncaacaggaa aaacaagaga 720
tcttttgca nggaagtngg catttacttc aaa 753

<210> 5513
<211> 612
<212> DNA
<213> Homo sapiens

<400> 5513
gggtctgcgc accttcccgg cccagccggc gattcattca aaaggcgcgc aggctgcgcg 60
gctgtccggg cgctcgccga gccgggccgc ggcgccgagt cgaacgggga gccgagctgg 120
agctgccgcg gcgcagccag gccggcgacc accaggggcc tgaggatgaa gccaagtctg 180
ctgtgccggc ccctgtcctg cttccttatg ctgctgccct ggcctctcgc caccctgaca 240
tcaacaaccc tttggcagtg cccacctggg gaggagcccg acctggaccc agggcagggc 300
acattatgca ggccctgccc cccaggcacc ttctcagctg catggggctc cagcccatgc 360
cagccccatg cccgttgcag cctttggagg aggctggagg cccaggtggg catggcaact 420
cgagatacac tctgtggaga ctgctggcct gggtggtttg ggccttgggg ggttccccgc 480
gttccatgtc aaccatgttc ctgggcacct ctgggtactc atggctgtga tgagtggggg 540
cggcgggccc gacgtggcgt ggaggtggca gcaggggcca ncancggtgg tgagacacgg 600
nagcctggga ac 612

<210> 5514
<211> 759
<212> DNA
<213> Homo sapiens

0950250.0950250

<400> 5514
gaccagcagc ctgaactggc tggggcatcc ggaaggctta gatcttgtgg ccaagagttc 60
agaccgtggc gaagtggaga gtgacatgca gttggatggc ggtgactgcg tggtatggaa 120
gaaaattcag ctgaaatttg ctagaaaatg agttgttttg gaaagagact gtagagaaag 180
gcaaatggaa gaagaaagct tctgtgcccc cacagatacc gactgaaaag tgttagcatg 240
agcaaaagtt cctatctaat attatatgct ttcctttgct cccaaagtgc tgggattaca 300
ggcgtgagcc accatgctca gccaaagctg ttattttttt aagtatgtat tcctagatgt 360
tttatacttt tatagttatt gtgaatggaa tgattttttt cctagataac ttttaatgaa 420
tagaaacagt tcctgcttta tctccaaatt ctagaacagt cactggcaca caagtgctca 480
gtgtttaagt gacattgttt tcctgcaccc aaaagtagaa tgctgctcct cattggaagc 540
atgttacttt agcaaagtgc cactaaaatg accatagtcc atgtgctctg atcacttgtc 600
acagatggtg ataaaattca ttcacagctt cctttctagg cctgcagcat ttgggagaca 660
aaactctgct naacctttgg aagaaaaaag agaccagang ccattggtcc cgaaagtgga 720
tggaagatag ggaggtagaa ggaatgttac aggctnaaa 759

<210> 5515
<211> 792
<212> DNA
<213> Homo sapiens

<400> 5515
agtgcgcgcc ggccgggcaa ccctatgctg gcgtaatcgg gttcctccga gccgccgtag 60
gactggttcc ggcgggctgg tgaggaatgg agccggtagg ctgctgcggc gagtgccgcg 120
gctcctccgt agacccgcgg agcaccttcg tgttgagtaa cctggcggag gtggtggagc 180
gtgtgctcac cttcctgccc gccaaggcgt tgctgcgggt ggcctgcgtg tgccgcttat 240
ggagggagtg tgtgcgcaga gtattgcgga cccatcggag cgtaacctgg atctccgcag 300
gcctggcgga ggccggccac ctggaggggc attgcttggt tcgcgtggta gcagaggagc 360
ttgagaatgt tcgcatctta ccacatacag ttctttacat ggctgattca gaaactttca 420
ttagtctgga agagtgtcgt ggccataaga gagcaaggaa aagaactagt atggaaacag 480
cacttgccct tgagaagcta ttccccaaac aatgccaagt ccttgggatt gtgaccccag 540
gaattgtagt gactccaatg ggatcaggta gcaatcgacc tcaggaaata gaaattggag 600
aatctggttt tgctttatta ttccctcaaa ttgaaggaat aaaaatacaa ccctttcatt 660
ttattaagga tccaaagaat ttaacattag aaagacatca actcactgaa gtangtcttt 720
tagataaccc ttgaacttcg tgtggggncc ttggcttttg ggtatnaatt gctgtaaagg 780
tgggaagcca gt 792

<210> 5516
<211> 827
<212> DNA
<213> Homo sapiens

<400> 5516
aaacgcgctg gctgactggg gtcggcgttt agttcagcgc agcgactcgg ggacctggag 60
ctgacgccta gacacttgta ttagctttaa tagaagagaa atggaggagc catagaatat 120
taaggatgaa ttcaggaagg cctgagacca tggaaaactt gcctgctctc tacactattt 180
tccaaggaga ggttgctatg gtgacagact atggggcctt tatcaaaatc ccaggctgtc 240
ggaagcaagg tctggtccat cgaactcata tgtcatcctg tcgggtggat aagccctctg 300
agatagtaga tgttggagat aaagtgtggg tgaagcttat tggccgagag atgaaaaatg 360

atagaataaa agtatccctc tccatgaagg ttgtcaatca agggactggg aaagaccttg 420
atcccaacaa tgttatcatt gagcaagaag agaggcggag gcgatccttc caggattaca 480
ctgggcagaa gatcaccctt gaggctgtct tgaacactac ctgcaagaag tgtggctgta 540
aaggccactt tgcaaaagat tgnttcatgc aaccaggtgg gactaaatac tctctgatac 600
ctgatgagga agaggaaaag gaagaggcaa agtcagcaga gtttgagaag cctgacccta 660
caaggaatcc ttctagaaaa agaaagaagg agaanaagaa aaagaaacat agagatagga 720
agtcatctga ctctgacagc ttcanactct tgagaagtga tacaggccaa naaggcaaag 780
gcacacatca aaaggacagc cagggcagcn aaagaaagaa agaaaaa 827

<210> 5517
<211> 880
<212> DNA
<213> Homo sapiens

<400> 5517
agctcctccc cctgcgtctc tggcctcgcc ggtcttgggg ggatggttcc atcatggcgt 60
caatgcagac cacaggaagg agggtggaag tatggtttcc aaaacgacta cagaaagaac 120
tgttggcttt gcaaaatgac ccacctcctg gaatgacctt aaatgagaag agtgttcaaa 180
attcaattac acagtggatt gtagacatgg aaggtgcacc aggtacctta tatgaagggg 240
aaaaatttca acttctattt aaatttagta gtcgatatcc ttttgactct cctcaggtca 300
tgtttactgg tgaaaatatt cctgttcatc ctcatgttta tagcaatggt catatctgtt 360
tatccattct aacagaagac tggtccccag cgctctcagt ccaatcagtt tgtcttagca 420
ttattagcat gctttccagc tgcaaggaaa agagacgacc accggataat tctttttatg 480
tgcgaacatg taacaagaat ccaaagaaaa caaaatggtg gtatcatgat gatacttgtt 540
gatgccactg ttatcatcct cctagcagaa gatagtccta ctgagaaaat gagcactttg 600
atcattcagt ctttgaactt taacctttga ctggaagtga cctataggca atgaagacta 660
cttcttttac tgnattttta ctcgtgtgca ttctgggcgc atgttgatcg ctggtcagtc 720
caggcaactg acatgctttt attagncata cagtattaat gcaggtgtca ngaaatgtca 780
aatataattc catttttaat tttatttttt taagctttg ggaaaactcc aggtcctcat 840
gnattgngca ataacaatga ctttccttgg cgggtttggt 880

<210> 5518
<211> 581
<212> DNA
<213> Homo sapiens

<400> 5518
gtagcggcgg caacgaccat ggaggccacg tcccgggagg cggcgccagc gaagagctcg 60
gcctcgggcc ccaacgctcc ccccgccctg ttcgagctgt gcgggcgggc ggtgagcgcc 120
catatggggg ttctggagag cggggtgtgg gccctcccag gcccaatact tcaaagcatc 180
ctacctctgc tcaatatata ttacttggag aggattgagg aaactgccct caagaaaggc 240
ctctcaactc aggccatctg gcgccgactc tgggatgaac tgatgaagac aaggccttcc 300
agtttggaaa gtgtgacatg ttggcgagcc aagtttatgg aggccttttt tttcccatgt 360
tctacgtggg accattgatg tgtcttctga caggcgtctt tgtgatcagc ggttctcacc 420
tcttctgcac agctcccgcc atgtccgaca gctcaccatc tgtaacatgc tgcagggtgc 480
aaccgagctg gtggctgagc ccaaccgcag ggttctggag accctgccag ntnnctgcac 540
actctcaagt tccgcacctg ctgntctctg atgtggctgc t 581

0088294.0002

0508050.0002

<210> 5519
<211> 812
<212> DNA
<213> Homo sapiens

<400> 5519
tctctcgtgc aatggcgtcc gggctggtaa gattgctgca gcagggacat cgctgcctcc 60
tggctccagt cgcccccaag ctggtccctc cggttcgggg agtgaagaag ggattccgcg 120
ccgccttccg cttccagaag gagttagagc ggcagcgcct tctgcggtgc ccgccgccgc 180
ccgtgcgccg ttcagagaag ccgaactggg attaccatgc agaaatacaa gcttttggac 240
atcggttaca ggaaaacttt tccttagatc ttctcaaaac tgcatttgtt aatagctgct 300
atattaaaag tgaggaggcc aaacgccaac aacttgggat agagaaagaa gctgttcttc 360
tgaatcttaa aagtaatcaa gaactatccg aacaagggac atctttttca cagacttgcc 420
ttacacagtt tcttgaagac gagtacccag acatgcccac tgaaggcata aaaaatcttg 480
ttgactttct cactggtgag gaagtcgtgt gtcacgtggc tagaaacttg gctgtggagc 540
agttaacact gagtgaggaa ttcccagtgc ccccagctgt gttacagcag actttctttg 600
cagttattgg agccctgtta cagagcagtg gacctgagag gactgcactt ttcatcangg 660
acttcttaat tactcaaatg actggaaaag actctttgag atgcggaaga taataaatcc 720
catggggcta ttggtagaag aactgaanaa aaggaatggt tcaacttctg gaatcaagga 780
atttacttag gcanncttgg gggggacccc aa 812

<210> 5520
<211> 724
<212> DNA
<213> Homo sapiens

<400> 5520
acgccacccg cttcctcgcc gcagggggcc cgcccgctgg cccgtttccg gtccggtggg 60
tacaagatga cggagccggg cgcctctccc gaggaccctt gggtcaaggt ggagtatgcc 120
tacagcgaca acagcctgga ccccgggctt tttgtagaaa gcacccgcaa ggggagtgta 180
gtgtccagag ctaatagcat cggttccacc agtgcctctt ctgtccccaa cacagatgat 240
gaggacagtg attaccacca ggaggcctac aaggagtcct acaaagaccg gcggcggcgc 300
gcacacactc aggctgagca gaagaggagg gacgccatca agagaggcta tgatgacctt 360
cagaccatcg tccccacttg ccagcagcag gacttctcca ttggctccca aaagctcagc 420
aaagccatcg ttctacaaaa gaccattgac tacattcagt ttttgcacaa ggagaagaaa 480
aagcaggagg aggaggtgtc cacgttacgc aaggatgtca ccgccctaaa gatcatgaaa 540
gtgaactatg agcagattgt gaaggcacac caggacaacc cccatgaagg ggaggaccag 600
gtctctgacc aggtcaagtt caacgtgttt caaggcatca tggattccct gttccagtcc 660
ttcaatgcct ncatctnatg gccagctttc aggagctgtc ancgtgtgtc ttcagctgga 720
tcga 724

<210> 5521
<211> 670
<212> DNA
<213> Homo sapiens

<400> 5521
gaagccctgg caggtcagtg gcaggcactg tcacgctgag tcctatgctg gcagcgggga 60

accttgggga gaacacggga caccgcggaa gccgggaaat gattgtgcgg ctgtaaccgg 120
cacaggttcg cggtccgagt cactgcaccg agactccaag gcctgcagca gaaacagttt 180
aatagggggа gaggagagaa gaccccagtt ccgcctccat gagaggtttg gggatggggg 240
tgtttagggg tctggacagg ggcggctgaa gtgtggggtc gctggttggt ggggaagtga 300
caggcgaatc ctgggacggg aggtgaagaa accgcattct cctgctgagt gggttcctc 360
gtggggtttt caccctgctt ggcgccagcc tttccgttgg aattcaagat ctgagaaaga 420
acttgggcaa ctcgagcagc tctccgagat cttatcccca ggcacaatgc anaagccggc 480
ggtcagtgtc ttctgtgacc tgactctcag gaaggcggcc cccgcgaggc agtggggctc 540
angtttccat tccttgggga cacacggctg gtcagccagt tgaatgattg tatttggggg 600
agaagacaga agtgatctct tccttnctga ctctnagact aatgaagaga gaaaacaata 660
tgattcanta 670

<210> 5522
<211> 849
<212> DNA
<213> Homo sapiens

<400> 5522
gatgaattca cgtcgaagga aagctcagtt ttttctggga actacaaaca aacgtgccaa 60
aacagtggtt ttgcatatag atggccttga tgatacgtct cggagaaatc tatgtgaaga 120
ggctttgtta aaaattaaag gtgttattag ctttactttt caaatggctg ttcaaaggtg 180
tgtggtgcga atccgttcag atttgaaagc tgaggctttg gcatcagcaa tagcatcaac 240
caaggttatg aaagctcagc aagttgtgaa aagtgaaagt ggagaagaga tgttggtccc 300
attccaagat actcctgtgg aagttgaaca gaacacagag ctacctgact acctgcctga 360
ggatgagagt cccacaaagg aacaggacaa agcggtgtcc cgggtcggct cacacccaga 420
aggtggagct agctggctta gcacagctgc aaactttta tccagatcat tttattggtg 480
acttcacttt tgggctcaag gactgtgtga accaacaagg ggccagtttt ccattgttgt 540
ggtgaactgt caagtgcaat ttgcaataag ttatcatgaa aagtttttag attacacgat 600
cgcatatgct gcatttcaca ttttattgga cattttaccc cactgagtgg taaaaaggac 660
agaggctaca gatggagttg ctttggttat gaaagtattt tggnttggtt tctttcattt 720
aattgctcat atttaaaaac catgggtcca ctggtaaaac cncatgtgta tgtgcacttt 780
acattttatt tacgtgaaca tgtgantagg aaactcattt cttttcaagc cttaggacct 840
accttgaaa 849

<210> 5523
<211> 845
<212> DNA
<213> Homo sapiens

<400> 5523
atcctgagct tcgtgagttg agcgctgctg ctccgcggtg gagtcaccgc accgctcccg 60
ggatcatggt gttctacttc accagcagca gcgttaattc atctgcctac actatttaca 120
tgggaaaaga taaatatgaa aatgaagatc tgatcaagca tggctggcct gaagatatct 180
ggtttcatgt ggacaaactc tcttcggctc atgtatacct tcgattacat aagggagaga 240
atatagaaga catcccaaag gaagtgctga tggactgtgc ccaccttgtg aaggccaata 300
gcattcaagg ctgcaagatg aacaacgtta atgtggtata tacgccgtgg tctaacctga 360
agaaaacagc tgacatggat gtggggcaga taggctttca caggcagaag gatgtaaaaa 420
ttgtgacagt ggagaagaaa gtaaatgaga tcctgaaccg attagaaaag accaaagtcg 480

0098270.9459

agcggttccc agacctagca gcagagaaag aatgcagaga tcgtgaagag aggaatgaga 540
agaaagccca aattcaggaa atgaaaaaga gagaaaaaga agaaatgaag aagaagaggg 600
aaatggatga acttaggagc tattcatcac taatgaaagt tgaaaatatg tcttcaaatc 660
aggatggcaa tgattcagat gaattcatgt aaaaggagaa aaggagaaaa ggacctttga 720
aagatgtgaa tgtagagaca attgcagacc ttttgggttc atctggggtc tgaagtataa 780
aatncaccaa aattctacct ttatnctanc cagaaattat tgattttcaa gttttaaaaa 840
aattg 845

<210> 5524
<211> 849
<212> DNA
<213> Homo sapiens

<400> 5524
aggctcggcg gacctgctga ttgggaaccg atatggcggc gactctgggc agcggggagc 60
gctggacgga agcttacatt gacgcagtta gaagaaacaa atacccagaa gacacacctc 120
ctgagagtca tgacccctgt ggctgctgta actgcatgaa ggcacaaaag gaaaagaagt 180
ctgagaatga gtggactcag acccggcagg gtgaggggaa ctccacgtac agtgaggaac 240
agctgcttgg ggtacaaagg atcaagaaat gcagaaatta ctatgaaatt ctgggagttt 300
ctcgagatgc tagtgacgaa gagcttaaga aagcttacag aaaactcgcc ctgaaatttc 360
accctgacaa gaactgtgct cctggagcaa cagatgcttt caaagcaata ggaaatgcat 420
ttgcagtcct gagcaatcct gataagagac ttcgctatga tgaatacgga gatgaacagg 480
tgactttcac tgcccctcga gccagacctt ataattatta cagggatttt gaagctgaca 540
tcactccaga agagctgttc aacgtcttct ttggaggaca ttttcctaca ggaaatattc 600
atatgttttc aaatgtgaca gatgacactt actattaccg tcgacggcac ccgacatgag 660
angacacaga ctcagaagga ggaggaagaa gagaaacctt agactacata ttctgcattt 720
attcagctac ttccagttct tgggaatggg attatatctg ncattactca ctgctggctc 780
taatccccat atagctggtc tataaatcga ncttgggcta cccatttcta gagaacttan 840
aacctgaag 849

<210> 5525
<211> 756
<212> DNA
<213> Homo sapiens

<400> 5525
agctgtccgc gaaacctagt gctgaagcag gcgcggacgt gcccggtgcc tggcgcgtgg 60
tagcaggcgc ccggtgcccc ggccggcgaa gaccatggcg ttcatggtga agaccatggt 120
gggcggccag ctgaagaacc tcactggggg cctgggaggc ggcgaggata agggagatgg 180
ggacaagtcg gcagccgaag ctcagggcat gagccgggag gagtacgagg agtatcagaa 240
gcaactcgtg gaagagaaga tggagcggga tgcacagttc acacagagga aggcagagcg 300
ggccacactg cggagccact tccgagacaa ataccggcta cccaagaacg agacagatga 360
gagccagatc cagatggcag gtggagacgt ggagctgccc cgggagctgg ccaagatgat 420
cgaggaggac acagaggagg aggaggagaa ggcctcagtc cttgggcagc tggccagcct 480
tcctggcttg aacctgggct cactcaagga caaggcccag gccacactgg gggatctcaa 540
gcaatcagct gagaagtgtc acgtcatgtg accacttccc ggggttaccc actgggctgg 600
gcccccatga gggctaagag tgtgtcaact tncagggacc catactccat ttggggcttt 660
ggttcccttg cccatcctag ttncaagact ttccatncat gccccagcct atcttctggt 720

09/20/2005 9:45:50 AM

tcttcctctc cgtgggagta aagtccccat cttnat 756

<210> 5526
<211> 804
<212> DNA
<213> Homo sapiens

<400> 5526
aacaatgctc attgaagctg caaagggtgg ccatactaat gtagtttctt atctgttgga 60
ttatccaaat aatgttctgt cagttcccac cacagatgtg tctcagctcc ctccaccttc 120
tcaagatcag tctcaggtgc cacgtgtgcc aacgcataca cttgccatgg ttgtacctcc 180
ccaggaacct gacagaactt cacaggagaa ctctcctgcc cttttaggag tgcaaaaagc 240
tgtgagtacc agagtgccca ctggttccaa cagttcttct cagaccacag agtgtcttac 300
acctgaatcc tgttcgcaga ctacaagcaa tgtggcttcc caatcgatgc ctcctgtgta 360
tccttcagtt gacattgatg cacatactga gagcaatcat gacacagcat taacactagc 420
ttgtgcaggt ggtcatgaag aacttgtatc tgtgctcatt gcacgggatg ccaaaattga 480
acacagagac aaaaaaggtt tcacaccact aatcctggca gcaacagcag ggcatgttgg 540
agttgttgaa atccttttgg ataaaggtgg agatatagaa gcacagtctg aacgaactaa 600
ggatactccg ctttcattgg catgttctgg tggacgtcag gaggtggtag acttgctgct 660
ggctcgaggt gcaaataaag aacataggaa cgtatctgat tgtcaccact gagtctanct 720
gcgtctggan gatatggtaa tatcattaag aatctgctta atgcttgggc aanaaattaa 780
ttcaaggact gggagtaaac tagg 804

<210> 5527
<211> 743
<212> DNA
<213> Homo sapiens

<400> 5527
aagcattccc ttcgtgccgc taccaagatg gcggcgccca tcttgcggtc cttttcctgg 60
ggccggtggt ctggtaccct aaatctctca gtattgttgc ccttggggct gcgtaaggcc 120
cactcgggcg ctcaggggtt actggcagcg cagaaggctc gaggtctgtt caaggacttc 180
ttcccggaga cggggacgaa aatagagctc ccagagctct tcgaccgtgg cacggcgagt 240
tttccccaaa ccatttactg tggcttcgac cccacggcag actcgcttca tgtgggtcat 300
ctacttgcgc tgctgggcct gtttcatttg cagcgagcgg gccacaacgt gatcgcgctg 360
gtgggaggcg ccacggcgcg cctgggagac ccgagcggcc gtaccaagga acgcgaggcg 420
ctggagacag agcgcgtgcg agccaacgcg cgagctctgc gcctagggct tgaggccctg 480
gcggctaatc accagcagct tttcactgat gggcgctcct ggggcagctt cactgtgctg 540
gacaactcgg cctggtacca gaagcagcac ctggtggact tcctggcggc agtggggggt 600
cacttccgca tggggacgct gctgagcccg gcagaagcgt gcaacttgcg gctcaagagc 660
cccganggca tgagcttggc cgaagttctt ttaccaagtg cttncangcc tatgacttct 720
attaccttct ttccaacggt tat 743

<210> 5528
<211> 755
<212> DNA
<213> Homo sapiens

0952690.0702800

<400> 5528
gaaagtaact ccaggacgag accggagcga cccgcgcagc gagcataggc ggcgaagctg 60
cgcccggcgc ccgagaccgg cagctgcgtg gggcgggggc tgcgcccgag cccgatctgc 120
cgctccggct ccgagcagtg gtctcggaaa gagggtcgtg gtcccgcacg gatgcgcttg 180
ttgggagaaa ccttggagat tcacggcaag gcgtaaagcc tggggcttcc aacgatactc 240
tgggcaggga tggaagccta gatgcctcac cgcaaggagc ggccgagcgg gtcctcgctt 300
cacacacacg gcagcaccgg caccgcggag ggaggaaaca tgtcccggct gtctctcacc 360
cggtcgcctg tgtctccgct ggctgcccag ggcatccccc tgccagccca gctcaccaag 420
tccaatgcac ctgtgcacat cgatgtgggc ggccacatgt acaccagcag cctggccacg 480
ctcaccaagt accctgactc caggataagc cgcctcttca atggcactga acccatcgtc 540
ctggacagtt tgaagcaaca ttatttcatt gaccgggatg gggagatttt ccgctacgtc 600
ctgagcttct gcggacgtcc aagctgctgc ttcggatgac tttaaggact tcagtcttgc 660
ttgtacgagg aggccgccgc ttactatcaa gcttncaagc cccattggtg cgccnaacct 720
tggaaccgct tggcancaag gaaccaggga accaa 755

<210> 5529
<211> 799
<212> DNA
<213> Homo sapiens

<400> 5529
gaaaatgttt cctgttattt gctggacaag tcccaaagaa caggcagatg ttcttattaa 60
aagatcagcc tataagattg gtcaggacca ggcgcctctg gccacgtgcc tctcccctcc 120
agcacctgcg gtctgcggtg gcacctggca gctggaccac agccaggaga agggtactat 180
tagccctgct tcaaacatgc agaaactgag gcccggggag attaaataac ctgcctgaaa 240
tgacagtgag tagctgcgcc tggatttgag ttctgctctg gccaatcccc aagctccacg 300
ctgtcagcca ccccgctctc ctacctccca gaggagcagg ctacactcct gttccttta 360
gagagagaaa tattgcggcc gggcgcggtg gctcacgtct gtaatcccag cattttggca 420
ggccaagggt tttgccatgt tcgtggggct ggtctcaaac taattacctc agatgatccg 480
cccacctcgg cctcccaaag tgctgggatt acagccgtcc tgggccgccg gacacccccg 540
ctggggccga tgcccaacag tgacatcgac ttgagcaacc tggagcggct ggagaagtac 600
cggagcttcg accgctaccg gcgccgggca gagcaggagg cgcaggcccc gcactggtgg 660
cggacctacc gagagtattt cggggagaag acagagttcc agcttctaaa atatttgctn 720
ctaaaatctt gaccacctga ctttccggat tgggatgccg ntctgtgcgc cttaaatact 780
ctgnagatcc caaagagaa 799

<210> 5530
<211> 810
<212> DNA
<213> Homo sapiens

<400> 5530
aaatgaaatg ttttgaaata tacttaaaca acaaactttg aagaaagtgt tgttataaaa 60
ttattgaagc gatttctatg tggaaataaa tgtgaaaaat aactatgata ttttggtaaa 120
atattcacca cttataatgc ctcatcttaa tagctaactc aggtttaata gtcttataaa 180
aagtaatcag ttaaatgatt acttgcttat aaatatctaa actagtccag ttatgaaatc 240
agtgtaatac attgattttt aaaactgctg ctttttatgc tttaaggaaa atgtatttca 300
tatttgagtt taaaggaatt gaaattactt caggaaatga atataaaata ggttcacagt 360

0063703-0946950

taaatgaata agcttttgtt tatttgtggg tggagttatt ctccaatttt ttctgccatt 420
tttggctcta gttcaggttt tagcttgatt agcaaaggtt tttgacaaac agtttatgaa 480
aaaataaaac ttaaatacat tacacgggtt gtaaggacaa aggattttaa aatctgagca 540
cttaggtgaa gggacaagca ggtttatgtg tttaaacaga aagaagggaa aaggtctatg 600
tgatatggta ctgaaatttt gatcccaata gaattcattt ctcttacgtt gaatccccaa 660
tcataattaa gcccgtatac cccggattaa aattaaccgg aagcatttca cataaatggt 720
tggtttcaag ncattcaacc tacccatgga aattncctgg cccaanggat tactttaaat 780
ccgggaattt aaaaattttt cctaatggaa 810

<210> 5531
<211> 696
<212> DNA
<213> Homo sapiens

<400> 5531
agcgccctcc gcgatttggg ctccagcggg cagggtgact tcctttttct gcccactctg 60
gtaacttatt gctctgctgg gctctttccc ttagggtctc tggccctgtt cttgccccag 120
catgactttt atcgggacgc cgttgtggaa gcctcacgca ggagccctgc ccccgtggag 180
aagatcccac tggtgactcc aaccctacca ccatgaatgg ggtcctgatc ccccatacgc 240
ccatcgcagt ggacttctgg agcctgcgcc gggctggcac cgcacgtctc ttcttcttgt 300
ctcacatgca ctcggaccac accgtgggcc tgtctagcac ctgggcccgg cccctctact 360
gctccccaat tacagcccac ctcttgcatc gtcacctaca ggtatctaag caatggatcc 420
aagccctgga ggttggtgag agccatgtat tacccctaga tgaaattggg caagagacca 480
tgaccgtaac cctcctcgat gccaatcact gtcctggttc tgtcatgttt ctctttgaag 540
gatattttgg aaccatcctc tacacaggtg attttcgata cacaccatcc atgctaaagg 600
agccagccct gacactgggg aaacagatcc atactttata cctagacaac accaattgca 660
atccancccct ggntcttnct tcccgacaag aagctg 696

<210> 5532
<211> 820
<212> DNA
<213> Homo sapiens

<400> 5532
acaagatggg ctatgacaca ccgttgcatt ttgcttgtaa gtttggaaat gcagatgtag 60
tcaacgtgct ttcgtcacac catttgattg taaaaaactc aaggaataaa tatgataaaa 120
cacctgaaga tgtaatttgt gaaagaagca aaaataaatc tgtggaactg aaggagcgga 180
tcagagagta tttaaagggc cactactacg tgcccctcct gagagcggaa gagacttctt 240
ctccagtcat cggggagctg tggtccccag accagacggc tgaggcctct cacgtcagcc 300
gctatggagg cagccccaga gacccggtac tgaccctgag agccttcgca gggcccctga 360
gtccagccaa ggcagaagat tttcgcaagc tctggaaaac tccacctcga gagaaagcag 420
gcttccttca ccacgtcaag aagtcggacc cggaaagagg ctttgagaga gtgggaaggg 480
agctagctca tgagctgggg tatccctggg ttgaatactg ggaatttctg ggctgttttg 540
ttgatctgtc ttcccaggaa ggcctgcaaa gactagaaga atatctcaca cagcaggaaa 600
taggcaaaaa ggctcaacaa gaaacaggag aacgggaagc ctcctgccga gataaagcca 660
ccacgtctgg cagcaattcc atttncgtga nggcgtttct agatgaagat gacatgagct 720
tggaagaaat aaaaaatcgg caaaatgcag ctcgnaataa cagccggcca cagtcggtgc 780
ttttggcata cnagngcacg ccttcccttg gagcagagca 820

<210> 5533
<211> 711
<212> DNA
<213> Homo sapiens

<400> 5533
agctgctggc tgggctgcct gttgagtcag ccttcttccc tcacggctct tctcccggtc 60
cctgaaactc ggctgccagg ggagctggag ccacctgcga aggtgtcctc ccatactgga 120
cccctacagg aagctccgtg tgcccagctg gggcacagcc ccagctgatg ccccagaggg 180
gccacccatc gcaagagggg ctttgggctc tgccctccct ccccatggcg catgggccaa 240
agcctgagac tgaaggactg ttggacctca gcttcctgac agaggaggag caggaggcca 300
ttgctggcgt cctccaacga gatgcccgcc tgcgccagct ggaggagggg cgggtcagca 360
agctccgggc ctcagtggca gaccctgggc agctgaagat cctgacaggg gactggttcc 420
aggaagcacg ctcccagcgg caccacaatg cccacttcgg ctctgacctt gtccgagcgt 480
ctatgcgcag gaagaagagc accaggggag accaggctcc aggccacgac agggaggctg 540
aggctgctgt gaaagagaag gaagaggggc cagagcccag gctcaccatt gatgaggccc 600
ctcaggagag gctcanggag actgaggctt cagatcctga ggangcgtcc aagcccagga 660
agatcctggc caaggagacc aacaggtctg tgccgangaa gcttacccgg a 711

<210> 5534
<211> 746
<212> DNA
<213> Homo sapiens

<400> 5534
actgaaaccc aagagcctag atgtgcggca ggaggagctg ggggccgtgg tcgacaagga 60
gatggcggcc acatccgcag ccattgaaga tgctgtgcgg aggattgagg acatgatgaa 120
ccaggcacgc cacgccagct cgggggtgaa gctggaagtg aacgagagga tcctcaactc 180
ctgcacagac ctgatgaagg ctatccggct cctggtgacg acatccacta gcctgcagaa 240
ggagatcgtg gagagcggca gggggggcagc cacgcagcag gaattttacg ccaagaactc 300
gcgctggacc gaaggcctca tctcggcctc caaggctgtg ggctggggag ccacacagct 360
ggtggaggca gctgacaagg tggtgcttca cacgggcaag tatgaggagc tcatcgtctg 420
ctcccacgag atcgcagcca gcacggccca gctggtggcg gcctccaagg tgaaggccaa 480
caagcacagc ccccacctga gccgctgcag gaatgttctc gcacagtcaa tgagagggct 540
gccaatgtgg tggcctccac caagtcaggc caggagcaga ttgaggacag agacaccatg 600
gatttctccg gcctgtccct catcaagctg aagaagcagg agatggagac gcangtgcgt 660
gtcctggact ggagaagacg ctggaagctg aacgcatgcn gntgggggaa ttgccggaac 720
aacactacgt gctggctggg gcatca 746

<210> 5535
<211> 776
<212> DNA
<213> Homo sapiens

<400> 5535
ccggagactc gggaggctga gctttcctcg gcctgagcca gccagacccc gggcaccgcg 60
ctcacccctc ttcgccgcca cgtccgcgaa ggcctcacgc gcgaggccag gcgaggcccc 120

US 2005/0059005 A1

gaggcgccca ccacttcacg acaccggagc gaaccgggcg ccagaggctg cgacccccct 180
gccccgaatc ctgccggtgg gagtggctgc atttgaacca aacggccttc gcgggcagca 240
gccgtcgccc cgcagtcccg gggctcccaa gggcctgtga ccgacgccgc cctccgcgtc 300
ttcgtccccg aagccccggg aaccatccgc cctcgggaga ccatgctgca gatgcgagga 360
aagccgtttc ctggaacatc ggaattctaa ccccagggtg aaggactcac gacaggcgag 420
gggcagacat gctgaattcc acgggcgaac tggagttttc gaacgaagaa gatcccgaga 480
tcatctccca actcacttcc ctgcctctgt ccggtgggaa aagctcagct ggtgtgcccg 540
aaaaaacggg ctatccggac tccgtttatg tcatggcagc caacattttt cagggtattc 600
gaatcgaaaa gtcggcacag aaagtcttaa tcaagtatgg gaatgaaccc ctgcggtcct 660
tgtccgagtc tgaggatcag tcctttaacg ttggcttatg agctggnttt aatgcccttg 720
aaatatcaag atatttggaa actatattga tagacagntg atttccaagt ncacac 776

<210> 5536
<211> 774
<212> DNA
<213> Homo sapiens

<400> 5536
gcttgtcgtg cagctggccc caagcgcgcg gggcaaggcg gccctgcagg ggtgagcttt 60
cctctgagaa cccggggcct tagcgacacg taatccggtt ttccgtctcc ttggtgcaga 120
tgaagaaacc gacgcccatg ggcgaaaggg acctgctcaa gttcactcaa gaccacagag 180
ctgggcagca agaaggagct caagtccatg cccttcatca cctacctctc aggtttgctg 240
acagcccaga tgctgtcaga tgaccagctc atttcaggtg tggagattcg ctgtgaggag 300
aaggggcgct gtccatctac ctgtcacctt tgccgccggc caggcaagga gcagctgagc 360
cccacaccag tgctgctgga aatcaaccgt gtggtgccac tttataccct catccaagac 420
aatggcacaa aggaggcctt caagagtgca ccgatgagtt cctactggtg ctcagggaaa 480
ggggatgtga tcgatgactg gtgcaggtgt gacctcagcg cctttgatgc caatgggctc 540
cccaactgca gccccccttct gcagccggtg ctgcggctgt ccccaacagt ggagcccttc 600
agtactgtgg tctccttgga gtgggtggat gttcagccag ctattgggac caaggtctnc 660
gactatattc tgcagcataa gaaagtggat gaatcacnga cacttgacct gtacacagga 720
naattcctga gttttgctga tgacttactc tctggcctgg gcacatcttg ngta 774

<210> 5537
<211> 854
<212> DNA
<213> Homo sapiens

<400> 5537
agcgcaccgc gggaagatgg cgttggaggt cggcgatatg gaagatgggc agctttccga 60
ctcggattcc gacatgacgg tcgcacccag cgacaggccg ctgcaattgc caaaagtgct 120
aggtggcgac agtgctatga gggccttcca gaacacggca actgcatgtg caccagtatc 180
acattatcga gctgttgaaa gtgtggattc aagtgaagaa agtttttctg attcagatga 240
tgatagctgt ctttggaaac gcaaacgaca gaaatgtttt aaccctcctc ccaaaccaga 300
gccttttcag tttggccaga gcagtcagaa accacctgtt gctggaggaa agaagattaa 360
caacatatgg ggtgctgtgc tgcaggaaca gaatcaagat gcagtggcca ctgaacttgg 420
tatcttggga atggagggca ctattgacag aagcagacaa tccgagacct acaattattt 480
gcttgccaag aaacttagga aggaatctca agagcataca aaagatctag acaaggaact 540
agatgaatat atgcatggtg gcaaaaaaat gggatcaaag gaagaggaaa atgggcaagg 600

09/2009 Sep 09 15:50:50

tcatctcaaa aggaaacgac ctgtcaaaga caggctaggg aacagaccag aaatgaacta 660
taaaggtcga tacgagatca cagcggaaga ttctcaagag aaagtggctg atgaaattca 720
ttcaggttac aggaaccaaa gaaagacctg atagcccgag tagtgaggat tattgtacca 780
aaaggcaatt gacttctgat ggaaaccgtt gaattgaaca aatgnggctc ttatatgaat 840
ggantcgaag anac 854

<210> 5538
<211> 774
<212> DNA
<213> Homo sapiens

<400> 5538
gtatcgccac gcctggtctc tgggacgccc ctccggaccg gtttcgcctc gcggagccgg 60
taggtccagg tgcagcggcc gcagtgctgc gtccgtgcgc cgcgggctgg ggcggtctca 120
ggtgtgccga agctctggtc agtgccatga tccggcagga gcgctccaca tcctaccagg 180
agctgagtga ggagttggtc caggtggttg agaactcaga gctggcagac gagcaggaca 240
aggagacggt cagagtccaa ggtccgggta tcttaccagg cctggacagc gagtccgcct 300
ccagcagcat ccgcttcagc aaggcctgcc tgaagaacgt cttctcggtc ctactcatct 360
tcatctacct gctgctcatg gctgtggccg tcttcctggt ctaccggacc atcacagact 420
ttcgtgagaa actcaagcac cctgtcatgt ctgtgtctta caaggaagtg gatcgctatg 480
atgccccagg tattgccttg taccccggtc aggcccagtt gctcagctgt aagcaccatt 540
acgaggtcat tcctcctctg acaagccctg gccagccggg tgacatgaat tgcaccaccc 600
agaggatcaa ctacacggac cccttntcaa tcagactgtg aaatctgcct gattgtcagg 660
ggccccggaa gtgaaaaagc ggactgtctt ctcagttcgc tgacaaagta tgagacttna 720
cgcatgatac tcttttctnt tcagagtctg aagccaaaag gagctnatca gctg 774

<210> 5539
<211> 826
<212> DNA
<213> Homo sapiens

<400> 5539
gacatctccg ggaacccagc ccaggccctg cctcccggac acaccgacgc tcacgtagtc 60
gcgcttgcca caaccctgcg ggctctccga tgcggcgagc gagctgggga gggggcttct 120
ccgcggccca aaagcctgtt catctagccc catgatggct gtggacatcg agtacagata 180
caactgcatg gctccttcct tgcgccaaga gaggtttgcc tttaagatct caccaaagcc 240
cagcaaacca ctgaggcctt gtattcagct gagcagcaag aatgaagcca gtggaatggt 300
ggccccggct gtccaggaga agaaggtgaa aaagcgggtg tccttcgcag acaaccaggg 360
gctggccctg acaatggtca aagtgttctc ggaattcgat gacccgctag atatgccatt 420
caacatcacc gagctcctag acaacattgt gagcttgacg acagcagaga gcgagagctt 480
tgttctggat ttttcccagc cctctgcaga ttacttagac tttagaaatc gacttcaggc 540
cgaccacgtc tgccttgaga actgtgtgct caaggacaag gccattgcag gcactgcgaa 600
ggttcagaac ctcgcatttg agaagaccgt gaaaataagg atgacgttcg acacctggaa 660
gaactacaca gacttttctt gtcagtacgt gaaggacact tatgccggnt cagacaggga 720
cacgttcttc ttngacatca gtttgcccga aaagattcag tcttatgaaa gaatggaatt 780
tgctgggtac ttacgaatgc aatgggcana cntctgggac aggaac 826

<210> 5540

08.02.2010 09:46:50

<211> 816
<212> DNA
<213> Homo sapiens

<400> 5540
agttaatagg ctggctgtcg cttggggttg ctgcataaat gctaggagca gcagctctat 60
ggttatgagg tggggagaac ggaatgacgt catcgcttgg gagctgctgc aggatggagt 120
ggaaagctgc tgctgatggc attgtttttg tggcagcaag ctgaatgaca gatcctcact 180
acaaagatac ccctttggcc cccgtgtagg cctccttggt tcgggtgttt caccatgcca 240
gcacagcgcc atgagtcctg gatgcatgct gctgtttgtg tttggctttg ttggcggggc 300
ggtggtcatt aattctgcta tcttagtatc tctctctgtt ttgctgcttg tgcacttttc 360
tatttctacc ggtgtgccag ctctgacgca gaacctacca aggatactca gaaaagaacg 420
ccctatatca ttaggaattt tcccattacc tgctggagat ggattgctta cacctgatgc 480
tcagaaagga ggagagaccc ctggatctga gcaatggaaa tttcaggaat taagtcaacc 540
acgttctcat accagcctga aggatgagct ttctgatgtt agccaaggcg gatctaaagc 600
taccactcca gcatcaacag ctaattcaga tgtggcaaca attcctactg atactccctt 660
aaaggaagaa aaccaaggat ttgtgaangt tacagatgcc ccaaataaat cagagataac 720
aaacacattg aaatacaggt agcccangaa actagaaatg natctactgg gctcttgctg 780
aaaatgaana aaaagtcaga agttcaacca tcatcg 816

<210> 5541
<211> 850
<212> DNA
<213> Homo sapiens

<400> 5541
acggcgccgg agagatggcg gagttggaca tcgggcagca ctgccaggtg gagcattgcc 60
ggcagcgaga ttttcttcca tttgtgtgtg atgattgttc aggaatattt tgccttgaac 120
acagaagcag ggagtctcat ggttgtcctg aggtgactgt aatcaatgag agactgaaga 180
cagatcaaca tacatcttac ccatgctctt tcaaagactg tgctgagaga gaacttgtgg 240
cagttatatg tccttattgt gagaagaatt tttgcctgag acaccgtcat cagtcagatc 300
atgagtgtga aaaactggaa atcccaaagc ctcgaatggc tgccactcag aaacttgtta 360
aagacattat tgattccaag acaggagaaa cagcaagtaa acgatggaaa ggtgccaaaa 420
atagtgaaac agctgcaaag gttgcattga tgaaattaaa gatgcatgct gatggcgata 480
agtcattacc acagacagaa agaatttact ttcaggtttt cttacctaaa gggagcaaag 540
agaagagcaa accaatgctc ttttgccacc gatggagcat tggaaaggcc atagactttg 600
ccgcttctct agccaggctt aaaaatgaca ataacaaatt tacagctaag aaattaaggc 660
tgtgtcacat tacttcagga gaagccttac ccttggatca tactttggaa acctggattg 720
ctaaggagga ttgtccttta tataatgggn ggaaatataa tcttggaata tctcaatgat 780
gaagacaatt ctgtaaaaat gttgaatcnt acttggaata gcattcaagg attcaagtcc 840
gaaatcncag 850

<210> 5542
<211> 727
<212> DNA
<213> Homo sapiens

<400> 5542

0050450.0007000

tttccttttc cttctctcct gagcgctcct gcagttcctg gggcgtagta ggggatccac 60
aagcgtttgt gaccagtgaa gttctttaca agggtgagat ctgcacggga ggacccgagc 120
gagggtctcg gcttgccagg aagccggggt tccccgggaa gcgtggagtt cacccgcgca 180
ctcgaagtgc ctttgcaaaa ttatatctgg gtgttggcac ccagccacta ttctgccaat 240
gaagtacatc ctggtcacgg gtggggtcat ctcaggcatt ggtaaaggga tcattgccag 300
cagcattgga acgattctaa aatcatgtgg actccgagtt actgccataa aaatcgaccc 360
ctatattaac atcgatgctg gcacttttc accttatgaa cacggtgaag tcttcgtctt 420
aaatgatggt ggagaagttg atttagacct tggaaattat gaaagatttt tggatattaa 480
tctttataaa gacaacaata tcaccacggg gaagatatat cagcatgtga tcaataaaga 540
gaggcgtggt gattacctgg ggaaaacagt gcaagttgtc cctcacatta ctgatgctgt 600
ccaggaatgg gttatgaatc aagccaaggt gccggtggat ggtaataagg aagagcccca 660
aatatgcgtt attganctgg gangcaccat tggagacatc gaaggaatgc ccgttgtgga 720
ngcgtta 727

<210> 5543
<211> 795
<212> DNA
<213> Homo sapiens

<400> 5543
agtttcctct tggcctgaac ttggctgacc tccgcagctt ccgcccgact ctggctaaag 60
tcttggaggc tactgccttg aagatgacct ctagggacca gcccagaccc aagggccccc 120
ccgaaaagca cttcgccttg tcctgggatc tcgaactctg agagctctcc gacgctgaat 180
tatcagggca ttctaaatcg gctcaagcag ttccccaggt tttctcctca ttttgctgcg 240
gagttggaga gcatttacta ctcgctgcac aagatccagc aggatgtggc agaacatcac 300
aagcagatag gaaacgtctt acagattgtg gagagctgca gccaactcca gggtttccag 360
tctgaggagg tctcacctgc tgaaccagcc agccctggga cgccccagca ggtgaaggac 420
aagaccctgc aggagtcgag ctttgaggac atcatggcca ccaggtcctc cgactggctc 480
cggcggcctt tgggggagga caatcagccg gagacccagc tgttctggga caaggagcct 540
tggttttggc acgacactct gaccgagcaa ctctggcgga tttttgccgg cgtccacgat 600
gagaaggcaa agcccagaga cagacagcag gcaccaggcc tgggcaggaa acaangcacc 660
aggatcctgt gacccangaa cagacccatg tcctgaagat gcctcacccc caggccacct 720
gangcctctc agtccccctg aggttccaag acaggaacca agttgggggt ggncaagacc 780
tctgganacc tttgg 795

<210> 5544
<211> 783
<212> DNA
<213> Homo sapiens

<400> 5544
ggcagaccgt cacgtgacga cgtcgattcg cgtgcggcag tggcgaagtt gacaaacccc 60
gcgaaaatcg actctttgca tcgcacattt tgttgatttt ccctcgtttt tctttctctc 120
tttcccccgt ccatccgaaa gagggttgga aaaaaacaaa acaaacaaac aaacaaaaaa 180
aaaaaaccta acgctgttgg gacccggaag cggaaagggc atctttgagg tcgatacttc 240
cgggtcattg ggagagtgcg ggattcctgg gccgagagcg ggtggctgag ccgggacctc 300
gcgtgattct cggaacccga ggagaagcgg cgtccggggc tatggctgtg actctggaca 360
aagacgctta ttatcggcga gtgaagagac tgtacagcaa ttggcggaaa ggagaagatg 420

0080270-960502

agtatgccaa cgttgatgcc attgttgtat cagtgggtgt tgatgaagaa attgtttatg 480
ccaaatcaac tgccttacag acatggctct ttggttatga actaactgat actatcatgg 540
tcttttgtga tgacaaaatc atctttatgg ccagcaagaa aaaagtggag ttcttgaaac 600
agattgccaa cactaagggc aatgagaatg ctaatggagc ccctgccata cactgctaat 660
acgagaaaag aatgaaagta ataagagtag ctttgacaaa atgattgaag ccattaaaga 720
aagcaagaat ggcaagaana ttggagtgtt cancaaagac aaattncctg gagagttcat 780
gaa 783

<210> 5545
<211> 765
<212> DNA
<213> Homo sapiens

<400> 5545
gtaaaacctt tagtcgaagc ttctctctta aacttcatca gaacattcat acgggagaga 60
agccttttga atgcagtaat tgtagaaaag ctttcagaca gatctcatcc atcctacttc 120
atcagagaat tcacagtgga aagaaaagcc atgaatgcaa taaatgtggg gaaagcttca 180
atcaaagaac aaccccttatt ctacatatga gaattcatga tggaaaggaa attcttgact 240
gtgggaaggc cttgagtcaa tgtcagtctt tcaatataca tcagaaaatt catgttgttg 300
ggaatgtctg ccagtgcaga aagtgcggaa aagccttcaa tcagatgtca tcccttttac 360
ttcataagaa aattcacaat ggaaagaaaa cacataaata taataaatgt gggagaggct 420
tcaaaaagaa atcagtcttt gttgtacata aaagaatcca tgctggagag aaaatccctg 480
aaaatgcgaa ggccttaagt cagagtctac agcaaagaag tcaccattta gagaatcctt 540
ttaaatgcag aaaatgtggg aaattattta ataggatttc acccctgatg cttcaccaga 600
gaattcacac ttcagagaaa ccgtcaaatg tgataaatgt gacaagttct tcangcggct 660
ttcaaccctt attctgcatc taagaattca taatggagaa aaactntnca gatgccataa 720
atgtgaaaag ggctgcaatc ggcattcatc ccttattcaa catcn 765

<210> 5546
<211> 811
<212> DNA
<213> Homo sapiens

<400> 5546
ggaagtggat ggcgtggaga tatggcgcaa ctgcggcgcg gacacttgac attcagggac 60
gtggccatag aattctctca ggaggagtgg aaatgcctgg accctgtgca gaaggcttta 120
tacagggatg tgatgttgga gaactacagg aacctggtct ccctgggaat ctgtcttcct 180
gacctgagta ttatctccat gatgaagcaa aggacagagc cctggactgt ggagaatgaa 240
atgaaagtag caaaaaatcc agataggtgg gaaggtatca aagatatcaa cacagatgga 300
gtcctgttct gtcgcccagg ctggagtaca gtggtgtgat ctcggctcac tgcaacttcc 360
gcctcccagg gaggagctgt gcagtgagaa gcaaagcagg aaacaagcct attacaaatc 420
aacttggatt aacctttcag ttacctctgc cagaactgga gatatttcaa ggtgaaggga 480
agatttatga atgtaatcaa gttcaaaagt tcatcagcca cagttcttca gtttcgccac 540
ttcaaagaat ttactctggg gtcaaaaccc acatatttaa taaacatagg aatgattttg 600
ttgattttcc attgctgtca caagaacaga aagcacacat taggagaaaa ccttacgaat 660
gtaatgagca gggcaaagtc ttcanagtgt cttcaagcct tnctaatcat caagtaatcc 720
acacttgcag attaacctaa cagatgtcat tggatgtggt aaaaaccgtc agggacaant 780
taaggccttt gcanaaccat tgggnaaatt c 811

09529465.072800

0090209.0050

<210> 5547
<211> 810
<212> DNA
<213> Homo sapiens

<400> 5547
ggaggctgac gcgctagcgt ggctctaaga cgcgtcaccc acgctgcggg caagccatgg 60
cgggaagcga gccgcgcagc ggaacaaact cgccgccgcc gcccttcagc gactggggcc 120
gcctggaggc ggccatcctc agcggctgga agaccttctg gcagtcagtg agcaaggaga 180
gggtggcgcg tacgacctca cgggaggagg tggatgaggc ggccagcacc ctgacgcggc 240
tgccgattga tgtacagcta tatattttgt cctttctttc acctcatgat ctgtgtcagt 300
tgggaagtac aaatcattat tggaatgaaa ctgtaagaga tccaattctg tggagatact 360
ttttgttgag ggatcttcct tcttggtctt ctgttgactg gaagtctctt ccagatctag 420
aaatcttaaa aaagcctata tctgaggtca ctgatggtgc atttttgac tacatggcag 480
tctatagaat gtgctgtcca tacacaagaa gagcttcaaa atccagccgt cctatgtatg 540
gagctgtcac ttctttttta cactccctga tcattcagaa tgaaccacga tttgctatgt 600
ttggaccagg tttggaagaa ttgaatacct ctttggtgtt gagcttgatg tcttcagang 660
aactttgccc aacagctggt ttgcctcaaa ggcagattga tggtattgga tcangagtca 720
attttcagtt gaacaaccaa cataaattca acattctaat cttatattca actacccaga 780
aanggaaaga gattgancca ggggaagagc 810

<210> 5548
<211> 500
<212> DNA
<213> Homo sapiens

<400> 5548
actaaggcac atgacgtaga aatattgagg tacaaaatgc aaatttctgc ataagatttt 60
taagatattc attttggaaa atgaaggtga acatcatctc ccagaatatt cagcttttag 120
cttgtttttt cttttggacc agttcaacca gcaacttgta cctagcgata cagtcttcct 180
tgctcttgga cgggacacat ctggctattt tgtcccagcg gtcagaggat ccccttgggt 240
actgctgcaa cgccagttcc agaagtttct gttgattttg agtccacggc tcctctgcag 300
accgagctct ctcttttctc aggctctcct cgtcgctgga ctcgttttgt tctgctatgt 360
caaaagtcct tctgccgctt ggctctggac ttctctctgg cttccgcttc ctggaancct 420
cancaagcct ggcttgnttt ccgcttccaa ggcccggctt naangggccc cggntcntgt 480
tacccggagt ttccctcctg 500

<210> 5549
<211> 522
<212> DNA
<213> Homo sapiens

<400> 5549
catggncact tctttatttt tgatncaaat gtacatgaca cgtnttgaca gcccacccac 60
caccacacag gtagggcctg gcccccaggg aanaagcggg atggggagag agctggtggg 120
tcccaccgtc tgcctctcca gccttcccag gctgcagcca ggttcccagg cctccanagg 180
gtgggaccac agcaggtgca ggtagtgatg gtgggtgctg gccttgcana ggttacgggg 240

aggggactca gctccacagc caccagctga gtcggggacc ccggggagcc agccccaggc 300
tcaggtgctc agtcctccac cctagccagc acacattccc cctccacgca ggagcaggag 360
gagatggagg gaagtggttt ttgatttaag ttcatagana aggggctana nttgggaggg 420
atcaagggag gcacttgcag gacaaaactt gctacccgga caagtcctgg ctccaagtng 480
ggaaaggnan ctnatcccat tcttgtccaa tngtttnggn cc 522

<210> 5550
<211> 545
<212> DNA
<213> Homo sapiens

<400> 5550
gtgggagaca gagtctcgct ctgtcaccca ggctggagtg cactggcgtg atctcagccc 60
actgcaatgt ctgcctcctg ggttcaagca attctcctac ctcagcctcc caagtagctg 120
ggactacagg tgcccgccac cacgcccggc taatttttg tattttagta gagacagggt 180
ttcaccatgt tgcccaggct ggtctcaaac tcctgagctc aggcaatccg cctgcctcac 240
cctcccaaag tgctaggatt acaggcatga agccaccgta cccagccaaa aagctgggat 300
ttttaaagat attttctttg cttttaaaag aacactataa actagtcttn gaaaacaaag 360
tacaatgtgt caacagaaaa aaatatcaat ttgcactgat gggaaactgg aatcatatcc 420
taactataca gccctttaa attggtgaaa tcaaaaaacg aaggcttatt attagagaaa 480
ttcctaattt cttgagccag ntgcttgaaa aagttgccaa ttttggctga cgtccttaat 540
nacaa 545

<210> 5551
<211> 543
<212> DNA
<213> Homo sapiens

<400> 5551
aatctctgct tttcaggtca aataattctc ttgatctgcc tgcagtttgg ctagcatttc 60
ttctgccact cttttctttt ttttttgaga tggagtcttg cactgtcgcc caggctggag 120
tgcagtggcg tgatctcggc ccactgcaag ctctggcctc ccgggttcac atcattctcc 180
tgcctcagcc tcccgagcag ctgggaccac aggcacccgc caccatgccc ggctaatttt 240
ttgtactttt agtagagacg gggtttcagt gtgttagcca ggatggtctc aatctcctga 300
cctcgtgatc tgcccacctt ggcctcccaa agtgctggga ttacaggcac gagccactgt 360
gccccggcct cttctgccat tcttaactat tattataccc atctactaca tattttcagt 420
tctaaaattt tatttttac agntataatt ctctactgna actttccctc tggttactca 480
ttatgaccat gttttccttt aattccttgg ctatatttat aactggcttn aaatcctggn 540
tgn 543

<210> 5552
<211> 502
<212> DNA
<213> Homo sapiens

<400> 5552
ctcccaaagt ctcactgtca acatgtattt ggggagacat caaactcagt atgaattgac 60
aggatgatct agcttccaag aagaccaaat ttaacctcag gctgcattaa gagaagtata 120

EP 1 950 305 A2

gtagcctacc ctgagaaagg tgacagttcc tctgctttgc actaatcaga atatatctag 180
agggctgtgc tattctcttc actgtatttt tagagggttc tctgcaaact gaagcacagc 240
cagggcagga tgactaggat ggtgaggctt ttaggaacac gccattgaat aagggttgtg 300
aattagcact gtttgacctg gaaaggagaa ggatgacagg aggaaaggag gatctgatgt 360
aattgacttc acatgtgtga gaagctagga tagggaagaa ggagtaaatc agaaatgtcc 420
canagggcan accttggatc antgggaagt tcancgaanc aaattgggct tcatattang 480
catactttnt acgagaacta ct 502

<210> 5553
<211> 463
<212> DNA
<213> Homo sapiens

<400> 5553
gagatggagt ctcactctgt cacctaggct agagtgcaat ggcgcgatct tggcttactg 60
caacctccgc ctgccccacc tcgggttcaa gtgattctcc tgcctcagcc tcctgagtac 120
ctgggactac aggcatgcac caccacgccc ggctaatttt tgtattttta gacgagacag 180
ggtttcaccc tgttggccag gctggtctca aactcctaac ctcaggtgat ccaactgcct 240
cggcctccca aagtgctggg attacaggta tgagccaccg tgcccagcag aatttttaa 300
ctatttggtt acgactaatt tggataatgt agtgcatgca gctttgattt gtgccactaa 360
gagtgggcaa actgtcttcc tttttgtgaa tcagtaaaaa ttttccctca acatgtgttt 420
gacagttgnc attcactgnt taantaaagg natttngnna acc 463

<210> 5554
<211> 538
<212> DNA
<213> Homo sapiens

<400> 5554
ccttttttt ttttttttt ttgagacaga gtcttgctgn gtcacccagg ctggagtgca 60
atagtgccat ctcagctcac tgcaacctct gtcttctggg ttcaagcgat tcacgttcct 120
caggctccan agtagctggg actacaggcg tgcgccacca caccaggcta atttttgtat 180
ttttagtana tatggggttt caacatgttg gccaggctag tctcaaactc anatttttt 240
ttttctgaa gacaaatgct ctctgattgg catgctccag tcactgnctc accatttaaa 300
gacttctaga ttaaaattaa gcatgggctc aacagttcta aagngaaaac atgcatagng 360
ganatccctg ccttcttctc tcctctcttc ctttcctttc tttctttnnn ttttttttct 420
acttcccatc cttnttaaag agacaccagt cagaaatatn gatatgctta tgcttgcttg 480
gggncccttga ttataaaaag ncccaacatc nggaactaaa tcaaggggat tttntacc 538

<210> 5555
<211> 512
<212> DNA
<213> Homo sapiens

<400> 5555
ctatcccatt ttttcattta tttttatgag gngcctcaaa aaatagaagt ggccttggta 60
gggaaggaat gtcgtgattc tgagtncagt ntggcaaatt cttttgcctc agtttcccta 120
actccatcca gngcatatga aaatgtctat gtgcgtacaa ggtaggtctg gactaagctn 180

09/23/2004 08:45:50.0

tggccctccg gttgttttcc cattgcggga gcctaagcca gggtgcccag gactcctgtg 240
tggctggtgg gcctgatgcc cacagctgat gattcaggaa ggaggggcct ggagtctgct 300
gcagactntc ccgccccnta cagcccaaac cgggcactgc agcaatgagg tggtcagtcc 360
agggaaaggt ccgacaagtt ctnggcacaa tgcttcagga agtcaaaagt cagggcccgg 420
aaaaaggcac ncnggaccac tttttggcct ggatcccccc ttganggggt ttccancaan 480
attcttgggg cttttgnccc ttggggaant tt 512

<210> 5556
<211> 514
<212> DNA
<213> Homo sapiens

<400> 5556
gggtttagaa gttgcaattt taggtactat taacagaaaa tacataacaa aagcttccta 60
acaagtgaaa aaaataatta taaatgctgg aaaaattggc ctcattaaca tatttacaga 120
cttttactta atacatacgc ctttggaaat taattatctg acatttatac aagcatcaaa 180
atttccaaat cactgagtag tgagcacttc agttctttat tgtctatacc caaatttgaa 240
agtcatttag tttctgaaag tagaaatgac aagtaacaga aatggtcaat ctgagatact 300
attgacatat tgttctgttc cttcgcctaa aggtgcttct gttgagtaag tgtccttatg 360
ctttcttttc tctttgctct gatcttcctg nagcttcaga attatgtttc ggatttcttc 420
ccttttggn cccaatcttg ggggngggaa accnnnttgc ccaattctat gggggggtca 480
aaaccgggaa natgggntct aaaaaagctt ttta 514

<210> 5557
<211> 484
<212> DNA
<213> Homo sapiens

<400> 5557
gagttggagt ctcactctgt tgcccaggct agagtgcaat ggtgggatct cagctcactg 60
tagcctctgc ctcccaggtt taactgattc tcctgcctca gcttcccaag tagctgggat 120
tacaggcgcc tgccaccaca ctcagctaat ttttgttatt tttagtagag acgggggttt 180
cactatgtta gccacactgg tcttgaactc ctgacctcaa gtgatccgcc cgcctcagcc 240
tcccaaagtg ctgggattac aggcatgagc cactgcgctc ggcactcctc tagcttctta 300
cttgtcacta tataggtgta tgacctcgac caagtcactt ttcctaatct acaagatgtc 360
tgagattaat gacgtaacgt caaacattcc tcctggctct aatttcctac ctnttccann 420
tgcttgnata agggagccca atgncttaaa agccaatgtg agcccctggg tttgggaacn 480
aaan 484

<210> 5558
<211> 468
<212> DNA
<213> Homo sapiens

<400> 5558
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180

0962946.0702800

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnn 468

<210> 5559
<211> 466
<212> DNA
<213> Homo sapiens

<400> 5559
cctttttcca aatctttatt ctcggggttg gccccccccg anagncactt canggcctcg 60
gttantgggt caatcttcgg aaactctggc aatgggcaaa aactggantg ggggttggct 120
ggttggcact aaagganaag gggcccttca agcttccctc tggatcgagg gggctcttct 180
ttgacgtgta caggatgcac gggcttgcat aggagatctg cctggactgc tgtcactctc 240
gttgctgttg gtatgctcca ttgccccgtt cagctcttcc cgtattgcgc tggctaagtt 300
gcccagagtg ggatttccca tggaagcggt agtgtataga ggtatactat tctcagccat 360
tgaagcctgt aaagctgcat tganaggtgt gcagtangcg tggctgctct gcatgttttt 420
aaataaggga aaggggtacc actgancttt tgggggcntn nntttt 466

<210> 5560
<211> 417
<212> DNA
<213> Homo sapiens

<400> 5560
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnn 417

<210> 5561
<211> 461
<212> DNA
<213> Homo sapiens

<400> 5561
aatttttttt gttttgtttt gttttttttt ttttggaagt gtcaaggatc agttctgtgg 60
caccgtttaa ccacagactg ggagcaacac gcatctgtgg cattttaaaa tggaattggc 120
aactgcatga cattgaaaat gcgtattaca cttacagtgt ctagactttc ctatgtgtgc 180
tcagatacaa ttagtgaagc aaaagtatac atatcacccc tactgntact cagttgctac 240
agagccataa atgtgaaaag caatactctg aaataaagat tttttgtttt ttttgcccta 300
gccctactta gcagcacagt ttaagtaaac acaaaaactg tggttgagat gcttgncttt 360
ccaaagatgt aaacatcagt cccagtggcg taaactttgc tgnatcgaat gagaccnaag 420

0098270 6346950

atctnaggnn caaaggcaat tcaccccttt tacncaaacn t 461

<210> 5562
<211> 438
<212> DNA
<213> Homo sapiens

<400> 5562
cgagatggag tcttgctctg ttgaccaggc tggagtgcag tggcacgatc tcggctcact 60
gcagcctccg ccttctgagt tcaagcaatt ctcctgcctc agcctccccg ggtagctggg 120
attacaggca tgtgccacta cgcccggcta acttttgtat ttttggcaga gatggggttt 180
cacaatgttg gccaggctgg tcgtgaactc ctgacctcaa gtaatcgacc cgccttggcc 240
tcccaaagtg ctgggattac aggggtgagc cactgagccc agccaggggt gggggattta 300
aaacagaaaa ctacactccc aggaggccaa cttcttccag ccaagaaaag gacaggagaa 360
aggtcaaggt ganggatgan gaaaccccta antgccagta taggggcctn atttgggggn 420
gcncaactaa aagggtnc 438

<210> 5563
<211> 548
<212> DNA
<213> Homo sapiens

<400> 5563
agttataatc ccatttttt taaaaaaagg aatacagata ttgatcacat caaacatttt 60
cattgagaaa ttgacacgga cactaatgag gtttatcatg gatggtctca gaagctttcc 120
tgtgtatgtg aagcagaact acaggccttt ttgtataagt tcctgtacat cttgtccatg 180
ctgttctcaa agatgggtcg gtgggatttt cccttataag aggctgccct gttggaccag 240
tattcaccgt catccaaatg gaaagtgcca cgtggctgct gacatgagct atactcgggg 300
tcactgtcat aggcagagtc tctacataaa agacttcttt tcagttccag ttcatcatct 360
ttctctaggt ctctctcatc atataaatgt ctttgatgag cctgatgtga tttcaagaca 420
ttttttaccc ggtcatggat ctcatcgcag tttgaaggtg aacaccaatc agaatgaaat 480
ctttcctgag agaagctcta tttaacacag ggcttggaga atgcttggca ttgttgangg 540
gtgctgaa 548

<210> 5564
<211> 153
<212> DNA
<213> Homo sapiens

<400> 5564
gaagagattg aacatgacct gttgcctttt atttaaaaac tgttactagc cctgcctggg 60
gctcctatac aaaaacaaaa cacaacctaa aataaggttt cttcctgacc ccagagactg 120
gggaggggta gggagggtnt tgnnntantn ntg 153

<210> 5565
<211> 539
<212> DNA
<213> Homo sapiens

0080790 6946950

<400> 5565
aggtgaggtt aagcctgtca cccatttctt tatttctata attacacaag cataataaat 60
acatctgatt ttaaaggtca cttaaaatga gtcataattt acagtacagt acgtttcagt 120
tcaagtgcaa aaaataacta tttgctgaat tctatttctt tcagttattt tatttttaag 180
ctgtgtttta ttgtgaagcg agacatccaa gtgtagaatt tcttatccca aatgcagtat 240
tgggcagaac tatggtgtca tggagaagcc ctcactttac aattgatcct gtctaatcag 300
ggtcagaggg taaggtgagt tgctcatttc gactgntctt ttctttcctc tctctcctgt 360
gctcatccac agctattata aattatataa ttcaccttta ttcagctaaa cagttttccc 420
ctttccacac tccccccagg tttcctgtta acctctgctt tgatttttag tggcaagctt 480
taccgtgcga ccaccagcat tgntcnggct gcaantggac ngttgcangt tgaatccnt 539

<210> 5566
<211> 546
<212> DNA
<213> Homo sapiens

<400> 5566
catttatgag agtttattca ttcaaaacat atttactgtc gggcgtggtg gttcatacca 60
gtaatcccag cactttggga ggccaaggca ggtggatcgc ttgaactcag gagttcaaga 120
ccagcctggg caacatggtg aaacctcgtc tctacaaaac atataaacat cagccaggca 180
tgatggcaca tagctgcagt cccagctact tgtgggagct gaagtaggag gatcacttga 240
gcccaggagg tcgaggctgc ggtgagctgt gtttgtgcca ctgcactcca gactgggtga 300
caaagtgaaa acccaggggc tcattcaggt tcaggagtgg ggtgctgggg tcctgagcta 360
tatctaaatc tgtctccact gcctcagtgt ctttcccgga ggtgaagagt ctgtgcacat 420
tctcggtgcc cacaggtagt tcatctggga gatcagccca aagaggactt tgggggtgcc 480
ntgtggccan cggggtgctn ggaatggctg ntctgaaacc ccttccngat gggtcccagg 540
aaggcn 546

<210> 5567
<211> 535
<212> DNA
<213> Homo sapiens

<400> 5567
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnn 535

<210> 5568
<211> 534
<212> DNA

0080-6754-2950-0

0005045350.0005045350

<213> Homo sapiens

<400> 5568
gagacagagt tttgctcttg ttgcccaggc tggagtgcaa tgacacaatc tcagctcact 60
gnaaccacca cctcccaggt tcaagtgatt ctcctgcctt ggcctcctgc gtagctggga 120
ttacaggcat gagccaccgt gcctggcctt tttctttttt aaacagggtc ttgctctgtc 180
acccagacta gaggtgcagt ggcacagtca tggctcactg cagcctcaat ctcctgggct 240
caagtggtcc tcaagggcct ccagagtagc ccaccaccat gcctggcttt ttttttttt 300
ttttttttgt aagtagagac ncatttcact gngttggcca ggctggngtc naactcctgg 360
gctnaagcca ttgcccacct naaagngctg ggattacaag tgtgagccac cacacccaac 420
caggttattt gaacattttt aaagtnctgg attttctcta ttggaaaatt gactggcaat 480
ttttgggcan gnttttaag gggtgcttaa ggttgaaacc ctttnaaatt tttn 534

<210> 5569
<211> 542
<212> DNA
<213> Homo sapiens

<400> 5569
gtaaattggc tcatgtcctt tgcctatttt tctattgaag tgatcatttt tgaacatttt 60
tcttacgaat ttggaagaac ttttcatata tgaagggcat tagctctttg acatgacggt 120
tttcttttct tcctgttact ttgtcctttt ctttcatttt ctttttttgag acagagtctc 180
agtctgtcac ccaggctgga gtgcagtagc atgatcttgg ctcactgtaa cctctgcctc 240
ccaggttcaa gcgattcttg tgcctcagcc tctcaaagtg ctgggattac aggcatgagc 300
caccgtgccc tccgtaatta atattcttaa accatattca tgaaacaata ataggatttt 360
gaggactcag ctctgatttg ttaaatcttg cccaaattcc tgtctaaggg gcctagagag 420
tcatgcccta caaatcataa attctcatca aggtgggttt tatttaaccc tgnatatctt 480
gactttncaa tctggactct ggcataacaa gggagaaaat aaaaatgttt acccaaaatn 540
tt 542

<210> 5570
<211> 515
<212> DNA
<213> Homo sapiens

<400> 5570
ccattttctt ttttgttgtt gttgttttag cacctgtaca ataaaactgt accatctcca 60
accagagccg gccacggcga ggccctcctg cctttggatg gtacatactc tacaaggatt 120
gttcggaaaa atagcaattg gtagaaaaat aagagtggga gggacaatgc cacagagggg 180
gcggggacag ggaagcaacc caagctcctc tctctctctc actcgacaaa cccagcgctg 240
gaggcccaga ggccaggggg aggccaggta gggataccac tcagccccag gcccccaggc 300
atgagtggag caagggctgg agaccacttt cctgcccttg cctagcaaac aagcttgacg 360
cctggatttc acattccggc agtgagtccc agagccctct gcagattccc aaggagaatg 420
aggggctnaa gggaagaagg ttggaaggaa aggaanggaa aaggggtgct gtgagtctca 480
naaggggccn gggattgggg ggtggctnan gnctt 515

<210> 5571
<211> 541

<212> DNA
<213> Homo sapiens

<400> 5571
gtagtaactt aaaagatcct taatgcattt attttaaacc acaaaatcaa aatacagcaa 60
tcttaaaatg aatcactata aaccatacat tgtctcttct tttattattt aaatactgat 120
atcattcttc tcttcatggg acagttctgc acctagttta aaccatcatt actaatgcca 180
tgctgaatgc ttgtctctga aaaaatctag taaaattggc agggatgtga taaccttaac 240
tacaaatgaa ataacttcaa atttaagggg ctgtcagaaa aatggaattt cacaactaat 300
tatttccaaa aaagtctcct gctcaccatt tgttagaagg atataaaaac ctagctgcat 360
cacataggaa tccttgtatc cttgtcttat atttgttgcg aagttgatgt ctcttaatgg 420
tcatgtcttc tacaagttgc ctctgctctg ctcctgatca cagaaaggaa gtcccaagtg 480
gagctgtaat acaggtcata ctggangggt gggtagctat gnnctggagg aggtaaccat 540
g 541

<210> 5572
<211> 550
<212> DNA
<213> Homo sapiens

<400> 5572
cctgagaatt taattttatt tgctgtagat tcaaaatgag gaagtggtaa atgcattatt 60
tactcaaagc ataaagtcag ccttaggtag gagatgaaac aactcctcaa ctttacacta 120
tccagttaaa gccaattttt aaaacctttt tttttcttat gatgaccctt gagtcataga 180
aaacttttca ttttagaaaa tgttaagcat gaacacaaaa agactagata acagtgttat 240
aaacactcat gtacccaagg cccagcttta acattcatca cttagcatgt ttaaggtagt 300
gcttaggttg aaatttatat tgngtgtatc agaataaaga gcagttcttg cagatagcta 360
gaattacttc atttttatag agtttagagc ataaactaac aagggaatct aggctcttta 420
tagtaaatat ctaaaagcat tttattttac agaattgaca gcgtatgcca tggctattca 480
tttgnangnc acanggttcc caaaaagggg aaaaaaangg ccaaacccnc ttaaggcctt 540
ttcnggcccc 550

<210> 5573
<211> 549
<212> DNA
<213> Homo sapiens

<400> 5573
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnn 549

0 3 0 5 0 4 5 0 2 0 0 8 0 0

0802702.0+6+20050

<210> 5574
<211> 553
<212> DNA
<213> Homo sapiens

<400> 5574
ctgaaattga cctggtagag ccttcaatga ccctttgaag aacaaggtgc aaaagattca 60
cgtttgagat taacaggagg gctgcacaga ataaagcctt caattcaaca tacaactatc 120
aaattcagaa aaaaacatat catagcctaa aaaggaaaaa attcctcacc agagaaaggt 180
tgataaaatg caaatttaaa ggtgtaaacc tgtgcagaga ccatggagtt atgaggctca 240
ctgaagggga aggaaatgcc agatcattct tatttcaaga agcttcaggc tgaatagttg 300
cttggatatg ctaagttttt ctttttcttt ttctaaatca agtagtgcta ctgaaatcca 360
gtgcctaatg gagcagatgg tggaggtctt agactctgga acatttatag tgatgcttct 420
gaatgcaaaa caccaagagt ggatttcaca ggctgtgaat ctgatttgat tttgatggga 480
gtaaagcttc cattttcact ggcttgaccc cattggaaaa aagcntgtgt gactggcaca 540
acttttana aaa 553

<210> 5575
<211> 540
<212> DNA
<213> Homo sapiens

<400> 5575
cttttgagat ggagtctcgc tctgtcaccc aggctggaat gcagtggcgc aatctcagct 60
cactgcaagc tctgccgccc ggattcaagc cattctcctt cctcagcctc ccaagcagct 120
gggactacag gcacctgcca ccatgccagg ctaatttttt ttgtattttt agtagagaca 180
gggtttcacc gtgtcagcca ggatggtctc aatctcttga cctcgtgatc tgcccgcctc 240
ggcctcccaa agtgctagga taccatggct cttgatgcaa tcaagtgcaa atcctctctg 300
aaggaaattg ttgggagaca attctctatg ggtctcatgt ttctacagat cttgtgagca 360
gaagacctgt ctttgttacg aactattttt cacggatgct tgtatagtga agagccttga 420
aagatagaga tggtgttttc ctaaggagta aacattgggt ttgngtacta tccaatcaat 480
naagatgttt ccctttggct cntctngcan gcatgcttgg tgccntttta aagatccccn 540

<210> 5576
<211> 553
<212> DNA
<213> Homo sapiens

<400> 5576
ggtagagaca aggtctcatt atgttgccca ggctggaagg ccttttgagg cttgtatgac 60
aaaggtgggg tgggggtga ctgtcaactg gtttcacttc accagccaag ggggctggtg 120
gtaatcttga ttgtcaaagg ccaaggataa taacagtgaa tatgtactga gagctcacca 180
tgtgccaggc acattcagag caagctacat aaattaacac acttaattct ccaaacacct 240
taaagtgggt acctagtatc attatgtctt tcacagataa gcaaactgag gcactgagaa 300
ttaagtaact tgcccgagat cacaagttag taagtagggg acagggattt gagcccaagc 360
agtctaagac tagagtctct gctttttttt ttttttaac ctcaacttta ttcatcttcc 420
atgtgcctgc tgagtctnag acccccctttc tttccatcag ctctggcagn nctcatcaag 480

atgactgaat ccctacttna gntcctttgc ctancnacct gagatgccca tgggggctga 540
aacctgccat nac 553

<210> 5577
<211> 531
<212> DNA
<213> Homo sapiens

<400> 5577
atttgttatg ttgcagcaat tacactgtaa aagtgctgcc caagattgat tgctctgatc 60
tgtagttcaa ttgtaaatta gaatacacat ccccccaggg acacacggcc cctatttgtg 120
attaagaaaa aagccccata atagactaat agctaaagtt ctctctcttt tactttcagg 180
caattagctt gatgaaatgg cctctttttg tgtaccctgg aagtgtaaac cgatatcata 240
atgaagtata tgatgtttat tctattattt tcaccttgct ggatatgcag gaatgcataa 300
gtaatggctg ctttgtctag tacgtttact gattcacaag taaactattt cttaaagatg 360
cagtgtacgc tttctgaggc ttgagttaag caactcctaa ctgtggatta accttcacgc 420
aaatgtctac tgcaggggag gaaaacgaat nccctaagtt gggggagagc atgatgctga 480
tattcaagag ggcttcagnc actggggcaa ctnttggatn gatgtnnngg c 531

<210> 5578
<211> 553
<212> DNA
<213> Homo sapiens

<400> 5578
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnn 553

<210> 5579
<211> 548
<212> DNA
<213> Homo sapiens

<400> 5579
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360

09529459.072800

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnn 548

<210> 5580
<211> 555
<212> DNA
<213> Homo sapiens

<400> 5580
aaatagatat gaaatacgta ccaagtttat ttgcctttaa atgatacaaa cagaaaagac 60
atgttagtca aaatattaaa ttttcttgca ttttacagaa gaaaaataaa ctgaagtaaa 120
actgtaggaa ctgctgaacg tcagataaat gtttcttcag aacaagagat attagttcct 180
aaaagattct tctaaagttt ttttaaaaga gattaagaaa aacagtaagc cactgggtta 240
ttacattcta aaaaaaaact acatgtttct taatggacat atgtttacat ttacagatag 300
taaacttagt ttcctgtctc ataaaactca gaagacgcca gtgatgtcta aactatggaa 360
aagaataaaa gcctcttttt catatgaaaa aacattcaaa ctaaatctac cttaacatta 420
ttttctatga aaacttaata aagaatggct cttctgaaaa caaaatgcta tacaaatcag 480
tttcaaaaaa gaaatacatt atgaggatta ggcttatagc tagtggtatc aagtaaaacc 540
ccaaacgatg ccccn 555

<210> 5581
<211> 568
<212> DNA
<213> Homo sapiens

<400> 5581
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnn 568

<210> 5582
<211> 570
<212> DNA
<213> Homo sapiens

<400> 5582
gctattacat tttattttat ttttacttct caaatgttaa ggaaacctat tttaaatata 60
aagatataaa tatagggaaa ttacataatg ataaaagggt caattcacca agaagataaa 120
cactgaaata taatatgcaa ctaacaaaga tccaaaataa atgaagcaaa aattgataga 180

0605202.60502

actaaaagag atatggaaaa atccacagtc ataactggga gactcaataa gtccattctc 240
aatgactgat aaacaaatag atggaaatca aaaaggatat atcaaacctg gataacgtta 300
tcaactggtt taatataatg gacatttaca aaaaacactc tacccaagaa caacagaata 360
catattcttt ccaagtgccc acagaacata tacccagata gatcatattc tgggtcataa 420
aataaactaa caatttttaa taaaaccaca taaagcatgt tctctggcta taccaaaatt 480
aaacnaggaa ttaaataatn gaaaactccc ccaggctaac caacatgggt gaaaaccccn 540
ctttcttacc attccaaaaa ttagctnggc 570

<210> 5583
<211> 569
<212> DNA
<213> Homo sapiens

<400> 5583
agacagagtc tcgctggagt gcagtggtgc aatctcggct caccacaacc tccgcctncc 60
aggttcaagt gattctcctg cctcagcctc ccgagtagct gggattacag gcatacacca 120
ccacgcccgg ctaatttttg tatttttagt agagacaggg tttcaccatg ttggccaggc 180
tggtctcgag ctctgacctc aggtgatctg cctgccttgg cctcccaaac tgctgggatt 240
acaggtatga gccactgtgc cctgccttga ctcatttttg agaaagggtc tagcaaacac 300
cagtctcagt aaccatcagg cactggcggg tcttttaatg tgaagtttgc tgaaagtgtg 360
gcctttggaa gggctggagg ctccttccca ggcagcagcg tcccttcact gaacctcttc 420
ttccacangc tcttctgaga atttccttcc aagcctgaaa ggctcttttg gggcattggg 480
gtaagtgata cttnatnacc cttggccttt tgaccnggtc cattccccaa aacctgtgat 540
tggggtgagg tatttatntn naattntgc 569

<210> 5584
<211> 551
<212> DNA
<213> Homo sapiens

<400> 5584
aaatatatat tccactttat tagttagaaa aaatcattta agccacatgg tggccacaat 60
gtccataact tgagcaggct ttggcatccc accacccccc tcagaccaat acacactatg 120
ttggaggaac gactttaaaa tgtaaaatga gaaatgggca ctgaacactc catcctcact 180
cccaacagcc cacccacaca acctcttcaa ctgctatcca aacatggagg agctcttgtg 240
gaagagaggc tcaacaccaa ataattgagc ataagacatt caagactaaa ggaaccccag 300
acagatgttt aggaagtagg gttgaaaata tcaccatctc ccaacagctg aagttgggac 360
atctaagaga tgtcagagcc atactgctga ggaaagcaca gcatacacca gaccccgggg 420
taagggcgag atcaacctat cttcatagcc ataagcaatn cactnacacc tgggcattaa 480
acaggctttt ccttttcttt ttttttttg agatggagnc ntngccttgt gggcccangc 540
tgggtncagc a 551

<210> 5585
<211> 562
<212> DNA
<213> Homo sapiens

<400> 5585

0960469.0012

aattatactt taagttctag ggtaccgtgt gcacaacgtg caggtttgtt acatatgtat 60
acatgtgcca tattggcatg ctgcacccat taactcgtca tttacattag gtatatctcc 120
taatgctttc cctccccgc ccccacaaca ggccccggtg tgtgatattc cccctcctgt 180
gcccaagtgt tctcattgtt caattcctat gagtgagaac atgcagtgtt tggttttttg 240
ttcttgtgat agtttgctga gaatgatggt ttccagcttc atccatgtcc ctacaaagga 300
catgaactca tcctttgtta tggctgcata gtagtccatg gtgtatatgt gccacatttt 360
cttaatccaa tctatcattg atggacattt gggttggttc caagtctttg ctattgggaa 420
taggtgctgc aataagtcta tggtgtgcat gtgtctttat agcacnatga tttataaacc 480
ttttggggta natacccagt aatggggntg agtgggntca aangggnatt tctaggtcta 540
aanccccttca gggaattgcc cc 562

<210> 5586
<211> 562
<212> DNA
<213> Homo sapiens

<400> 5586
agtagagatg aggttttgtc atgttgccca ggctggtctc agactcctgt ggtcaagcaa 60
tcctcctgct tcagtctccc aaagggctgg gattacaggc aggagccact gcgctcggcc 120
aaagacaggg taacataaac tttaccctaa atccactgtg catgcagaaa ggggttgact 180
gacgaatcct tgtttttctg agactcgaca tgcagacagt ttgatgctag aggagctccc 240
tttcctaggc tttgtcatat ttctttccca ttcactgact gaccttcctt gttttcagcc 300
ctctatttgc actggtaccc tttaactcag tagttctccg ctatggtatt agttgtcagg 360
agtgtccata cttaagtacc ttaagttcat gagtcatttt ttaagcaaac aaaaaagagt 420
agttatagca cttactttct tttgagcatg aatngagaag aaaaggacag aagtntagca 480
aagaaattaa aaatctctta gtattaagag gtctaaaaaa atctagattt tagcaaggga 540
gaatggagta tatggtantn tc 562

<210> 5587
<211> 359
<212> DNA
<213> Homo sapiens

<400> 5587
gcgccatcca ggtttgngtt tattcgatac aggcccanaa cccagccctc cttcanagaa 60
gtggccgagc tgggggaaca gaataaataa aggccgccga ggtgtgatgg ggactggacg 120
ggccggtctg gggcgaggca agggtgccca ggaggcattg accccaacct nagctgtcca 180
cggntggccc cactcccagc aggctccggg ggcagtgtga gcgcccacaa ggagcagggc 240
tcggactcct gccacctcca agtcctttct tttccttcct gccctccctc tccttcctaa 300
ggcaggtcca gagaccaagc tntccctntg gccggggaan ccgggagggg aggnantnn 359

<210> 5588
<211> 414
<212> DNA
<213> Homo sapiens

<400> 5588
gagacagtct tgctctgtca ctcaggctgg agtgcagtgg cacaattgta ggtcactgca 60

gcctctgcct cccgggttca tgccattctc caacctcagc ctcctgagta gctgggatta 120
caggcaccca ccaccatgcc tgcctaattt ttggattttt agtagagatg gggtttcgcc 180
atgttggcca ggctggnctc gaattcctga cctcagggga tccgcccacc tnggcctccc 240
aaagggctgg gattacaggt gtgagccact gggcccggcc aaaggttacc tttattgata 300
tttaccttat tgaaaattca aggattttta acttaaaaat atttatattt acaaatatta 360
taaatattna caaatccaaa tactgatatt tacaaaaact attnctattn nnnn 414

<210> 5589
<211> 538
<212> DNA
<213> Homo sapiens

<400> 5589
ggtagtttaa aggtttttga aaatgttgat atacacaagc tgtacttgga gctggataac 60
agacatagga gctggatgac agacatactt ttattctttt atttttgaga tggagtttca 120
ctgtcaccca ggctggagtg caatggagcg atcttggctc actgcaacct ccacctccca 180
ggctcaagca attctcctgc ctcagcctcc tgagtagccg ggaccacaag cgcctggcac 240
cacgcccagc taatttttgt agctttagta aagacggggt ttcaccatgt tggccaggct 300
ggtctcaaac tcctcacctc aggtgatcca cctgcctcgg cttcccaaag tactgggatt 360
acaggcgtga gccactgcgc ccggccttaa cataggattt tcatcctaga atgacttttc 420
ccaaaaagat tcaatcttan gcctcttgct gtaggcaagt tccatgggac tgcacaaaag 480
aaggcaggga acagtcccca tgggaaaatg ganttcntta aaaannggnt ttnaggcc 538

<210> 5590
<211> 580
<212> DNA
<213> Homo sapiens

<400> 5590
gggtattata ttattttatt tcagttaatg agcaaattta tcagagctgc ttgacacatg 60
atcaatttaa tataattcta tgttcaaaaa ttgtatttct gtattttgcc acaaacaatt 120
ataaaatgaa aataaagata tgatttgcaa tgatacaaaa aagtaaacat ttaggagtaa 180
ctagtgaaac aagtttataa tttttaaaca gaaaactaca aaacaatttt gacaaaattt 240
aaagaaaaac ctaaataaat ggagagatat attatgtttt gtagtttcaa tatgctttca 300
gttctcacca atttgagcta tatattcaat gcaatcccaa tcaaaagtct agcataattt 360
tatagaaact gacaatctga ttttaaatat gagaataaat gcaaagggcc aaaatagcca 420
gggcaaagtt nanggaagac aaagttggna aactcaccgt tactttacct caaggattat 480
accaaagnta taaaagttgc aagcanaggt cccactggca atggancccc ggaaagggat 540
ggccctttta aaataannga tgttatttca actggatatt 580

<210> 5591
<211> 565
<212> DNA
<213> Homo sapiens

<400> 5591
aatggttaaa atccagattt tttttattaa tgataaactt cacccgtcac tgtacattat 60
gcattgagat agtaactaat gatagtatga agtcatcaca attagcaaca ggttttcaaa 120

0020040050

taatatttat ttcaccctca agcttggttt gaaatttctg tccttacgta tgcttcataa 180
tgtacctaat cattgttcgt gggttcatgc atatgcttat aaatgtgcat atattggggt 240
gcatacaaaa aaacatttta tagacaggaa tgtgctgaaa aaatgtaatg aattagacag 300
tagaaagaac caactatgtg ctccaagcca cacaaatgcc taagaatttg gcgtttgttt 360
gcggccatag tttgagtgct tctcaaatgt acngngcatn cagatcacct ggggatcttg 420
ttaaaatgca aattctgaat caataancag gaaggtgggc cctganatcg gcccaacttc 480
cagaagataa aaagctgctg gttccangcc acacttccga gggccaagac cttaaccntn 540
ctgggatggt aangggcatg tgcac 565

<210> 5592
<211> 561
<212> DNA
<213> Homo sapiens

<400> 5592
gctattcaat tgtttgaatt ccttatatat tctgattatt cactcctggt cagatggata 60
atttgtgaat attttctccc attctgttgg ttgttacctt gtcatttgtt tcctgtgctg 120
tgcagagcaa ttttagattg atatatgccc atttgtccat ttttgctttc attaccagtg 180
cttctgaagt tttgttcata aaatctttgc ccaaaccaat gtcctgactc atttccccta 240
tattttcttc tggtagtatt atagtttgga tcttacattt aagtctttaa tccattttga 300
gttgattttt atatggtgaa agatagaggc ctagttttat tttctgcata tgaatatcca 360
gttttcccag caccatttat tgaagagggt gtactttccc caagtgtgtt cttggcactt 420
ttgtcaaaag tcagttaggg ctaatgtgga tttggttatg ggtctgcatt ttggtcaact 480
ggcctgggng gctggtttca taccagtncc atgcnggttt gggtacnata gctttggagn 540
atggtttgaa nccnggtagg g 561

<210> 5593
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5593
aggtaaaaag atgtatttca aagtgggatc agtgaatctt caactaaata ataaatgta 60
cagcccccca agatgcagaa tttcccatcc ctagcttaac agtcacggtt cactttgttt 120
tacgtgcgtt tcgcagatga gtggtgctct catcagcaga cacaagactt ctttggcctc 180
tgctttttt tcctttcttc taataaggag actacactct agataaacaa aacagacagg 240
cgaatgtaat ccagggtttt ggtggttttt ctgagtctag aaggactaaa aattagcctt 300
gataggcaga aagagcatcc caacctgtct gtcaaaaact ctggccattt ctaggacacc 360
tttgccgaac tgaaacagga aacaacaaaa attttacatg cttataaatg ntttctcccc 420
ctncgaggna aatctttcat aaagatggac tcattacctc antttttaca cttgcatntg 480
nccctttca aaaagtaccg gactactctt catgatntta acccagcccc ctaaggggcg 540
ttttccattn tggcctt 557

<210> 5594
<211> 566
<212> DNA
<213> Homo sapiens

<400> 5594
attaaagcat atatgttgca tataaaatac agtacagaac caggagttgc actatactga 60
ttagtgctta acagaagaaa tgattaaatt tgttcctccc agaagtatat acacagttca 120
tttccacagc attttcctat atagccagca agttattttc ttcagttatt cacaccttga 180
tcaaacctga attataaact tagcacttac aaatatgaaa attcattcac aaggaaaaac 240
agtatttcca tttcaccaat aaaaattttg aaagttaaca gtctattcta ggaaaccaag 300
tttagctgaa aacttcaggg atgaagatca tctgttgtag cagcattcaa atatataaac 360
agtaaaaata agacttaaaa ctgctgccta cagtgtcatg ttttggattt agttcatcca 420
attgattttt agtacaaaac tagaaatacc ctcttcttca tacatctata gttatcaata 480
tattntcttc ttttcaatgn gaaataatac ttcaggatga tctatttccc caatggtggc 540
cggtcaagct ggcatataaa ataaag 566

<210> 5595
<211> 493
<212> DNA
<213> Homo sapiens

<400> 5595
aatttcaaac tatttttatt taacatttgg tattgttaaa caggtatagt attcaggaca 60
tacaccttct accacaattt ctttaattag ggtactttat attttatcaa aaatgtgcat 120
attaatagat tgtagtttag cctttgtcaa aagacacgca agtatttagt atttacatta 180
aaaggattgc ctcagaagaa acattgaatt cataagccct cttaaaaagt caaaaatatg 240
cataaagaag actagtattg atattttctg atattttaga tatgattaat attttggacc 300
tccattggtt tccacactat catgcaaatt tccaacttgc tttaacacaa cagttctatc 360
agctgtatta gagggaatac acattttaat tgctcttttt gaaaatatca ccaggcagtt 420
cagaatgtct catttattga gaatattgtg acaatcaaag accttaattt aaaaaaaaaa 480
annnnnnaan ccc 493

<210> 5596
<211> 564
<212> DNA
<213> Homo sapiens

<400> 5596
gctggtttta gcttcacaag ttggcctttt ttttaaaatt atttatttta ttattattat 60
actttaagtt ttagggtaca tgtgcagaat gtgcaggtta gtgacatatg tatacctgtg 120
ccatgctggt gtgctgcacc cattaactcg tcatttagca ttaggtatat ctcctaatgc 180
tatccctccc ccatctcccc cccccacaac agtccccaga gtgtgatgtt ccccttcctg 240
tgtccatgtg ttctcattgn tcaattccca cttacgagtg agaacatgcg gtgtttggtt 300
ttttgccttg cgatagttta ctgagaatga tgattccaat ttcatccatg tcctacaaag 360
gacatgaact catccttggt aatggctgca tagnattcca tgggggatat gtgcccaatt 420
tcttaatcca gtctatcatt ggtggacatg tgggttggtt ccaagtcttt tgctattggg 480
aatagtgccc caataaacat acatgggcat ggggcnttta tagccanntg gatttaaang 540
ccctttgggg antttcccna naaa 564

<210> 5597
<211> 556
<212> DNA

0050204.00000

<213> Homo sapiens

<400> 5597
acatagacaa tccagtgtat ttatacttaa tccataaagg catgatgttc aaaacacatt 60
tgtatattat gaagccatct ggcatcaaat tttccaattt atagacaact ttgtatttac 120
ataacaaatt attaaatcaa ccatttttcc ggtttataaa aggtcactga ggtcacacac 180
agtgtgtata aatgcagata aggctggtaa tacatattta cagtagatac aaattaatct 240
ttcatatttg aagataatgc tttttatata ttttttctat atcagactcc ccactgttag 300
caggatttcc catgctcgag ttgtttattg ctttttggct cactgattta atattcactt 360
ctgggttgtt tacacatatg aattactaat gttcttatct ctttggctaa tgcaaatgtg 420
atagagtgaa tgaaagaaaa agatgaacta attaaatatt cagttctggc tgggtggata 480
atttttggtc atgtccccaa atgaatcaat gcncactcat ttgatatnct ccttgaaaag 540
cttgagcttg cattan 556

<210> 5598
<211> 570
<212> DNA
<213> Homo sapiens

<400> 5598
cctatgctgt ttgttttctg ccatgagctt tagcaatctg tttatgttgt gagtgtgtgt 60
gtatttgtgt gtgtttccct ctccagcctg gctgaattat ccccaagtga ctcttaatcc 120
tcaaccataa ttcccagtga ttgcactgac atgataacgg gggagcccat tttcctccca 180
cccctcctca ctccctcccc ccttgttgct aagctcagcc aaggatgctc tagggagctg 240
ttcatttaaa agaggaagtt cacagcaggg tcaccaggct tttaaacaga gagagaggtt 300
gcccagggta agaagagagc tcaaagtcac aaacccttc ctttgtcctg tgaccccagc 360
atgtggggac atcagtccca agtcgtcact ctttctgagg ccactgacat ccccacaagc 420
atacctggct ggcactgnga ctagcaaaag gcttggactg ggaatcagaa aggcaacacc 480
taccctgact agctgtttca tggtgggaaa agtgacctgc ccactntggc ctnaatttcc 540
caatcncaaa aatnggcttg gacanattng 570

<210> 5599
<211> 549
<212> DNA
<213> Homo sapiens

<400> 5599
cagcttcggg tgaatcactt taatgctgtt aacggcaagt ctgtaaaagg ttcaggacaa 60
agttcttttt tctttctttt ttaattataa aactaacagc tgttanaatc ttttttttctt 120
tttttccttt tttcttttcc cagctacaaa atactctggg gagatgcatt ataatttaaa 180
atatataata ttgcacaaac aaccaaaagg ttaattaaac taaagaaata attacaaaga 240
gaaaaacccc atcccgtcaa aaaaaagatt cagcattctc tccatcccac cccctcactg 300
aaggtttgaa gtggaagcct gatgagagtt tcaagttcac ccccaggata gcccttccag 360
aagcagaagg gctgaggcgg anaagctagg cttaccagag ttgtaagtac tcggctttga 420
tcaccgctct gtaccgctgg tagctgtttt gggtcctaaa ctacagggga gttgaggngg 480
gtagctgggt tggacaaagg tttctngcag gnacacacca aagggcttaa aaacccccctt 540
ctttttgg 549

09/02/2008 09:56:56

<210> 5600
<211> 225
<212> DNA
<213> Homo sapiens

<400> 5600
aaatctgctt tggaagtgtt taggacttaa acatttcaat gaatattcaa ataacaatgc 60
tgtactgcct aatatttaca ttatgttagt acatgcaaat gggtgttcta agtgagctac 120
ttggaactgt acaatttctt aagcatatct gaatgcaaaa ggaagaataa cgttattaga 180
agaataattc tcagaggtgg tgctgggtgg gctgtgggnn nnnnn 225

<210> 5601
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5601
gacaatggga aggaaagtaa tttaatatgc aacataactc aatccatgaa ataaatattt 60
atttatgtaa tacaatttgc taaacaccac cattattaag gagagcacta ggaaaaacta 120
ccaaacacag catgtgaaac agttgggcac ggtggtaaag ggcacagact ctggagccac 180
agctggctaa tacactgcaa tattttatgt ttagcaaatt atagctggtc tgtgtataac 240
cagaagagcg gtatctgggg gatcaggata tctaaattct agacttacag cctggccctg 300
aatctaacta tcaatgttgc cttggaaaaa ctgctcaaac ttttgatgtc taaagtttca 360
gacttgtaaa cttgagaggg ttgaggtcca aggtccctta aatgtaaact ttaaaatgct 420
tttttgggaa tctttcaaat cttcaagctc ttcaaagtgc aacccggact ttctccttac 480
tatacagtct gaacaacttt gagaatcact ggattatctt aagttatata gnaatcctga 540
cctaaattta nttttcn 557

<210> 5602
<211> 531
<212> DNA
<213> Homo sapiens

<400> 5602
aagatttttc ccaagctatt aaacatgtac ctttcagtat gttctacaac aatatagttc 60
tcaaatcaag gtcaggacat taagtcctac tttcctttct tccatgagaa gagcttaatt 120
ctttagtctt ttcaattagc tatagataac agttctgaaa tgtgtccatg tgtgcacact 180
tcccactgnc ttaccacttg tctgcttggt gtgtcttgca gattatcagg ctacagtgat 240
ttcttgtatt ttattttgac cctgtgttct gctaccaact tcctaggttt gtcatgtact 300
agactcagtg acatggccag gttcaaaaac tgtgtttttt ttttttttct aagantttc 360
ccaagctatt aaacatgtac ctttcagtat gttctacaac aatatagggc tcaaatcaag 420
ggcagggcat taaggcctac tttcctttct tncatgagaa gagcctaaat ctttagnctt 480
tcaaatagct tngatacaag tctgnaatgn ggccctgggg ggggaaagnn g 531

<210> 5603
<211> 535
<212> DNA
<213> Homo sapiens

0080703.0002

0003703-0615260

<400> 5603
gctttttttc ttttgagaca gtctggctct gtcacccaag ctggagtgca gtggcacaat 60
cgcggctcac tgcaacctct gcctcccagg ttcaagcaat tatcctgcct cagcctcccc 120
agcagctggg acaacaggcg gctaccacca cgcctggcta attttttttt ttttttttt 180
tttttttga gacggagttt ggctcctgtc acccaggctg gagtgcaatg gcatgatctc 240
ggctcactga aacctccgcc tcccgggttc aaacaattct tctgccttag cctcccgagt 300
agttaggatt acacgcatgc atcaccacac caggctaatt ttgtattttt agtggagaca 360
gggtttcacc aggttggttg ggctggtctc aaattactgg ccttaggtga tcagcctgcc 420
ttggtctccc aaagtactgg gattacaggc gtgagccccc atgcancctg gcctnagggn 480
ttcttttaac ccttaaaaac ttcanttnaa gnattaaaag nttccccaat taaaa 535

<210> 5604
<211> 516
<212> DNA
<213> Homo sapiens

<400> 5604
ctgtaagatg ctttatttca ttgaccaaca acatggggtc tgaaaaccca gcgggagggg 60
tctttttatc acagagccag tcccaggcga gctgatgcat ctctgctcct ctgcccctca 120
ggagctctca tcctccaacc ccagctgccc ccgatcacat acagcttgtt gaggagggtt 180
gccatgccgt gccaggcgcg ccgcacaggc ccgtcagcca gtgtgtgcca agtgttgctg 240
cctggatcgt agcagtgtgt ctctttcagg taatcctccc ctctgcggcc gcaggtgata 300
tacatcttcc cctccagcgt cgcgcctgcg tgggcataca cctccctctt gagtggggcc 360
acgtatgccc aggagttggt ggcagggtcg tagcgctcca cagcattcag gtcattgtgg 420
tagtcacggn ccgccacaac gtanatgtac ctgcctacaa cacacacgga caaggtcngg 480
cgtgctcctg ctgnanggac tggatcttgg ancnac 516

<210> 5605
<211> 552
<212> DNA
<213> Homo sapiens

<400> 5605
acctagaggt tataggaagg gatgaacaga gatgacagac aagacaaaaa aggttatgag 60
agaattcctc attatacatg ggtagaattc accccagaaa ccaaagaact tttcataatt 120
acaagggagg gacagcacag ggcacaagat ctttgaggtg ttagaagaca ggctgacaga 180
ccaagcttgg tgactggctt aataagtctc ctaccacttg aaattctgtg ttatttattt 240
aaagagaggc agaggaagag ttcagaagcc agaagatttt tggaagagaa gttgagcctc 300
ttgcatttc ctacatcatt aatttccttc accagaagat atagttggac caaattgcaa 360
tagggttcgc caatggactc cattatgtag tcgacctgtg ctcctcacta ggccctgatt 420
tcgctatctg ataacaaagg cttctgaact cttattcttt tcctcactaa caaacctcaa 480
taatctacac ttagcattna gggcttccat tcangggtat tggaaaaact agcttnctta 540
nccaacgttt tt 552

<210> 5606
<211> 546
<212> DNA

<213> Homo sapiens

<400> 5606
cttttttcaaa tgcgatttat tgtacataaa ataaattaat tacagtttaa gccaaagctt 60
gagtggcttt ttaaagngca tctgtggagg ggatgtggca ggtagcccct gttcacttgc 120
tgtaagatag ngttttagta tttcagccac ccttaggcac aactcagcca ggcctaggaa 180
gcaacccaac gtcattgcca tgaaccattt acacaagtca caccaaaatc aactgacaca 240
ttttttttcct gatggaacag ttaaaaaaac aaaaaactat acagtcaaag tctggggttg 300
aagagcgtga agttcacagc tcctccacac acgcccaact gagcatgctc atcctgtgag 360
ggggaaccag agccttcctg taaaccatgc gagcttacca atgtctggta tacagaatat 420
tctggcccat aaactcaacc tgtttttgan gggtaggggg attttccatc ttgngcntaa 480
agaaaagaaa tctgggtttc ctcanggtaa aaaggncttn tggaaaaaaa aggggtccaa 540
agttcn 546

<210> 5607
<211> 547
<212> DNA
<213> Homo sapiens

<400> 5607
cttaaggttc atttaatgcc acagacagag aacattccat aaaagattaa gattaatttt 60
atatgcaaaa taacttatat ctacaggtat agattatcac tcaaactgtt agaagaaaca 120
gatattcatt cccaagaata tagttttgga aaagaatgtt actaaatgca ctatttttgg 180
ctatatctat gtatagaatt taaagacatg ccttgattgc tcttatgggg gcagtgaata 240
taatttttaa aatataaaaa gtatatcaaa tttgggcttg tttaacagct agcaatttaa 300
caattatttc ccttttgcat acttaaaagg cccttaaaat tatctgaatc aaagcaaaaa 360
aaatattcat tgctccccaa actttatacc atagaacttt ttaaagactg tttaaactag 420
taatcattct tcataactat taactaccat tgaaccaatc catctattaa gacaccagng 480
gatggtggct ttttttttta acccaattaa aagaaaaaat tgcttgctcg ggctttaaaa 540
agtganc 547

<210> 5608
<211> 510
<212> DNA
<213> Homo sapiens

<400> 5608
atgtcccagg gatggatttt actctaaaag tgaatactta atgtcaatac agagagacat 60
cagttcgtga agctgaactg tctgattgaa cttctatcca tttccagcat aaatatcaaa 120
gtataaactg atcactactt gtttgcaatg ggaagaaaga tttacagaaa aaaaaaaaaa 180
agcattgatg tatcttcagt ggagaatgtt tagccagcat gtagtttgtc tagtccagca 240
ttcaggagct tctgcctgcc tggtttcttg ggagttcttt tcattcttct ccagctgggg 300
gaggtggctc gcacagcttg tacagccttg gtgcagactg tggagtccgg tctctgactc 360
ccaaattctt cgctgtgttc tgaactcttg ctccctgctt ccgcatcaca tctgtagcct 420
gcatgatgta acnaggtggc aagtccgtgg cttctgggcc nnaatgatgg cttgcttcaa 480
cgtnacnctc angggccccg ntgcccaccg 510

<210> 5609

0960960.0076000

0020050250

<211> 544
<212> DNA
<213> Homo sapiens

<400> 5609
ctttcacatt ttaattgaaa gacagtgtaa tgccattaca gtacactaag tntacagcct 60
gatgatttct taacacgcgt atacctgngt aaccaccacc cagatcaaga tntagaacat 120
ttccaggccc canaanactc ccttgtacct ntttagtcaa tgctgccacc cccagaggta 180
agtacttntt tcatcatgga ttacttgcct gttcttgaac ttcatataaa tggaatcata 240
cagtatttat cactatacct gngataatgc aatattgttg tgtggatatg tggctaatta 300
ttatttattn attttttttg anacggagtt ttgctctttt tgcccatgct ggagtgcaat 360
ggcgcaatnt cggctcaatg caacctccac cttccgggtt caagtgattc tcctgcctna 420
gcctcccgag tagctgggat tacaggcatt gcgccaccac ccggntaaat ttggatttta 480
atanaaaccg ggggtttnca tgttgggcaa ggctggnntt tgaacttccn aacttanggg 540
ggtc 544

<210> 5610
<211> 583
<212> DNA
<213> Homo sapiens

<400> 5610
gagcatagaa attttaatcc acaaaattcc ataaaatttc aaacaaactg agaagagctt 60
ctctttactt tggggtcaaa acccagcaat aacaattttg tgctatgcta tatctgccaa 120
ttccggatca gggcagaggg aaggtccaat gagatttatt aattgccttt ccaaatgctg 180
tatgtgtatg tgacaaaaac tactctgaga atgaagaacc acagggaaaa gtctaggtat 240
ggaatgatat gaaaggcaaa gccagatatt gggagctatt tggtaaatca aggataaaga 300
gatattctgt ataagaaata cattagccag tgcaacaaaa cccaaagaaa tggaaagaat 360
tggaacacaa tgaaaaatgg catgaggaag ataaaatggt aagaaatccn gaaagtcatc 420
cctggagatg ctctggcttg tgggtgtaga attggaactt aatgaaacaa tncaggaaga 480
acagcagtca caaggaggtc catgcnctan atcctttcaa acattctgga ggaggaaagc 540
tctagtcttt naaaanaatg tccnggaagg gggaatggga gna 583

<210> 5611
<211> 576
<212> DNA
<213> Homo sapiens

<400> 5611
aaaagcaagt ggcttcacag tttatgacat catacaaggt atcaatctcc ttatactcca 60
aacaaatcat ttcattctta atgaaatagg agatgctttc agtctttcac agaccttatc 120
taaggactca cagggaatgc agcctgaacc ctagctggta gacaaataat agccttaagt 180
ttagacttag ctaaaaaatc agactacctc aatcaccccc aatgaaagta aaggccaaaa 240
ggaaagcaca atcagacgct gggaaactta gcttggaaat gcatttggaa ttatactgca 300
gtgtgatggt acccagtcct agtgtgaagt gaggaaaagg agacgagtga gtaaggcaca 360
gaggcaacag agaaaaaggc agcttttga atcctctcta gttgaatcct cccagtacca 420
gcttcagtaa ttggttagaa ccagttttat tcctaacaaa catagaacac cctaactaaa 480
tgtgagtaag gcncggaggc aacngagaaa aaggcagctt tttgaatccc tctagtggaa 540

tcctccagtc caggtttngn aattgggtaa accnng 576

<210> 5612
<211> 573
<212> DNA
<213> Homo sapiens

<400> 5612
aggattttac tttagtttta attgacgttt tgctcaaaag caaagaactg aacatttcaa 60
tggttcaatg ntacaagatt acaaacaaaa tccttacaca gttacagnat cctacttcgg 120
gtacttcaca ttaaatgcag gttgntaaaa tcagtgctgt gcttgaacac aagataagca 180
tttcaattta ataacaaaat taaatctagc accttgaaat aaatattgac gacagcttta 240
taagtatgaa agtatcattt caataggagg aaaaaatcca gttcaccaac agtggaaact 300
aatagcagca ttttcaaagc tgagatgaaa tttgngtaaa cacacactgg cccgcacagt 360
ggacatgcat ttctgttggc tgggccctnc ccacccaggg atgaacagag tgcccactga 420
gccttttaca ttccaaatct ggaaagctgc ctcaagtttc anaccgtggg ctagaaagac 480
tcaaatgccg ggcaanggga aatcaatgng tttaaacccg gatggggncc tttttggaca 540
nggcaancta gtacattttc agnccacttt aaa 573

<210> 5613
<211> 560
<212> DNA
<213> Homo sapiens

<400> 5613
attaacattt cattttattt cttagatttg ggtggattac atcaatttcc taaaaggcgt 60
gtaagtattt gtatagtttt tttttacatc tacagttggt ttagctaaaa tataattttt 120
agttctttga gaaatctcca tactattttc catagagttg ttctttgggt agatatccag 180
tagtgagatt gctgggttga atgagatttg gttataatat aattgatggc atttcttatc 240
caatctcagg gaagctgtag gatcttatgc agaaaatcaa agaataacag ctgtccgaag 300
agtttatcaa cgaggttgtg ttaatccgat gatcaacatt gaacagctct ggagagacaa 360
ggccgtcaaa aggcccaacg aggattcaga tgaagatgaa gaaaagggga gcccgttgtc 420
ccccctgttc atgacattta cagagcacgg nancagaagc cggnttcngt agggttttaa 480
acgcctntgc agaaaactcc tgtccaggat tcctttggcc tcaagnggna ttgttaaaag 540
agacacgctt tggttncang 560

<210> 5614
<211> 584
<212> DNA
<213> Homo sapiens

<400> 5614
gcaaagaatt tacatatatt taatatttta taaaatggcc agtattttat attgaagatt 60
atcgatataa accgtaacac acaatggcgg ctccctggca cttcttattt ccttatattg 120
ataggagact aagaaccagt aaaatgaagg agagaaagac ggtttgacaa aacagtgctt 180
actagtagat atgtcagata cacagcagtg gaaatgtaag agattaaggt acaaatacag 240
gttgtgctta tagtcgtcta atgagccaca cagggatttt aaaaattaag atttcaaact 300
ccatgaagca gtcaagttag accagcaaag gaaagattca agcaatgaag tcacagtata 360

0080794.0002

tatccatact tctgtatctt gtaaaccaat ctgccttacc tcagccaagg ccatatgaat 420
taataactta aatgtgtaca gtgcttttaa acttttaaac cccttcacat ctatgaacta 480
cgtgatcctc acaacaaccc tgtgaggtag gcagggcagg agttattatt gatccccatt 540
ttacngatga ggaacccnct ggagggangg naactgnttc ccat 584

<210> 5615
<211> 586
<212> DNA
<213> Homo sapiens

<400> 5615
atgctctttt tttggttcta aaactgatgt ggtttcattt ggagttctct tcttttcatt 60
aaccacatca ccgtctgctt ctcttgcttc tagtagtgat aaactatttt gctctttatg 120
gataaattca ttcatctctt ttgtaaccct ttctgtttgc tgcttttctt cttccatctg 180
tttatcatgt aatagctgct gntctttttc ttttctccaa aaagcttcct gtttttgccg 240
gattcgacgc cgtaattctt catcatcagt gtcagatgac tcagatcctc tgtcactcct 300
ctcatcttca ctgtctcctg atccataacc acccagtcca cctgtgtgca taaagctcag 360
tctatcatat gaaaaaaatt atactatgca ctaaaaactt ttcaaggnct gagaaaaaag 420
ttcatttctt ttttcaatgg ccttttccca gaagaatacn cctaattcgg ggtggggaga 480
agtntatatt caaacccctа aggagttcac agaaccttta ggcaaaggta cttaatatct 540
aatcctttct ggactattca tattttctca ctgnaaagga acataa 586

<210> 5616
<211> 551
<212> DNA
<213> Homo sapiens

<400> 5616
aaatcttatt ttataaagtt ccagggtaca tgtgcaggat gtgcaggtta cataggtaaa 60
tgtgtgccat ggtggtttgc tgcacctatc aacctgtcac ctaggtatta agcccagcat 120
gcaatagcta tttttcctaa tgctctcccg cgacctccgc cctcctctga aaggccccag 180
tgtgtgttgt tcccctctct gtgtccatgt gttctcatta ttcggctccc acttataagt 240
gagaacatgt ggtgttggtt ttctgttcct gcattagttt gctgaggata atggcttctg 300
gcttcatcca tgttcctgca aaggacatga tctcattcct ttttatggct gcatagtagt 360
ctgtggtgta tacgtaccac attttcttta cccagtctat cattgatggg catttgggtt 420
gattccatgt ctttgctatt gntaataagt gctgcaatga acataagtgt gcatgaacct 480
ttataacaga atgatttata ttcctttggg natataccna gnaatgggaa tgcngggcca 540
anggnatttn c 551

<210> 5617
<211> 585
<212> DNA
<213> Homo sapiens

<400> 5617
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180

0000-0000-0000-0000

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnn 585

<210> 5618
<211> 584
<212> DNA
<213> Homo sapiens

<400> 5618
gagacagtct ctctctgttg cccaggctgg agtacagtgg cgctatctcg gcttactgca 60
agcttcgcct cccaggttca cgccattctc ctgcctcagc ctgccgagta gctgggacta 120
caggcgcccg ccaccatgcc ttgctaattt tttgtatttt tagtagagac aggatttcac 180
cgtgttagcc aggatggtct tgatctcctg acctcgtgat ccgcccgcct tggcctccca 240
aagtgctggg attacaggcg tgagccaccg cgcctggcct gtttagagtt tttatacccc 300
ctatcttttc ctgggctgtg tcctcctttt gttcttcccc tgggcgggcc tttatctatc 360
acatgtgcag tggccctgcc agcacttggg agagctgcat gtgcagcgtg tttattgaag 420
tggtgcacat gctcantagg ggcaagttct cactggtcca gcgctccana ggaagtcata 480
taccagttaa atttcaccat cttgcccttt actggacatg cttnaaaccc tattggggga 540
ttatggcttg ncnaattcca ggngnnttct ggctggtnta aaaa 584

<210> 5619
<211> 580
<212> DNA
<213> Homo sapiens

<400> 5619
aatcttgcct gaatagggcc caagtccact tgtctttata agaccatttt agtatcagac 60
gacataatac atgtgcaaca ctttatatac aaggggtcta tccggtgcgc aaaagttcaa 120
acacatgaac atccaacagt ttgataatac aagttttatg gtacaataca atgtttctga 180
ataatataca ttaacaatga aagtttcgtg caaagagtaa aacatgttcc ctttttgtgc 240
cacaaaatca attctccttg agagactgta cttgcactaa ctgctgtgtt gggtcattgt 300
atgattctgc aagctctgtt tggaagaaaa acttctgtgg gacattgtgt cagtcataga 360
tcttgncttc ttgtccatgg gcagagaaaa tatgctgctg caacttgttt gcttgaacaa 420
atactgtaaa gcagactgga caccttgaag ggcctcccat cccttcnaac tggctctatc 480
angggcact ggagtttggc aggagaagtc aaaggtctgg ctgcaaantt tgcattnatg 540
ggtcaagcct tnattaanca tggggatttg gaacatgaac 580

<210> 5620
<211> 559
<212> DNA
<213> Homo sapiens

<400> 5620

0005045.0005

gattttggct ttattgctga atttggtaat cttaacatta ggagtactat gtagctacag 60
aagatgacta gatcatcaca ggttatggga attaatcctg gattcatgcc attaaacttt 120
tgacaatttc agagtatcac ttggattttt aaagctttat ttcaatcagt atacactgat 180
acatatcctt tatttctgct ttgcttagag aataaatgcc taaggtaaaa gattattatc 240
aaatgttgaa tttttcccat gcccttgttg atagttatta aatcatcaat aagtttatgg 300
attatagtta caaatagcag gcttttacac acctgagtat atgatgtaag cgccatgatt 360
tcataaaaat aaaaattata aaatgagaca aaatgtttaa tttcaaactt atccatgtag 420
gtcttatttt tctactgctg ataaaactca gaaaaaaatt atctttattg gaagactaaa 480
tgaaagccta aaaaattaan attgtcccaa aatttagncc ttcttatcaa aaacnccttt 540
ttcctntatc atcangnnc 559

<210> 5621
<211> 571
<212> DNA
<213> Homo sapiens

<400> 5621
gcccacgctg gagtcgagtg gcatgatctc ggctcactgc aacgtccacc tcctgggttc 60
aagctattct cctgcctcag cctcctaagt aactgggatt agaggtccat gccaccacgc 120
ccagctgttt ttgtattttt agtagatgtg gggtttcacc atgttgccca ggctggtctt 180
gaactcctga cctcaagtga tccacctgcc ttggcctctc aaagggctgg gattacaggc 240
atgagccacc atgcccagcc atatgtctta acccagcatc tatcatatga tcctcanaat 300
gacagcttcc ttanattttg taccctaatt gccttctctt gctgcagcct agttttggct 360
ccagcaattc agtaaaagta gttctactga ggtccagtat catacaatcc agatagctcc 420
ttgatggtct tgcttgggtc aaggaaactt tgggctctat ggtaaaatag nggaattcct 480
ttaggaatct ctccatcttc atagatatta tttttcacaa gtgaactgta ggaaagtccc 540
aagtttacag gtagatttct gaananaaca t 571

<210> 5622
<211> 581
<212> DNA
<213> Homo sapiens

<400> 5622
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn n 581

<210> 5623
<211> 525
<212> DNA

0050703-0070803

<213> Homo sapiens

<400> 5623
caatttagca gttcacatag tttattcagc aatataacag gagagaacct ccattgtaag 60
agacataagg cagatacagg gtgcatctct ggggtacatt cttcatacag actaacaaat 120
aacttcaggt ttcacaacat gtagcaagta tgatttgttg cacaccaaca gccattcatt 180
cctcacgttt tccttgctaa aagagccctg gtcaggcacg gtggctatgc ctgtaatccc 240
agcactgtcg gaggtcaggg caggtggatc atctgaggtc aggagttcaa gaccagcctg 300
gccaacatgg tgaaaccccg tctctactaa aaacacaaaa attagccaga catggtggcg 360
ggcacctgta atccccacta ctcaggaggc cgaggcagga gaattgcttg aacctaggag 420
gtggaggtta cagtaagccg agatcgtgcc actacactcc atcctgggca agagagcgag 480
actccgtcaa aaaaaaaaaa aaaaaaggct tgggcacann nnnnn 525

<210> 5624
<211> 593
<212> DNA
<213> Homo sapiens

<400> 5624
ctctcaacat ttcattttta atttttctaa tagtacattc tttaaaagaa gttaacgact 60
tcaattccaa atataaggat taaataatgc aatgaaaagc tgtcattttc agtgaagcta 120
ttgcctaatt accctggaaa aaagtattct tatgactgaa ctgatgcaaa aatcccttag 180
aaaagcttca tttgttgcct gtaaagagtc ttcttaaggt cacttttact tctagactgc 240
ccccttgttt ccagtgaaag agttttgctt ggtaatggct tgtggttcca cagtgttttg 300
tgtatgaaaa gcgtagacta agagatacta ctgaagtcgc tcaaattgta gattctgcca 360
tgaaaggaag tcccaacact gtaacatttc cccttaatct tcagcaagac acatgaaaaa 420
aaaaaaaact caagtcccaa ctgaatcttt actttggatc atcactttcc agcggcattc 480
aaaaggctgc tgtgccggtc agaccacaga agctcccttg anggcccctg ngggcttatg 540
aagaccctgc aggtttganc gtcggcgccc agcccggncc aggggtntgg aaa 593

<210> 5625
<211> 591
<212> DNA
<213> Homo sapiens

<400> 5625
aagttttgat ttttttttta accctgaaaa gtagacagta aaacagctcc tgggagaatt 60
tacaaccaac tgcatgaggg tctgggaagc tgaggggctg gagcagggtt gggagagtga 120
acaggagggg attctccccc cagtcactgt agcctcactg tatgatcaag ggaggtgggg 180
attatttagt caaaaaggaa gaaggtagga agaacaggag gtggaaggct ggggaggtgg 240
ggacaaacag aaaataaaag gtcattgttg cctgtttgaa tccagaaaaa aatgcctggc 300
cctatggagg ggaaggaagc ccctcagagg ggaggcagtg ggctggaggg aggcagccct 360
gggatgaccc catccccagc accacgggat ctgcggggca gaagaagggg cccaggcang 420
cgctggttgg aagaacccgc aggggccttc cggagcctnt gggtcacact ggctactggg 480
gaccttgtgc ccacccttgt gtgttncccg agtaactncc gtagtcgtaa gttcccgtaa 540
tattggcggg cacttggccc tggggtctga tatacctggt tccactggtg g 591

<210> 5626

US 2005/0260609 A1

<211> 592
<212> DNA
<213> Homo sapiens

<400> 5626
aaagcataat acaggagtag atttattaca gctactccac attttccaga gtgatacaat 60
gaccatagag ttaaaaacta tcactgttat cgctgtttat tttacaatac ttggtttagt 120
ctacaagttt aaggcaaaca tactaatgca tttgcttttc ttcagaaatc atacttataa 180
agattacata aaatctgtcc caaaacgtct aagaaatatt cagtaattaa aaataagtct 240
gattaagatg ctttaccagg atacatgaat gaactaaggt ggtatatgct tttaaaaaca 300
aaatttaaaa aattcaaaaa aggcaatctt tatcttgttt caacaatgca ttctgaaaag 360
gttaaatttc agaaattatt taaaggtaaa taagagtggc agccataagg aatactattt 420
ataaaataaa cnggagttat agangctact ttaaggaaga atggactttg ggacttctga 480
gtatgacnag tgccccgatg atggatcact ggtattgggg aacacagtgc ggattcacgg 540
gacacagant ggcatnggct gggcctgccg cttgttcctg gttcttnaaa aa 592

<210> 5627
<211> 575
<212> DNA
<213> Homo sapiens

<400> 5627
ggacaagagt tctttattgg tgctattact actgttgtgt actgtctctt gcatcaaacc 60
aggaggtaca caataattga ctgtctcatc ttcaatcagt gggtttgatc agatttctac 120
attataaaat ttcccattaa cctatcatct aatggttttc acatccaaga aatactgctg 180
tctagattca ctacttcatt aagactttca aacttttatt ttttaaaagt ctatcatttc 240
ttttgcacct attagctgga aattttccta agaattttcc ctcagttact tggctgccta 300
aaatacagtt cataacaaga agggcaggat aaatattata ttctctcctt tatcaatctt 360
cagagtaaga atctgatgcc ctagcaaact ctgatggtaa ccaatgagtt tttctggttt 420
ccaatattct tttaataggc ttttaatcnt ttggnagatg acaccattat agcccaaacc 480
caaaccccat acttgggaag tactggtgaa ctgaagccta agttataatc ccatggccca 540
gaanggatac taccatactg gaaatttctt tgact 575

<210> 5628
<211> 561
<212> DNA
<213> Homo sapiens

<400> 5628
gtagtttttt agtagagacg gggtttcact gtgttagcca ggatggtctt gatctcctga 60
ccttgagatc tgcccacctt ggcctcccaa agtgctgtga ttacaggcgt gagccaccat 120
gaccggccta tgaaccactt ttgactcagc ctgggggact gtcttctggg cacagctggc 180
agtgggttca cctgaccatg tttagcagca gaagcttcaa ggcctgttcc taattttgta 240
ttttcttaag gaaggtccct taaaccacag aagcctcagg ccccacaaaa cctgcatccg 300
cccctggctg caggacactc cagggtctgg atgcagccag ggccagccac agcctcacta 360
gctgaccgca cctttaaaag tacgcgcatt ggcaagcttt gtctgacggc acacccccca 420
agagacctnc ttggcctttg cttgggtgat gctgacccac atgggangggt ctctggncca 480
acaagtcctg gggacattcc ctgnatgaag accatatgtc tgacatggca cttggccacc 540

09/25/2003 09:45:05

tttntgggca nttgncccta n 561

<210> 5629
<211> 586
<212> DNA
<213> Homo sapiens

<400> 5629
agtttaaaaa caacaagcat cctttattct ccttccagtc tcagtgtcca gaggctacgg 60
ttaacaggtt ttcaaagtgc aaatcatttc attcctcaaa agccagaggg gaataaaaac 120
tgtacatcat ctccaatcca tattcatcag gagcgccctg gggcttgtca tcctgctggc 180
acggggccag gtttcagggc ctggcggaaa gaggtctgta ggctttggga cttggtgtct 240
ggccccttga gatgagatta gttctccaat aacctgaatg cctcttgggg aggcggcagc 300
acgcaggcgt agaatccctc tagacagcca gatcgggcgt gggtggggtt taaaccccag 360
gatgttgcta acagccacaa tgaaagctgg ggggtcanag gtaagaacct gctgagcang 420
agtggggatc tgcaaaaggg actaaagggg gtagaataat acaaaaaggc caagccataa 480
ggaaccaaat ggaaaaatat ttctcctggt gtgaaagggc anaagaaaan ggaacttngg 540
ggtagccatg aatgaaaact tangacaaac tttcntaggg acatcg 586

<210> 5630
<211> 572
<212> DNA
<213> Homo sapiens

<400> 5630
gtagagacaa agtcttccct tatccaggct ggtaagctgg tcaaactcct ggctttaagc 60
tatcttccca gctcagcctc ttaaagtgct gagatttata tctatctgtc tgtctgtcta 120
tgtatctatc tgtctatgta tctatctatc tatctatcta gtatatatta aagcaaacaa 180
agtcaaatct caaattcatc taactcagtt tcagtggttt tcactgtatc ttttctaaaa 240
taaaatttaa aagaaacatt ttaatatatt cattcaatac atgaaaatac acacttttgt 300
ggatcttggc tgcttcacat atttgaaatg aggactaatg cgaagtatta tcaggttaca 360
atttttttaa ggcacttctt aattttgtat attaaatttg tgactataca gcaaattttc 420
tttctataat cattgaagaa tttttgctaa aggaaatatt tttaggtgtc tcagatctaa 480
acagaagtga agttgagaat aaaatttcan ggngnattat ncatatccaa atatgctggc 540
ctacattcnt atattacttt ctaaagggct na 572

<210> 5631
<211> 572
<212> DNA
<213> Homo sapiens

<400> 5631
gagtgtttga gtttcattca cacaaaacat ggacatcatc tttgaggctc tgtcccagag 60
agacagggcc atccctcatg tctgttattg ggttgtagat aaacaaaagt ataaatcaaa 120
caaactgcaa attactctgt ctcttttcct aatcaataca gcaacagtcc tcagtggtac 180
tgcaccactc tggaaaaaat gccttcaggt tccttcccat cccccaaggc agcagcaaat 240
ccttcgtgtc gcctcctact ggccaaggca gccaaagatt tgaaagtctt tggctcgtag 300
atggccagat ccgctaggac tttcctgttg agctccacct ggcacttaac taaattccca 360

0509468.0002800

atgagcgctg gatacttcag tccatgttcc tggctagcag ctgnaattcg attaatccag 420
agctgaaatn agaaaacatg aagatnctta aaaatgactt ctgggatggt atggnccagc 480
aaaagcctnt aatggactaa agaatatttt tctaaaagta aattgccaaa atcagngggc 540
tntgatggng ccataatttg ggctaaacga aa 572

<210> 5632
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5632
gcaggatgag acacatttat tctacatctg gtcacagtaa atctcaccca gaccacaggc 60
aggatgccac gtggctacag gcagctggcg gaaatggaga tcatctgttc tggtgctcat 120
ggccactctg ggcagaaagc aaaggtgcct catggcacct actcanaggc actgaggcca 180
cattcccatc tccaggcacc agggatgtct ctgaagggtg attccatttg gagtttccaa 240
aatccaggac ttctgagagc caagccctag ttccaagtca tcctgagtcc aggctctgcc 300
agaatcttga gcacctggag ctggtggcaa ggcagcctgg gggctgaaag ggcctcagac 360
tggaccacag ggcaacccaa gggccctggg cctnanggtc gacgatcctt tttggnggtt 420
tttgggtccc acctggggaa ccttaatgac aggaagcnna acaggncaga tttcttcacg 480
gggaacctgg ttaaggcttg gngccttttg gcccgggcct aantttncgg atgttgccag 540
gactttnggg actcttggca aaa 563

<210> 5633
<211> 574
<212> DNA
<213> Homo sapiens

<400> 5633
aacaaactga aggtttctag catccctgca tggagcaaat ccattggtga catttttca 60
atggtttgtg cacacttcat gtctctgtca tattttggta atgcttagca atatttcaaa 120
ctttatggct gggtgcagtg gctcacgcct gtaatcccag cactttggga ggctgaggtg 180
ggtggatcat gaggtcagga gatcaagacc atcctggcta acacggtgaa accccgtctc 240
tactaaaaat ataaaaaatt agccaggcgt cgtggtgggc gcctgtagtt ccagctactc 300
gtgaggctga ggcaggagaa tggcgtgagc ccaggaggca gagcttgcag tgagctgaga 360
tagtgccact gcactccagc ctgggcgaca gagcaagact ccgtctcaaa aaaaaaatgt 420
atttcaaact ttattatttt atctgnaata gtgatttgga atcagtaatc tttgatggta 480
tcctagtaat tggtcctggg gcctaaaagc cccnccatnt aagaangcaa aggaantggt 540
aaaagtgggg gggtcngact ggtccggcat tncn 574

<210> 5634
<211> 582
<212> DNA
<213> Homo sapiens

<400> 5634
gcatgttccc gtatgcttta ttggaatgct gtcaggtccg cgccttccac ctgagaacag 60
ctcaggtgtg ggtgtggcta ttgtggaggc cgtgtctggt gaacctggtg aacttggtgg 120
tgagcatggt ggcagggagg agagcacctc acgtacaaac tgcacgagct tcgggcgcat 180

09/05/2005 09:50:56

gcatggctgg ccaagactga gggtcacaca gggcagacaa gggagacgag tcacacgtgg 240
cagcacatca tccagtcctc ggggaggtga gggttggcat gtggcgggca ccggtgtgca 300
gggcagcccc atcctggggc tggagcttcc ctagacccag gcaccacgca caggcatccc 360
ctgctcagct cctgaacccg gcccctcctg cctggccacg tccgctatcg caccctcctg 420
catcagggcc gagggcccac cctgcgctcc tttttcttcc agggtgttcc aggatggtca 480
agttccagca cttgagaaca agttaagtgt nggtgtggct attgtggaag ccntgtctgg 540
tgaacctggt gaacttggtg gtgggaaccg tgcttatccn gg 582

<210> 5635
<211> 583
<212> DNA
<213> Homo sapiens

<400> 5635
gttagccaat ggttttatta gtgtttacta ttattctttg taaaaggtat gacgtatttt 60
ctatatgtat caaatattaa actcctaaaa caaggtgggt tagggcaaac atggagtatg 120
gccatataat tgagaatcat actatagttt ttatacagca gtcaagtcac taaaaatggt 180
ttatcaggtt aggtttacca ggaatcctag atgacacaac tgggcatgag aatacgatga 240
accaccgtcc tctccctgat ggcagaggtc attactggcc tttcacattc aagccatctc 300
ccagctgtga ctctgggctt gctgcactgt agtgtaggta gtgctttaag gagatgggag 360
tagttagtta atggttcttt actgaattgg ttctaagata agtgggctaa aattagaaga 420
aaaatctaga aaaaattagg agacatgttt gtggcagaga tcattaactt gagggatccc 480
tatggnctta acatcagctt ttattctcat gccataagtt agaaacctat tctggaacct 540
taagccttta ntatggagaa tttttttgc nttgaaacca agn 583

<210> 5636
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5636
gagacagcat ctcgctctgt cacccaggct ggagtgcagt ggcgcccacc ttggggtctc 60
ccaaagtcct gggattacag gcatgagcca ctgcacctgg cctaagattt ttttttttctt 120
caaaactggt aatctaaact attatgtgac tgaaaattga tttctaggtc tntgcacagt 180
ccattaactt tatactttta gtttccaaat ctatatatgc cacaaacccc aaacataagc 240
atccacatat ttgttctgca tttcctctgt ccatactgga ttagcagaag cattaagtgt 300
tagtgtggca agatggaagg accctgataa catgcctctg taaccatatg taagagttcc 360
attttaaaat tacagacaac acagaaatac ttccgtatga ccctctctga aatgtgaact 420
tttcaggcat gtgaacaata aaaacaaaat gcagaaaata tttcatgaag ctgcactgag 480
caatgccctt aagactggct ttcttgggtt ccctgtccaa tctttagcat cacttttggc 540
agacattaag ctaccagtta ata 563

<210> 5637
<211> 575
<212> DNA
<213> Homo sapiens

<400> 5637

0050020.0002

gagacagggt cttgttctgt cacccaggct ggagtgcagt ggtgattata gatcactgca 60
accttgaact cctaggctca agcgatcctc ttgcctcagc tttccaagta gttggaactc 120
taggcacaca tcaccatttc tggctaattt tttatttttc atggagacaa ggtcttgcta 180
tgttgctcag gctggttttg aacttctggc ctcaagtgat cctcccacct aggcctccaa 240
aagtgctggg attacaagag taaaccactg agcctggccc tgaaatgctt ttttttttt 300
ttttttaatg aaaatacaag gcatggagat gtggaaagac accttgcttt attactgnta 360
ttattagttc tatagtataa ttcatatatc acaaaaatca ccatttttaa gcatatattt 420
cagtgtcttt taccatattc caaaagttct gcaaccatca ccactaccta attccagaat 480
attttcataa atgccnaaaa gcatgcctgn acctatnggc aggcactntt caattncccc 540
tttttacagn cttttgcaac cnctaattta ctttt 575

<210> 5638
<211> 585
<212> DNA
<213> Homo sapiens

<400> 5638
caaaggcaaa taaaataagt ttattgggat gtaaccccat cataaattgn ggagcatcca 60
tacaggcaag ctataaaatc tggaaaattt aaatcaaatt aaattctgct tttaaaaagg 120
tgccttaagt taaccaagca ttttgataac acattcaaat ttaatatata aaaatagatg 180
tatcctggaa gatataatga agaacatgcc atgtgtataa attcagaata cgcttttttac 240
acaaagaact acaaaaagtt acaaagacag ccttcaggaa ccacacttag gaaaagtgag 300
ccgagcagcc ttcacgcaaa gcctccttca aagaagtctc acaaagactc cagaaccagc 360
cgagtctgtg aaaaaggaat tccaggtttt catcaggttg aaattagtta caaatgaagg 420
agattaactc gggtggtgct gaaaaatctc agccctcagc attcctgggn aaanccgcct 480
tccaagagtt ccggctttaa gggancctg gtggcagtan ccggcccgnn ttattcagcc 540
caacccaaag tgggaaagaa accactggtt aacccgtcct tgggg 585

<210> 5639
<211> 561
<212> DNA
<213> Homo sapiens

<400> 5639
cttttctttt ctttctttcc tctttccttt cctttccttt ttttgagatg gagtcttggt 60
ctgtggccca ggctggagtg cagtggtgcc atctcggctc actgcaagct ccgcctcctg 120
ggttcaagtg attctcctgc ctcagcctcc tgagtagctg ggattacagg tgcgtgccac 180
cagggccggc taatttttg tatttttagt agagaagggg tttcaccgtg ttagccagga 240
tggtcttgat ctcctgacct cgtgatccgc ccaccttggc ctcccaaagt gctgggatta 300
caggcgtgag ccgctgcacc cggccgatgg gggacatttt cacctgaata ttggacagct 360
atgtttgggg cagtggtgaa gacaaatgca caccaacaaa tgggctcttt ccaaaaagca 420
tcttaaaaag tgctttaagg gtgcatcctg ataggtggca taagggagca tgccttttgg 480
tgccagaaaa aatttgacag taagnctggg ctttnggtcc aacttcaagc acccttccca 540
ancctngggn ctngncctac c 561

<210> 5640
<211> 577
<212> DNA

Docket No. 50570-2003

<213> Homo sapiens

<400> 5640
caagagaggc ttcttggtag tttcatcaca cagtggtttt attaggggat gtaaggatta 60
cagaaacatc gtatttttta acatatagta ttttttgaat atgatttgaa ttaatataga 120
aaagtgcatt ttttccagtt ttttagggaa aaggagatac ttcaccagga ggataaaaag 180
gaacaagagg ggaaggggaa ataaaaattc cagaaagatg aaaaattgtt gatgtaagat 240
ggaggcacat ttttgccaaa attctctaga agacagaatt attatggctt cccagtaact 300
gactccgctt gccggcagcg ggaggatctg gccgggttct gtcttctcct gcaatgacac 360
actgtcctgc actgaaaact tgagccacag cccatgtgcc tgggcagtat tggtaagtgc 420
agatattcag caaggaaaga aaagaaaact cctaaaagaa acagcagttg ccttaaacca 480
gcggagatta atagaaccta tagaattggg gtggggagac agcntcagga aggtaccctg 540
ggccttacat ttctaatatg ataaaggctt gctcagc 577

<210> 5641
<211> 589
<212> DNA
<213> Homo sapiens

<400> 5641
aaaaatcaga tggggacttt attgtgatgg tggcaggtcc accagcagat gcaaatgtgg 60
ggtgctgaga gtggcaacac aggccacccc aaaccaactt cactccctcc cctgtcctca 120
gccagtacag aagccaaatg tagccccagc cctagactcc agcccaggca gagtccaagg 180
gaggggtgtc agggtcagaa gtcacaggga gcccagtgac tatcaaggtg gctgagagca 240
aggctagggt agggatgggg cagagaaagg gcaggggggtg cagccccagg tggcccaaag 300
caacacagag gagcaagggc tggcattcaa gtcagcaggt ccctggggag aacagatggt 360
gcctggagtc ccacatggtg gtacaggtgg gggagcttct tggtggcagg cagcacccca 420
ggaggaatgg gactncttgc cgangctgac ccaacttcaa ggctgccaag ttctgatggg 480
aatgtcctct tcangacatt tccagccccg gacgaacaaa agccttgagg aattgggatt 540
cttgccttga gctgacccaa ntttggggct tgcagttctg atggaatgg 589

<210> 5642
<211> 580
<212> DNA
<213> Homo sapiens

<400> 5642
aattctgatg ttcatattta atatcattta acatttatac atattagtca ctggagcttt 60
acttggagta catccacacg aaaaaccaat tatttattaa attttccttt cttagcaata 120
gcctctaaat ttgcaggccc accccaaact gttcctaaaa gatctctttc gttctgtaat 180
gcttcctcca aatatagctc tctgcctgaa caaacagatt ttttcaaagc tctaattact 240
tccggtggcc cttggatgaa ttgctttagc cattcttgtg cctcttctag agatttagtt 300
tcatctgaag actgcaagac ctcttcaacc attcctatgt ttagagcatt tttgaatcca 360
gtttaagggc cccactcaac actttgagag cttgtctact tccgattatt tcaactagcc 420
cgggtgggcc accccagctt ggtattatgc ccatctcttt gtggacgaat ctgatcttac 480
tctctgggag cattaacctg gaatcacatg ctgnagtaaa atctgntctt canccaatgg 540
ccaancttga accagngcac acttattaaa ggaagctgtt 580

0050250-0050450

<210> 5643
<211> 576
<212> DNA
<213> Homo sapiens

<400> 5643
gagacggagt ctcgctcttg tcacccaggt tggagtgcag tggcacaatc tcggctcact 60
gcaacctcca cctcctgtgt ttaaacgatt ctcctgcttc agcctcctga gtagctggaa 120
ttacaggccc tgccaccacc cccccgctaa tttttgtcta ttttttttt ttagtagaga 180
cggggtttca ccatgttggc tagtctggtc ttgaactcct gactgacctc agacgaacca 240
cccgcctcag actcccaaag tgtcaggatt acaggcgtta gccaccatac ctggcctgct 300
cccagttttt acaagatgtt aattcccaat aatctgagag caatgtgtta atatgaatat 360
taattcttct aaatgaatat tcatccttat ttcctacttg tataggtgga tgaataaaga 420
tccaatagta taatagaaag actattagta agaatgccag aaggncagtc tcatgcacct 480
ggtgaaataa accaaccaac caacctgaan tctaaagctt gngtggcaag taccactgtg 540
gggaagtgta gaattaacnc tcttttccta agggtc 576

<210> 5644
<211> 595
<212> DNA
<213> Homo sapiens

<400> 5644
atatataaaa tctttattac aggcagtatt ggtccataca ctaacacaat accaacagta 60
caggtttaat ctttcaaaat catcatttaa acagcaaaag accaagaaat aaaatttgag 120
tcaattattt ttcaaaatat tctcaatgca cattatcctt aattccctta ttatagtgaa 180
acatacaaat acagaaaaat accccattta acaaatacta gtgttaaatg gttatttggc 240
ttaaaatctg agttaagaaa atccttttta gcaacctaca tacagataag tagcaaactt 300
tattatatta aacaaattca ttctgctaaa acatgtaaag aatttcatcc atcatgtatt 360
ctgatcccag tacaagtgtt tattctctta ccgtcacgat tcttatatga aggaccaact 420
caaagagttg tcctagatat aacctcatcc tcttccccaa cacacttcat tccaaagtct 480
ggtcaacaga tggcaacccg ggtagcagtc actttancat ctggatgccn gtgggttccg 540
tgaaaancgt gggcaaggcc tgtggaacaa gcccattttc ctacctactg ggggg 595

<210> 5645
<211> 582
<212> DNA
<213> Homo sapiens

<400> 5645
atttttaaa ttatacttta agttttaggg tacatgtaca caatgtgcag gtttgttaca 60
tatgtataca tgtgccatgc tggtgtgccg cacccattaa ctcgtcattt acattaggtt 120
atacgaccat tctttttcac tctgaattgt tttcaaattt ttcacgtatg tacacctcgt 180
acccccaaa accatatcgg ccttaatagt atgaaatgca tcctatttcc tttgtatttc 240
actaagcaaa ttatttttaa aatactttat ttcatttgat caggacgatc tgtgtaagga 300
gacacatttc acaattcccc taacctccat caggaaacca gccaaagtct ggctcaccca 360
aaagcaagcc cgatgttgac caaagctgcc acaggctagc agccccacac agttgagaat 420
gaaggtctgc ctttccattt ctcacagtga caaacaccat gggcttgcat tacacatact 480

0505050.00200

tcaggctgat gactgggaat acncatatat taggttcatc aatcgctcac ttggttcaag 540
gggggttacc caacaggggg cttggagcca tcctttactt aa 582

<210> 5646
<211> 579
<212> DNA
<213> Homo sapiens

<400> 5646
gagacaaggg ctggctctat tgcccaggct ggagtgcagt ggtgccatct cggcttactg 60
caacctccac ctcctgggct caagcgatcc tcctgcctca gcctgagtag ctgggactac 120
aggcgcacac caccatgcct ggctaatttt tgtatttttt gtagagacgg gatgtcatca 180
tgttgcccag gctgtctcaa acttgtgagc tcaagtgatt tgcccttctt ggcctcccaa 240
agtgctggga ttacagacag gcatcagcca ccgtgcctgg cccaaaatta tggactttaa 300
ggaaactgtt gggagatatt tttctgtggt ttcatgataa tctggctata ctctggtaga 360
atacccacga attttcacat caaggcagta ataatacagt ttttagaagt gtaaacatca 420
acaccggact ctcaggttaa tgtctangta aaggaccccg canggtgcct tcattcctta 480
ttacactgng ggcatctctt tttcttcctt actcataatg gaatatgaga attaaacccc 540
tattggggtt tcttctaaaa agaaaggtan gggtgggcc 579

<210> 5647
<211> 588
<212> DNA
<213> Homo sapiens

<400> 5647
agaattcact gtaacacttc attaattaaa tgtattgaag gggaggattc ccaaggtctg 60
ggcaaagtta ccggaatcca gattccttct tgagctcgaa ccaacattac acttttcctg 120
gaatcaaaat gggagttaat acaagtgtat aaatgacaat taatgcattg gacagtttga 180
ttgttcatcc aaatttttgat atatctcact aacagcatgc aaggaggctt aacagaactc 240
tgtatggaaa caggttggag gtaggtaaag cagaatgtct ggatctacgt tgatactgag 300
agagggagat ggtagtgggg acaacagaca gaatagtttc tgcttcccat acttgcagtc 360
cagacatggc aatagccaat ttccaaagtt ctgggtgttc tgggtcagaa tggggagtat 420
catatgaggc ctcggaaagg gggtaatgcc tttatcttcc attttaagga aaagaatgac 480
ttaacctncg atgccaaagt antatgatga attctcggtc tcctgataag aaataaaata 540
agtgctggga tacaggcatg agccaccaca cccagnccaa atgggtgg 588

<210> 5648
<211> 517
<212> DNA
<213> Homo sapiens

<400> 5648
agacaaaggn ctcactttat cacccagctg gagtgcaatg gtgcaatcat gacttgctac 60
agnctcgacc cccaanggct caagtgggat cctnccatct tcaagcctnc ccagtagctg 120
gggaccatag gcgtgcccca ccacacctgg ctaatttttg tatttttttgt agagacaggg 180
tttcaccatg ttgcccagac cggtcttgaa ctcctagact caagcaatcc tcctggctca 240
gcctcccaaa gtgctgggat tagaggtgtg agccacgtgt ctggcctgaa atacttagat 300

US 2003/0165900 A1

accagttgat aaacagttgt gccttacact acctctccac ctccaaatgc caacccctttt 360
ttgttccagc ctctcttcct tatgttccaa ggatctaaga gttaaagtgt taatactctg 420
catacaaaag gtagtcttga ggaccatgct tcanaactat ggctgttgnc accctgcttg 480
ctggncccat gccaccatga ttggnattna ntncttg 517

<210> 5649
<211> 576
<212> DNA
<213> Homo sapiens

<400> 5649
ggtcttttat gcaaatatcc tgtatagtca caatttcttt gatcatgttg tagatactaa 60
tttatttgag gatgacataa tactttgctt aattttactg tttttatcaa atatttattt 120
ttagaaaatt actacttggt catgataaaa attttaagta atgcaaaaga gaacaaggta 180
aaaacaaaag ccaccatgct tttggcccct tccaatcctc agcagtgtcc actggtaaca 240
tttcttgaat atgcagagat tgtctttttc aaagagatgc tattaataaa ttaaggcctc 300
tggggttgaa agagtaaagg agacttctga cccttcttta gtgcactccg tggaggtcac 360
tatcagatct catctggcct gactggctat cagcaacact aggaataagt gttaggaaaa 420
aaacacctgg ctccaatgtc aatgaagttt caattagaaa aataggaaca ggangtatga 480
aataggatgg ncctggactt accaaataag ccctggatga agtcnaaatc taagacccct 540
tattngncaa ggagggccgg tttccanccn gggaan 576

<210> 5650
<211> 573
<212> DNA
<213> Homo sapiens

<400> 5650
atgagacgga gtctcgttcc gtggcccagg ctggagtgca gtggcacgat ctcagctcac 60
tgcaagctcc gcctcccggg ttcccgccat tctcctgcct cagcctctcg agtagctggg 120
actataggtg cccaccacca tgcctggcta atttttttgtt gtatttttag tagagacggg 180
gtttcactgt gttagccagg atggtcttga tctcctgacc ttgtgatccg ccacctcggc 240
ctcccaaagt gctgggatta caggcgtaag ccaccacgcc cggccatatc tatctcttaa 300
agctacacag aacttcccaa aatttcaaag cagatgatcc ttccaaataa ttgtattgaa 360
tggacccaaa tatccttgtt atatctttta aaatgcactg ggcttgccag gaaatccatt 420
tatagggtag ttttaacaac ctgtcttcca agggacaacg tcagttagaa aatgggaagg 480
gcnttagact tnttgaaccc cctttaaacc ggaccttgga actttnggga tnccaaggnn 540
cccccttaagg gccccaaccc aggtttttcn ttt 573

<210> 5651
<211> 575
<212> DNA
<213> Homo sapiens

<400> 5651
gagacgaagt ctcgctctgt cgccaggctg gagtgcagtg gcgtgatctt ggctcnntgc 60
agcctccaac tccctggttc aagcaattct cctgcctcag cctcccgagt agctgggatt 120
acaggcacac gccaccacgc ccagctaatt tttgtatctt tagcagagac ggggtttcac 180

US 2003/0224385 A1

aatgttggtc aggatggtct cgatctcctg accccgtgat ctgcccgcct cggcctctca 240
agtgctggga ttacaggcgt gagccacagc gcccggccga ccaatgttct ttacatccac 300
cttctgttct agatgctgtt caattagtct gcttttatag ttgtctgaga gcagagagaa 360
aaagccccac aactaagtgc tgagagtcac caagtaaggg ggacgtggcc acaaggcagg 420
aaacaagaag tccaaaattc aaatcacaca ccaacgcggg tctttctgca ttcaaggcaa 480
taaaaaaaaa ttttttttg gtaacttnct atattgctgg aaccaactga tggancangg 540
caccttgtgg gaccaaacgt ttttatgaac caatn 575

<210> 5652
<211> 570
<212> DNA
<213> Homo sapiens

<400> 5652
gaaatttcaa atgtccttta ttaaacctga ttgctgacta attagagcct aggcaagtag 60
gaagaaattg cacaactgat atttaactac aggtttttc tctggacata ttgacatatt 120
aaagtatttc tcttcttgaa aatattttaa aatacaattg cagtaaaaac aattgcatgt 180
agacattatt ctccatctgt tttttttgta ggagactgtg gaagacagga gggagttggg 240
cgtgcacaca gaatttaccc taacagcttt gttagggagg tggtcccaaa tactttatat 300
tgggactccg tactcaggtg actttctggt taaaaatatt gaagacggat gacaactggg 360
ctcttttac tttgacaact gagacaaaat gacaaattgt cagtgttcag agatccagac 420
caacttctca aaaaaatatg tttacccctg atatcatcat tattttagcc caactgngcc 480
ttttgggggg gatcacaact cattactggc tttttggttt aaggnttaga atttataggg 540
gccttnaacc angggnttag ggaaanactn 570

<210> 5653
<211> 569
<212> DNA
<213> Homo sapiens

<400> 5653
caaagctcct cattccactt ctttatttca gtttatgtga atattagagc tacgcgacag 60
gtgagatcag aataaggccc gttaacaatg aaactgaagc agaggactta gtcctgattt 120
ctgtctctng ctttctcttt tctctttttt taatatgcaa acaaaaaaat gcaaaaatga 180
aaatgacaac acaacatcag aaagacattt ttttaacttc attcgctaca acagtcacga 240
actggttgaa ctctacctgc catccaactt taagaaacga agacccggca ctgtgaaaaa 300
gaaacaaaac ccaaacaaaa caatgataca aagcaactgc gaattaatgt aaaaatggag 360
tgcaaatgcg actacagaat gcaaaaaaaa acatcagcgt tgcagattcc agcaacactt 420
atcaaaataa tttctgaant gtttcatatg aaacatagac aaagcantaa aaagaggata 480
tatgttaatc atcttaagcn taccaatgtg agttaaganc ttaaaaatta aaaaaaaaaa 540
agtncttgga atgaataagg gctnccttt 569

<210> 5654
<211> 565
<212> DNA
<213> Homo sapiens

<400> 5654

0050204650 : 0 : 2009-02-03

atctttgtct tcatcttgct ttttcataga tgccagtttt tcttgngtca atctgncttt 60
gttttatttc ttctttcttc agttctagga aagcagaagg gattcccgcg atgttttctt 120
gtgcacttag cagcaggggc cacagttctc ccataaattc tcgagcattt tttccattca 180
aaaatccagt caggttgatt tgcatcattt tggagtctgg attctgcaaa aagacacgac 240
aggaagaaaa acaggttact tcaaaaccaa ccaaccaaca aatcaaccaa cctaaaactc 300
atttaaatta gtatttttta agtctaccat aggggcttag acatatatat agtccttact 360
attttacaaa tagtcttccc tagtagcttc tcagcaatat aatctctaac agattaccaa 420
attctctctc actctaccaa aagcatcaga gcagcctgtt aatcctttgg ggattcgtaa 480
gtattttaga ctctgngctg gtantgggcc ttacattatt aactttaaaa cctctggaac 540
atccncaaat ctagnnttac tacag 565

<210> 5655
<211> 580
<212> DNA
<213> Homo sapiens

<400> 5655
aaagagacag agtcttgctc tgtcacccag gctggagtgc aatggcgcga tcttggctca 60
ctgcaacctc tgcctcccgg gttcaagcaa ttatcctgcc tcagcttcct gagtagctgg 120
gttacaggcg cctgacacca cgcctggtta atttttgtat ttttagtaga gatgggattt 180
caccatctta gccaggctgg tcttgaactc ctgacctcgt gatccccctа ccttggcctc 240
ccaaagtgct gggattacag gcgtgagcca ccgtgcccag cccagcttaa attctttgaa 300
ctcacctccc ctactgagag agatggctac cttggatttc tttctctgaa gttgaagttg 360
aataacctat cgttttacct gcttaggaca gctgcttgcc caaactttac tagcacacat 420
gattgtatgg agcttcatgc ttccagtgta gaccaagttc tcaggccaga accaggccat 480
cctcttgnga tcaagtcttg gcaacaagac attctggtct tactggangg aatgctctgg 540
ggtttcactg gttgggctta aaagggcctt nacaaaatct 580

<210> 5656
<211> 571
<212> DNA
<213> Homo sapiens

<400> 5656
aaaaaagggg tcctatgtgg gaaatgagtg ggacaatgat aaaaataaac aaataattaa 60
aattccaaat caaaacataa ctcctggccc tgagatcccc agttaatcct ctaagaccac 120
aatctccaca ttgtgaactt gatgctggtg ttcttccatc tcagccacaa ctttctcctc 180
aatcctcagc tctgtctcca agatgactgc tttgccctca gtatcttcag cttctgggtc 240
cggggctgga tcaatctcaa tgatggtctg cccatcctct gaggtgcttt caacagcctg 300
aattgccgag gttaggccgg actccatggc caccaattcc acagggctaa ccatggtggt 360
catgttgccc agtgtactcc catcctgcat ggcagtagag ctcagcagcg ccaagctaga 420
tgaagggtgg atggtcattg tgtctggtga gctgctcttg gcagaagaga ccactgtggc 480
ataacggaaa aactnaaggg ncaaaaagca tgtgtggaca ggccaggatg gancctggtt 540
aaggtggccc tnggaatttg nccctngnaa a 571

<210> 5657
<211> 572
<212> DNA

0050250.0045.0070

<213> Homo sapiens

<400> 5657
aaggcagggt cttactctgn ctcccagccc ggagtgcagt agtgcaatct tagctcattg 60
cagttttgac ctcccaggct caaataatcc tcccgcctca gcctcctaag tagctgagac 120
tacagctgtg cgccacgaca tctagctaat tatttgtttt ttgtagagat gaggtctcac 180
tgtgttgctc aggctgggta ggtgtctaac tcctaggctc aagtgatcct cccacctcag 240
cctcccaaag tgctgggatt acaggtgtga gtcaccgtgc ctggctttgt ttaaggcatt 300
ctttttccgc agcatctgtt accagcagcc tgaagccatt tctataacaa tatcaggaag 360
acacatggac agagacccta atgtatgaaa aatgcatcaa ttatttgaga ttaatgagtc 420
ctcataaaca gagactgaga ggctctaact ttcctncgtt atgtgaagag taagaacnag 480
acacttctcc tgtcctttgg aanggtgtta tgcatctaag ggattaaatt gcaacaatgg 540
ctttaanacg gagggggaa aacattgggc nt 572

<210> 5658
<211> 577
<212> DNA
<213> Homo sapiens

<400> 5658
gtggcattca ttcctctgaa taactgtttc tttaaaacaa acaaacttgc attttagctt 60
caagggtaca tgtgcaggtt tgttatatag ataaactcat gtcacggggg tttgctgtac 120
agattattta tttcatcaca caggtactaa ggctagtgac caatagttat tttttccgat 180
cctctccctc cttccaacct ccacccaact ctgtttctga aagaaggaaa gaaagaaaga 240
aagaaagaaa gaaagaaaga aagaaagaaa gaaagaaaga aagaaagaaa gaaagggccc 300
agagaggaca aagtatttgt ctaaggccat actgttatta agaggtagaa ccaagaccta 360
cactaactct gcaaatccaa tttctgtcca cagtgcccct gagatcagaa tgatactcac 420
tccatttctc taaaagctac aaatgaaact cttcttatga gtaaaaagta ctaacccaaa 480
ttggattatt actatagtgg tctcgcaaaa tttagaggga tgttcanagg gcaaagattg 540
agaaccctgg cttaatcttg tangggtgaa tgtncnt 577

<210> 5659
<211> 530
<212> DNA
<213> Homo sapiens

<400> 5659
gtagggacag ggtctcactc tgttgccagg gctggtcttg aactactggg ctcaagcagt 60
cttcctgcct caacctccca aagtgctggg attacaggca catgccactg tacccaaccc 120
aggttcatgt ttttatagtt cattttgatt tttcattttc catccctgat ctttagagaa 180
tttctgttca tgcagctctg tcaccccttt gcttgggtca gtctgactct gtcttcacca 240
gttattatct tggaagcttg agacagtttc cttatctgaa cttgcaggtc gcagaccttt 300
gagtttgggt tgcttggcag taggtggcaa gttacttaac ttggccatgc ctgatgctat 360
ggtctgaatg tttcccccaa attcatgtgt tggagactta atccccaatg caacagtatt 420
gagaggtggg gagtttggct ccttttgcc ctcctggctt ttgccatgtg agggcaccgt 480
gntcttcttt ttcagaggat gcnncatctt nggggnantt ttggganaaa 530

<210> 5660

0050050.0012500

0609203.0004000

<211> 573
<212> DNA
<213> Homo sapiens

<400> 5660
aacaaaatgg cccctaaaca aacaccaaca acttcacttg gtcttcaaac aaagaaacag 60
tctttttttc caacatagga ggaaaagcta cttgttgtgg atgtacaggt ttccaacatg 120
gcacccttct aaagggcttt caaggatcat cctaatagcc cattttacct atgtactgac 180
cttggaagct aacccctgag tatgatgcaa ctccactcta atgtaaatta aaatgccatg 240
atcttaaaaa tgccataata ttgtcagtat aatttaattt ccagtttagt tccatcttca 300
catttagcag tgtgtgtctg tggccgtctc ctggtgccag catttcagaa tgtactatca 360
ctggctgaga aaatctcacg gtgagaagag tagtgtgtca taagatctga acaaaaaagc 420
taccaaagtc gatcagtctc agtatgattc anggatatga ttttcaatta gcaaatggtg 480
ccactgaagc anaaagtggc tttgttttgc tacacccagn gctnccagga atttcctgng 540
gcctcctttc atgggtttnt accctggcag gtt 573

<210> 5661
<211> 575
<212> DNA
<213> Homo sapiens

<400> 5661
aaaggcatgt caaaaagaca ttttacttcc ccaaagcatg gccccaagaa gccattatta 60
taatagagta tgaatttctg ctgcaggtta ttagcctata atactaacaa taaagtcctg 120
cttaggacat aaaggcttac actgggacat gaagtagtaa gacacaatcc actgactatt 180
ttaaatttgc tgtacaccta aaccatcttc tccattatac caatctctgt gtgtgtgtgt 240
gtgtgtgtgt gtgtgtatac acacgtcctc tttcagtaga acataaactc tgaagatgag 300
gtaaaataca atacagctgc tgctgctgat gagctgtctg agtttctgca gacaatctgc 360
aaaaaaatgg aagttctcaa ggcccagttg ctggtgtctc ttttgaggcc ccaaaacttg 420
gttgatttat cttattggca ctctgcatga aatcaagagt aggctcaaag gcaagcctta 480
tctcctgnga acacaattcc tacaggtctn aactcaatat ttaaatttng ttgggacctg 540
gntncaaatt ggaacttctt aaangatttt aaaag 575

<210> 5662
<211> 483
<212> DNA
<213> Homo sapiens

<400> 5662
aaatagagac agggtctcac tgtgttggcc acgttggtct tgaactctgn cttgtttgtt 60
tgttttgttt ttgtttttttg agatggggtc tcactctgtt acccaagctg cagtgcagtg 120
gcgtgtcctc agctgggctg caacctctgc ctcccgggtt caagcgactg tcccatccag 180
cctcccgagt acctgggact acaggtgcag gccaccacac ccggctaatt tttgttattt 240
ttggaagana tggggtttcg ccatattgcc caggctggtc tnaaactcct gacctcaagt 300
gatcctccca cctnggcctc ccaaagtgct tagaccacag gcccaagcca tnatgctggc 360
ccanagtagc tttcaataaa ctctntttgc actgtacttt ncgactcgnc ttgaattcct 420
tcctgtatga gatccaagaa ctcttttggg atctgatcan gaanttnttt cccagnatat 480
aag 483

<210> 5663
<211> 586
<212> DNA
<213> Homo sapiens

<400> 5663
agacttttat ttttatttta cttgtttgga cagaaaagaa aattcatcag ctttcattag 60
agtctcctta agtgttggaa acacattaaa ctcaggaata gtggaccttg tagaaaagca 120
tcacaaatta aaaatatatt tctccatgtg gtaaaagtgc tttcaatccc attaaagggc 180
acagcaaggg tgtttggaaa cacgatctga aatttggcct gcaatccgtg gcatcgattc 240
caaccacagg gcgggggagt caccatgatc tagagcacag gagccacgtg gggcccggag 300
catgcggaca gcaacactcg caataactga gtgaggacga ggcccatagc ctgagtagaa 360
tagattctgt atttgtaaaa aatgaggtgg ttacatcaac tgggttgaag ggggactggg 420
taatcccaga aattccttgt ttctggtctg tggggatggt cagatctgcc caccactctt 480
ggcacccgan gcttnnctgg agacgcatna acctgggntg ggaaagtgcc canatcttgc 540
tgggggaaca caaccttcgt tgccatgccg gcacccagcc tttcnt 586

<210> 5664
<211> 587
<212> DNA
<213> Homo sapiens

<400> 5664
gtttactatg cttttattta tactatttgc acagtgagca tatttacaaa tgtgttccat 60
tacaagacat cagacacaag ggaaagacag aacaaatctg taatcttctt ccactcacac 120
tttactggtt attccaaact ttcaaagaac agcctctcag tggtactttc tatccatcac 180
acaacatgac acaaagactt catttaataa ggttagcaca gctgttaata tcaaatgcca 240
acgacagaaa aaaataacat aaacttttcc tcaagtatat atttaaacat attgtgattc 300
ttagtcaaca gtgttataaa atgaatacaa gataacaata tctatagcaa acactacttt 360
gcagtttaac aattagcact ggtcacaaat accaaatata gtgccctccc caccctccac 420
aacctttga attcaggacc ctgcctatct actccatgga gcagatcttt ggattctctt 480
ttccactcct aagggtttgc ctaggatctc tctatggngc agaatacccc ctagcacccg 540
aattggggaa taggcttaac cttgnatnat catctgaatc ccagcat 587

<210> 5665
<211> 572
<212> DNA
<213> Homo sapiens

<400> 5665
gagatggaat ttctttcttg tcgcccaggc tagagtgcaa tggcgtgatc ttggatcact 60
gcaacctctg cctcccgagt agctgggatt acaggtgccc gccaccacgc ctggctaatt 120
tttgtatttt aagtagagac ggggtttcac catgttggcc aggctggtct tgaattcctg 180
acctcaagtg atccactgng ctcggccaga attatgtaga atttctaatt gaacaaaagg 240
aatatctgtg agaaagaatc caagctgtct gcaattgcta ttatattaca tataataaca 300
actgcaacag ggggattcca gctgtatgtg ttcaggttaa ctgtgtcaag acattccaac 360
acatattcat tcattctaac gtatgacaaa aacgctagca gatcaagtat gtatgcctat 420

0005050.000200

ggagggaccc tgggatacat agcantgctg agcatcctta aaaangtttt tctaactgga 480
gccattggtc tttggggnca acangttntg acatcccttg gggcaccttc cccttgactt 540
tttnaaaagg ncccaancta cttttaaaga nc 572

<210> 5666
<211> 586
<212> DNA
<213> Homo sapiens

<400> 5666
agtaaaatgc ctactaatgc caaattcatc ctccattata tctttcaata gcttgtattt 60
aataagctta tgtgatgatt ccttcaggct tatggggaaa aaaaatgtct gcaaattaag 120
ttacatgctt cgccctccgc cccctgcccc aatcaaaaat gatacaacca agttttggtc 180
tctctgtcag atgccaagag aattcttggc aagttttggt tcaaatgcag ctttcctcaa 240
catccaatca tttctccctg ctctgacacc tgtcccctct ttctcagctt ggagtttttg 300
tttcagaatt gtcttatccc tatgatacat ccatttgtac ttctatatcc cactttaggt 360
aattaggttt tagagcccac aggaatcaca attcacatgc tgttgctaag ttctgtgcca 420
ttaagccaaa attgctatct accaaagtat ttaagtcctt atgaagagta ttccaagggt 480
ttcatgcaat gtganggtcc attgcaaata ttttgaactg agtttggaca aagagtttna 540
agngggaacn cagattttcc ccaaggnggg aaaggaaggg cagggt 586

<210> 5667
<211> 530
<212> DNA
<213> Homo sapiens

<400> 5667
catctttaaa ttaatgtctt tactaaaggg ttagaatgat ttcagaagga aattacaatt 60
ttgaagggaa aggaaaagac attgaaatta caggtttcag aagaagagct tcctctgact 120
ccagctttgg ctctcctgcc ttgggatccc caacccaccc ccaagcaccc ttgtatgcat 180
tcctcaggaa gagggatgtt gttctcagtg ttttcctctt ccatccgngc ctcaaactag 240
gcagcttcca atggtgccct gggcttcana aggtggccac tgagctgacc tctaggcttg 300
caggctgaat ttctcgtcag cacttcagga tcatgatctc taacactcat cttctctctg 360
cacactcagg gttggggtgc agccccagct gaggtcccag ggncagtggg tggatgtggg 420
ggcaagggag ctggaanaac actngagaga cagcaggtaa attgagacat ggctttattn 480
agcagccctt ttanagggtt aagggtncca tttttcnntt cacaaaccct 530

<210> 5668
<211> 470
<212> DNA
<213> Homo sapiens

<400> 5668
aaagaaaaac aacagaagag aaggctgatc ccaagctaca gggttttttt gtttgtttgt 60
ttgtttgttt gttttggaga cagtctcgct ctgtctccca ggctggagtg cantggngcg 120
gncatagctc actgngggct cagactcaag ctcaagcaat cttcttatct tgcctttcta 180
attgctggga ttataagcat gagccactgc acctggcctg tgngacgtaa ttctgatgtc 240
aactccctga tgttacatca aatgccacag gttaaggcca ccagcccccg ntaggctgcc 300

09825946.072802

ctcgcttcag atgcagctgc aagcttgggt gtccacagac cgnatgtact tttcaccaac 360
tggctgcaaa tttggaggtt cccaccacgt cctcaggttt gataattcac catacaaccc 420
acagaactct gaaaagcatg ancttttcnnt ttcnntattt gagacannag 470

<210> 5669
<211> 586
<212> DNA
<213> Homo sapiens

<400> 5669
gagtaatgat atggtttaga tctgtatccc cacccaaatc tcatgtttaa ttgtaatccc 60
caatgtggga ggtggggcct ggtgcaaggn gactggacca cgcaggtagt tnctcatgaa 120
tgatttagca ctgtcccccc actgctgtct cgtgatagag ttctcatgag atttggttgc 180
ataaaaagtg tgtagcacct ccccctctctc ttttcctctt gctctagccc tgtgaagata 240
cctgctctgg ctttgccttt tgccatgagt aaaagctccc tgagacctcc ccagtcatac 300
ttcctgtaca gcccatggaa ccatgagcca attaaacctt tnttctttat aagttaccca 360
gtctcaggca tttctttata gcagtgtgag attgaaccga tacaagacaa caataacaaa 420
aagtagataa atatgaaggc ccgagaaatg gcaacttctt acgaagggaa agctgttatc 480
ctcaagcaag tcaagttgag ggactatcct gggagctatt tttccgngcc ttggtttnca 540
cttataccgg gaagtatgcc cntggnggnt taaagttggt ttantt 586

<210> 5670
<211> 572
<212> DNA
<213> Homo sapiens

<400> 5670
ggcttgtgct tatagaggac ttcatcagca cacttcactt gaaatgcacc tggctgcagg 60
taaccatgtt agtaaagaat atcctttctt ccaggctacc gcttagtgtt aattccgaaa 120
aatcaggttt gtgaaaattc agatggccta tgggtgagct gtcactcagt tgccaaactg 180
ncttaatctt cttttgacca ctatatattt ccactctcca tttctgtggc ttctcacttt 240
gatataagtt ctttacagca gttggtctga ctggcagctg aaaaatgtgt tgctcatcaa 300
gaggattttg tttgtaatac tttatgcaga tctgtgttaa agaaaagagg agttcatgtt 360
gagatttaat gaaaggcatg caactgacta atatttctag aatatggggg agtttttgga 420
cacgataaac ctgttcttgn atatctactg atggagcant gaagtattcc aaatgattca 480
aagatcaagg tcctggncta tgaaaaacct ggttaaacct tncttaagtn ggccaaacca 540
tttccaaagc cnttgaccgg aatngccccc ng 572

<210> 5671
<211> 492
<212> DNA
<213> Homo sapiens

<400> 5671
gagacagggt ctcactttat tgcctagact ggagtgcagt ggcatgatct cggcccactg 60
caacctctgc ttcccaggtt caagcaatgc tcctgcctca gcctcccaag tagctgagac 120
cacaggcaca tgccactaca cctggctaat ttttgtagag atggggtttc accatgttgc 180
ccaggctggt cttgaactcc tgagctcaag tgacccactc acctcggcct cccaaagtgc 240

0602-5646-0203

tgggattata agcgtgaacc accatgcctg gccaagtaat ccatttttt ttttttttt 300
tttttgagat ggagtntcgc tctgtcaccc aggctggagc gcaatggcgg catttcggct 360
cactgcaagc tccgcttccg ggttcacgcc attctcctgc ctcagcctcc caagtatgnt 420
gggactacag gngcccngca ntacgcccgg ntaatttttg gatttttagg ananacgggg 480
tttcaccgtt ta 492

<210> 5672
<211> 604
<212> DNA
<213> Homo sapiens

<400> 5672
ggttaattac cccaatgttt tattaaccat ctatagaccc atgagggaca gcaaatttga 60
ttaggcttct gtattcaaat ccattttcat gctgctgatt catacctgag gctgggaaga 120
aaaaaaggtt taattggact tacagttcca catggctggg gaggcctcag aattatggcg 180
ggaggcaaaa ggcacttatt acatggcggt ggcaagagaa aatgaggaag cagcaaaagc 240
agaaactcct gataaaccca tcagagcttg tgagacttat tcactatcac gagaatagca 300
cggaaaagac tggctgccat gattcaatta cctccccctg ggtctctccc acaatacatg 360
tgaattctgg gagatataat tcgagttgag atttgggtga ggacacaccc aaaccatatc 420
acacccctgc gccctccgaa tttcatgtcc tcccatttca aaaccaatcg gccttcccaa 480
cagtcttcca aagtcttact catttcagca ttaacttaaa aggtccacag acccaaggtt 540
tatctgagac aaggcaggct ttttcaccta atgggcctgg aaatcnaaag ccagctngtt 600
cntn 604

<210> 5673
<211> 614
<212> DNA
<213> Homo sapiens

<400> 5673
aaaaaagtat gagtgtacag tggagtgttc cagaggttac atggtgtgct aaccacaaca 60
gtctgacgta gatctgagaa tcttctatta aaccaggcat taaaaagatt tgcaaaaatg 120
caagatgtca ctcttatcat ctatgttaac atgtaatgga tttatttttt gtttttggaa 180
aaaaaaacca agagaaaaga aaataaagtc atctttagtt tccttaaatt caaagtctga 240
gcctgaaaat ggaagtatca aagctgatgg ttatacgtca gtgagaaaaa aatttaaacc 300
aagctgggtg ggtctttaca tgagataaac tatctacagg aaagaatgac cactaacttc 360
tgcataataa atgagagtgg atcttttaat tctgagatgg caatgtactt tacaaggacc 420
atttacagac tacatcaaac ctttttctag ataaaaaacg tacttcagta acttgcctga 480
attgagagag ccaaaccagt ccggagagga aaacttaaaa tgtttccaca ttatcaagcc 540
cccttnagaa gtcctggggg ncctnggccc ctccntttga ccanaggtcc ggttggcaca 600
gtccancngg tttt 614

<210> 5674
<211> 601
<212> DNA
<213> Homo sapiens

<400> 5674

cgaggtggag tttcactctt cttgcccagg ctagagtgca atggtgcaat cctggctcac 60
tgcaacctcc acctcctggg ttcaagtgac tctcctgcct tagcctccca agtagctggg 120
attacaggcc cgtgccacaa tgcctggcta atttttgtat ttttagtaga gatggggttt 180
tgccacgttg tccaggctag tctcgaactc ctgaactcag gtgatccgcc tgcctcagcc 240
tcccaaaatg ctgagattac aggcgtaagc caccgtgtct gacccatttt attattattt 300
atctgcatat tcaaggaaaa aaatataaat tttagattcc tctggctcat aataggcttt 360
cttgaagaga aaaatgacgt gcaagaaata actggagcca ttaaaatata ttttatttt 420
ccttatttgt agttattaac agaaaaaatg ctctaatagg tacctaatgg aagttgcaga 480
tgtgattatc aagttgaaat gaatatttac tcaaacctgt aaagggcttn gcttttctgg 540
caatatttaa tgaaggatgc cattagcatt ttaacttaca ttctttcatt aaggtccang 600
g 601

<210> 5675
<211> 533
<212> DNA
<213> Homo sapiens

<400> 5675
aaccaaaaac aacactaaac tttaatggca tactgtagat ctgccaaaat gaggcaaatg 60
cagaacataa tgacggtatc acaaaaatac atttttaaat ggtcaattta gaaagggtac 120
ttttgtataa aggttcagta aatcatttga caagtatttt taaacagtaa atttttgtaaa 180
gtgtgaagtc tatggaaatg tcaacacaag gcacattagg ttctgaatga ccacaaaagt 240
ttaaaattag ctaaaaaggg aaaataaata ggttttaaag tgnaaatgca gtaagttctg 300
tatgttcact atttactttc ttagttttca ttccttctac tgtaatgtta tgataatgtg 360
agatctacat cagaattggt aggaaaaaca gcttctctct tctgtcacct caacaaaaga 420
tactttaaat ctgtactgtc taatacagta gccactaggt acatgtagct atngagtact 480
tgaaatatgg ctagtgacat atgataanac ttgactatac tgggtgaann nnn 533

<210> 5676
<211> 608
<212> DNA
<213> Homo sapiens

<400> 5676
aacagtttca ttgaaataga attcacatac catacaattc acccatttaa agtgtacaat 60
tcagtggttt ttagtatatt cacagatatg tgcaatcatc actacagtca attttagagc 120
attttcatta cctcggaaag aaactctgta ccctttagct attcccctgc ccacccatgc 180
tcccaccctc agctttaaac agccagtaat ctactttctg tctgcataga tttccatatt 240
ccattcattt gaatgcaatc atataacata tggtcttttg tgactagctt ccttcactta 300
acataatgat ttcaggatcc attcatgttg cagcatgtat cagtacttca ttcttttata 360
taccataata taccattata tggataccat attttacttt tgcatgtgtc agttgatgga 420
catttgggtt gtttccacct tttggtgatt ctgaataatg cttctgtaaa caaatgtgta 480
caagtttctg tgtggacata tggtttcatt tctcttgggg atatacctaa gtannagaat 540
tggttgggnc ataaaagtaa cctngatggt taatcacttg gnggacctgg ccanatngtt 600
ttccaaag 608

<210> 5677
<211> 610

09/22/2005 09:50:59 PM

<212> DNA
<213> Homo sapiens

<400> 5677
acctttaagt gaggacaatg gcacttaata aataggactg ttgtgaaaat taaatgagta 60
gatacatata aagcagtcag aacagagcct ggcacacaat aagtacaatg tatgtgttaa 120
ctagttgcaa tagtggaact ggaagactag tagtaggtag catatcaagt tgtataaaac 180
cttgagccaa atatgggaat ctcataataa accttcatag agttatcatt cttagcctct 240
ataatacact catggctaat gtaatgcaca gaaaatcaag ctaaacaaac tcaataattt 300
cacagcaagt aggtatatct attttacttc tgggatagag tgaatggttg aatcagcata 360
actccacagt ttttaattga agaattttac cattaatggc cactggaaca ggacactgac 420
tatacttttc agctaatggg atgggctcca gagaccacac tggatgttgc acaaacaact 480
ggatgtgtgn tttgggcatc attaaaataa aagttaccat ggtaaatacg gcagaaaatc 540
ttgcattgga aggagctttg ncagcatttg cagcttggac attttatggc agcagaccag 600
ttggtaacng 610

<210> 5678
<211> 602
<212> DNA
<213> Homo sapiens

<400> 5678
agacggagtc atgctctgtc acccaggctg gagtgcagtg gtgcattgca acctccgcct 60
cctgggttca agcgattctc ctgcctcagc ctcccgagta cctgggacta caggtgcgtg 120
ccaccatgcc cggctaattt ttttatattt ttagtagaga tggggtttca ccgtgttagt 180
caggatggta tggatctcct gacctcgtga tccacctgcc tcagcctccc aaagtgctgg 240
gattacaggc gtgagccatg gcacccggcc cacagattct gcttttaagt gcagaagtat 300
tttaacaatg ggagacggaa taaacgggtc ttacctactt cctttccttc ttaaacgatg 360
tactctaaag cagagggtcc ctttagtgat gaatccagat gctgctgtca tcaccccaga 420
taacagaaac tggcaacagg gagccctggg cagctgcaag tgacacccac tcctgncccc 480
tcagactcaa tggncctagg agctctgcaa tacattggct tactatacct tcctttctta 540
ttggccaata naagtttcct nattcccaaa tnttaaactt ttccaacttg gacttttatt 600
ac 602

<210> 5679
<211> 605
<212> DNA
<213> Homo sapiens

<400> 5679
atttgagata gagtcttgct ctgtcgccca ggctggaatg cagtggcgcc atcttggctc 60
actgcaatct ccgcctctca ggttcaagtg attttcctgc ctcagcctcc cgagtagctg 120
ggactacagg catctgccac caagcccgct aatttttgta taaaatacaa aaattttaag 180
tataaaatac ttaaaaagta gagacgggat ttcaccatgt tggccaggat tgtcttgatc 240
tcttggcctc gtgatctgcc cgcctcagcc tcccaaagtg ctgggattac aggcatgagc 300
caccgtgctc ggccgacctg gggctctttc ctaagagaaa agtccacacc gaggcagacc 360
tgcacagccc ccagcacagg gaaacggcag caagtgtgtg tgaaggcagg aatggcgctg 420
ggatgccctg ccatggaacc gctggctcac agcagactca cgcttgtggg cagtgcttgc 480

0000-5678-5678

gacggacggg actttgacgt ggctcaaggc aagttcttnt caantncaag aaggaaaagg 540
actttccggc aaggggccat naccggacaa tggttggctt ggatgggatg ncctgaggag 600
gcatg 605

<210> 5680
<211> 357
<212> DNA
<213> Homo sapiens

<400> 5680
ctccagtgcc agaaatgatc aatgatgaag tgggggttgg gcagctagct ggctggagag 60
gtgagccaaa ggaacccagg agtggacacc tgagggagtg gggtctcaga ggaactgggc 120
agagctaaat gggctaagtc ttaagaggca ggggcaggaa atgtaatgga ggctttctac 180
tctacaacgt ccaatcctgc tggggagggc atggagtatt tcagagtagg aaagaatgag 240
ggagaggata gtcacgataa atcaangttt cattcttttc ctcctctttc ttagctcgnc 300
aaancctacn ctttctctcc agctggaatt atggtggtga ntgagggagg taaacnn 357

<210> 5681
<211> 596
<212> DNA
<213> Homo sapiens

<400> 5681
ggacatctca gatgtgactc ttgctgccag gctagaattt aggctatgtg ataattctca 60
gctgtcctac aatgcctgct tcttgaaaga agtcggcact ttctagaata gctaaataac 120
ctgggcttat tttaaagaac tatttgtagc tcagattggt tttcctatgg ctaaaataag 180
tgcttcttgt gaaaattaaa taaaacagtt aattcaaagc cttgatatat gttaccacta 240
acaatcatac taaatatatt ttgaagtaca aagtttgaca tgctctagaa tgacaaccca 300
aatgtgtctt acaaaacacg ttcctaacaa ggtatgcttt acactaccaa tgcagaaact 360
gggtttgttt tcctctctaa aaaacaggat gtgtcaaaat gataaatatt ctaagattaa 420
agtggcaatg ctcagattcc caatcttacc agntctggga ttcactctgg cctcctagaa 480
gactgagggg aatatgctgg acttacatgg ccatggaacc ttccttcttc tagaaaccca 540
agcggtatgc ngaatcatta tgcncacatt cccgcnggaa aaaagggttg accctn 596

<210> 5682
<211> 598
<212> DNA
<213> Homo sapiens

<400> 5682
agaaaatagc ttatgttaca acaaaaaccc tataaaaaca ttcatcccag caaaagcctc 60
cagggctgga gggtgagggg aaaagtttca aagcacgtgg atagtccaga tctgggatgc 120
cctgtcctca tccggctccc atagcaccac gtggtcccgg tcgtagcccc ggcctccctt 180
cacgtccagg atctggcctt cgaacatctg gctgcagatg tggcccgatt cactgatgct 240
ccacgtctgg cgcggcaggc ggctctcggc ccacagcacc ggggcccttc acgacctccc 300
tctgggtaaa ggggaggaca gggacatttt cagagttctg aacaaactta ttccttgggg 360
acgatggagc agaaagacct cctgggctgg ggacatcctt ccttcttgta gtggatggag 420
cangaagttg tccagggact gncacatgct cgcttctnac catgggcagg acggtggcaa 480

0 5 9 2 0 9 4 . 0 2 7 2 0 0 0

caaggggtc cacgggccgg ccttttttaa ggggcagaac aaggggagtg aanccgggcc 540
ccgggtgaag nggcaccaca ggttgttttc anggggaagt taggcccgaa angggcct 598

<210> 5683
<211> 588
<212> DNA
<213> Homo sapiens

<400> 5683
gatgcatgag gataaacatt cttggaagga cgcgtgtgtt ctgtgatatg tcttgattgg 60
ctgggcggtc aggattgcgt atggttttgt cattgcatgc ttttgtcttg tgtgtgactg 120
agtgaaaata tggtgatagt gtgggcaatg gtgtctgtgc agagtcccct cataggaggg 180
acatcagagc agcccctcct caccagtggc tgccccagca ccctcaggaa gctgtttctt 240
gggggaagat gcagaaagaa atgaagtctg ggtacatgtg tacttggcag gcaagaggag 300
agattcaaca accccagaga gaccaggaca aaacaggctg gtgacaaggg acaccctctc 360
acccagctag agagaggccc tgggatacga gcaaagaggt tgcagngtct anatgatttc 420
aagggctgng tttaccaaat gtttgcctgg aaaccagcct gagtgcctnt cttgccccaa 480
aagggagatc tcantgaana cttgnggtnc caagccaggg cctcaagctt aatttaaagc 540
ccccccttc ttccaccacc agcccaannc aggacctttc ttccncca 588

<210> 5684
<211> 585
<212> DNA
<213> Homo sapiens

<400> 5684
gaagttngat aacaaagaaa tatatataag acaaaaatag acaagagtta acaataaaaa 60
cacaactatc tgttgacata acatatggaa acttttgtc anaaagctac atcttcttaa 120
tctgattgtc caaatcatta aaatatggat gattcagngc cattttgcca gaaattcgtt 180
nggctggatc atagattaac attttctggg agaaaaaaga aaaagagata tttatttagg 240
aaataaacca ttttttacaa aaatctccat aaaacctcaa cttttctaca ataaaccaaa 300
actaatactt tcagngaata tctattaaat gagcatttcc attagtttaa cacacaaang 360
tctcctcccc tacatttcac tcttgaggtc tagaataact tactctgtaa atcatagata 420
ttctcaataa cctctttttg ttatcaatta cggtaagact caagcatcca gaaatagctt 480
taaactggga cccaaatntn ggaaggangg ctagttaata tattacattg ggaataaacg 540
ggnccccctgg gttattacac cattcttgga aaggcattaa cttgg 585

<210> 5685
<211> 602
<212> DNA
<213> Homo sapiens

<400> 5685
ctcacttctc ttggaattac tgtatacctt tttatgattc cattttatct ccttgttggt 60
ttattagctc taactctatt gcggcccctg tgtgaacttt aaggaatatt ccctttcctt 120
ctctggcctc agatagtttt ctcacacata tgcactaacc agtacttagt taaacactag 180
ggtaggacct cctggagata gccagagtgt tctctctgtg cagctttctt ctttctggta 240
atctgccctg caaacccaaa ccactgtggc ctcttcagat tccaggtctg gctccccagt 300

0080250 - 0080250

tcagaggacc tccagaatat gcctgggctg ctcctcctgg ggctggtatc tggaaattgt 360
ctccaggcaa ccacactact cctcttattt gtttctatct tttgggaatc actgtcctgt 420
gttgcctggt gtccaatgcc ttccaaacag tttttcttta aatatatttn ggtcattttt 480
tttttcaatt gggncatgtg angggggtaa ataaatcgag gccccctttac ttaatcttgg 540
gccngaagaa gaaangagga agtctcctgg ggcntttaa cnctcttttg aaacccaact 600
tt 602

<210> 5686
<211> 597
<212> DNA
<213> Homo sapiens

<400> 5686
aaaaattcat attgacttta ttgactgctg aagttcagtc tcattcatct tccagccttc 60
tctgatactg tctttctgag gcttttctac ggtagacatc atagaaggtc tcctggccca 120
cgcgcacttt aatcatgatc cactccatcg ttcctcccag gacaaaaaag aagggcagga 180
accggtagat gccaaatcgc tgctccttct gaacttggaa acagaatcgg ctccctattt 240
ttaaagctgc actagattcg gtaagctcca gatacagctg caaatcaaga gccatcaatt 300
tgtatgatgg tctctcctga gtctaacagg tcccacagcg catggcaaaa gggcagattt 360
tacggtgggc agatctagga agtggagctg gaaacgagaa tgtgcagctc actctccctg 420
ttcgggaacg ggatgtgtgt gtatcaagtg acgtccaagg cataggggag ccagcgacgg 480
gtggcctcgt gtgcagaata naataaccat ttagcataga tctgtttcag ggctttttag 540
gggaccattg gnganattta cccttgaatt aggcnntatt ttaaaaaaat cattggt 597

<210> 5687
<211> 596
<212> DNA
<213> Homo sapiens

<400> 5687
gccttttggt atgcctggta atttttttctt ggtagctgga catgatgtac caggtaaaag 60
gaacttttat aaatcagctt ttagcaatgt agcagttagg tgggggaaag gggaggggag 120
acattctatc atcctatgat taagtctcag tcttttagta agcatatgcc tctggtgtac 180
aaacttctaa gtgtttcctc agtattcttc tcccctcttt ggtaggacag gatggctaga 240
gttgtctgga gtttagtatt tcccttctct gatgcagaag gttagagctg acaagagtta 300
ggtatttccc ttcccttggg tcaggctcta ataatacccc agcaggttag gatttagcta 360
actaatttct cctgggggca gaccttgtta agaagagcac agtgctctgg catatttcaa 420
aatggttcat ttcaccttcc ccctgccaga acacataggg atttttctgc aatatttact 480
tggagaatct aattgagctc atgtaggtaa gctaacaaaa atgggggggt tncccatgaa 540
gngggtcctc ctggaggtta aaactttcaa agtggtcata ctgaacctcc tataan 596

<210> 5688
<211> 585
<212> DNA
<213> Homo sapiens

<400> 5688
gttttgtttt gttttgcttt ttttttttt tactttaata gaataaggaa aagaaaagct 60

0050205.00000

atttatcatt ttttttctct taattttctt ctccccattc taagcagcta gacaggtctc 120
tgngctattt tttctttcag tggatgattg cgctttaaaa cagaaaacag agcttacttg 180
tacacaactt cccttcctgg cttctttcag tcctatgaca atgtcatgga gtgaggaata 240
cgctatgtat gtcacaggag aagggagaga agctaatgct tttaagggag ataggcagga 300
gcagtagaca aagcaagact agagcggttg tccagagcca gttctcccat ggaggcaggt 360
ggtagtacct ctggaagaag tgtggaaagc tggcttccac cccagggaat attactagaa 420
catttctgga gagaggaata ggcagtagaa ccactgaact gcaaaggaat ctgnggactt 480
ggaaaataaa gtgaacttct ggttttctta accaaacttt atagcatgga ttaagncntg 540
ngcaagttaa cttcgggaaa attaaaatca cttaagaggg taagn 585

<210> 5689
<211> 586
<212> DNA
<213> Homo sapiens

<400> 5689
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnn 586

<210> 5690
<211> 371
<212> DNA
<213> Homo sapiens

<400> 5690
gagacggagt ttcgctctgt cgcccaggct ggagtgcagg ggngcgatct cggctcactg 60
caagctctgc ctcccgggtt cacgccattc tcctgcctna gcctcccgng tagctgggac 120
tacaggcgcg caccaccatg cccggctaat tttngaattt ttagtanaga cggaggttgc 180
aangagctga natcgggcca ctgcactcca acctggatca cagagaanac tgnctcaaaa 240
aacaaacaaa aaaccaggna tgctgaatag caagtatgta ggtatccact gaagtactcc 300
naanattttt tcaaagatga gcatgatttt attatagaca atttaaaaat atgngcangc 360
gngnataaan g 371

<210> 5691
<211> 588
<212> DNA
<213> Homo sapiens

<400> 5691
ataatgccat acagatattt taatgctcac aagttatttt tcgacggaga tcaacattac 60

0050450.0025

attaacttga atttagtttc attattaaat tatgaaacaa gatacagata aatcttataa 120
gcagagttct gattacttaa cacagtgaaa ttgcaattcc aagttacaga gacattcaca 180
taaagatatt cttgagctac taaataatgg ctaaatactg atgacaataa gaattaatac 240
tttccactta tgacatttgt caataacaac tctgattagg taaaaaataa ttaacatgat 300
ggtcatatta taattctaaa taaatacatt attatgtttg ccacaggagt aggtgtgtat 360
gcgtgtgtgg gtatatgtgc atgtgtgtgt attcagatgg tactgaactc aagttggctt 420
ttaaaaagga agagatcagg catattactg tgcacttatg ttatcagagt gatttatgta 480
atgctatgat gtcaaataaa acctagagtc tagtcaatta gagtaagccg agtcntgaat 540
ctggtgaggc tggttgggca tgggaaaagg gntacctnta ccaaaacc 588

<210> 5692
<211> 585
<212> DNA
<213> Homo sapiens

<400> 5692
gaatttaaag ttacaagcat ttaatggttt aatcaagcat gtagttttta ccagtataca 60
aaatgagact tagtacaaaa cggtcttcaa ctgtcacgtc agttgttcct ggagtgtttt 120
atggggaaaa gcaaacttca ccaaacatag agtaccaaca ttcaagtgct cttttccaca 180
agtttctgat tttcaactta ggagagaaga acagcattta ataactgcat cccttgcata 240
tgggatgtat gacaggctat acctgcaaga aatattcaag catgttgaat cttcatctga 300
atgatggttt tcctttatgc caaaaggcca tgtctaacct tataataaat acagcagcat 360
gagactgtac agtggttctc aaagtgtgac cccgaccagc agtgagagca tcatctggga 420
acttgttaaa aatgtaaatt attaggtcct accttaaacc tcctaaatca caagcttgct 480
ttaacaagca acctgcactt taaaacaaac tctctaggtg atctggtgca tgctaaagtt 540
tgagcttctt ataataaaat tgnaacttnn ccncaactgg gtaat 585

<210> 5693
<211> 590
<212> DNA
<213> Homo sapiens

<400> 5693
gttgggattt cagatagagt ttggtttata aaaagcaaac agggccaacg tccacaccaa 60
attcttgatc aggaccacca atgtcatagg gtgcaatatc tacaataggt agtctcacag 120
ccttgcgtgt tcgatattca aagactgttt tgctccattc cccagtgtgt ttctgtaaaa 180
aaggacaaaa tgtacatgat catgacatta caattactta gacaactctg acttaacaag 240
ttaaagaaaa ccttttttact ctaaagaagc attcatcgtg ccatgttatt attcatgtat 300
atgagacctg ctctacttca aagctgtaat cttcttagtt gataaacaat attcttaaac 360
aaatgccttg taaggattct tagtaaatgc agcagggcaa ttgctataga ccagtgcatc 420
ctcaggaggc ctggttccgg ccattgctaa caggtttata aatggtttat taaaaagagg 480
ataggtctct cacaatgaaa ttcgctaata ttagaagtga gttttncctt tggtccaaat 540
aaccataacc aaatggagag aattggaagg ttacccntta aaattttaaa 590

<210> 5694
<211> 584
<212> DNA
<213> Homo sapiens

0509203.0002000

0003704-0000-0000

<400> 5694
agtagagatg gggttttgcc atgttggcca ggctggtctc aaactcctga cctcaagtgc 60
tccgcctgcc tcagcctccc aaagtgctgg gattacaggt gtgagctacc acacctggct 120
aatttacgcc aacattttac aacccttca aagcatttgc tattgaaaga aggcattcag 180
tggcaaaatt ctgacattcc agtaaatatt actacccaaa gaaaagaaaa ttcttaattt 240
caagatcaaa gtgccaatgc ttttcttttc taaataagag taaagaaaaa gaaggccctt 300
attacatctc tagcaaataa ctctatctcc aaagacttag gtaagaaatt acaattcttc 360
agaaaaatat tctggcactg tttaaatatc tactagtttt ctaatccaaa aggttaacac 420
tttcaaagag ggcactatta ttcaattaaa gntactgntt ctcaggaatt tgagaagata 480
tatcttttt ttttttttt tcaatttata gcangaaaaa agctggggtt ancccaaga 540
atacggctta cnttcnccaa aagnaaattg gggccagaaa ngna 584

<210> 5695
<211> 578
<212> DNA
<213> Homo sapiens

<400> 5695
acgacttttg caggagtgtt ttgaagggag aggttcttga ctacaaaggg tgcttccaac 60
tggggtcact atagttaaaa cataccaagg ggaatacttt caggcacttg ataaaatgat 120
gaatgggctt ggaatggaat gaggccagat ggtagttatg ggaggggggc gccatggagg 180
gctggggact ggggaaagtt ttaagtggcg ggatcctcag gctcggactg tcactgaaag 240
aacctccctg ggaagcgctg gaaaatggga accgcagtcc tcctgcaatg ggacagaatt 300
tttctcaaat gcattgtctc acctgcattt ctttcatagt caccgatgaa tcgtttggtg 360
aggaaccgga ccaccagtgc tgcacgtcag aaaaaagaac gtcaaagtgt taaccttgga 420
agttagattg ttctccaccc caccccctgc ctggaaaaca gttctcccaa agaaagccat 480
agatggcccc aagtgaaatt cctaccctgt acttcntgcc cttcttttca gacaaaagga 540
ggggctagaa ggcatcggga atatggcttt ggccactg 578

<210> 5696
<211> 544
<212> DNA
<213> Homo sapiens

<400> 5696
cttgttacat gtatctcctt gtactctgcc ttttcttttt ttgttgtttt gttttgtttt 60
gtttctgaga tagtctcgct ctgtcaccca ggctggagtg cagtggcgcg atctcagctc 120
accacaacct ccacctcctg ggttcaagca agtctcgtgc ctcagcctcc tgagtagctg 180
ggattacagg cgtgcactac catgcccggc taatttttt atttttagta gagacagggt 240
ttcgccttgt tggccaggct ggtcttgaac tcctgacctc aagtgatcca cctgcctcag 300
ccccccaaag tgctgggatt acaggtgtga ggcaccataa cctacctaag ttctttttag 360
aataaggtaa ggggtagagg gtggaagagt ggatggatgg atggacggca gatgggcgga 420
tggacagatg ggtggatgga ggaatggatg gacagacaga caaagggact gaagctgnac 480
caagcctttc anttcaccta accgggactg agctcaaaca aaggccacca nngacncana 540
ancc 544

<210> 5697

0098/2045950

<211> 566
<212> DNA
<213> Homo sapiens

<400> 5697
gtgtgaacaa gccttcattg tgcaggcgtg agcccaacaa acaaacaaac accaggtctg 60
cgctggccga agacgaagcg tcctccctgg aggtgggaac aagtcacctc tgaccacacc 120
tcctctgacg ccatcacctc ctcctggccc cacccaaggg ctcgacacaa gccccaaggt 180
cgggggggaga ggggcggggc ggaaccgagg gcggaggcca aggtgggatt ccaggaaggc 240
cttccgaagg atggaggtgg gtcctgtccc tccaggtagc ttgtgggtgt ggacagcagg 300
acttgctggc tcagtgtggg cacaaggaca ctgtgccact ggttgagtga gtggtgaggg 360
attggaggtg gctcccagag gcctccatct gcatggccct ggccctgtgg ctccagcagg 420
ctgccctggc tgtgggtagc ccaggagcca catgcgctta ntggggccgc ttctggggca 480
agggctttna caggaaagca tgagccactg agcccgctgg gganggccan gncaggccgg 540
gagcttnggg tgcaattttn tcctgn 566

<210> 5698
<211> 499
<212> DNA
<213> Homo sapiens

<400> 5698
aaaaaaagat atatggcatt actttggtct ccaaaacagt tgccagtttg aactttattc 60
tgccagcaag tatttggttt ggctcagcag ggctcaagtt gaaaaaatat ttgcccattc 120
caaaaagatt taacgagctt tgctgcaaat gctggtgcca tttggcacat cacagggact 180
gtggcacagc aaagagaact ctctcaacca cagattttat ttgcccaagg tagccagcac 240
tgggagctca gttgattcct cgggtcaaga agctgcaagt caaatgcgtg aagtttccaa 300
gagaaagtga ccaaagcagg catgagaaaa ctcttgctga cattgaaaag gaagtcactg 360
ggtctgactc caccctgcac aggaatttga tggctaactt tcagaactgn caacaacatn 420
cttacaccaa ccnttagatc caggctctaa aggtgcaggc agcagaccng attnatctcc 480
acntntagca cagctattc 499

<210> 5699
<211> 601
<212> DNA
<213> Homo sapiens

<400> 5699
ggataaggct gtgctttatt acatgcataa ttacaaatct gatttctcta atttattctc 60
tgaagtagca ccttaacact ggctcatctg tctaaaatca agaacaaagc ctagaagaaa 120
cacaaaagca aacttgagac accctcctta tcgctactgc actatgaaat atgaccaaac 180
ctttcattgn cattaaatac cagaaatagt aacattttct gttttgcaaa ctttagtggg 240
gaaggacaac taataagaca ggtattggac cagaaatgta cagataagaa ctttgatttc 300
tacacaatat acagggtagt caagccaaat agtctcatat gaaggaatca gtgacatgga 360
aaggacaaaa tatgtggtta ctgagccatt actatgatnc acatacccca gaaaggattt 420
tttctttttc attaaaatgc tanaggngga ctattcccan ggggaaactn ttgcgctggc 480
ttgattantt taaaggataa aataaaataa nccccttgggt anccaagttt gggccaaaaa 540
aagaagttca gantttggaa ggaccagact ntgggtaaaa ccgtctaaaa tcagggtccc 600

c 601

<210> 5700
<211> 602
<212> DNA
<213> Homo sapiens

<400> 5700
gagatggacc cttgctctct agcccaggct ggagtgcagt ggcgcattct cggctcacca 60
caacctctgc cttgtgggtt caagcaattc tcctgcctca gcctcacgag tagctgggat 120
tacaggcacc cgccgccatg cccggctaat ttttgcattt ttagtagaga tgggattttg 180
ccatgttggc caggctggtc tcaaactcct aacctcaggt gatccacccg cctcggcctc 240
ccaaagtcct gggattagag gcgtgagcca ctgtgcccag ccatgaatgg attttgatat 300
ggacagatgt gtgtcctgga agatgtgctc taatgagggg agtgagccaa gcatgaggag 360
gacacgaaag ccagaaaaca gagattcaac cggaaaggaa tggggaattc caaagatgac 420
cccaaangga agnccnaggc attagctncc aangggccta agaaagcaac taggcccaaa 480
tggaaagaag gttggatacc taaaaaatgg gactggaaca tcttttacct ggtgggactg 540
gcccngnngg aaagcaatac tganggcttt tgggaaaggg ggnaaggccc nccccaaana 600
aa 602

<210> 5701
<211> 600
<212> DNA
<213> Homo sapiens

<400> 5701
agagatggtg gtctcaccat gttgcccagg ctggtctcaa actcctggga tcaagcaatc 60
ctcccacctc agcttcccaa attgctggga ttataggcat aagccaccaa ggctggctgt 120
gaacaatatt aaacaaaaat tatttcctgt ggtaacagag attacatcct atgggacagg 180
gagacaggca gcagactgat aaattaatac aagatctgtc tgatggtgat aaatattgtg 240
caggaaaaaa aacgaaggaa gaggataaga aacattgaag gactaaagga acggtcacaa 300
agaagaaaac atttcagaaa agaactgagt aaggaatgaa gaagctgagt tctgaaagtg 360
tctgcagaaa ggcttttcag tagaagtttc agaaagtgta aaggccctaa gataggaaag 420
ggtctaattg atgagcactg gcctacgaag gatgtgtggc catcagcatt agcccntccc 480
aaaatcaaat ttaaggagaa ttagacttta ntttaaattt tgcaaccaca ccacaagcat 540
cacaaggttt tggaaatggg taagctgata ccaattagta ttgnaactat naatctgctt 600

<210> 5702
<211> 474
<212> DNA
<213> Homo sapiens

<400> 5702
gaactgtnca agagttattt atttttcctt aatctcaaag ctatttttag taatacaaaa 60
aagccatatt aacatttttt tccgttagaa aacatgatgt acaaaacttt ggatgaaaag 120
atacgtcaaa tttcatttaa tcacttggag gaaaatccac caactccatc aataccaccc 180
aaagngtttt aggcagngaa taaaatcaaa ataatgcatc ttaataaatt ccagctgtta 240
aaagaacaaa cttagcaata tataacagtt tgctaacagg atttttgact attcactttg 300

US 09/503,503

ggagttattt ttaaaaatcc actttttttac tgagtcttac tacataccag gcactgtact 360
tgggccatct anggtaacta agaaaaccgt tggttaagat nggaangacc cttaaatcag 420
cccttnggtt nccaaattca attttnacct ttnaacatcc tccaggatca gnaa 474

<210> 5703
<211> 576
<212> DNA
<213> Homo sapiens

<400> 5703
gagatggagt ttcgttcttg tcacccaggc tggagtgcag tggtgtgatc tcggctcact 60
acaacctcca cctcctgggt tcaagcgatt ttcctgcctc agcctcccca gtagctggga 120
taacaggctc ttgccacagg gcccagctaa tttctgtatt tttagtagag acggggtttc 180
accatgttgg ccaggctggt cttgaactcc tgacctcagg tgatccaccc accttcacct 240
cccaaagtgc tgggattaca ggcatgagcc actgggccca gcctaaatag tatatatttt 300
taaatatcct ttcagaaaag gccgcttatc cagaactatt ctgaagacag taaagaactg 360
ctgaagagga agaaaaaact ggctgtgcaa tagcagaacc tcctccgaac caaagcctct 420
ggagaagaac cagntgcagt ggaggcntta ctcacccatg ttaaaagcac cggaaccgat 480
taanaatccc aagcttggcn aggantggaa cttggaaaag ggnccttagg ngccnttgga 540
actaccccn ttaatttacc ggtggaatgg aacccg 576

<210> 5704
<211> 584
<212> DNA
<213> Homo sapiens

<400> 5704
ggtaaagaaa agtgctgttt tttatttgtt cttgaatgta taggttcttt taaaatcagc 60
tatacttccc tttaaaatat cctccctcat gccccaaccg cttagaatcc aatagccact 120
cctaacaagg gcctaggagg aactcatcct acatagccaa gaaaggggta cagcttgagg 180
aatgggcata tggctcagga agcagcacca gctgataaga actttcccca aagcagctct 240
gtttggcttg tgagtctcct ttccctgccc tggtctggac tcccccagct gtgtcccacc 300
cctggaattc ccctgttcct tatgtggcct gatcttgaga gttaaaatca taattaacat 360
ctttacagct ggagagctga gagatcactg gtctcaagcc attctcccac cacaacttta 420
tagatgagga actgnatccc aaggttcccc agctcatatn ggaaagagcc aaaaatttng 480
gggtcaaact cttcaaatca ganatctttc taagganaan cctccttaac ctccagnaag 540
ccacccatac tggcttcaac tccnnaacaa ctggggccag cngg 584

<210> 5705
<211> 598
<212> DNA
<213> Homo sapiens

<400> 5705
atacacaaaa agatttgtga acttgaacaa ggcaagagat acaatctaaa ctacaaagag 60
aacaaaagct aacccctacc ttggcccccg gagtaagaga tatcattctg aggaacacca 120
agtggaagcc tctaaaactg cccccctccc cagccaaact ctatgatcaa gatagtaaat 180
gaaaaacaat attgtgggag gggtagtgag gtttataaga tataaaaaag taaaatatat 240

09629469.072800

ttcatatctt gtaaacccta ctatacatat tagtgcaggg agccaaaggc ccatgggaca 300
tgacaaactc agcattccgc tggaggctat atgatcaaac agcaaactgt ttatcatgaa 360
tgcaggatgt gggcaaactc acactggcct gccaccattg ccacagttnc catnttacca 420
gggnttttcc ctggacaagg tccttnggac ttaactggga ctgcntggga aggatttccc 480
cttcttgatc cccggttttc cctggnggga tcccntaagg ttaccaggna ggccttttttn 540
aangaacctt tttacctttt tcaggcctaa gggntttntt ccgggggggt ctgggaag 598

<210> 5706
<211> 462
<212> DNA
<213> Homo sapiens

<400> 5706
gttgttgttt atttgttttg agacagagtc tcactctatt gcccaggctg gagtgcaatg 60
gcacgatctt ggcccactgt aacctccacc tgccaggttc aagtgattct cctgcctcag 120
cctcctgagt agctaaggga ttacaggcgt gagccaccat gtcaagctaa tttttttgta 180
tttttagtag agacggggtt tcaccatgtt ggccaggctg gtctcgaatt cctggcctca 240
agcgatccac ctgccttggc ctcctaaagt gctggaatta caggcatgag ccaccccgcc 300
tggctgagcc agctgcttct gactcaaaga aaggagccna cagtaggcca aggaaagaac 360
acaagcccgt gaatggggcc cttccacaag aatactgnca gaacccttcn ggctttccac 420
tacattatgc tnaaantngg atgggantgg tangaaccaa aa 462

<210> 5707
<211> 566
<212> DNA
<213> Homo sapiens

<400> 5707
aagacgagtc tcgctcttgt taacagccca ggctgaagtc tggagtgcag tgatgtgatc 60
tcggctcact gcaacctccg cctcctgggt tccagcgatt ctcctgcgtc agcctcccga 120
gtagcaggga ttagaggctt ccaccaccac acccagctaa tttttgtatt tttagtagag 180
atagtgtttc tccatgttgg ccaggctggt ctcccactcc tgacctcagg tgatccgccc 240
gcctcagcct tccaaagtgc tgggattaca ggcacgaacc accgcgaccg cacccagcca 300
ggatttcttg atacactaca aaaaggggat gtcaacttat gaataaaagg gaatggggct 360
tttggtttca gattaggcca gacaggttga tgatgtcagg aggtgtccat gaagagttaa 420
atggaatttt acatatctta ttgnatttaa tatgctcaca tattctattg natttaattt 480
tcacgacaat caggtaagaa ttaggataag tantggatct tcattcacaa atgatacccg 540
aanttcagag angngaaatt ccttgc 566

<210> 5708
<211> 565
<212> DNA
<213> Homo sapiens

<400> 5708
canggaaagc catgtagttt tttaagtaac atattgctgg tagtaaaaat gctatgacag 60
acacgacttc aaattttaag aaacaaaatg gactgttcat acttcggctt cagctactgc 120
ccaaagcagc tgtgatatat cttgcaaaga aaagagctaa aatttctgtt gataataaag 180

00827069.092601

ttgtttgtaa actgatgcta aaatatattc caattgtctt atttttagtg ctggtatgat 240
ttactaactt ctgatagttt tatatgcatt gaataatgtg atattcttaa aatancagat 300
ttattcaaga atatttaaca tcaaagttgg gctttcaaat aaatatttta cctcggttag 360
tttttgaaca aatgttgcag gcagaagagt ggacttgatt cctttagata aataaacagc 420
ctacttaatt tccatgcaaa taacaactta aacattattc catgctcaac agtaatgtgg 480
gggaaaggtt aaaaaggcag gtnctcatga tggggaactt ccttacatat atccttaggc 540
agattctttc tttaccgnaa ggtct 565

<210> 5709
<211> 558
<212> DNA
<213> Homo sapiens

<400> 5709
aaaggctagt caagtgattg acatttccta aaaacatttc agtcatacct tagaaaacac 60
acataacatt caactggctt ttttctacca gaatgtctga tgctaatttg gaagaatttc 120
acgtatattc tatttgccga atgtacagca cattcttttc acttcagcac tgacaatcca 180
aagtgtttca ttaaagaaac aggactttta cctttgttca agttgtttaa tggtagcagc 240
catctgatta gtcttctctt ccaagcgact gtttagttca cttttctgtt ttactcctaa 300
gtctgaactc tgcagcttaa aggcaagttc atgcttgaga gctctgaggt catccaactg 360
ctgccgaaga gataccaggg catcctgctt ctcacagaca tccttctcca gcatcttcat 420
agccaattcc atctcctgcc ttatgctgat ctgcatctcc agttctttct caacatccaa 480
tcggaattgg ggctcttctt ttaaagcttc ttggtttact taangctggc cttttgnagt 540
ctatcttgct tgggancc 558

<210> 5710
<211> 559
<212> DNA
<213> Homo sapiens

<400> 5710
acttattagt gctttatgtt acatgaaatt aagtgcaaaa atacttaaat aatgctgtgt 60
gccaggcacc actctcaatg gtttgactca ctgtactctg cacaatcacc cattttccag 120
tgaaggaaat ggaggcacca agggtaaagt agccagcaca agtcagacct catggcgggg 180
ccaaggcatt ctggctccaa aatcccgaat caaaaagcag aaggtcaaaa aattaaaaac 240
aaagaaacat cacacacgga aggaggagag gccaaagatt actccgaggg attaaaatct 300
gagttttcct ccggtttacc ttctacaact ccttttactg accacgcctg acacactgac 360
acatgcattc cctgncacag tggcttctgn ggcccgcctg gctgtactgn acagtgcaac 420
ttctnaaggc ggagctgcgt ggacccctgg nccttnttgg gccatggctc taantacccc 480
atggttcctt ccaaaggcaa tgggcantgg cataggtanc cacacgtccc atttttaaa 540
aaacctgnnc cntggatgc 559

<210> 5711
<211> 555
<212> DNA
<213> Homo sapiens

<400> 5711

0090270-960250

atttttttga aacagagtct cactctgttg cccaggctgg agtgcagtgt cgtgatctca 60
gctcactgca gcccctacct cctgggttca agcaagtctc ctgcctcagt ttcccgagta 120
gttgggacta caggcctatg gccacctcac ctggctaatt tttgtatttt tagtagagac 180
gtgggttcac catgttggcc aggatggtct cgaactcctg acctcatgat ccacccgcct 240
ctgcctcccc aaagtgctag gattacaggc acgagccacc atgtccagcc aattagttgg 300
ttttaaatat atttaagtta atggacaaaa tattctaaaa gggcacagtt aatgacgcct 360
cttcctagtg aatccgtgtt ctttatgagg tatcttttat agttgtatct ttttttttt 420
ctgagatgga gtctcgctct actgtagccc aggatggaat gcaataagtg ngatcttggc 480
tcactggaac ccctggcttc cgggttcaag gaattttctg gcntaaaccn ccggggaact 540
gagaattcag gcncc 555

<210> 5712
<211> 338
<212> DNA
<213> Homo sapiens

<400> 5712
cttacttttt ttttttttta atccaggtac ccaattttat cagccaagtt tggagtaang 60
ggttgatgaa tgttgataca gtcatggggt ttcatttatt cattatgtct tccttcttct 120
gtgggaggca gcgctgagat gataaatgct gggctcanat ccagcttggg ccactcactc 180
ccaagattca tacacaaaca gaccagcttg atcagggccc agcagggagg tgaggcttaa 240
gcctcctcgc tggaggagga gccaataaga agactggcag cttggatagt gagtgtgtgt 300
gtgtgtgtgt gtgtgtgtgt gtgtgtgngt gnnngnnn 338

<210> 5713
<211> 555
<212> DNA
<213> Homo sapiens

<400> 5713
aagaaggtac tactgctgta agaagttaac aagtaataat ttcctattta acatctgntc 60
ataatgacat ttccgctgca ttttttttcca tcaagaatac caaaacagtt tcctaatata 120
cagtatttga aagtgtttgc catattggct cttaaaatga tagactaatt tttctcattc 180
aataaaagaa aatttctaat aacaaaatac atgtaaagtt agaattttat aatttccaca 240
aaggaagcag catttattaa ccagagtact tgtttgcaat tttttatctg tgaaaatatt 300
ttaaagctct tacaaaactt aaatttttaa aaaatcagct caaaaatttt ttccatgttg 360
ttgggcatac cactgctgtc tctgctttcg gttttccaac tctgtaagaa gggcttgnct 420
gtatgcttca tacattttaa caatctgctc caattctttc atgaagagca ctttagcatt 480
ccctggnatg natccaggca gncagctggn aagagttcca cttcaaaatg gggcatantt 540
ccangggctc ggcgn 555

<210> 5714
<211> 553
<212> DNA
<213> Homo sapiens

<400> 5714
ctggatgcaa ccaatcactc tgtttcacgt gacttttatc accatacaat ttgnggcatt 60

0502045 - 07/02/2008

tcctcatttt ctacattgta gaatcaagag tgtaaataaa tgtatatcga tgtcttcaag 120
aatatatcat tccttttca ctagaaccca ttcaaaatat aagtcaagaa tcttaatatc 180
aacaaatata tcaagcaaac tggaaggcag aataactacc ataatttagt ataagtaccc 240
aaagttttat aaatcaaaag ccctaatgat aaccattttt agaattcaat catcactgta 300
gaatcagagt ctgtaattct tttcttgatt agagtggtag gacactgtaa tactgttcct 360
ccatgtttcc atgcatacaa tgttatgtgt tactctacac tgtaaatgca gtattcaaat 420
tcacttgagc cgtgggcctg gaagttagag actagctttt accttattac tttcaatgat 480
tttatctggg gttagctgac aaatctnttc gnggntgaat ccaaattctt nagggtctcc 540
tcaggggggg cnc 553

<210> 5715
<211> 564
<212> DNA
<213> Homo sapiens

<400> 5715
ggtagagatg gggtttcacc atgttggcca ggctggtctt ggactcctga cctcaagtga 60
tccgcctgcc gcagcctccc aaagtgccag gattacaggc atgagccacc aggcccagcc 120
tacttcttga attaaaaaac aaaaaacaaa caaaaaaccc aggcagataa tgaaatcctg 180
catacactca agtctgcatg aagcataagg ccaaactgga aagtgggcat ttgaacaacc 240
ctcttcctgc tcccttcccc taactaagat gggcttctgg gcctatcaac cattctttgg 300
taaagagcag caattcccca taggctcttt aacaacagca ttggtgtttg aggttgcatc 360
tttaaaacat ctatttcagg atttggaagc ttctggaacc ataactttaa cccagccttc 420
cataacagtc tttttacttt ctattacaga acatgacact gcaataatag caatgaaccc 480
gcttcaagct ttttcacttt ctggcagaaa gcttaaaaca cttctncaaa tatataaagg 540
gggctggaaa gcttaatttc ctgg 564

<210> 5716
<211> 564
<212> DNA
<213> Homo sapiens

<400> 5716
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnn 564

<210> 5717
<211> 525
<212> DNA
<213> Homo sapiens

0088750.0450

<400> 5717
cactttggga aatttttaa tcaatcagtt tcttaggaac aacacccagt gggcatgatg 60
agaccctcaa agtaggaatg caggaatgat aggcaggtga ggtggntgag ctatctgggc 120
tgggaggcca gcctcctgga atcttaggac aaataaaagg gggaaaaatc caacctcaca 180
cttnttttga aggtcggata tgtttacaga aacaatttct gttttggaaa ataaatgnat 240
ggtncaattt ggggctgggg gaacaatgac aattgtcanc tagagagagg ctcatgattc 300
tgagataaat gttaagtgga gctttttaaa atgctgaaac aaaacattac cttggtactg 360
tctccatcat gagatgtatt tgacacattt gaccatgtgt aaaaccccca gatttaccca 420
atgccatgga tccatgtgcc cacnccatga atncaaacct ggnggatatg ttccaggaag 480
gaccggcnna gagttcatgn gctttacttt tnggaaagaa aattt 525

<210> 5718
<211> 540
<212> DNA
<213> Homo sapiens

<400> 5718
aataaagcag aaatgtattt attaggcacc cttgttcctc acagaggagc aagatccagg 60
cctgagcgcc tgggaagtct cttgaggttg caggaatctc cagagaaaca tgctctgacc 120
cttctgctct ttcaggatgg tctcatagcc cacgccccgg gtggggtaca tgtccccctg 180
gtagctttgc tctgggctgg acttggtcac ctgggagacc tcggggatga cgtagaagag 240
gacgaaggcc caggcattgg cggcgagggc gatggccagc gtggggtcat cccaggtggg 300
actgttgtgc tgcttgttgc ccgtaagtat acatgacgat ccacaccacc catatggcaa 360
cggaggtggc tgggcctgcc agggngaaga ggagcctgga aaagtcccct tgtcccgggg 420
ccaggtcctt angggccttc ccaaatccga acggctttnc ttgncaccgg ttgctnaanc 480
ccaacacgta aggggttttt aaaggacctg anagttcttt gccggctttt cgcggngtng 540

<210> 5719
<211> 561
<212> DNA
<213> Homo sapiens

<400> 5719
aacagaaatt actgtaactg ttgaattatc tgggagatag acacagccct gtccttgngg 60
tctacgaaca ttgggaaaca caagtaacaa tttcaagcat aacctctggt ataaacaagg 120
gaaacaacaa aagttcatgg gcactcatca caaaaagact aataaaatct aagacctagt 180
aattccttat ggagtaagaa gccagaaata ataaaagaac tgttttaatg gaaagataaa 240
ttcacgtgtc agaacctaga gaagcaacag acaagtctga acaggaaggc agtaagggta 300
tgaatcattt taatgcgttc taaactgaac ttatgggcat taaaaagcta ttgaagggtt 360
ttagaagagt tcctggttaa gaaagaactc ttatgagagt aatggggaag aangcttgag 420
agcaaaaaac ttttaaggaa ggcttttgag gttgagaaga caatagnggt ctgggttgga 480
cccggngaaa ctggttagga tcccgacttt anggangtag aaccnttaag gngngggagg 540
atgaatgacg agttaagcct g 561

<210> 5720
<211> 406
<212> DNA

0508200-0508400

<213> Homo sapiens

<400> 5720
ctgntaataa gaagacagct ttattttctc aattagttca cgtatataca tggctgaaat 60
ttacttattg ctacaattct attcttcttc ctttttttt gagatggagt cttgctctgt 120
tgcccaggct ggggtgcagt ggcacgatct cggctcactg caacctccgc cacctggatt 180
caagcaattc tcctgcctga nactcccgag tagccgggac cacaggcgca tgccaccatg 240
cccggccaat ctttgnattt tcagtagaga cagggnttca ccatgttggc caggctggtc 300
tcgaacttct gacctcaagt gatcccgccc cgntggcctc ccaaagngct ggnattacng 360
gcgtgagcca ctgggcccag ccctattctt nattttngac atgnaa 406

<210> 5721
<211> 248
<212> DNA
<213> Homo sapiens

<400> 5721
gaccaaaaaa ggcaactata tttaaagtaa atgtatgtga ttcttgtcac aacaaatatt 60
tgcattttct cagcggcagc tgcggcacct gggtggaagc cgngattgag gtgcccgtcc 120
atctccagct tcaccccgtt caggtggtct gggggcagga tctcattctc ctccctgttg 180
gctactcatt tccagcgaag tttaatctat ttttaatant cgttcanntt tcanggaaat 240
ggnngngc 248

<210> 5722
<211> 523
<212> DNA
<213> Homo sapiens

<400> 5722
aatagaattt cattttaata attaaagttt atcgcttcca aaaaacagca ctttaattac 60
attcaagttg tattcatttt aaataccaac aaacccatca tttacatata gagctagata 120
ttacaaaaca gatggaaatt taaacaagtt tttttttaa gtccttccaa atttagaaca 180
ttgtgaacta ttaagtacat gcctaaaaaa tgtacacatt atcagggaaa cacaagttgc 240
tctaatagga aaagagccat aatacacata cagtggaata taattcaaat aggttcaatt 300
tacaggtatg tcttaaagtc aagaaaaccc caaagctaat aactagaact atagggcaaa 360
atcatagctg actttctaaa ctaatgcacc actatataat gcttttcccc agagaaaggt 420
agaanggtct caagatttat ggtggcccca tggatttttc acggggtctc aaatntaaaa 480
nccagagttt tctttttggc nttaaattac nctcanngtt tgc 523

<210> 5723
<211> 484
<212> DNA
<213> Homo sapiens

<400> 5723
ccaccatttg ggacgtcttt attatggatc cgtccactct tccaggagca gtagcccttc 60
taggaaaggg gtgggaagaa aaccagccta cccttcaagc tgacttagga tgcaanggta 120
cagacaccag ccttgggggа gggttctcca tccacactcc taccccaaac gggctttgtg 180

US 2009/0203600 A1

ctgctcaatg gggattcggg gccatcagaa gcgatgccgc ggntgggggc caaagtgcat 240
ggncaggttg tgctccaggg gcatgtggat gggaccgaag tcatagttga cccgnacgtt 300
gggcagaggg ggcacgtacg gggctgggat aggccccatg ttgagnggga agttgntgaa 360
cacagggccg cacgggaagg cagcggaagg gtgggtgccc caaagcatng ggngggatct 420
gtgcttgtng caggttntgg gaacgggcct nggganggcct tcacctttgg aacttttcn 480
caag 484

<210> 5724
<211> 566
<212> DNA
<213> Homo sapiens

<400> 5724
aacttctaaa actcagtcat tagtgatcct accaaaaaag ttttaaaata aatgtgtata 60
ctttttggac aaatgtgtaa attaggtata aagatgaatg agaatttaca gaattgaaaa 120
taaataataa cagagagaaa tgaagaatta ttctgccaat actatgattt gaattattag 180
caaggcaaaa aacatactat tcagatccct aaaaaccata tgaagcttct ttttaaagtg 240
ctcaaacgtc ttaatggatt tgagttttaa aaccagatct taatttttt tggtttatta 300
caaaaattat acacataaat tataaaatga tcaaatacaa gacagttttt caatcccacg 360
ccactgaagc aagaaccatt aacaatttga tggttctttc taggcatttt tgnggaatat 420
aaaatgnata atgnattatt tttaagacat ggcttttgga aaaatgcttt aatantatat 480
catgggaaat ctttcacctc ttngggactg ggcagacctt tnaagctgga gaaaaatttt 540
cngngaccaa aaaaaaanng ctttat 566

<210> 5725
<211> 573
<212> DNA
<213> Homo sapiens

<400> 5725
cataaaatga ttttaataga aaagtacaag acatgancaa aaataaataa tctttatctc 60
atttctagcc cagcaaattg tncactgcat ataaaaatgg tctaagatgc aattttcctc 120
cattcctttt ttgcttttaa aatactgaga cagcatttta gttcaatatt ctaggttcaa 180
actgatacat taaaaaaaaa tcataccaac ctttaatcat tctacatcca ttttttaaag 240
ttagctaaca agatgatgtt tcactaaaat aaaatatcca atcatcagat taaagtgtaa 300
agtttgtgtg aacagggaaa ttagatcatt tctctaagtt ttaattccta tgttctgaat 360
gtttcttgaa ttaaaaattc attcatcatc ttactttcaa accacggcat ctctctttta 420
ccattccaca gaggagggga aaaggactag aaaatacctt taaaaaaatt aaatatttta 480
aaaggatagc ttacaggggc catggaggaa tttanaacct ggggccttng ggcctatttg 540
cattaaancc aggcttnagg ttttacctcc ctt 573

<210> 5726
<211> 530
<212> DNA
<213> Homo sapiens

<400> 5726
gcattgccat gattttatta ttagtgtcca aaatgggact cccaagtaat aaatgattta 60

0898270 6450

ttccagccac agccaaaaaa gactttgcct ggctaaaaga gtctctctct aagtatgtaa 120
tatacaagaa atacaattca aagagatgtt cctataagta catttttac acggcatata 180
tttaaaaagg aggccccttt taatataaaa ttccggttat ataccaatat ggttaattag 240
catttacact atagtttgaa cgtattttaa atagcatgat gtgtatacaa tgtctcccgc 300
gcccattggc aaccagggtc gtgggaagct tggtgaggag ttaaccaggt cctgtggttt 360
aagcagngga gcacccggga attcctgccc ccnttttggt tncacaattg cctccattct 420
ttccgccttt cntggttttc tccaaaacca cctggatang gggggaaggc cctggatttc 480
tggaggggg cntntcaatc aaggactggg tttngttttg nccttttnga 530

<210> 5727
<211> 545
<212> DNA
<213> Homo sapiens

<400> 5727
gatttagtta catcattctt ttcttctcta ctttctcttc ctgaaaaact cttccttaca 60
taaacaaatt catactggag atatatgtca gaaaacattc agcctgagta aactgaacgc 120
tctgtacaga aaacaacgaa caaaacagaa cttcaacagt aacactggcg tggcataata 180
taagccacgc aaaatgcttc caaatccatt atctcttctg agtttcatct tgtgaggttt 240
gaagggtaca ctgattgtac ttaaaaacct aaggcacaga gaaggttaaa taacatgcct 300
gagttactaa aaagagaatc cagatctagt tcaaaatctg gncttctttt cactatacca 360
ataacatctg actgggaggc agnatgagaa gagcaatgga gtaagcacta anggtaattt 420
caggggcctt aaaccccccta atatattatg gaccactctt canttgaaaa aaggttggca 480
tttcttnaag cnttaaatcn ccattatata tttttnaagg gtttcccagg tcntttctac 540
ttntt 545

<210> 5728
<211> 513
<212> DNA
<213> Homo sapiens

<400> 5728
agtagagacg gagttttacc atgttgtcca ggctggtctc aaactcctga cctcaggtga 60
tccgcccacc tcagcatccc aaagtgtggg attacaggca cgaggcactg tgctggccaa 120
ctctctttct ctctctcttt taatctcttt attatggaaa ttcagaaact atacacaacc 180
cagaatagtc tatgaactcc ctaaagactc atcaaccagc ttcaacaatg atcatctttc 240
tgcccatctc attcctctcc ttttttttt ttttttttt tgagatggag tctcgctttg 300
tcacccaggc tggagtgcaa tggcacaatc tcaagctcac tgcaacctct gcctcctggg 360
tacaagcgat tctcctgcct tagcctnccg agtaagctgg gattacaggc gcatgccccc 420
gtgcccagct aatttttnga ttttttttta gtananacng ggnttcacca tgcgggcaag 480
gctggcntgg aactccnggc ctttgaactg gca 513

<210> 5729
<211> 250
<212> DNA
<213> Homo sapiens

<400> 5729

0050205.0050205

cgagcaanaa tctgttaaca gttttatttt ttttatgtta aataccangg gacaggattg 60
taaggatgaa aaactcagtc aacaactgcc tcacanggga taanaaaaat tctgccatga 120
tattagcaaa ggtaaaggag gaaaaattta cnctgtaana ggcnccattt ccccaaggaa 180
tacctntngg catttcctga atgagnggga ttagcaatct aaataaatca tatttcaaga 240
ggtancagca 250

<210> 5730
<211> 569
<212> DNA
<213> Homo sapiens

<400> 5730
gccagataat ctttatttta cacatttgca acacggcaag agaattcacc ccgtacatca 60
ccatgatcgg atcccccacc cattatacgt tgtatgttta cataaatact cttcaatgat 120
cattagtgtt ttaaaaaaaa atactgaaaa ctccttctgc atcccaatct ctaaccagga 180
aagcaaatgc tatttacaga cctgcaagcc ctccctcaaa cgaaactatt tctggattaa 240
atatgtctga cttcttttga ggtcacacga ctaggcaaat gcaatttacg atctgcaaaa 300
gctgtttgaa gagtcaaagc ccccatgtga acacgatttc tggaccctgt aacagtatct 360
tacgtgctcc aaaggctgac cttctggagg ctcaccgcct catctggctg cttcctccaa 420
aatccaaaac cttgcctcaa aataaagctg tcctgtgggt gaagttggct ggtctggttc 480
attctgacca ttctgacttt tgnccaaaaa gccgtccaac tgnagacacc ctgntggcag 540
aactccaaca ggtccccnag gtacgaggc 569

<210> 5731
<211> 583
<212> DNA
<213> Homo sapiens

<400> 5731
cctggacagc atttcatttt attatgtaac tgtagaaagc cttgatcaag ataaaaatag 60
ggatgactta tcagaaactg aagaattttc ttaggaaagc aaagtttact gaaggatacc 120
ttcattccag ccatgatgag catctgtctt ctcaggcaat catgatgaag ctccagggac 180
agtataaccc atctctccca ctcatccctg agccttggtc ctggactgaa tgtggttaga 240
ggttgtggaa ataaaaaaaa gaaccaaaat aagaacactc tccataaaag ccaagctcag 300
agactggtcc tcttttgctt aggtacaaca ggagcaggaa ggatcaacat tcttgaaagc 360
ataccttcta ttcatttggc ttttttgact tggggccgcc agtgtanagc tgagcactcc 420
actgcccttt ctccactcac aaatgtctgc ataggtacac gttccggcac tttcaagcct 480
tcttccacgt naacttccct ggggctttc ggtggnccat ncctgntcct tgaaaggtaa 540
aagggtcaaa ccttanccaa gatcccaang gactccgaga tna 583

<210> 5732
<211> 460
<212> DNA
<213> Homo sapiens

<400> 5732
aatgttcaag gagcacttta atagtcaaca aattgatgca gttttgtcac aatactttgc 60
ataattttat agtaacagta aaattctgaa tcactttata gtaaaagaaa agacacagag 120

0882704.0350

gaaaataatt tccctgtaca atgaaatttt catacactat atgaagattt cccacatctg 180
tcaagttttg gctcagaata aaagatagct aatatatttc actcttttt ctggtacttt 240
ttttttttt tttgagacag tggttcgctc tgttgcccag gtcggagtgc aatggcacca 300
tctcggntca ctgcaacctc tgcctcccag gttcaagcga ttctcctgcc tcaacctctc 360
aggtagctgg gattacaggc gtgcgccacc aaacccagnt aattttggat ttttagcnaa 420
accgngnttc accatgtggg nanggctggg ctntaactcc 460

<210> 5733
<211> 564
<212> DNA
<213> Homo sapiens

<400> 5733
aatttttttt ttttttttt tggcagagtt tctgcattca aattaagtcc ctcaagggaa 60
ggaacgaaaa agagcccagc atttcctaag cttcatctac gtgacagggc atttatttag 120
nggaattaca tacaggaggg tcttggagat tgcctttgcc tttcacttgg gatgaaaatt 180
tcctctgcag catgcaaaac aggtgagagt gttcctgctg ctacagagtt cttttgcact 240
aaaagaaaaa tcttcctcct ctcaaatttt gcctaccaac tctagcacag tcatctgagg 300
cagcatgaat caagcccagt tttcttctta cagtcacttc cttaacagtt aaaagaagca 360
tctgtcttct tggacttctc tggacctaat acccccttata ggtcagctat ccccagcaca 420
aagagatttt caggaatacc tcaacttgnt cactcactac atgcctctta cagtctacca 480
accatggtac ccanaaatgg actcagattg cnctaaacat actgcttcnc atacctggcn 540
ggtaggaata gcctaaaggg gtan 564

<210> 5734
<211> 558
<212> DNA
<213> Homo sapiens

<400> 5734
gttctagatt gttttattca gtaattagct cttaagaccc ctggaagcct gtgctctacc 60
cagacgctaa caacagtctc tatccagttg ctggttctgg gtgacgtgat ctccccatca 120
tgatcaactt acttcctgtg gcccattagg gaagtggtga cctcgggagc tatttgcctg 180
ttgagtgcac acacctggaa acatactgct ctcatttttt catccacatc agtgagaaat 240
gagtggcccg ttagcaagat ataactatgc aatcatgcaa caaagctgcc taataacatt 300
tcatttatta caggactaaa agttcattat tgtttgtaaa ggatgaattc ataacctctg 360
cagagttata gttcatacac agttgatttc catttataaa ggcagaaagt ccttgntttc 420
tctaaatgtc aagctttgac tgaaactccc gnttttncag cactggantg tgggccgtat 480
gaaagaaaac tttacantag atgggagaaa agggaatagt ncttgaaagg nagggnggtt 540
ttttttttt gacagggc 558

<210> 5735
<211> 564
<212> DNA
<213> Homo sapiens

<400> 5735
cgactgtaac ctgctttatt aacacagaaa ctgcaccaca cacatttgaa cctcatagcc 60

0050/0050-0050-0050

aatgaacaga cccagcactt agcaacttct ccctcctgcg ccccagagaa gggagaaaaa 120
gagggagcag aggagcacca gctacttccc aaacagcgcc acggggaagt cctcgccatc 180
actgttgctg tgctgcagct ccccgctctg ccccagctct ctcccaacat cttccatgag 240
ttgctccagg tccaggtcac tggaggcttc gtcctcaagg gggacacttc cagcctcctg 300
ggtcaggggt tcccggtgtc tgggctcttc tttcgcagat gaggggcagg ccccccttaca 360
cgctgatagg cccaggttct ttggcactgt tctaacttct tttccctctg aaaagctggc 420
tgccaaggcc ttgctctggg gagctttaaa ttttttctta aggctggttt ctctccttnc 480
ttccttttcc aactcttcct cttctccttt ttctttanca ngatcctggc tggttaaaac 540
caaaaactgg aagcttttt ttcc 564

<210> 5736
<211> 571
<212> DNA
<213> Homo sapiens

<400> 5736
acacaaaata ctttatcagc agctgttttc atcaaaaaat caagtcagtt tcacagttga 60
aaaagttaca cattaaaata ttttacaatt cattatatat tcaccaggtt cccattttct 120
aatgggcttt taatataaag cagaatagaa gggaaaatct caaagttgat tactttgaca 180
ctaagtttta cataggacac taagaaccac aaaaagctta ggttctattg taaaatagca 240
accaaattcc attcttcttt taaaaatcca attagaaaca tctttttaa aaaaacaaat 300
tccacaataa gagtaacaga tttcaaatta acagtagtct aaaaatcttc aaaataaatg 360
gttttgtata gctgagaata tggtagaaag tgaaagcata attttccaac agtcatttct 420
tactacagtg ngtttaaaat tatttttatt acttttagac tttttctcaa aataattatt 480
canggaaata ttcttaaggn gggccaataa aactgnagag gccataggca ggtaccccca 540
tattcanggc canggatggc agctnttgat g 571

<210> 5737
<211> 539
<212> DNA
<213> Homo sapiens

<400> 5737
gacagagtct cactgtgttg cccaggctgg agtgcagtgg tgcgatctca gctcacttgc 60
aacctccacc tcctgggttc aagcgattct cctgcctcag cctcccaagt agctgggact 120
ataggtgtgt gccaccacca ccggctaatt tttgtatttt tagtagagat gaggttacac 180
catgttggcc aggctggtct tgaactcctg acctcaagtg atccacttgc ctcagcctcc 240
caaagtgctg ggattacagg catgaaccac tgcacctgga nagcccactg cttcttgatg 300
catgttttga acttcaaatg tggaccagct gacagaggct tcaaggggac ctttagctga 360
ttctgctcaa ggaccagttt attttgttaa catcaccaaa tagcctanag tggggatatt 420
acctaatttt agaagagtct tatgnnctaa naaaagtaga tgcatagggt gatcatgcnc 480
agaaagattt tcatgctcct ctttgctctn ctttccnttg aacatccagg gggnctaat 539

<210> 5738
<211> 567
<212> DNA
<213> Homo sapiens

0050250.0050

<400> 5738
caaattaatt atttctttaa ttcccaattg gtaaatagtg aatggggcag aggagcaaag 60
attttctttt ccttcttcct acgctggata aacaagaaca gaaaacagcc agttatatgt 120
gaccctctaa tcttcactca cacatgcttg ccttctcact tatgtcataa ctgcccaatc 180
tgaaacagta catcacagat gacagatgca accagagagt tcaggacagc tgatatcgag 240
atatccagca accggccctc gtgcaaaagg aattccgagc ggttttcgtc cactctggcc 300
atggctagca aagccttggc cgccctgcac atcatgtcta cgctaggtgg ttccaggggc 360
gggggctgca tgtgcatgag gttgtgctgg ctctgctggt actgggccat cgtgacccca 420
tcctctagga agcttatcaa gtttccaatg cttcctttct gcacagctat ggcccttgct 480
gctagtgcgt ccccttggca aggttcgata aaagcgccat gggcatttnt cgacagactg 540
ggntttgggg ancccaacgn acctant 567

<210> 5739
<211> 504
<212> DNA
<213> Homo sapiens

<400> 5739
ggttttaaat aaaaacactt tattgcacaa atcccacaaa ggtctcaggc cctgggtcca 60
agcccacagc cccaacctgt cccctggctc tgggcctggt ctttggtgcc caccctggcc 120
tcacatgcca acgtcttctg tggagtgtgc aggtgtccat gagcgttcct gtgttggggg 180
aagcctgcct gggccacaag tagtcaggca ctgtggcagc ctcacgatga agacaggtgg 240
ggtggagttg ggtccccacc tgcccaggct caggggccac aggggtctac acagtccttt 300
ctgctttgaa acacgtggta gatgctggtg ggagggaaca tggcacccgg caccaaacag 360
ggagcccact ttggatgggc acaccaactg gcagcaatgc cgggcgaacc ccaccatgca 420
caaggaactt gnanncancn ttacatatga gaacccccac ngacncggaa ccacgaaagg 480
accccaagga ccacccttga atgg 504

<210> 5740
<211> 560
<212> DNA
<213> Homo sapiens

<400> 5740
gccatggctc tcaaaccaaa gacagtagct aaagttgacc tcctctcaac ttaaggcaaa 60
aggctggcat acagcacaga agcagaccac cagcttcttt actccacatt tccaccactg 120
gatggcagat attccccctc tagaaatgca ttaattttat ttactaaaca gggcagcagt 180
tcacaggtct caagaccggt cactttgtga tgttttgcag ccacacaaca ggaggctaat 240
aattatttta atagccatac tgagactctt cagtttatta agaaaaatgt atttcctcag 300
gcattttaaa atatatatac atttaatatt tttggagctg tatttgcatt ggatcataat 360
agattatgtg cacatgtgca attataaaca taatgtgcta ccacaggctt caacaaagag 420
ctgttaaaga tacttttttc ccttctcatt aatattacct tagaaaagaa tccccatgct 480
tggtttataa aaatctacct tnacttaaac agacaggtta gaacngaaca tcctatctta 540
aaggtggtta aaaaaatctn 560

<210> 5741
<211> 557
<212> DNA

0050204.0050250

0033270.0504260

<213> Homo sapiens

<400> 5741
aaatcttgtt ttacaatagt tacaatagga acccatccca atccttgggg ctggccatag 60
cgaaaaacac taaatactgg cagaaaggaa aacaactgat aaatccagag cccaagatta 120
cggatttgaa attaatacac taccactacc acctctctcc ctgaaacaga gaccctctct 180
gngtaaaatg aaagagatga aaggagctta aaaagctgct taaaactgca gaagttcctc 240
tgggtactga cctatctggt tgggcctacc ttttcaggga ctgngtccat gaccaggtct 300
ccatacatgt tcatcacctg gggagaagat gggaggcagc ttgccatgga gggtgcggca 360
tgggtacagg gctcccccat gcagagggcc ccagacaccc tgntccctga atcccctntc 420
aggcctgntt ctctaccctt tctnnctggn cactgagcca agtctgncca tcaagggccc 480
aaggcattca tggcagcacg tgccgttata agccctngga agnccntacc atggattgcc 540
tggnatccct gggaaaa 557

<210> 5742
<211> 512
<212> DNA
<213> Homo sapiens

<400> 5742
agacacttcc atttgctcat gatggtattg taaaatgntt atcaatgcta atgatgcagt 60
tctccagagc cccattttgt tttaagggct gtaagtgaaa ttgttaagaa ataaatttcc 120
tatgtaacaa tacatcacaa aggaaagcaa acagaacaat agccagggcc ttctccccgg 180
ctaataggga tgtcacttgc tggggccttg gaatccatga ggcctgagca tctgggttct 240
ttgctgtgcc caanantggg catntgggag tccctggcac aagagggagg gccaccatct 300
tggagaatga ggagaatgaa gatgagatta gagccacctg ggtcttggtc ccagctctgc 360
cacttactgg caaatcagga aggaatgttc ctgagggtct gagaaagcat cattctctct 420
gggccttaat tctcanggca gaatggggca cttgcattgg gaaaaagtng gcaccttaac 480
ntgnttgctn caagggtaaa ggnttgcnaa ac 512

<210> 5743
<211> 551
<212> DNA
<213> Homo sapiens

<400> 5743
ggagacagag tctcgctctg tcactcaggc tggagtgcag tgacgcgatt ttggctcact 60
gcaacctccg cctcccaggt tcaaataatt ctcgtgcctc agcttcctga gtagctggga 120
ttacaggtgt gtgccaccac aaccagctag ttttttttaa atatttttag tagacatggg 180
gttttgccat gttggccagc ctggtctcaa actcctggcc tcaggagtga tccgtctgcc 240
tctgcctccc aaagtgctgg aatcacaggc gtgagctacc tcgcctggcc tgaattattt 300
tatcaggtta aatttcgtgg gcgtgctaat ggtactgtgg ttttgtagaa tatcttggtt 360
tttaggagat acgtgctgaa aggttttagt catgtgacag gatgactgtg acttactttt 420
aatgattagc tgaatcagag aacaagagag agctggatat gtgtgnggct atgtttagac 480
ctagagaaag agaaagcnna tntngcccat ggtaacgatt ggtaaatctn aagtcccggg 540
gnggatgggg g 551

<210> 5744

0 0 0 2 0 0 4 5 0 0 0 0 0 0 0

<211> 549
<212> DNA
<213> Homo sapiens

<400> 5744
aagagagaca agatcttgct acgttgccca ggctggagtg cactggcatt atcatagctc 60
actgcagcct caaactcctg ggttcaagcg atcctcctac ctcagccttc caagtaggaa 120
gggctacagg catgcaccac catgcccagc taattaaaaa aatttttttt gtagaggtgg 180
agtctcacta tgttccccaa gctggtctca aactcctggc ctcaagcaat cctcccacct 240
tagcggttgt agacatgaga caccacacgc agcctaaacc ttttcttcta aagaaccctt 300
aacacaaggn caatatgcaa aacaaaatac agatactaca gaataagctg gagtagcaga 360
gagagacata agataacctc accttataca atgcagaaca tctgncttta atcataattt 420
ttttttttt ttgagccagg gctctttctg ggttcctggc tggagtgcca anggngngac 480
acnggctact gggagcctta ancctgggt taaaagancc tctgcttanc cccccaggaa 540
cttggactt 549

<210> 5745
<211> 499
<212> DNA
<213> Homo sapiens

<400> 5745
caggaacagt aatttgactt tgtctatatt aaaaatcata aatagtcaac aaatacaaaa 60
aatacaaaga gtttgcagat atgatcagng cattataggn gttttcaaat ttctcctatg 120
ataaattaaa aatgtaatgt tggacattaa tttcctaaac ccaatgctca gcaattttct 180
caaattgttt cgcttttccc aagagacttc agaaccattc cctggagnga attatttcca 240
atggtgaaga gtaatggatg gatgggatga cattctcaaa aaaatcttgc tcctatttca 300
gaagngtcac tccagcccct tgaaggtcca ggaaacctgg ctgagtagtg tggtctatgg 360
aggtgcatgg gcttcagagt caggccaacg ttgatcctga gtcccagcca gctgcttant 420
anctgnggga tagttatacn aggacacatc tagtgatggg gctcaagctg aagacngnta 480
tctggcgatg cnaaaaacc 499

<210> 5746
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5746
gttcataaca agttgatgta gacgttcctt cagtttatta tattcacgct cttttctctt 60
catatcatga ttatactgag tagctcgact tgcaatgata ttttgtaatt ttttgcacct 120
catctttctc attctttagt agctgatgca aattcctgtt cttacattgt aactgtctgt 180
ctctttcctg aagcccaatc atttccctcc tggaggtttc cagttgttcc ttaagttttg 240
agtagcagct ctgtagatgg tccatatcac ttcccagctt caaattctgt gtctccacat 300
tttcctgagc tagaaggttc ttccgctgaa gcacaagcag ctcattcata caatttagta 360
cagctactat atttaactct ctctttgtct ctttaccttt ggattcttca tataatgaag 420
gaaaaccaaa agtagtcaat tcctggtagg agaaaatgnt ttcttaaagt tggttacagn 480
tgaggagata ctggcagagg atacaaactt tcagntagat aggaagaata agnttaatag 540
gactattgnn ccacccnggg gnc 563

0 0 0 2 0 0 6 0 . 0 2 0 0 0 0

<210> 5747
<211> 550
<212> DNA
<213> Homo sapiens

<400> 5747
ggaatatttc aatccatgtt ggttgaatcc acggatatgg aacccatgga tatggagggc 60
tgaccgtata gttggaattg cagttaacag tcaatgactg cagaactttc tggcatctag 120
ttcgtggggt ctccgggggc ttttcatgtt taacttccaa tctgtgaaga attgttgcag 180
gtgatcacct gccttcctac cccacacacc aagcacagga gacccctgat taacaacaaa 240
ccaaaagtgc atgctgcttt aaggaagtaa ggatagaact caggaatgca gtttcaaaag 300
atcacaggaa cttcaagaga atcttcctac catatttagt gctttctcca attttcggag 360
aatcttcaac agaatggtag gaagtaaggc aaatacattt gattaggctt atgaggagaa 420
attagaggaa agtggttgta gaagtgattt aatcactatc ctgcatatta aaagatcaga 480
tnggatacct ggtcaatggt tcnttggttt tgaaatggag ncttgctntt gganccccagt 540
tgganngcca 550

<210> 5748
<211> 558
<212> DNA
<213> Homo sapiens

<400> 5748
gaatggcaga gggaggttta atggtgtcac cttgtcttgc taatgagcca acaaaaaaaa 60
aaaaaaaaaa aaaatgcaag taaaaaaaag tttaatcaca cagcacttta tacagatatc 120
gtaagcagta ggcattcaca tctccacatg tacaatgcac tgggaagcac agccccacca 180
gtcactccgg gtgtttctca aacaagatac cgactcggtt ccaaatgcca cggtgtgtgg 240
tccggctcca tcctcccgca gctctgctgg ctgggcggtc acagcacagc acaggtgtgg 300
agcccactta aggctgacaa gacgcatcat gctttggctt tttttgnctt tttttctaat 360
aagagttaat atctttgctt ttgagttttt ttttcaacct taaatattca tacatacacc 420
aaaaattnca tagcttgcaa tgngctcaac agcatcctnt nggcctggag cttacattnt 480
caaagcttan aaacttggaa acctttggcc tgtttttggg cnctaggaan cccccgccgg 540
cggncccttt ggatgagc 558

<210> 5749
<211> 541
<212> DNA
<213> Homo sapiens

<400> 5749
gcagtggctg gtattaagaa agtttttctt atattaagaa agtttttcct ttcttaatat 60
ttagtgcttc cttcaggagc tcttgcaagg caggcctggt gttgacaaaa tccctcagcg 120
tttgcttgta tgtaaggatt ttatttctcc ttcacttata aaacttagtt tggctggata 180
tgaaattcca gttagaaaat tcttttctct aagaatgttg aatattggcc cccactctct 240
tttggcttgt aggttttctg cagagagatc tgctgttagt ctgatgggct tccctttgta 300
ggtaacctga cctctctctc tggctgccct taacttttt ttttttttat tgagaaggag 360
tctcgctctg ttgcccaggc tggagtgcag tggcacatct ccgctcactg caagctccgc 420

ctcctgggtt cacgccattc tcctgcctna cctnccacgt agctgggact acaggcgccc 480
accaacacgc ctggncaatt tttggaattt tttaatanan atggggttca nccgggtacc 540
n 541

<210> 5750
<211> 564
<212> DNA
<213> Homo sapiens

<400> 5750
aaaaattatt aaaacattta atcactgaaa acacaaatcc acattaggaa attatctttt 60
aggatactta tacaaaactt aacacaggat tattgacttc actgttaagc aatgtgcata 120
ttgctactct ttctccttca ctaatttttc tatccttgga attaaagatg tgactgcaag 180
tcttagggca gggccagaac ccaacagatt tttttgtttt gactcagtca aagctgaaaa 240
ggcagcatca cataaataaa cagttgaaaa gggtaataaa aatttcattg ccctttcatg 300
gagttctggg taacttgtct ttgcatttat ccaaaactga gttacagaca ctgatttaaa 360
tagtgcttgt aatcctaaat ctgaagatag ctctgttagc ttttcttctt cgaagtcggt 420
gagattatta ttttggtgat tcataaaagg gtgaattatc cacaaatttc ctgaacgcaa 480
gtcttggtct ggtgggaaaa cagcctggac ccttgggaaa agtccttcca gggctcaaaa 540
taatcctggg anggctggca tatt 564

<210> 5751
<211> 543
<212> DNA
<213> Homo sapiens

<400> 5751
gcaaggaaac tgcatgggta caaatttcca attcatactt aacaaggtgg ggaaacgggt 60
cattcttggc ctgctccaga acaaggggcg agtctatgca ctcctggagc agcaggcgca 120
gggagggtta aatgtgaggc cagaaccaaa tctcctgttt ccaggagctg aggatttaga 180
agagtctctt tggttgattt ttacaggaga gaagaaggag tgaccagcaa gtgagaggag 240
gcctgcaagg gtagaggaag gaggatgaat aataataatc acaatacttc tagtcctttt 300
ggaaaatatg ttctcatcct tcaagtcgac gtcaaatgct tcccactttt tgaagcttcc 360
ctgcctcccc cactaacctg ggtgtgaagg ttctttctca gatgtgtctg gctactttgt 420
gccaggctcc ctggtanaag cttgattaat gctattcatt tcattcttac ncaggnattg 480
ntggcataca ttaaaaaaga tggaactant cccaanagtt taattggctg ccaaaagcnt 540
nca 543

<210> 5752
<211> 471
<212> DNA
<213> Homo sapiens

<400> 5752
aagagatagg gtcttgcttt gtcacccaga ctggaggaca gtggcatgat cacagcttac 60
tgcagccttg acctcctggg ctcaagggat cctcccacct cagcctcccc agtcgctgga 120
actacaggca cacatcacca cacctggtta attttattta tttattcatt tttgtggaag 180
ggtctcacca tgttgcccag gctatacaag gcttaatttt aaaatttaaa atcagccggg 240

US 2002/0164570 A1

catggagact ctaactgtaa tcccagcact ttgggaggcc gaggcaggtg gatcacctga 300
ggtcaggagt tccggacaag cctggccaac atggtgaaac cctgctctac taaaaataca 360
aaaaaatgag gcgggcatgg ngggtatgtg cctgnaatcc cagctactca ggagactgag 420
gcnngagaat cgnttgaccc aggaagtgga agctgcantg anccaagatc g 471

<210> 5753
<211> 575
<212> DNA
<213> Homo sapiens

<400> 5753
gttactctct taaagtggca gaaacagaaa agttgtggct ctgctggtag actagtttgg 60
aaacactgat tcggacaaca caatttgtaa ttcagataga ctctttattg gccaaatgga 120
ttccggtttt gaagacgatt cccaaaacgt tctgatatag aactcttctg gccttaggcc 180
tagtttagag atttgtggga agacttcaaa ggttaccatt ttcctctgtg gatctgtaaa 240
attaaccatg aatacctagg tcagatttcc tttttcctac ttcactctgt ttgggcttcc 300
tcagggaaga tttcagctac ctacctatag gagaaatgcg caatcaatta ttgatttaaa 360
tcaaactctg aaatatcata tgattatgat aaagggagta tcagcaggtg aatacattaa 420
gccaggcaga ccctttttgg aatagcttta aanggccagc ttcattaggc accaaaatct 480
ttcaacttca aacttttgca gccttatcct tttaaangca nccnttgnaa aggngcttcc 540
ttaaccagta cttggaaaaa ggttggtata tttca 575

<210> 5754
<211> 590
<212> DNA
<213> Homo sapiens

<400> 5754
gtggaaaaag tagaagtcag acaaggacca ggaactggcc aatgtacatg aataaatgga 60
aatttgcttc tatctctgtg cttggaagca agctcaagcc aagaggataa gcaaaacaag 120
tctaagaggt caccaggccc ctgatgacaa gctaaattca gattgacttc tatgtgtcag 180
cccacttagg ccagtgcatt tgctgtatgt tgggtggctc tgaacacagc agaaagggga 240
ctaaatgcag tactgtctta cagtgatctg gaaggccttc cccacgttcc aacctgctga 300
agctgggaag gcagcaggga tagttcatag gcttgctggg gcacaagccc agtcagaagg 360
tctcctgccc cattctctcc ttggaatatg tcctcactgg ctgagcatga aggaagctgg 420
ttcaaagggc agaataaacc atggggaatg ggaanggcca aagggccaaa agttnccacc 480
ttttgagtcc actnaccttn atctgggggn ggcncatatg ccaaaacctg gcggangcca 540
gccaatggcc tttttttcct tgggccttta acccttcaan aaaaggnttg 590

<210> 5755
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5755
gagacaaagt ctcgctttgt cgcccaggct ggagtgcagn ggcatgatct cggctcactg 60
caacctccgc ctcctgggtt caagngattc tcctgcctca gcctcccgag gagctgggat 120
tacaggcgcc tgccaccact ccacgctaat ttttgnattt ttagtanaga caaggtttca 180

0025.0054.0003

ccacgttggc caggctggtc ttaaacttct gacctcaggn gattcgcccg cctcagcctc 240
ccaaagngct gggattaccg gcgtgagcca ccatgcccgg ccctttctc cttcttcagt 300
acctgggggt ggctggacga gggactgcag aaggactgtg gtgctgggag gcacagctct 360
ggatggcatt gggacagngg ttagcactac angtttgggc tgcaatggcc ggntttcggg 420
tggcaaggct ttgcctgang agccntcaag ggatgggccc atgccgatct tggaaagttc 480
caatganggg gctgggaaat tccccaggag ggttcttnaa ggcacaggga ctttggttaa 540
tttcaggacc cccnttn 557

<210> 5756
<211> 529
<212> DNA
<213> Homo sapiens

<400> 5756
actgtggact tgtagtatag tttgaagttg gatagtgtga tacctccagc tttcttcttt 60
ttgcttagga ttgtcttggc aatgtgaact gttttttgg tttcatatga attttaaatt 120
agtcttttct aattctgtga agaatgtcga tggtagttta atgggaatag cattgaatct 180
ataaattcct ttgggcagta tggccatttt catgatattg attcttccta tccatgagca 240
ttggatgttt ttccatctgc ttgtgtcctc tttgatttct ataagcagtg gtttgtagtt 300
ctccttgaag aggtctttca cttcctttgt tagctgtatt cctaagtatt ttattctctt 360
tgnggcaatt gtgaatggga gttcattcat gatttgcatt tcttcttgnc tgntggtggt 420
ggtataggaa tgcttgngac ttctgcacat tgactttgat ctngagactt tgctaacgtg 480
cttatcactt aaganncttt tggcctgnaa agaatggggt tttcganan 529

<210> 5757
<211> 571
<212> DNA
<213> Homo sapiens

<400> 5757
gagacaaggt cttgctctgt cacccaggag tgcagtggca cgatcatgga tcactgcagc 60
catgacctcc tggactccag caatcctccc atctcagcct cccaggtagc taggactacc 120
ggcgtgtacc accacactcg gtatttttt taagagacag gatctcacta tgttacccag 180
gctggtctca aactcctggg ctcaagcagt cctcccacct tggcctcccc aaaagtgatg 240
agattacaga catgagtcac ctgcctggcc tgatggtaaa gggggttata acctgttgga 300
aaataaatta gggttagatc acactaactt caaaatgcaa tcatgatcat acatggtaag 360
ttcctcaaaa aattaaaaat aaaattacca tattatccag caattctact tcaggggtat 420
atgcccaaaa gaactaaaag caaggacttg aacagatatg ttcaatcacg aacccatgtt 480
catagcagca tttttcncaa tagtcaaagg ntgaaaccac cccaangcta tggaatttgc 540
ccggttaacc aaaggggat ttttccttgg g 571

<210> 5758
<211> 540
<212> DNA
<213> Homo sapiens

<400> 5758
aatgaagact tctcagttgt attatatttt taaaaattta aaatgaactt gtatatgtgg 60

US 2003/0082558 A1

aaggattgat gatctgtact gactccagat ggttatgttc tcctgatgac agatggaagt 120
ccaggaggcg gggccatccc aagtgtatgc cagcaagata tggttctact gctggtgacc 180
tcatagaagc agagtcatca ctggagaaag acatagctct catcctgatg ggcatctcct 240
gcccctgagg cctcagttag ctgcacttgc cttctgcatc tcctggggat ttcactccat 300
cagttagcat cttgnttact gccttcccat gtgatggctg tttaagctcc agagtccctt 360
actctccttc ctgccactat atcatcgata tgggtggcct gggaagggat ggcatttatt 420
catgacnggg ggcaagtgtc cagatcccag atctaccgaa aatctttcat tctggtgggg 480
ccccctgntt ccatcctggg ngncccntcc ccnaacttta tttaacaggc anggncatag 540

<210> 5759
<211> 556
<212> DNA
<213> Homo sapiens

<400> 5759
cttaagtgtc tttaatactc cactcagggc agcccctccc tctactgaga ggctcttggc 60
tctggcccca agagcagctg gaaggccctg gcctgacttc accacttgat gtccaggctg 120
tgtgtgccac gctcctggct ctggtacgtg gtatgcagca cctctcgggc cttgggggag 180
ttgatcccct ccagccactc ctggtacagc tcctgcacgt gtgcactgga ctccggacgc 240
cgcacaggga tgtcagcgta aatgccttcc atctgccgca gcagggcctt atccgcatgt 300
ccgtctggag tctgggcttg gcctctgcca tttaagcatc ctcagcacag gcgaggacct 360
ccacaaagtg gaatggggaa cttgcccttc ttaagcttta aggacatgtc tggatgtttc 420
naaagccata ggctgcagca aagcgtacac cacctttccg tcttttaang gtgacctttt 480
ggaaagcttt ggttttaagg cttggnaagn gacctctcaa atcctngttg naaaagtctt 540
ggccnatgnt taaaat 556

<210> 5760
<211> 580
<212> DNA
<213> Homo sapiens

<400> 5760
gtagagatgg ggtttcacca tgttgcccca ctggtctcaa actcctgggc tcaagtgatc 60
caccettctc agcttcccaa agtgctggga ctacaggcgt gagccactgt gcctggcctg 120
tatctacaga tattaagaaa aactttgggc tgcatattta gacataactg ctttttgca 180
attttgattt catattctac tgctaagatt tcttatatgg gatttgctgc atttcacaga 240
aatctatcta ttcaaaaatc acactcatgc tgattttgct agttcaaaag cagagatatg 300
accactataa ggaaagcccg tgttcacttg cattggtaat attgaagaaa taatacactt 360
catgggaaat aaatacagga tatttacaaa atctttggta aaacttccta agaagtattg 420
gttggggttg gttttccgga gaccagaagt ctnccttgg cacccagctg gaatgcaatg 480
gcncgactcg gttactggna accttcgctt ccggggttaa gccaatcttg ggcctaacct 540
cctgagaact gggattccga agcccgtgcc caccagntan 580

<210> 5761
<211> 521
<212> DNA
<213> Homo sapiens

0050050.0050000

<400> 5761
cgtaactggt gtaagccacc aggttctccg tgtactgcaa gatcgacttt acaaacttta 60
ggtactgctg atactcatgc gcattcttcc cacaaacagc atgaatgttg accaactcca 120
gcgcaatgag taacagtatc aggctgagca caggggacag tagtctgata ctactccaca 180
tacgcaggta gttctgccgc tggcgagacc gcagcgtcct ttccacccac tgcctgtgtc 240
tcagctctga ggcaacggtg acctggctgg acacacggcg gcactgttcg ctgatgcttc 300
agagcacaac cagcactccc agcacaatcc tggggcagaa cagggtggga acaggtgtgc 360
tgcagagctc acggagaagc tggggccacg tctcagtagg aagacgatcc aagtccttta 420
acacacaacg attctnaggc atatggngat cagctcatcc gcatttttg gaatcnaaaa 480
ntngcagggc atttggttca anaattattt tctaatntga c 521

<210> 5762
<211> 533
<212> DNA
<213> Homo sapiens

<400> 5762
ctttttcttt ttttttttt ttgagacaga gtcttactct gtcacccagg ctggagtgca 60
gtggcacaat ctcggctaac tgcaaccttc cacctcccag gttccagcga ttctcctgcc 120
tcagcctcct gaatagctgg gactacaggc atgcaccacc atgcctggct aagtttttt 180
atttttagta gagatggggt ttcactatgt tggccaggct ggtctcgaac tcctgacctc 240
aggngatcca cctgccttgg cctcccaaag tgctgggatt acaggcgtga gccaccatgc 300
ccagctagct ctgcctcctt ctaaattaga tctggtcagt ttaccggttt ttattttggg 360
atcgtactag tactcttcaa ctgaatttta accttacttt gaaatattta tatctggctt 420
taagaattta aatgaagaca ttttcacagg actaattcta gaaaaaaggc tctgngngac 480
antnaaaatc tataatataa nttaanattt ccagaactgg cttgaaaatt ngg 533

<210> 5763
<211> 462
<212> DNA
<213> Homo sapiens

<400> 5763
gagggcgggg caaagggagc atgacgggga gagtgaggag gaaagaggaa aggaaggcca 60
gggtgggagg aaggatcagc taaatctgag ggaagaagaa ggaaaggaga gggactattg 120
catagcagat gcaaatgaag ggacttgggg ctagtcagga agaaagggaa agggaaggaa 180
ggcaagagag aggggtgaag ggaacctcag gaaggggtgt taaggacaac cggaaaaatc 240
atctagtaat aaaactacaa acagaccaaa tatatataat attatatatg tataaataac 300
agctggctat ttacaggggg acacacacac ggacacacac acacacggat ccaggggagt 360
gggggctgaa agatatggct gataggtgga ggaacggctg agggttgggg gagaggccct 420
tcttctaggc agggcaaact cctccgggga tttaannnnn nn 462

<210> 5764
<211> 513
<212> DNA
<213> Homo sapiens

<400> 5764

0050204.0050204

gagacagagt ctcactcttt ggcccaggcc ggactgcagt ggcgctatcg cggctcactg 60
caagctccgc ctcccgggtt cacgccattc tcctgcctca gcctcccgag tagctgggac 120
tacaggcgcc caccactgcg cctggctaaa ttttttttct ttctattttt agtagagaag 180
gggtttcacc gtattagcca ggatggtctc gatctcccga cctcgtgatc cacccacctt 240
ggcctcccaa agtgctggga ttacaggggt gagccaccgc acctggcctc ccctttctct 300
tatagcacct tcatacttaa caccatgaca tcaaatgaca acgtattcac acagaaagca 360
ggcattttgt ttactggttt atttatgttt acttatgcaa ccaagagaac ctatatggct 420
gtcatgggag ccctaccttt tagaaagaga acaaccncat caggacaagt tntaaaacac 480
ttntggatac naggngggan taacctttga ncc 513

<210> 5765
<211> 543
<212> DNA
<213> Homo sapiens

<400> 5765
ggatattaat cccatggtgc aaggatttcc tgcaaagtac ctttaatgtg tttaaatcag 60
cagcaagcat taggacatgc tattttggcc ccataagtta ggtgtgtagc actacacatt 120
agacaccaag tcatcccaac caatatttat ccatatgaac agataaactg aacaaaaaca 180
tagttctgat aaaacctgca ttcacaacct aatgtagttt aaagtaaatt ttttcacaat 240
tgagggctgc tatttaggac tgttttgtta ataataaaaa caggaattat atagaagata 300
aaacaccatt ttttactgct atataatgtc ttgctatata aaacataccc tcaacaagtc 360
aaaatattta aaaccagtgt ttcaaatacc aaaaatcaca gctatgttac tggtcaagta 420
acttcactca ataaatggta ggactggant cttggangga aaaaactgna gccaagncag 480
naccttaag ttggnctcca aggtttaaaa ggacggaccc tactttgnaa acggaaaact 540
gcc 543

<210> 5766
<211> 556
<212> DNA
<213> Homo sapiens

<400> 5766
ctttttttt gtttgctgca gaatttgcat atgacagctg ctatgatcag tgtatttata 60
tatatttaat cctcatctaa ttaggaggta taagtaaccc tattgtacag atgaagaaaa 120
aacatcttgc tgaaattaca agttaatgtc tcagaaacag aattcaaact cagatttgtc 180
tgactccaaa acgtactttg tagtactagg gatatactgg aaaagccctt cagcctttta 240
tatagtcaat tgtctgtaaa aaggacacag tccaaacaat gaactgttaa catattttac 300
attattgaat atatacatgg agactgtaaa gaggtaaaag ctctaaaaat aatggattca 360
cagaacttga aaataaagtc aagactgtgg tctctctctg aaactgaata gagtaaaaca 420
gacgatgaag aaatgagcta tttgcagagg taataactta cccttaangg naaatttcaa 480
atatcttttt ttttttttt tttgggaaca aancttgntt tggcaaccca gctggaannc 540
ttgggcccaa ccttag 556

<210> 5767
<211> 523
<212> DNA
<213> Homo sapiens

<400> 5767
gaaaagccag accttgtgcc cttgttttga acaccgactg ggaagatggg gcttaggtaa 60
cagccaaacc tggctgtcag ctgtgtggga gccaccaccc tctctgggaa gagttcctgc 120
ttctgtatgg caagcataaa tcaagctcag tctgggttat ggagaagttg aaaattgttt 180
tgttcctcat tagtttataa ttgtatgaaa tacgatttta atgaaaactt ttcagaattc 240
acgtttgtgt agatatttca gagaaccatt tttactttac atcctaaaac tgccttttcc 300
tatggttttg tcaataaaac actatgatgt tggtctgttt ccttttatat ctcaagtctc 360
aaaactttaa aagacagtag atatttgngg gtttctagct aaatgagggc caagattgga 420
ctttttcaac taaattgaat catgtagtaa tatctgattt catagctttc tgggggaaaa 480
agggaggatt tggaatanca nncntgcang gcaggacnng taa 523

<210> 5768
<211> 537
<212> DNA
<213> Homo sapiens

<400> 5768
aagtatttta ggtaggtatc accatttagg ttgggtagaa gtaattctta aatcttaaga 60
agcgatcata gatatgtgga agccaatagt cattactagg gatcatgatt cggaaaaaca 120
gcctctcttc aatgatcctg aatgagccct ttgaattcct ctcctgcaac tgatctcccc 180
atggggagtg gtgagggatg ggtggcagga agggacccta acccaaagta gttcagagcg 240
ggtgagtttt aggagcattt cggtaccaaa cacagcttca cgattgagaa tcatcagtca 300
tccccagctt tctatttcat ttgctaacct ctctaggaac aactggatgt tgtaaatgtt 360
tctcatctgg ccttaaaatc catgaaagct ggaaaatcac aaggcatctg ngcatatact 420
ggtggatttt aatgagaagc ctggggttng agcccngaaa taaccngctt tanaagccaa 480
gtagnaaagg ccctggattt tgacctggcc atgggnntac ctatttgagg ggggatg 537

<210> 5769
<211> 531
<212> DNA
<213> Homo sapiens

<400> 5769
cttgtcatgg ctattcaggt ttttagttca gctgctgagg cggtgagaag ttttcatgtc 60
agacgtacag gtagcatttt accccacttt cctctgtcca aagcgacata caagtaacag 120
gcctgcttcg tgctgccatt cagaacaggc ataaaaagca aatcatttac tttccggaaa 180
cagagtccag ctgcacagag cattcgcggt tattcccttg ttctatcatt ttctaccacc 240
caacaacatt cagcaaaacg agttaataat agttactggt gtttgaggaa gggtaaaaaa 300
ataaaataaa ataaaataaa actaaagaac acacatggca gagatacgat attactgcaa 360
aagcaggtga atgcgggaac atccttggct tgccaggctt tatgtgaagc ttgcattttt 420
cttatccttg gctttcttgg tttgctgggc cccaagatgc tgggcctggg actgtagtaa 480
ctgaaccggt ggctttcttc ttctggaaag tggtcacctc cttcttaagg n 531

<210> 5770
<211> 548
<212> DNA
<213> Homo sapiens

0000-0000-0000-0000

WO 2004/050702 PCT/US2003/038450

<400> 5770
atgaagattt atttttaag ttctaaggaa ctttagtttt cttatttgta gctaattctc 60
ttcttaaaat ttatttattt tttacattag tctctttaca tttatttata tatattttta 120
ttatacttta agttctaggg tacatgtgca caacgtgtag gtttgttata tatgtataca 180
tgtgccatgt tggtgtgctg cacccattaa ctcgtcattt acattaggta tatctcctaa 240
tgctaaccct ccccactccc ccaaccccac aacaggcccc ggtgtgtgat attccccctt 300
ctgtgtccaa gtgttctcat tgntcaagtc ccacctatga gtgataacat gcaatgtttg 360
gttttctgtc cttgcgatag tttgctgaga atgatggttt ccagcttcat ccatgtccct 420
acaaaggcat gaactcatca ttttttatgg ctgcatagna ttccatgggg natatgngcc 480
ncaatttctt aatccnggct atcattggtg gacattttgg ggtgggtccc aggctttggg 540
tattggga 548

<210> 5771
<211> 540
<212> DNA
<213> Homo sapiens

<400> 5771
gagnggcagc gcctttattt gnggggggcct tcaaggtagg gtcgtggggg gcagcgggga 60
ggaagagccg anaaactgtg tgaccggggc ctcaggtggn gggcattggg ggctcctntt 120
gcanatgccc attggcatca ccggtgcagc cattggtggc agcgggtacc ggtcctttct 180
tgttcaacat agggtaggng gcagccacgg gtccaactcg cttgaggctg ggccctgggc 240
gctccatttt gngttccagg agcatgtggt tctgtggcgg gagccccacg caggccctga 300
ggatgttctc gatgcanctg cgctggcgga aaagcgcatt gaccaccggg ctgccgggcg 360
gactagtggc gccttgaana ggaagctgag cagggacagc acggggtgga aaggctgcgg 420
cttngggtcc atgtcagtgc aaaaacttac gcccttggac annttgggca aacaacgctn 480
aggtccaaca ttaatgggtg ccggncaaca ancgaggtct ttaaaccgtg ttgggcaaan 540

<210> 5772
<211> 542
<212> DNA
<213> Homo sapiens

<400> 5772
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nn 542

<210> 5773
<211> 280

<212> DNA
<213> Homo sapiens

<400> 5773
acatttttat aatgngtatt tattattcaa atagcttgac agcaaagtgt tggaaaacga 60
agagcaggaa ttccgcggtt cctgcccggc ctcgccatcc agctgggaga agagcatggt 120
catttccttc acttagtcca cggccactcg gcgctcatcc ccagcacagc cctccccagg 180
ccgcggcaaa gactgttgct gtcctgctga gggatgtgcc cccggggatt caatcgagat 240
tctgtaagat gtgggggatg tgggtggcgg ngnggnnnnn 280

<210> 5774
<211> 403
<212> DNA
<213> Homo sapiens

<400> 5774
gaacaagaca aagatgaact ttatngagng ttacaacagc tcagagacct ccaggggta 60
tttcctctct gtaggcaggt tgcccatcag gtattcagtt ctcagtagag aggaggccct 120
ggagaggatg gctcctctct gcaactgatc gccctaangt ctgcagctct cagaagagag 180
gaggccctgg agagggtggc tcttctctgc ccacaggttg nctctgcagc tgncancagg 240
gagggtaggn cctttctgca actggctgtt ccatcatctc caactatcag cagagagggt 300
agctcctctc ttaggcttgt tgacccatag gtctctgccc tctgggccct ctggcagncc 360
tntgccctac tntggctgaa cccagggttt ttanggnccn ccn 403

<210> 5775
<211> 549
<212> DNA
<213> Homo sapiens

<400> 5775
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnn 549

<210> 5776
<211> 530
<212> DNA
<213> Homo sapiens

<400> 5776
cttaatattg agtttattag ataaagacaa gaaaaaatgg ggcttgggga aattggggct 60

0060-9620-9450

tctggggttt taaggagcat gctgaaagaa cgtaagaaac aaaacatgaa gggaaatgga 120
aatgttaccc tcactccccc cctccctgct gtccagtgtg gatgccacct ccagcctgca 180
ggacggagcc ccctcccatc atcacacagt gcacctgggc tctgcagccc cttgcctcca 240
ttgcagccgc agcaagaggc ctccacttgt ccgtcaggga cgctccaagg aaggaaaaag 300
ccgcccccgg acaggggaga ccactgtgtt ctctgtgggc aggtggggca ggtgctccag 360
ggaaaggggg gctgaggtag ggggcccagt gatcaggcac ctgatcccaa aagtgggcct 420
tggctctttc tcctggactg ggaacttcgg cagaagtcan gctncacaat gngccccaca 480
atttgagaaa ggcttcccta acnttggccn aaggaanttn cccccaaatt 530

<210> 5777
<211> 541
<212> DNA
<213> Homo sapiens

<400> 5777
gagtgtggaa acaatgggat tgagctttta tcttagggaa aacttttaca agaaacagtt 60
cactgagagg gctccagaaa gttattgtag acctggaaac tttacaactg ttcctcatgt 120
ccagcaaaag caataacatc tttcatcttt aaagctttaa ttctttaagc aatctacttt 180
aatcacttca aggcggtgat atcattagat gttacaaaat taaagagctg ggctacataa 240
tttttggaac tctgcaccaa agaagccatt cacaatggaa actgtggagt ttcggtagat 300
ggcactcttt tctctgagtg acaactcaag gtccagcatg tgaccgtaga tgtagaacag 360
gggctttcct gaggagctgt cctttagcct caactataat cctggtaaac tcacagccaa 420
tcatttttaa aaagaagcct gtagataaga catcaatcca ggaatctgaa gtagttnaga 480
ngcatttaat cacagncttt ccttctttcc agaaatggtn cagnggantt ggtttctttt 540
t 541

<210> 5778
<211> 539
<212> DNA
<213> Homo sapiens

<400> 5778
cactgctttt cctttattga taggtcagag agcatttcct ggcaccccca gggtacagcc 60
ccctgactcc tgctacccaa gaaggccatc ctttcctgaa tccaagtcat ctgccatgac 120
aagagcaata aaactgtcct tgggaagagc ttctgacacc agtgatggct gggaggccca 180
tgtgacgtgg atgcttggga tgttgtcatt gacatccaga accttgatga gaactttgca 240
atgggctggg ataggattgg gacccaggtc ccttgcctga acatccacct cgtaggcagg 300
gttcttttca tagtctagag gtcgacgcag aatgacctgg cctgtcttgg catcaatact 360
gaaggtgtcc agcacctctg gaggcatgtg cttactgagg aagaactcca cctcccattg 420
gggccttggt caaggtctgt ggcggcaatt ttatgagaag cgtaccaagt gccanatntt 480
cttggatttc aagggccagg gaacttttan naaacnccng ggttttggca atggggcca 539

<210> 5779
<211> 493
<212> DNA
<213> Homo sapiens

<400> 5779

0080250 - 0080250

ccaagcacat ccacccatgg gggctttatt cagtcacgtc cccacgccca cggntnactc 60
caccaggcan acagagggga ggccacccca ctgcaaaggg tcccagccag ngggcaccaa 120
cctcaggaan acgtggtccc cacctggagc ttccctcggn tgccctggcc cttgagcccg 180
tcctgaggat ttgngctttg actntgacag ggagcagcag gaagctgcca gcccactgcc 240
tccatgcggg tccttggagg gcanacggtg gagcggcgct tcctnagctc ccgcggtcag 300
gccccatcag ggatggccac agtccagcca caggggcgac tntgcccatc agtccccctg 360
gggcagcgac canatcctgg ctggggcagc accggacagg ccctntntat gggcctaagg 420
gcaatgcaag tgggggcttt gttgggccca agncaatgga cccancccta ngaancctta 480
attggcaana agg 493

<210> 5780
<211> 530
<212> DNA
<213> Homo sapiens

<400> 5780
atacttagaa atacttgaaa aatgtggtcc ctttttgtag tactagtctc tacttgggga 60
caagaaaata gaatatgcaa ctcagaaagg aaagagccca aagacgagag aacctgcttg 120
ttagctcatt aacctgttta gtaaagatct gctttaaaat gcctgatgct gtgcagtatc 180
atacaaaaca atcttcagcc ttcaaagcag ctgatgcacc ttctcagaga tctgtttgtc 240
tgattaacag tctgctgcct tggtgggcct tggtcttggt cactttcggt catcgatggt 300
tttaatgaat tctactgctg ctgtgaactg catccaccaa taggactcct ctccagacag 360
acagctagca taaaagctac tgatatactg gacagtagac agcaaacagg gtggatttgc 420
ctttatcaac acaaacccca acacaggacc aaggcattcc ggttcanggg cagaagtcct 480
cattggncag gcttaaggag gtcataatcg nnnagcccat tttnngatgc 530

<210> 5781
<211> 541
<212> DNA
<213> Homo sapiens

<400> 5781
atgttccaaa tgtgatgggt ttatttttatt ttactatgat gcaaaaccaa agattccact 60
atagcacaga gaccagtata ttacaaggnc atgaaaaaat ggngtgggac atgcaggacg 120
tgatgtacaa actggngggt canatcgtct cctntaacat gacgctacac tgncgctgag 180
gaacacattt aataacactt canaactgaa ctgaaacgtg gcacaaacat gacaacttcc 240
aggcatgcct tcaagcgtct ccctnaggag ggattcgcaa cccctanact tcagtgtggg 300
gaggattaca attctttgga agaataaaaa gttcacactt ttgaaatttc acagaagaat 360
tttaaggcca aaacatagtg ggttcatttc tcttcacttt cagggacaaa tctgagcttt 420
ctnaaaccnc attaagcttt caggtcnaat cccaggccaa ccttgggacn tctngactgg 480
aagtttttcc catcggttta aagctgataa aggcaatttg gctcctagga agaanaaanc 540
c 541

<210> 5782
<211> 529
<212> DNA
<213> Homo sapiens

<400> 5782
attgtgctga tgggttagag aaagaaatat ttaaaaacct cagtccagac gacacccaca 60
gccgctccaa aagcctcgcg ccctcccccc gccccccccc cccaaggttg agtcgccact 120
ttgccgccaa gtttgtgatt gtcacgagtt cacaagtttg gaatcctggg tctgggccgt 180
gcagacgtcg cggcgccgcg ggctagcgtc ggtaggggtg gaacccttgc acgttgtggt 240
tctgccctcg tccaaagccg ctgccgccgg cgagggggcc ccccgaccct ggcacggagg 300
gacccccgta ggaaggaggc tgctggctgg ggtctgagaa gccctgtccg aagccactca 360
agtcctgccc gtaacctgca tactgaccat aggggaagtc tggctganct tgtcgggggc 420
ttgcttatgt ccggggcacc tgaaacggaa gccgtgggaa agnccnaggg cttgccccgg 480
aatggnttgt ngaaggaagg aacccccgga gggcnaaact gntctgncg 529

<210> 5783
<211> 494
<212> DNA
<213> Homo sapiens

<400> 5783
cagtaaacca ctttaccaat taatctttta ttttttattg catacatcaa tatttaacag 60
aagaaaaata aagaacccct aatgttaaac tgaattacat gttatcttct gattcttttc 120
aatgtagacc taaattttca catgtatcag taaacacaat ttatgttctt attaacattt 180
ttgaatctca ctttttttgca tacaatttga catatatcaa tattattgaa tggctatata 240
acattctgng atagcactag caatacacca aaatttactt aaccatttcc aatcgttggg 300
ctttttttccc ccttaaagtt atctgagtgg aactgctaga aaactttgta caaatagctt 360
ttctttcttt taaatatttt cctgggcata tgccactcaa agtgagtatg tcaaaagatc 420
agttataaag ccctttttat agncttctac acaggtctct taaaangntn ctaatcccca 480
tgntgntggt ntta 494

<210> 5784
<211> 485
<212> DNA
<213> Homo sapiens

<400> 5784
cagtgttcta acaagtactt taatggatag ggtttgctgt ctaaaacatg aagaggtaac 60
tcaacattcc tttcagtgcc acaggttaag aacttggaga actggctttc ctgaggagct 120
tctagctcca gaggttgtac atgctcatgg cagcaacaac ccattgacca cttcttcaaa 180
gtagttcact gccaaggaga atcaaaattc aatttggatt cccaatactc agcctacctt 240
caatttccca tcaagcctat attcttagcc tttagtttaa gtgtgggtta tcttaacagc 300
tcacttggcc tcagttcaaa gtgaaatttc ctgagtcctt gaaagaagta gaaacccaat 360
caatgagttt ttctcttgat ctctactttg tgagaaggat acatttctag aaatttcaat 420
acctttcaag ngtcagaang gaatntatgg aactggtgga aattgcnang gnnggataat 480
aaggg 485

<210> 5785
<211> 512
<212> DNA
<213> Homo sapiens

09/20/2006 09:46:56

0090209.0090250

<400> 5785
cttatcaaaa gtttgtttta ttttcaatac aagataaata ccatgcttgt tactagtgca 60
gtttaaggcc gacaatggcc atatatcaaa ctgccgaaca gtcacctaaa tgctaaagaa 120
aggaaagaca aagtaaacat taaacacaaa attgcaatta caaacatttt aataaaatgg 180
aatgagcttt ttaattgaag ctaatatgaa gtctaattct catggacagc aaaaaaaaaa 240
aaaaaaaaaa agtctattan atcaattatc accttacctt tttgcacana aatcttattg 300
ngaagtcacc atagagtcaa tagctaaaat tttaanactt tctttggcct tctgatatta 360
aacaaattat ttacaaactg ngatcagtaa ttcggggata ttgggtaaaa tgatcaattt 420
tttggtggtg ntggtaaggg ctttccatta aaaattggaa aaccacnttt gnanggttga 480
ncaggcttga aactaacttg ggtaanatnc ca 512

<210> 5786
<211> 542
<212> DNA
<213> Homo sapiens

<400> 5786
gtttaaccct agctaaacct cataactcct taatgagaaa gacactaata atctacaaat 60
aatattttac aaatgaaaaa acccaagcac taaaaagtta tgtatcttgc cctaggtcac 120
atagcaagtg aaaggtcaga atcttaacac tgctattctg accacttgta ataccttctc 180
taggcttaag ataataaaca aattaagcaa gggatatgtc tttttatttt tccctttttt 240
gtttgtttgt ttgcttgctt gctttttctt tacgtagtat tgctgtgcta ggcacatgtt 300
agtatctcaa cgaataattt gtattcagct ttctattaag cacagctctc tacaacctgc 360
attgttaaac atttatagtc aacaacatga tgttaattat gacgacctga agacattgca 420
agataataga gtcacttgaa gcatcaaaga aagattaaaa tatggtcatc tgngccctgg 480
actgcgaata ntggnanggg ncnaaagcca gggaaacttt ggccanaaaa ggcaggtccc 540
gg 542

<210> 5787
<211> 541
<212> DNA
<213> Homo sapiens

<400> 5787
cactgatgac aatttattat aatctgttag tagcacacag acaaatatta gttaaaccag 60
aaccatgtct acacagaagt gggcaatgac atgtgccatt ctatggcaca cggngtgcac 120
ttaatcatca tgttttagca ttttgatctt ctgcttatgg cgctcaattt ctttctgcag 180
acgctcaatc tccttcttat gatgaacgat ttcttcttca tggngttttt tcaaagctgc 240
cagttgttct ctactctgng ctctacaagg acacggtggc tcagggttta atttcaatcc 300
ttcaccccaa agagatctca aagcataacc tgtaatgtct aagcaaggaa taggagttcc 360
aattccatgg gagtctagct ggtcatcctc ttctactcct caactagtga aagaataccc 420
catcttaaat tgaggnggag ccatcttaag aagaccaaag agcttattgc tttcaaatnc 480
cctttaaaan ggaaactccg aaagaatggg cccaggncct aatncctntg aggggaacac 540
c 541

<210> 5788
<211> 475
<212> DNA

<213> Homo sapiens

<400> 5788
gagacagtct cgcactgtca cccaggctgg agtgcagtgg tgtgatctcc gcgcactgca 60
acctctgcct cccgggttca agcaattctc cttcctcagc ctcccgagta gaggcaccca 120
cgaccacacc cagttaactt tttgtatttt tagtagagat ggggtttcac tatgttggcc 180
aggctggtct tgaactcctg acctcgtgat ccacccgcct cggcctctca aagtgctggg 240
attacaggcg tgagccacca cacccagcca ataaggctcc tctctttacc taaagattga 300
ataacccaca caccactgac aaccttcctt ctcatacagt gaggtaggtc aggaaagagg 360
aaatataggt accaactagt aacgaatagg ggaccttatt aataggtagt aaaagcttaa 420
actagattaa aagaangntc ttttatatta aatanccaat ttnnatttta aggnn 475

<210> 5789
<211> 431
<212> DNA
<213> Homo sapiens

<400> 5789
gcgtgtcggt ctgcttttat tacctcccan actgagcccc cgacctggcc cagcctggcc 60
cgtccccaat ccannngggct ggccaggcca cctgcaccag ggaggacagc tgctggcagg 120
gactaataaa cccttccacc tggccatggt ggtggtgttc tctatggacc gaggccctga 180
aacgcgggca gggaggggca gagaacacac tagcttgggg gtgggcacca gcctcagacc 240
cctcagcagc tttgggccct cggccgactt tcccaggcag tgcaggctag cccagtccag 300
gagtgtgcag cctggcttgg gtcgagctct gtcacatctg gataagcaac tgggggctga 360
gagtcccagg gcagcctggc ccagcaggtc aaggcgccac agggggccat nangnccagc 420
tngnncangc c 431

<210> 5790
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5790
gagatagagt gtcactgtcg cccaggctgg agtgcagcag atgcgaaact gaaaatacct 60
ctgattggtt gctttgtgca accaatcaga tgttgcatag gagcgtaact ttgtaacttc 120
acttcagcct ctgattggtt gcagaaagca ggccgccact tcatttacac cgggtgaaca 180
ccaagtggcc aatgggaaac ctctaagggg catttggact ctgtagattc tatatcctgg 240
accttgagct gctgctccac ccattcccac actgtggagt gtactttcat tttcaataaa 300
tatctgtttt tgctctttca ttgcttcatt ctttccttgc tttgctgtgc attttatcta 360
attctttgtt caaaacacca agaacctgga caacttgcag tcaagaccaa gaccgtctac 420
tgataacaca ggtcagatac ttcacagcct gctactgagg gatgctgtgg agcttccagg 480
gcccaggatc cttggtggat ccacaacttt tcaaggggnc ctcagcactn tgnganccca 540
cgtggcagcc ttcttcn 557

<210> 5791
<211> 553
<212> DNA
<213> Homo sapiens

0838270.6+5250

<400> 5791
cctgagacag ggtctcactc tgccacccag gctagaatgc agnggcttga tctcggctta 60
ctgcaacctc tgcctctcgg gttcaagcga ttgtcctgcc tcagcctcct gaggagctgg 120
aattacaggt gcatgccacc atgcccagct aaattttgta tttttagtag aggcagggtt 180
tcattacatt gtaaaggctg ggttcgaact ccttacctta ggtgatccac ccgccttagc 240
cttcccaaag tgatgagatt acagatgtga gccacggtgc ccagccacag ttctggatca 300
catttttgt cacaaaaaaa ggtattcata ataataaaat cacctgaaat ttatttggac 360
actttactac ttttacaaag tactcagcag cagttagaca gagctggctt tccttgcctc 420
ctgctcggtg gctgtatcat tccaggcaag tcactttgtc ttgcattgcc tccaatttcc 480
tctcatttta aggactagca atttatacat cgantaagtt gaggggattg attagatcnc 540
atacctaacc tnc 553

<210> 5792
<211> 556
<212> DNA
<213> Homo sapiens

<400> 5792
cggactcact gccagtcaga aggtctgctc caatgttgtt taatgaattt acacgaaccg 60
caagggaaga tgtttgtagc aagcattttt aattcttggt atcaaagcgt ttttcatgga 120
tgggtagtct ataagatttg caaaggttgg aatgatgttt agacagagct cctggatctg 180
aatggaagga gcttctagtg ctctgtaaac catgggtaga acactgttct ttatctcatc 240
aggaggggtt ttggttagta gcaaatccat tttttgtagg aaaattaaca aaatctggat 300
tggctcctgc tgcttaaaca cagggccaag ttcaggaaga attaatttga catattcttc 360
tttggtgcat tcctcagcaa taagtagaac attgggcaaa acaaaaggta ccatgtcagg 420
gtttacaaat tctgaagtca aacaaggcaa aattctctgc acaatgacac gcttgggcag 480
ttttggtaga acctttggca gcctttgaaa aactggggat ttctgaagat tatctctttg 540
gaaaaaggga tnnaaa 556

<210> 5793
<211> 560
<212> DNA
<213> Homo sapiens

<400> 5793
gcaggcaatc catcagcatc tatcaaatag ttaaatgtat atgtcctttg acccaatcat 60
ttcccttcct ggtgactacc ctcagaaaca cttgtccata tatgtaaata tctgagaaca 120
agtgtgttta aggctatatc gttatattat ttataatcca gaaataacaa aaatgtccaa 180
ccagagggaa ctgattattg tacagtcatt tcacagaaaa atccctccat gcagacatta 240
aaaagaatgc agttgttctt tgcataatga tttctaaaac aagcaagggt tagaaccata 300
aacaaaagca gggaaatttt gaaaccataa gcttttgtaa agcccttctg taaagcagaa 360
taataccaca ctcatgcctg tggccagtac tgtggctgga acatcatggg cgcacaataa 420
atatgtgttg agtgggtgaa agcacttgca tcttactgtg gcaaacaggc caacaaaatg 480
cagatcatta gcaatggttt ggagaactag agcaaaaaca tacattccat taatttggct 540
ttcattcccc cgaaagggct 560

<210> 5794

09620469.050000

0050050.000200

<211> 554
<212> DNA
<213> Homo sapiens

<400> 5794
gcttttagct ttttattttt gtattaacag gagtcttatt acacataggt ctgataaaac 60
tggtttatga tcttcagtct gtttccagtg ctgcataact agataacgta tgaaggaaaa 120
acgacgacga acaaaaaatt aattgcttgg aagacttagt tgaatctatc catgaaaaca 180
gaatcaatta aacatgtatg tgttacttag actaaatata aataacccat ataaatggta 240
gctcaaacat ctcaagtgtt tcagagaatg ttagaatcta ttgtttgaag tgtctattgt 300
actctatgca agttctgttt ccaaacatta gtattagttg gtgatatttc cccttcatag 360
ggaaggtaaa aaaggtttgt agaggtggca aacaatattt ggtttaaact agcaggagac 420
aaaggaattc caagaaaggc aaaaatcctt tcagtaagtt ttctgaggaa aatgcacaat 480
atcttcaaac ttgccagctg gtagctagta ggcagcaaat ctggatttat tctcaaggct 540
gctgctggat ttgc 554

<210> 5795
<211> 553
<212> DNA
<213> Homo sapiens

<400> 5795
ccttgagaca gattattgct ctgtcgccca ggctggagtg cagtggtgtg atctcagctc 60
actgcaacct caacttcctg ggttcaagta attcttatgc ctcagcctcg cgagtagtag 120
ctgggattac aggcaagcac caccacgcct ggctaatttt tgtatttttg tagagatggg 180
gtttcaccat gttgcccagg ttggtcttga actcctgacc tcaagtgacc cacccgcctt 240
gacctctcaa agtgctggga ttacaggcat gagccaccat gcccggcttt tacatgattg 300
tattttaata tacagtgggt aaaagtttgt gctaaaatgt atcatttatg gctccaattt 360
ggtattattg aagggagatg tcccttcaat atgggagatg ttccctttta ctcctgactg 420
atttgtttgg ttggggcctt ataatgtcat agaaaatgtg cattttgagt ggttaaaaaa 480
aaaaacagcc tatagttttt actctcaaag acttgggtta atataaggaa cngtantata 540
cccgggttaa aac 553

<210> 5796
<211> 560
<212> DNA
<213> Homo sapiens

<400> 5796
ggaaaagatg agaaacgagg ctttatttgc tccaacagat attaaaagta tgagaaccac 60
aaccatgaaa acaacagaag ctgatgtgag aaacaacact aaaattaaac agtgcagaca 120
caggtccagc gacaatgatt ttagcactca tacaggtggc atttcggtca gtgcatgatg 180
attcagtggg cgaagcattt cagatccttg tctcatatca cacctcgaaa tacattcctg 240
gtcaattaaa cactgaaacg tactcagaga aaaagagatg aaagtgtaaa caatctttgt 300
gtgagaaagg actttccaag catgacctca aaggctagag cataagagtc ttcgttttaa 360
aatgtgcagg catttctgat ttaaaaatgt aaactatagc aggttacatc aaaaaggaaa 420
aaaatacagt taaatggcaa atgatgcatg aggaataatg atttacagtg aatatgttac 480
aggtttgctg ngcttaatat gtaccaatat cttacaagcc aaccaaatat tttcaaaact 540

aaatgccttc ttagataaga 560

<210> 5797
<211> 550
<212> DNA
<213> Homo sapiens

<400> 5797
gtagagacac agtctcgcta tgttgcccag gctggtcatg aactccggcc ttaaagctct 60
cacctcggtc tcccaaagca ttgggattac aggtgtaagc cactgtgccc agctaggaca 120
aaacttttga ctttgtcaag ccttaatttc ctcttctata aaatggagtt aagaagggct 180
ccttcctcac agattgtact gagtatttca tgagatgata tgtgtatgtc aggctgtgtc 240
tctccaggga tggctgcatc aatattttgc tactattcac atactctttt tacagtatga 300
tggacattcc tctcactgac agatggggca caggtcaatt ccccttgaat ctagggacct 360
tgtgactatt tgaccagtag aatgtgcagg aagtgatgcc atgtgacttt tgagactagg 420
tcatctaaac gatacagctg ccacctgact ctcactctct atactcgcct tggaatccag 480
tcaccatgtt gtgaggaagc tcaatctaac cgaacagatg tgggaacagc ccacatggan 540
aggaactgag 550

<210> 5798
<211> 498
<212> DNA
<213> Homo sapiens

<400> 5798
agatggagtc tcactcttgt tgcccaggct ggagtgcagt ggcatgatct cgactcactg 60
caacctccgg ctcccgggtt caagcgattc tcctgcctca gcctcctgag tagctgggat 120
tacaggtgca tgccaccatg cccagctaat tttttgtatt tttagtagag acggggtttc 180
accatgttgg tcaggctggt cttgaactcc tgacctcgtc atccacctgc ctcggcctcc 240
caaagtgctg ggattacagg cgtgagccac cgcgcccagc tcagggcttt tattttgtca 300
cgttgaaaaa acaatgagtt ggtaggagaa gcctcggatc caaggacaaa gacaatatca 360
ccaaatagct ccaaaattac aatgaggatc agaagcctgg aaggatgggg tggaggtgag 420
tggggatcan aatggaaaca tctttcctct ctctagcggc cagtttggng anggcaaggg 480
actngngcca tnctncct 498

<210> 5799
<211> 328
<212> DNA
<213> Homo sapiens

<400> 5799
gcacttataa tgcttttatt aancaggaac tctctggtgt tgagtaaaat gtgagcagat 60
aatgatggct ttttcacagn ctttatattg gnataattaa tctcaagtat aaangctttc 120
ctagcaataa agggngagca ttaagttttg ccatatngtt cacacatgta ggcgttttct 180
ccagtatgaa ttatcttacc tacaangaag ngngacaacc atttaaaggc tttatctcac 240
tcttcanatt tctaggattt ctcaccagta taattacttt natggttaga aaagttngag 300
gcgttgncaa aagtagncac atctttct 328

CO9502769A1 | 09502769 | 95027690

<210> 5800
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5800
agacttttga ctttattcag aaagtacatt tatacatttg ttccaaatgt gctaacatgg 60
ataatttgcg taacagaaaa ctcacattaa aattttaagg aaaaaaagag attaaacaca 120
aggtttattc ttaagtccaa ttcatattat tactggccca catgtagtca gagttcagcg 180
taattgaacc agatgttttt cctctttgca aaaaactgca tattttaata ctgaagttaa 240
agataaaaaa ctatgtttat gcatgtttct tttagtagat aagtaccata accttgtcca 300
tgaaaaagaa aattatcatt tacatggaaa cagcagccct tttcaaaata attaatgagc 360
ctaatttatt tggcaaccca agttgctgac tttggtattt gatgctctga taataggatc 420
ctacaaggga atatgttttt accaattata tgtgaaacaa caggaaccta tttaaatgnc 480
tcattttcct tttaaatgca aagtttataa ctgnggatgt gaaatcaaat taaaggcagt 540
tgtganctta agttatcccc ccn 563

<210> 5801
<211> 554
<212> DNA
<213> Homo sapiens

<400> 5801
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnn 554

<210> 5802
<211> 548
<212> DNA
<213> Homo sapiens

<400> 5802
cagttcaaga aatttatatt caaaaatttt cttaagaata cacatgattt tacaagatca 60
ttcatcatag caccaagcct aatattcctt aatagaaaac agtcaaataa caaatactcc 120
agttaattcc cacaggtata aattattcaa atagccattt atatcttaat ttacagtaat 180
caataaataa gacggcacat tcatatattg tttataaaga tctttttttt tacaaagcta 240
cagctatgta tatcctaaat agacaaaaat aatccttgta ctacaaaata acatttcatt 300
ttcctcaata gttttcttag agctctcagt aaaaactttc agacatagtc aattaagccc 360
tgcacaatag ggaaacattc aatctgctca atagaccaga ctcccccaaa ataaaacaat 420
gatcaccacc cactacaata tggtctgaac aatctcctnt ccaagtttag ttaagtctgt 480

09/05/2005 09:46:50

cctgaggatg tacagtaggg gaacgaccat ttttccgngt tcacaatttg gctttggcgg 540
anagaatn 548

<210> 5803
<211> 566
<212> DNA
<213> Homo sapiens

<400> 5803
gtctatccag ggggccttta atagctgaga agtgctgctc tttcagatgg gggtgccaag 60
caggccggtg accccaacct ccacccccctg cccctgagaa gagactgggc tgggccagag 120
accaatccac gggggaaagg ccaccagcac ccatcaggct tcccactggc accctgaaaa 180
cctgcccagg ctgggccgcc agcgtcgtcc acaggccttg gccagcgggg gccctcaggg 240
aagcaaccca gctcgcatct ggaaggccag gcagtcccct cgggtggctt gctgcggaag 300
aaagcacaca ggaggagggg tacatcacaa acagagctgg gggcggatgg caggcagagg 360
ggccacaccc accttgttga tctctctgtg tcgttctttg gttacgattt cctctaggac 420
ctcgccatct cccttaataa gcctggtgcg ccccgtctca gggtccacca ccttgcggat 480
gatgctctgc cgggcattcc actcctnctt gggcatgggc ttcatgggct ggattcggga 540
cttntgntca tncgnctgga ctgggc 566

<210> 5804
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5804
gagacgaagt gtcgctcttg ttgcccaggc tagagtgcaa tggcacgatc tcagctcacc 60
gcaacctccg cctcccaggt tcaagcaatt ctcctgcctc agcctcccaa gtagctggga 120
ttacaggcat gtgccaccat gcccgactaa ttttttatat tttttagtag agacagggtt 180
tctccatgtt ggtcagactg gtctcaaact cccgatctca ggtgatccac acgcctcggc 240
ctcccaaagt gctgggatta caggcatgag ccactgcacc cggccgtcaa tttgcctttc 300
tttatggtgc tgggtgggac taagtcacag cagagtcacc taacagcctg gatgcacagg 360
actgaggaag gtaagtcaaa gagtgcaggg cctttctcta ccttctcagc aacaaagaga 420
agagacacat tcttctctca gagtcctgct gngcttctgc taatacatgc agccttgggg 480
acttatcgac agcacaaagc cagcatttct nctttctcag agaaacatta aggnacctgg 540
actggcgata gggttnctgg atn 563

<210> 5805
<211> 446
<212> DNA
<213> Homo sapiens

<400> 5805
cccagaatga attctcgtgt ttacttccag atttaatgac tttgacttta gtagtcatct 60
gaactattta ttttactttg ccagtaatat ttagacctta tatatctttc attatgccat 120
cttatcttct aatgtcaagt gaacagttgc taaactgtct tctgcattta tcacattaaa 180
aatgtctttc ttggaaaatc ttcttgatat gaataaagta tcttttagag ccatcattta 240
aagcaggttt ctctccaaca cgagtctgct gaggtggtgt gagctgtgaa ctctggctga 300

EP 2 305 813 A2

aggctttccc atacacactg caatgacatg gtttctgacc agtgtgagtt acctgatgtt 360
gaataagggt tgactttcca ctgaaggcgt ttccacattc ttgacattna tagggctttn 420
cccnagnatg cattatcnga ncttna 446

<210> 5806
<211> 561
<212> DNA
<213> Homo sapiens

<400> 5806
catttataaa agggtattta tttcttattc atgtcaagtc caataagaat tctactgccc 60
tacttttgt aatttacaac catctgtaat acctagtttc caagaacaat gcaacagaaa 120
cagaagtgaa ggaggagggc acaacagctt ttaaccatct cagtctggaa gtggttccaa 180
aaatgtctct tccttttaca atctattgtc cagtagtcac atgggctcaa tctaattgca 240
aagagaagcc ccaaaatata agaggacatg tggatatttg gagaacttaa attgtctctg 300
tcacagaaaa aaaggaggtt ccaaatagag aacaacagaa tgaaaacaac ttaggggcat 360
gggctggaaa agcttcccca aagcagtgac atttacgcta agatctaaag ggagaaagaa 420
ctcagccctt gnatgtttga aaggtaacca atatagtgaa gaggtaagag gctaacacat 480
tattcaaggt ataaaatatg cattcctaac gnggcctgna taccatagat nctatttagc 540
ttngnaaacn tttatgggng c 561

<210> 5807
<211> 559
<212> DNA
<213> Homo sapiens

<400> 5807
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnn 559

<210> 5808
<211> 533
<212> DNA
<213> Homo sapiens

<400> 5808
gccaaactac cttgttttat tggattttga gtaaaaacat gaaccatgtc aaagtttcca 60
ggcagactcc taaaaagcat tagcagatct ggacccaggc aggccaggga cagggaggtc 120
cctctatcag gttttgaggc gggttgagcg ccgaggtagt gggggctggg agggtcgagc 180
cgtcaccttg ctgggtgttt tgtcctgggt gttgggctgg gagggtgggc ggccgctgga 240

0 9 6 4 5 0 2 6 0 2 0 9 0 0

ggtgaacagg gctgtcaaag cgttccgggc gttgattgcg caccggcggc tcacaggtcg 300
ggtggtgggg ctggggttct tggccgcctt gtatttctgc aggttctcaa agtggcccag 360
ggacttgcag tgggagagct gtgcccctga gttgctgtga tagaacttgt gggcaaatgc 420
ggctgtgaat gtcctggggc tgcacctgtg gctggacctg tttaacggct ctngcttcct 480
gctgcaactt nacctgnctt gggcccctng gaatggnccc nggggctgnc ctt 533

<210> 5809
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5809
aggcaaaact attttcattt tactatgatt ggcaaattat gatgtatttg attgataaat 60
ctcagattta tcagattgat tctagttcgt cttcatgtgg cagaatatgt gttgtcagga 120
gtgatttggt aattcagaaa agcagctgaa gaagcatgga aacttcccta caagtatatg 180
gccacagctg gctaaggttg gagacagtat tctatccttg ggcctcagac tcacatatgt 240
atgtacatac acatattatt cacccatatt tccttccttc tcccctcccc catctgtaaa 300
ctgatatcta aactttacaa attacagtta caagaaaagt tttgttccat ttgaaataca 360
aaaaagatca ggagaagcaa tctgcttttt aattttactt atgcaggtaa gtttttaag 420
gatacagtca atttggtttg gcactttgga actaagaggg gatcnggtca taaaaaaatc 480
taccaactct nagcgaaact gaaatgaggt ngacngaaag ggntcccatn cataaagggt 540
ttaaaaatta ccaagnccaa ttt 563

<210> 5810
<211> 318
<212> DNA
<213> Homo sapiens

<400> 5810
caatcatgac atctttatta taccatagat gaatattngt taaataaaaa taggtacagc 60
angngtncaa taagaccagt agttctcctt cagaactcta cccatttttc agaggaagga 120
aacacttttc cagaatacaa ngctcaagaa atgtaagcca gatcccgctt gtatgaggta 180
tcttaagtag tcagactctc aaaancagaa ngcagaataa nggngccaag agctggggca 240
ggcaggggga aggggaaaag aggagttgtt cggtgggtat agaacttcng aattcangat 300
ganaaagttc cggnggnc 318

<210> 5811
<211> 571
<212> DNA
<213> Homo sapiens

<400> 5811
cattgaaggg ttttactgct aatcactctg gggaaaacag aggcaggttg ggggagggat 60
aacaagtaac aaacatgggg gagtgtgaag gtccctgggt catggctccc tgagggtttc 120
cctttcattt ctaaggnggg acctcagatc tcttctccag accaaggagg ccccttccat 180
tgagaaggtc actcctccca ccccagagat ctagaagcaa agttggggca caacaggtgg 240
gaactagcag gaaactgcag tgcactccta cctaagcagt tcacagacaa tttggagaac 300
cttcagacag tgacacccat ctcataagta cttcctcaaa ggccaggggg actgctgcct 360

0960504.0020600

taataacatg agcatgttct gagcctaccc tatttctctt tcaccccaag aaagtaaagc 420
caagactggg tcttctgact ttccaacacg agaaatttgg cctggaaaga aggcaagggg 480
ttttatttca gangtccttc ctcaggactt tctngagaan ctgactttan aggctnttcc 540
aaaacccntt ttcaaagngg ggatggaagg g 571

<210> 5812
<211> 553
<212> DNA
<213> Homo sapiens

<400> 5812
gcaattcana aatgttttaa tgtatttaga agcataaata ccaaacctgt gctccaaagt 60
taacaagtat gtctctaaac tctagatctg atttttacag ccacacttga gacaatgacg 120
taaacttaaa ctttactttt aatggcttaa actagcacta aaatgtttaa tgtctcactt 180
aggagatttc aaataaagtt tttacatcgc tcatgtttac taactcgaca atctgagctg 240
tcctgttttc ccaggtgtta aatatcattt aactgggaaa tgaaagcaat aaaaaaattc 300
tcaaacatga actaccatta ctttcctata aacatcttaa cattatagaa aatttccaat 360
tatgtcaaaa tcagaaggtg aaacccttag ctttccatgt tacacctgac ttagtactac 420
tcaagtatgg gaaaaaggtc ctggagaata atggttccaa tacttttcat tggcatctta 480
attggcatca tgtagaagtg gaaaantgta gaggataaga gcncaaggct tgnaattctc 540
cggacnnatg gng 553

<210> 5813
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5813
gtagagatga ggtcttgctg tattgcccag gctgctcttg agctcctggc ttcaagccat 60
cctcctgtct tggtttccca aagtgctggg actataggtg tgactcacca tgcctggcct 120
acatccagtt taatttatac tacactgtgg gtttagtcct caaacatgtt tttgttttac 180
atataaaaat ttgaggtaaa agaacatttt tacattggtc aataatggta catttaaaca 240
atggacgact atatccatta aaatcgtgtt gtggaagaat attcagtgac atggaaagac 300
tgactcaagg gcaagtgaaa cgtgtcaaga gtctgttagg tactagacac tgtaaactgg 360
gtcttggctg tgttacttgc ttacatcctc catcatgtga tcttttagat aacaaaatcg 420
agatcatagg gataatgggg tgggctgatt gaaagaacag aacttgggcc acacttctag 480
atgcctgnga cttttctgca tctattcaga tattaaggaa ttgnttatgn aaaccatggg 540
ggttgaatgc taaaggaccc tcc 563

<210> 5814
<211> 555
<212> DNA
<213> Homo sapiens

<400> 5814
gagacagagt cttgctctct gtcctgggct ggagtgcagt ggtgcagtct gctcactgca 60
acctccgcct cccgaagatt caagcaattc ttgggcctca gtctcctgaa tagctgaagt 120
tacaggtgtg cgccaccatg tctggcaaat ttttgtattt ttagtacaga tggggttttg 180

0098/2010 09:45:50

ccatgttggc caggcaggtc ttgaactcct ggccttgtga tctgcctgcc tcggcctacc 240
aaagtgttgg gattataggc ttgagccact gcgccaggcc aatcttaaca ttttaattgt 300
tgttttgatt ctcttggttg tattacacta aaaacgtatt tatgtgtaaa aatttaaaag 360
cagcctgcat aactcaccca actatttgat aaatatcttc agattttcct tggtgtaacc 420
tcagtatcca agcacctggg tttgctttta attgaaaata ccccttttaa gatgagaaaa 480
aaataatcat tgggtaatat gactaaaaan ccattgaaat gntcatgaat acccgagggg 540
actaangaaa ggttt 555

<210> 5815
<211> 577
<212> DNA
<213> Homo sapiens

<400> 5815
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnn 577

<210> 5816
<211> 538
<212> DNA
<213> Homo sapiens

<400> 5816
gagacggagt tttgctgttc cccaggctgg agtgcagtgg tgctatctcg gctcactgca 60
agctccgccc cccggggttc acgccattct cctgcctcag cctcccaagt agctgagact 120
acaggtgcct gccaccttgc ccggctaatt ttttgtattt tagtagagac gaggtttcac 180
catgttagcc aggatggtct caatctcctg acctcgtgat ccacccgcct tggcctccca 240
aagtgctggg attacagatg tgagccacca cgcccggtcg gcagttcttt atagcagcat 300
gagaatggac taatatagta cattgagtgg agtgctgcta taaagagacc caaaaatgta 360
gaagcaactt tggaactggg taacaagcag aggttgaaag tttggagggc tcagaagaag 420
acaggaaggt gtgggaaagg tttggaactt tctaagagac ttggtgaaan gggtttggcc 480
caaaatgcta ataggggatn tggccaatga aannccaggc tgnatttggt tttcanan 538

<210> 5817
<211> 561
<212> DNA
<213> Homo sapiens

<400> 5817
cctttcaaac actgtggctt acttgtttac tcaactaaga aagaaaaagc aaccttatta 60

0020060150

tagagattag caagagatga agaaaattat agggaggctg ccctggccca aaggtctgct 120
aatggcttct gcagggagga tgaggatggt gctaggttaa ctgcttgtct ccactacaga 180
ccagagaacg tccatgcgat gcctcttatc agtgaggtag atgatcatcc tcttgccaga 240
ggtatcgagt gccagcccac agcacagcag agcaaaaaag tttaaagtag gtcaagttca 300
aaattatatc aaggagataa gagatgggag gcaaaggctc cagaagagga acagaggcgg 360
aaggaagaga agctccaagg tgacgcccac tctaggacaa gatgatgggg agcttgcttc 420
tgtcctgtca gacatacctc ctgccaccac gagcagctga atgaggggtg ggaanggaag 480
aaaagcccng agtgaatttt tggaagaaga agtggaaggc caggaatccc ttanntcctg 540
ggaacctttt gggggtttng g 561

<210> 5818
<211> 564
<212> DNA
<213> Homo sapiens

<400> 5818
acatagaata caattcaaca ttacattgat tcctttaggc ttcgggttag atcaaattct 60
cccaaacaga atagccatgg ggagcatgag acaatctagt gagcctaaaa cacggaagct 120
ggttctgtcc tttgacccac tgacgtgaaa agagtcattg caggtgatgc tttgttgcag 180
aaatgtggag tctgacctgg gctgcatttc cagatcaggt gcatccgtac ctcagccttc 240
catggggtaa caggcattgg caaaaaatgt cctgcctcag tgtgaccctg gaacctttcc 300
agcccacact catgtggagg atcccagtgg ggatgacgat gtttggggat atttcctcat 360
attctctttg ctgagaaact agcttgagtg ggcagggaat ggaggcaggt actgctagag 420
tctgcaaagt gagtccagaa cctggacttc tagagttggg gggtatncct aaacttcctt 480
tcactaagac attcatgata gccagtattc caaaggggnc cttcttataa nactnggccc 540
aggcttcaan ttctggggan gagg 564

<210> 5819
<211> 564
<212> DNA
<213> Homo sapiens

<400> 5819
aaaagttaga actaatttat ttaatcacag atatttagta tactcaataa tgcactaaca 60
atttctttaa aaaaacacta atactgtaca gtatttctgt gttttagttt ttcccacagc 120
tgttgaaaat ttcagccttg atttgaaaca tgacctgcat gacaggctat aagttgtcaa 180
tagttctttt tctttggaaa agtacagttg tggcatttac tcactttagc agatagctaa 240
aagggaaaaa taaggaaaaa tatacactgg acctgcagtt aagttttga caatgccaag 300
gatcaaaaac agatgaaaca acatttgctg aagatgaaaa ggtattgcat tggtcttaat 360
agatgttgcc atctctgggt gaggatgctg actgagcctg ttctgtgtct tcatcacctc 420
tatttgnttc ttcttctacg acagaccttc aagagacaag atccatgtag taagccacac 480
taagncctt tgcccttctt aatcntctgg aggctcttnc ctggggacnt ttgnccaaaa 540
tacttaggtt accaatnttt anct 564

<210> 5820
<211> 325
<212> DNA
<213> Homo sapiens

09052800.0-09052800

0050050.0003.0000

<400> 5820
acncggggag agatttaatt tacatagcag ccacttgggg nccagtcana gctggggcag 60
nggggaatn tataacccca gagggtnccc cccanacccc caccccggg agaccagtcc 120
tcaccaaccc ttggatgggc tcccaaggtt gngcaaaana tgctccagtc aaaaggatag 180
agacatttgg gaataaggct gnccccaagt tgggggaagt ccacggcctg gagnggnggc 240
ctacatgggg gcccaggggt ctgananacc agtccatgtc ctgggcgagt cctcagcctg 300
ggggccctan aggaagcctt ngngg 325

<210> 5821
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5821
aaaacataat acatttttat ttctttaaaa acgtatgaca aaatttcttc tgccatcggc 60
catgctcaga tttatacatt ataaaatgat ttaattccct aaagtacaaa aaagaatggc 120
tgaatctcca aagagttgat aaagactgaa gatgtttata aggcatgctt atgtatacta 180
tttcaagcca tctacaggac ttgagacagg aatgtttagt gtttgcaaag ccacagtcac 240
tgagccagac tttgtggtga tccagagatc ctttcatttc acagaactgt ccttgacggc 300
ttctcccaat aaagatttac aaccttatct cttggctgtg gcagtatgag agggtcttct 360
ttcagtacat atactaaagc ttcattggag tagccacgct taggaagtac caagtaaatg 420
acaacataag gccaaatgca ggcagcaggt atttttcaat aatgaattac aggggcttca 480
agaattcnac angagaaagn gattttcaca gngcttgaaa agcttganaa tgggattatt 540
gccaaannga aaagggt 557

<210> 5822
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5822
gatgcaacat tgcttttatt gggggttagg aacatatgac aaagtcacat aaaatgtcaa 60
caaagtcaca ctttgtgctt ggctgctctt taaaaaaaaa aaaaaccctg tttatttatg 120
aactcactca atgagaacta tgtgagatgt ggccaacaat tatcatgctt aaaacaggac 180
ggccagagcc atgaggagat tgaagtctga caatgctagc tagctaagtg gaaatttacc 240
attgtcaaat atcagatact tccacacatt tagatgtttg tccataagta gacccagctt 300
agctgactcc tttgagaaag aattgngtct caaacccctg ttattcagct ggccatatta 360
ttaatcatta ctaaatgcca gccacatgca aaggggatgg aaaagaagaa tgagatttgc 420
tcagttttag ctttctgngg ctgaagtatt tttgagtcag ttacatggat acatgaggat 480
tatagtaggg aaatgactgg atatttttaa aaacctaagt nctatgggaa caggcntggn 540
ttaaccattn ggncnna 557

<210> 5823
<211> 536
<212> DNA
<213> Homo sapiens

<400> 5823
gttaaaaaac atgtttattt tacaatatgt acaatcagga acatatttta aaaccattat 60
cattaaaata aatgaagatc ataaatcaca atttagtttg ttcttagtgt atatactcac 120
attaaaatat aaagaacata taccaaaaag agccaaaagt gtgcattttg ctaaaacctg 180
gtatatacat attccattgg aaaaaagcaa tcaaaaatga cttaaaccaa aactaagttc 240
ctgtgatgtg tagtaaccat tatattgttt gtatgaggta gtaactaaat tattttggcc 300
atgtattaat actctaagtc aaaagaaata tgaaaaggat cataaaataa ggccaacaaa 360
agtaaaaatt ccaagagaaa tttgaaccac ttcactctat gggaatggta cagttcttca 420
gtgngatcat atgaaatggt tagtgaggac tctttaataa tgctaattaa ttctttgggc 480
aactgggaat tcntggnccc caattggcng gatttctatc atgggacccg ttttnn 536

<210> 5824
<211> 507
<212> DNA
<213> Homo sapiens

<400> 5824
gtagagacag ggtctcaaac ccctgggttc aagtgatcct cctgcctcag cctcccaatg 60
tgctgagatt ataggcgtga gccaccgtgc ctggcctgca aactttataa acagaattct 120
ggctaaagcc tccagtataa atgggcaaag tagatgtctt aatttatttt atgctgctat 180
aacagaatat ctgagactcg gtaatttatg aagaaaataa acgtatttct tatagttctg 240
gctgagaagt acaagaccat gaggtctgca tctgataagg gacttcattt tacatcatcc 300
caggtcagag ggcagaagag caagagacgg tgcacactcc tttataacta acccactccc 360
aaataaagac agtaatccat tcacaggggc agacccgtca tgacccgaat cacctaatag 420
gccccaactt ccgacactat tgcaccangg attaaggttt ctnacaccca actttggaga 480
acccntttca accncattan ngggncg 507

<210> 5825
<211> 529
<212> DNA
<213> Homo sapiens

<400> 5825
gagatgaagt ttccctctgt caccaggctg gagtgcagtg gtgcgatctc ggcttactgc 60
aacctctgcc tccctggttc aagcgactct cctgcctcag cctcccgagt agctgggact 120
acagatgtgt gccaccacgc ccagctaatt tttgtagttt tagtagagac ggggtttcgc 180
catgttggct aggatggtct caatcttttg acctcgtgat ccacccgcct cggcctccca 240
aagtgctggc attacaagcg tgagccactg tgcccagcca gctctttata gtttaagagg 300
aaggataaac cttaagagat cacaacacta tatttgtgtc agggatccac aagactgcct 360
ccatgtttgg agatttgcta gaaggactca tgggatcagc ttagggttgt aatgggctaa 420
gatttattac tgnaacatag natggatata tagnagaaag atctcaatgg caaaagacac 480
tgnccgagtc tggaaaaatt cctggacccg gtttcttatg nggcngggc 529

<210> 5826
<211> 530
<212> DNA
<213> Homo sapiens

09/25/2008 09:50:56

<400> 5826
aaccctgtgg cacttaccac ctatcctact atatatttaa tatgcttatt tcctactgac 60
tgcctgtctc cccttatcaa ggccaaggtc ctcaaggtca gggatttgga tctcatttgt 120
tcactgatgt atccaaagtg cctagaaagg tgcctgatac atagcaggcc tcagtacgtc 180
tttgtaaagt atcggaatga atgtatcatc aatcaaaaca taatagtttc catttattgg 240
atgtcgtcta tgtgccaggg cactgcgatg aaaattttac aggcctgatc ttactattcc 300
tcacaaaaat ctcccaagaa aagagccttt attatgacta tcttatgaaa aaagacactg 360
tagtcctgca gggccaatta agatgaccaa gaccacccag gtacagagtg ggagaactga 420
gcctcagact agttctgctc aatgggaaca tgaccagatc ctgctggaag aaccnagggt 480
cgcttctggc aaataacgcc gcaacccttt tgngtnattc nctttccnn 530

<210> 5827
<211> 524
<212> DNA
<213> Homo sapiens

<400> 5827
ggctattgta tactaacatg atagaatgtt ttgatgaaaa acaggaccca gtagaattaa 60
gcaaagaaga aaaatgtact gaaattttta caaatcagta ttaaaatatt ttggtagttt 120
gtttcaatac ttaatcttta aatctttcta attgtgttta tccacacaga tcagatttat 180
cacagatctt tatttttcc attatattag attttgcttc tgttgaataa aataaactta 240
tgatgaaaag tcttataaaa aaacatgtct tttgttacct ttgcaaaatc aagactccga 300
atccagtcta atctgtctcc tcccaagcaa aaaatcttgg ggaaaaagct gaaatgctat 360
tacctgaaaa tttatgtaag attgtacatt tactttccaa ccagtctgaa ggctgaggag 420
tttgcaagga aagcaagaaa aagttaaaat gnctaaacca aagcctgact gggttcaaaa 480
ctaggtgctt aaataccaag ggcccantgg gcnnttaaaa acan 524

<210> 5828
<211> 512
<212> DNA
<213> Homo sapiens

<400> 5828
gacaactgac ttgtcatctt tattaatttt tacaaatgca tgtctcctaa tatgaaaagg 60
ttgattttca ctttattgtg tgctttgcac atttacagca gcaacaggaa gagcttctac 120
tgaatagatt ttagtcttca aaaatgtgac tgcatcttcc atctctagtt tgtccatctc 180
ccagttattg accaagatca catgaaaacc cattgcattc aaatgccgca ttttcatagc 240
aaggaatcct ctggggtggc ttgaacccaa acaataagca gatctggaaa cacatagcac 300
agctactctt tgaatatctg tagcagaagt tgtatcacat cagaaagtgg tagcacttga 360
ttcctgttag tgtccattct gatttcaaaa tcaatatgat aattgtgtgg caagtgcaca 420
tcctttgaga agtgtccttc accttccana aggctggtca ncacctttgn cacctttgca 480
tttggatggg acnattgnaa gttccgcngg na 512

<210> 5829
<211> 531
<212> DNA
<213> Homo sapiens

US 2005/0208500 A1

0020020-050305.SEQ

<400> 5829
ataagcagtt tttaatccat aaatacaaca ggcatttggt attttggcca tcagaaaaca 60
aaagttgtag tatcagtaaa ggtctgagat ggttcacttt tgtagattca attcagtgta 120
tttaaggtta acaaaggctg acattgaaat gtttaaagat aggcaaaaat tcacattaaa 180
aaaaacccta tatttctatt tagagtaaca gtaggcagta tgattccaaa agttaaaaat 240
tatttcacaa cctgtagctt cagcttggca aacagcttag attccaaaac tgattcatct 300
ctattaaaat gtaagcactt aaaaaaagag catgtctgtg tatatagaca tatattttaa 360
aggaatcaga taatctttga agcagcctta gtgtttcctt taaatttgtc tggaaatgac 420
cattgnatta gcttcacaga aaggactngc ccagcttctt tggtctaagg ntaacatggg 480
ngatcatttg gctnaagctt aaaaggnccc accagatgtt aaccgggggg g 531

<210> 5830
<211> 529
<212> DNA
<213> Homo sapiens

<400> 5830
aggaatattt acaccacaga aatcagcaaa cactacaaat cagaactttt accccaaaga 60
actagttttt aaaacattca ccaacacatc atcagcttca gtttccacct ctctcaaaca 120
ggactaataa caccaaccct gcaaatatgt tgtaaggact tcaaataata tcagtaaaac 180
acctagcaaa attctagtca cataaaaggc acttagtatg tggtatatag caaaaagtta 240
tggtactata aatgaaatct ggctatatga aagtagagca taaataataa gtaatgcagt 300
cattcatgta taagtataat aaagcaattg aactttagta gaggtgccgg gtcctttagg 360
atttttaaat gaaaagaatt aatacagaat tccatatact tttcctcaat taatgagaac 420
aatcttcttt ttgcatcttc tcctattttc caggnttctt tttaattatg anctcttggg 480
gtcaaanttg gcaagcactt ctacctattc cattaaacna acngnttgg 529

<210> 5831
<211> 501
<212> DNA
<213> Homo sapiens

<400> 5831
ccttttaga gactctgttg cccagactag ggtgcagtga tgcgatcatg gctcactgca 60
gcctcgaact cctgggctat atgcgatcct gccacctcag cctcccaagc tgagactata 120
gacccacacc atcacgcctg gctaattctt tttttctaat acatggggtt ttcttacatt 180
gtcctggccg atctgcaact cctgggctca agcaatcctt ccgaaagtcc tgggactaca 240
ggtgtgagcc accacgctca gcctttttt ccttattact gtactaggga catttgtggc 300
ttttccacaa tgagacttag tagagaaatg acagcttccc tcggccctat cctgaaatac 360
actaactagc tcttctctgc cagggctacc gttttctccc taacctttgc agatgtatgt 420
atccatataa atgnttctat ttcaacaaac tgtagaaagn atncagnctg nacaggttcc 480
cttatnaagg tattaccngg g 501

<210> 5832
<211> 516
<212> DNA
<213> Homo sapiens

<400> 5832
aacttaggtg ctcttttgcg ctatatactt taattcatgc aaaagtgata gaggactgga 60
cttgaggctc tacagaggcc tttctgagaa agctgtgtag ctccttactc tggcgaagaa 120
caaggggtg tacatcttgt caatctcaaa agcactgact gcagtctcac cagttgattt 180
gtaagtaatg tgacaagaat gatgtatcca gatgagtttg ttgaacctct ggtgaccact 240
ggaacatagc tgtagcccca catgaaaact ctgatctgct tcttgtacag ggacacgacg 300
aaaatatctg tatttatagt caagtggttt ttcttctttt ttcttagtta ttacagcaaa 360
tactttggtc tgattgtctg tgtcttgtga caagcgatag tgacccagta gaattgcatc 420
agtcctggna ttcctagttc ttaaacgtgg aacaatggac tgaggctctt taagggntgc 480
aacatnatna catgggcctn gggaagnaac ttttgn 516

<210> 5833
<211> 521
<212> DNA
<213> Homo sapiens

<400> 5833
gaggctaaga ttacatacat ttccatgtat acatagaaac ttgttgtatt agtcagcttg 60
ggctgagttg tgttgcaata atatccccca aatcttcagg gcttacaaca ataacggctt 120
ctctctggct tgtgttcatg ccctttgaag atcagctgca gccctgctcc atgttctctt 180
tatgatgaaa tggaccaaat ccagaaacat ggctaataag cctgatgtca atggagcagg 240
aagaatacct tctcacaggg agggccacca ggcaggccct ctccagttgc tagtgcattt 300
tgtctgttgg cctcaaagct tggctcaaat tgtcaggcca atggaaagac tgaatgcttt 360
gcctccaggc aaaattgtgg cctgcagagg gtggaccctg cattgcatct caacgagaac 420
ggaaagctca ctcagcatgc tgcagncttt catactgatt ttgacataaa acatnaggcg 480
ggaattcnct tttggctttg cagnaaattg ggggngganc n 521

<210> 5834
<211> 499
<212> DNA
<213> Homo sapiens

<400> 5834
ctgagacaag agtttcactc ttgttgccca agctggagtg caatggtgca atctcggctc 60
actgcaacct ccaactcccg ggttcaagcg attctctcac gtcagcctcc cgagtagctg 120
ggattacagg cacctgccac catgcccagc taatttttgt attttcagta gagacggggt 180
ttcaccatgt tggccagtct ggtcttgaag ccctgacctc aggtgatccg cctgcctcag 240
cctcccaaat tgctgggatt acaggcgtga gccaatgtgc ccagccagtt gcatattctt 300
gacccaaaca cagacagttc ccccaagttc aaaaccacaa cgagtagccc acacgaaggc 360
atactctgag ggttgtttca ctgttacagc agtacatatt tcgaagagac aacagattcc 420
atttcagatg cttctcaaga aagaaaaagt ctttgacaga atctctactc cangnctctc 480
tctctctttt ttttnnnnn 499

<210> 5835
<211> 531
<212> DNA
<213> Homo sapiens

0960264.0020

<400> 5835
gagacggagt ctcgctctgt cgcccaggct gaagtgcagt ggtgcaatct cagctcactg 60
caacctccac ctcctgggtt caagcggttc tcctacctca gcctcccgag tagctgggat 120
tacaggcgtg ccaccacacc cagctaattt ttgtattttt agtagagacg gggtttcacc 180
atgttggcca ggctggtctc caattcctga ccttaggnga tccacctgcg ctggcctccc 240
aaagngctgg gattacaggc atgagccacc gngcccaacc tatttttctt tatgtcttct 300
gtagctcatg aaactatttg gactttctct ccctacaatt aataggattt tacttctatt 360
tcattttcta ggcataaaaa tgctattgat tttggtgaat ctaccagatn gcaaggaatt 420
ttagaacttt ttttttttcc ttttttcgga natagggggc ttactctgtt ggccaagctn 480
gaacncaang ggggtaaact taagttactg gnaccttcaa tttnccagnt t 531

<210> 5836
<211> 552
<212> DNA
<213> Homo sapiens

<400> 5836
gagacagagc cttggtgtgt cgcccaggcg acaaaagtgc taggattaca ggcatgagct 60
accgtgcctg gcctgtctat atttttaaaa agcatttgtc ttaccttcaa cccgtgattc 120
caagtgctta tccaactctg aatctttttt caccgcttca tctgagacct tgggagcatt 180
tgaaaagcaa actagtacaa tactcatgtt atctcgactt cccttgngta aacaagtgtc 240
cactacccaa ttgcacacat tttccaggtc atcagatacc tcaagcctag atttaacata 300
ttcacagagc tcctcattac tcataacatc ccagatccca tcacaagcca agatgataaa 360
ttcatcctct tctgctctta aaatttcata aacctcaggc tctggagaaa caagttgttc 420
tgttgggccc ttgccatcaa cacacttgta atcatagtcc cccagagcac gaggatactg 480
ntaatggacc attaacacgg tggatcaata cgctgcttcc tggattttgg gntcgctcct 540
tttccctggg at 552

<210> 5837
<211> 525
<212> DNA
<213> Homo sapiens

<400> 5837
canatggagt ctcaccctgn ggcccaggct ggagtgcagt ggcgcaatct cggntcactg 60
caagctccac ctcccaggtt catgccattc tcctgcctca gcctccctag tagctgggac 120
tacaggcacc caccaccacg cccagctaat ttttttttgta tttttagtag agacggggtt 180
tcactgngtt agccanaatg gtcttgatct cctgacctca tgatccacct gcctcggcct 240
cccaaagngc tgggattaca ggcatgagcc actgcgcctg gccaagttca ttattcttta 300
gtatcttgng tctacatctg agtatatttg gttttcattc ccctgggagg ataaagtaaa 360
ctggaaaagc atgaactccc canggaaatg tttctgtctc caggtatttt cctactctaa 420
ttcaagtcct tccataaggn cctgacccca gcacaagtca ngnactaata gnaccttnca 480
aatgaatncc ccagtttgaa ttcaanggga aaatcaaatc ccttt 525

<210> 5838
<211> 185
<212> DNA
<213> Homo sapiens

0502060.0002

<400> 5838
gttgtttttg gtgtttttaa ttgtttttgt taatgtaaaa acagaaccat cacagccgct 60
cagctctata acccatccag cccaagactg ttctagtggn gaaaccaaga gtagacagga 120
aggggacncg agggatggng ncgcttcagc tgaaccctaa ganccncttt ctcnccttcc 180
tccgg 185

<210> 5839
<211> 480
<212> DNA
<213> Homo sapiens

<400> 5839
ggtatttact tgggaaaaaa agatgctaca aaaaagagac atgaattaag aaaatatttc 60
gcatgtaaga caagtgcaga taaaaatgaa aaatgtgccg ggtggtgatc tgacagttcc 120
tgggatatca gtaacactga aaatgcctag aaaacaacct tttcccagtg ttgggggaag 180
ggttctattc ctgtagagtc caaaaacaat ttttccacat tttgaaaaca tctggttgta 240
ttttggcaaa ctatggtagc tatcagcttt gaatccatat gtatttaatt ttgctggagg 300
ctggataatt aaaaccaata taactgaaaa taaaacaaca aaaagctttt ttcaccctct 360
aagagcatag aaatctacac ctgggttatc tggattccag ntgatatggg accagccagn 420
atactccaga antactcacc aatantttg nntctaattt ccacnttatc tcatttattg 480

<210> 5840
<211> 553
<212> DNA
<213> Homo sapiens

<400> 5840
gattgatcat taaggaagtt agaggaataa aaacacagta aaaggtttaa aacattaagg 60
aacatttttc aggtataaat tttataaata caaaacaaat tcacaaatta ctctcaatac 120
taaataaata tctagttaat aaacttggac ttaatacctg cagccagcac tggtacagca 180
cttcaaggtt ataagattgg attcattcat gtgtagtgtt gaaagaatgt actcaaacaa 240
ttaattaaga cataaacacc ttttctaaac tgtgctatag cggaagactc atccatgtag 300
ataactctcc cttaatacca ccactttaaa aaaaaatcat caataacaaa ataaatcgtg 360
ggtgaaaaaa tattttccaa gatctctgga cacatgaatg atctcaaaaa tgtacaaaaa 420
cctctgtaaa ccagtactgn atccaataca tctatcaaac ttattagata ctggaacaaa 480
actggagcna anggatatct ttcctacatt ctcccgaggg cttaatatta aaattnggga 540
atatagngcn nnc 553

<210> 5841
<211> 541
<212> DNA
<213> Homo sapiens

<400> 5841
ggactgagac catcaaaagg gaagaattag gagggttcct ttggtttgct caggtcccgg 60
cctgaaaaac atggctctga catccaagat gcctgctgct ctgtccctga cttcagtctg 120
aaccccaccc tgcccacccc aaggccacgc agatggttac tgtgggaaca atcccagcct 180

0803270 2005-05-26

tctatctccc cggggcctcc ctccctgctc tgcttccctc ccctgagcac ttgaaacatc 240
gccagctttg ctaccttcag tcccgccacc acggggctct ttcaaggctg tgggatcggc 300
agaagagtaa ccaccaccgc atcccagaaa cactgcccag gaaaaactgc tccatctgct 360
cctctgcccc agggccagca ggaggggaag gaaggggctg gaggtctctg cagggaagcc 420
ttggggttcc tcctgatatt gggactgctg cctggccagn ttctactctg ntgcaagaat 480
ctggacaggc aagantactt tntcccccaa gggtttttn taacggttga gcttactggt 540
t 541

<210> 5842
<211> 542
<212> DNA
<213> Homo sapiens

<400> 5842
attttttga gatggagttt tgcttgttgc ccaggctgga gtgcaatggc gtgatctcgg 60
ctcactgcaa tctctgcctc ctgggttcaa gcaattctcc tgccttagcc tcccgagtag 120
ctgggattac aggcatgcgc caccacacct ggctaatttt atatttttag tagagacagg 180
gtttctccat gttcgtcagg ttggtctcga actcccaacc tcaggtgata cgtatgcctt 240
gacctcccaa agtgggaggg ttgcttgagg ctaggagttt gagatcagcc tggggaacat 300
agtgagaccc tgtgtattta aaaaaaaaaa aaaaaaatag ctgggcatgg tgggtgtgtg 360
tctgtaatcc tggctacttg ggaggctgag acaggaggat gatctcttga gcccaggaag 420
ttcacaactg cagtgaggat atgaatcgta ccattggatt ggaccatttg cctgggggac 480
anaagtggga acccttgggg cttcggaaaa aaggttacnt ntaatggaat taattgggaa 540
tt 542

<210> 5843
<211> 476
<212> DNA
<213> Homo sapiens

<400> 5843
aaacacaggt caccatacac taattttcaa gtccgtatca gaaggaatat ctgttaaaaa 60
caaaaacaaa aaccatgatt caacagaaaa tgtgacagat tccttaggtg caactttaga 120
aacctaagtt tcaaaggaga aaaacagtag ttactccagg aattttaact cactaaccac 180
agttttatca tggctctgta agacagaaaa atggaacaaa atgtatatag ctgttggcga 240
tacgagcctt gnggctcaaa ttgcatacca aacatgggat ggagtaaggc tgatggctag 300
aggtaatcac ctctaagaga aatgaactgg gaaatgattt ataatctacc ctacanggat 360
atactgctag gttccattta gagtngtcca gctttcccta tgggaaggcc caatgggagg 420
tccntantgc aacatnacag ggncttcctt attccttttt ttcngaagna ttaagg 476

<210> 5844
<211> 548
<212> DNA
<213> Homo sapiens

<400> 5844
gttcattttt taaagagatt aagctataag caaacacaca tacaacattt catcattcaa 60
ttcaggttgc gttttaagaa agtcttccgt gctggtaccc tgttttgttc aatttttttc 120

0082970-960960

tgcataaact aaattggtat ctgaaaggct tcatagaaaa tagaaacttt caacttttt 180
ttcctacaaa gaaaaacaaa tagtatccaa aatattaagc attaattgtt tgccaatttt 240
ttcttaaata ttttacaaac ataggaaggt ggttttcata atgttcataa caaagaattg 300
catttctgct cttagcactg actacgtcaa tgacatcttt tgtccttgtc ccaagagggt 360
cagtttgtgt agccaccatc agagctatag gaggacgtgg gaccaagtaa agatgctggc 420
tccttgcaga cccaagggtg nccatcatgn tcatgtgggg gcaccactac acccccaaag 480
agcttctaag tgctttcttc antaatggnc catcagagta agtaggtttg ggctataaga 540
aagccant 548

<210> 5845
<211> 543
<212> DNA
<213> Homo sapiens

<400> 5845
ctgcagacaa gtaaaccttt tattttaaac cacaaatagt cagcaggtgg ccacaactat 60
ccatgtttca ttaaaatcac ataaaaccta ggtacaaaag caccactgat tattgctcta 120
gaaaaactgc atgaaaaatt caaatatgca cagtaaaaac accacagtat gcacaggact 180
aaattttaaa gcaagtgcat ggaatgctga atcaatctta cacacagctt ccaatattta 240
actgatattt attttacttg aggatgatgt aaatttccaa aaagcatgac tatgagacga 300
taaaatgtcc atccttatat attttcgtat gccaactagt agagtcctaa aaaattagca 360
tttacaaaat acttggtaaa aatagctttt aaaagttgtc ccaagagata cntanaatca 420
accccaattt ttcatggaca attcattctc cctcggtatc tacagattca gttttcttgn 480
gccttccntt tccaggtttc ctggnttttc ctncttnttc ccttttagca cctttgntaa 540
atn 543

<210> 5846
<211> 541
<212> DNA
<213> Homo sapiens

<400> 5846
cttgaaatgg agtttcactc ttgttgcaca ggctggagtg caatggtgca atctcagctc 60
actgcaacct ccacctccta ggttcaagac attctcctgc ctcagccttc caagtagctg 120
ggattacagg catgcaccac cactcccagc aaattttgta tttttcatag agacaaggtt 180
tcaccatgtt gtctaggctg gtctcaaact cctgacctca ggtgatccac atgcctcggc 240
ctcccaaagt gctgggatta caggcgtgag ccaccgtgcc cggcctanac tgtgcatatt 300
ctcttgaagt gtgtgtataa taaacaaatt aacaaaaaaa aaagaactgc tttaaaatgt 360
atatttaaaa taaaatagtt ttaactcaat cccattttct gtgatatagt tagccatact 420
ggttaatttc tcaaatcagg ttgactgntt tttctcaaat tgnatgagtc cctttgaaaa 480
ttttggggnc acttttggaa gggggtgcan aaagggcaaa aaggcctcgg ggccttgggc 540
n 541

<210> 5847
<211> 551
<212> DNA
<213> Homo sapiens

US09/509,800

<400> 5847
aagacggagc ctcgctcttt tgcccaggcg ggagtacagt ggcgcgatct cggctcactg 60
caagctccgc ctcccgggtt caggccattc ccctgcctca gcctccctag tagctgggac 120
tacaggtgcc cgccaccgca cccggctaat tttttgtatt tttagtagag acagggtttc 180
accgtgttag ccaggatggt ctcgatctcc tgacctcgtg atctgcccgc ctcggcctcc 240
caaagtgctg ggattacagg cgtgagccac cgcgcccggc ctttttggnt ttttttttg 300
agacagagtt tcattctcat tgtccaggct ggaagtgcaa tggtgcaatc tcagctcacc 360
acaatctcca cctcccaggt ttcaagtgat cctcttgcct cagcctcccg agtagctggg 420
attactnggc atgcaacacc acgcccagnt gatttttgga tttttaggta gaaaacnggg 480
gttctctata ttgggcaact gggcttaaat ctcctgacct naggggaact gcctggcttt 540
ggccttccaa a 551

<210> 5848
<211> 535
<212> DNA
<213> Homo sapiens

<400> 5848
ccctcagtct tttagactct cagctgcaca acttgattgc cttacaaatg acctgcttca 60
aggatgtgga aattcctaat ttcttctggg aaccttctgn gacaccttca ccaggaacat 120
caacatgtat ttccctgctg ccgtatttgg ttttcttccc atctcgggga ccctttctc 180
ttactgtaaa attgtttcct ccattctgag ggtttcatca tcaggtggga agtataaacc 240
ttcaccacct gngggtctca cctgtcagtt gtttgctgat tttatggaac aggcgttgga 300
gggtacctcg gttcagatgt gtcatcttcc ccgagaaagc gtgcagtggc ctcagtgatg 360
tacacggtgg tcacccccat gctgaacccc ttcatctaca gcctgagaaa cagggatatg 420
aaaagtgtcc tgcggcggcc gnacagcanc gcaagctaat ctcaaaaact tcttaacngg 480
tccattccnt ttggaggatg ggttaaaaaa ggccncaggg gcaaatagaa tggtt 535

<210> 5849
<211> 130
<212> DNA
<213> Homo sapiens

<400> 5849
ccagacttca atcaacattt taattaccaa gtctatattt agcaagacaa tgtgggagag 60
ataaagagga aggaaggggt aggtggggag gggcnnnnaa cggngctgnc ccnttttctg 120
cattggctgc 130

<210> 5850
<211> 547
<212> DNA
<213> Homo sapiens

<400> 5850
actgtttgta gaaaaggggt ctcattctct tttccaggct agtattctgc tttttaacat 60
gaaaagaagg aatgaagttg tgcagcctgc tttgtgtaat gaataaactt ccttgatgca 120
atagagctca ggaagttcct acaggtcaaa tcctttctct tccctttgcc tatgtatttt 180
atgtattttc attatttctc caatagaatt actactgttt tttctttgga agaaaaatta 240

0960245 "07250

gaaatgataa taatgggaga catgcactga ggcagtgaaa caaaattttt tctaacttga 300
acttatctag aaagtaagtt ttgctcacta gttaacaagg tatttttatg ccaaatgggc 360
agctcagaaa atggaaaact ctggagggaa ggaacttcag agcccaaatg aaagtcattg 420
actctagcat actaaatggg ggatgttatg ttgnaaagcc tttttcagct aacacaccat 480
taatcatgng gaagcttcgg gactgggatg gntggcttct ggctggatca tagtcaaaaa 540
nccgant 547

<210> 5851
<211> 543
<212> DNA
<213> Homo sapiens

<400> 5851
gagtcttacc ctgtcactca ggctggagca tagcaactct gtcatgcttc actgcagcct 60
caaactcctg ggctcagaca gtcttcccac ctcaggctcc tcagtaccta ggactacaga 120
tgtatatcac tatgcctagc taatttttga ttttttgtag agatagggtc tccctatgtt 180
gagtaggctg gtcttgagct cttggcctca agcaatcctc ccaccttggc ttcccaaagc 240
attggaatta caggaatgaa tgagtctctg tacctggtct cttcatgtat ttttaagatc 300
tgataataag tgcttacact tttagcactg tcttggtgaa ttttatcatt atataatgtc 360
cctaattatc cttggcaatt ttggttgtcc taactctact ttgatgaata taaaaatggc 420
tttttaattt atttttttga gacaagagcc tactctggtg cccaggttgg aaaagcantg 480
gtggganctt ggcttaatgg cttncaaggt caagccaatt ntccggcctn nncttcgggg 540
gaa 543

<210> 5852
<211> 545
<212> DNA
<213> Homo sapiens

<400> 5852
aaggttgaca ccccatttat tggagaagac cccagcaccc gccccctgag gtcttaaggg 60
ctttggtgta tccttggtca cgagcgctgg gccaggaagc agagttcctg agagccaagt 120
ctagtggttg agagaggacc ctggctgggc ctggggagca ggaagccatc tgtccagctg 180
ggcagccccc atgggtccct ggtgcagccc cggccatgtg tccagcgccc catactccat 240
gaggggggtc tgcaccccat cacacgctgg ttctgcaggt ctgcacccct gtgaggctgc 300
ccctgggggg catgggttct gttgggctct tgctcccagc atggatgacc cagcgatagc 360
agtcaagtga tgcgcttgtt gggtgcatgg gggccacagc gggtgcaagt acacgatgcc 420
cagtgcaagc aggaccacca aaaagacaca cgttggcacc caggaagtgc accagcaagc 480
acccggtcat tcctttgggc tgtgcttcgg naagaacaag ctttcccagg ggtttttggg 540
gcttg 545

<210> 5853
<211> 542
<212> DNA
<213> Homo sapiens

<400> 5853
acaaaaacaa ataaggattt ttatttgcag tactttccac tcttccttta aaaacttgcc 60

0090270 0090270

atttgcttat cagttcctct ggggctgacc cactcaaaca agacaaagga taaagaacaa 120
aagatagtcc tccgaggtta caggcttgga agggcagaga ggagctacga accttggaag 180
aaaaacaagg tgctcaggaa tttatcgcct aacatttcac ttccccaccc acccccttagt 240
gctcccactt tggcagtgat ctctctttgg ctttaaagag aaaggggggaa atgtgccttg 300
ttttgcaggt gtgcaacaac acagctctgg catctcaagc agcaggggag aactctaaga 360
cagaagaatt tcttcatgaa aatcacgggt atgttatcac atactgtctc catggcccat 420
acaaggactc cttaagggtc tttctaacat accaacatat cccccaccaa ctcagnagag 480
aggtttcctt ccactggaat agaaaaccnt tggctcatta ttacaggctt aaaaancccc 540
cc 542

<210> 5854
<211> 539
<212> DNA
<213> Homo sapiens

<400> 5854
ccatctgcac tcttttattt gttgcaatac tgtttataac agctaagatt tggaaacacc 60
ctaagngttc atcaacagat gaatgaagaa aatgtggttc acatacaaaa tggagtactc 120
ttcagccata aaagagaatg agatcctgtc acttgcgaca gcatggatgg aactggaggt 180
cactatgtta agtgaaatag gccaggcata gaaagacaaa cattgccatg ttctcattta 240
tttgngggat ctaaaaatca aaacaacgga actcatggat atagagtaga aggatggtta 300
gtaaaggctg aaaaaagtag tagacagctg agataatggt ggggcagagg tggggatagg 360
ttaatgggtc aaaaaaagta gaaagaatga gtaaaactta ctatatgata gcccaatagg 420
ggggctatag tcaataaaaa cttaactgca tattttaaaa tcngaggggn atcagggttg 480
gtttggaacc cccanggata atgttgaggg gatgggtacc ccatttttca tggnggggc 539

<210> 5855
<211> 548
<212> DNA
<213> Homo sapiens

<400> 5855
gagacagtct cattctgtca cccaggctgg aatgcagtgg cattatcttg gcttggcaac 60
ctgcaacctc ctcttcccag gttcaagtga tcctcctgcc tcagcctccc aagtagctgg 120
gattacaagc gtgcaccacc acgaccagct aatttttgta tttttagtan agacatgttg 180
gccagcctgg nctcgaactc ctgacctcaa gtgatctgcc cgncttggcc tcccaaagng 240
ctgggattat aggtgtaagc cactgcacct ggcctgagac atccagattt cttctgatct 300
aaataacctt aaagtgttaa caagnacaac taagtaggct tgggacagaa aaatgaagtt 360
agccaattgn acttaaaatg tgacaattca nagaatcaca gggctacctg nttcacacta 420
gtttctatct gctagccaag gtgcacatta ngggtaaaaa ggataacaac ttcttagcan 480
taagtggaac aataataaan ggnatttcaa tcccattacc aaaaatgnng atttggttca 540
aaaaattc 548

<210> 5856
<211> 428
<212> DNA
<213> Homo sapiens

0090270.0946250

<400> 5856
ggtaaagatg gggtctcgct atgttgctca ggctggtctc aaacccctgg cctcaggcaa 60
tcctcctgcc tcagcctccc caagtgctgg gattacaggt gtgagccacc acactcagcc 120
gggcccgtct gggttaaagg tacttgcttt ttttttttt ttttttttt ttttcgngan 180
atggagtctc attctggggc ccaggctgga gtgcagnggc gngatcttgg ctcacggcaa 240
cctccgcctc ctgggttcaa gcaattntcc tgcctaancc tcntgagtag ctggnattac 300
aggcacctgc caccacgccc ggntaatttt tngtattttt agtagagatg gggtttcacc 360
atgttggcca ggctggnctc gaactcctga cgtcaagnga tccacccacc ttantntncc 420
aaagngca 428

<210> 5857
<211> 321
<212> DNA
<213> Homo sapiens

<400> 5857
ccatcaaang taatttattt aaatancaat tcaatngcat gttaagtaan ccagttgtag 60
caatataaat tttganaaaa tctggcaaat taancctgta tctaaangca gcatattctg 120
ggatnctacg gaatgaaaaa taaaangngt tgactttcaa gtcaggatga ttnatttgcn 180
cttaaaaata taatttctaa natgacatct gttttcaaaa acatcctaan ggtaaaanca 240
ggctacagga attgttgnca tcatgttgaa attttanatt ttatattanc attagcttaa 300
aaatcataga cantancatt a 321

<210> 5858
<211> 477
<212> DNA
<213> Homo sapiens

<400> 5858
gagacagagt tttgctcttg ttatccaggc taaagtgcaa tggcacaatc tcagctcact 60
gtaatctctg cttcccgggt tcaagcgatt atcctgcctc agcctccgag tgaggnggga 120
ttacaggcgt gtgccaccac acccagctaa ttttatgttt ttagnanaaa cggggtttca 180
cagtgttggt cactctggtc ttgaactcct gacctcaagt aatccacctg cctcggcctc 240
ccagagtgct gggattatag cgcaagtcac tgcaccaggc caaaattagn ttttatgcat 300
gcctaaagat gtttatgctg tagacttttt ttttttttt tgacaaagng ttngctctgt 360
tgcccaggct ggagtgcacn ggtgtgatct cagcttactg caacctcaag cttccccngt 420
agctgggatt acaggngcgc acnancacaa ccgggttaac tttttggatt ttannca 477

<210> 5859
<211> 572
<212> DNA
<213> Homo sapiens

<400> 5859
catgttggat aaggcaggct ctatgaagta ttttttaat aggtcttcat aagacattac 60
aagctattga attcccatca agaaaaccta tttctattta attgtgctaa gtgctaaggt 120
tttactcttt aggttttcca tttttttcc acttgtgcat tgttcctatg caggcccctc 180
tggatatgtg ttgtgaagtc atatttgtcc gtgcaaagat gctggcatat gctgcactgg 240

US 2005/0130200 A1

aaaggtccac tgtcaccatg gcaactcata tgcaaagcat acatcacttc atccagaaag 300
acaatgccac agtgcacaca ttttgttgaa agttcatctt gagtacttct atcaactttc 360
tctgntttta ctacattcaa gggaccttca ttttttacat ttggtggngc cttcgttttc 420
tccttggang cccgttgcaa gttggccagg tctggaatgc ttggatcgcc aaatctaaan 480
gaatgcattg gctgaaccca ccagctgaaa aatgaggang cnaattggaa ggtgggataa 540
ggcccatagt ttngcaagga tttggaaggc ca 572

<210> 5860
<211> 535
<212> DNA
<213> Homo sapiens

<400> 5860
gagacagaga cttgctctgt tgcctaggct ggagtacagn ggcgcgatct tgactgattg 60
cagcctccgc ctcccgggtt caagcgattc ttgngcctca gccgccccag tagctgggat 120
tacaggngca catcaccata cctggctcat ttttggattt ttagtanana cggggtttca 180
tcatgttggc caggctggtc tggaactcct gacctcaagt gatccgccca tntcggcctc 240
ccaaagngct gggattacag gcgtgagcca ctgcacctgg cccaaattaa ctacttctac 300
tttgatgaat gtcttcccac taaatatcat tttattatac ctagtaatat tagccaaata 360
acagtgttta atacaactaa tttatcagaa caaattacaa ctattcataa taaaccctac 420
atatnaaaat gatttttaaa agctcaatat taacnccaat tgaaagaaac ctaanactgc 480
anaatttggc cactntttca atttcctttc cnggttgggt tatggacccc aaatt 535

<210> 5861
<211> 478
<212> DNA
<213> Homo sapiens

<400> 5861
ggtattttta gtagagatga ggtttcaccg tgttagccag gatggtctcg atctcttgac 60
ctcgtgatct gcccgtctcg gcctcccaaa gtgctgggac tacaggcgtg agccaccgca 120
cccggccaag actaaagtag gctttaaacc cgtaacaggt atgtgctcca agtccttctt 180
tcctgacttt tcggaaaaaa atttaaatgc ctcattacat agtggcattt aaaaactaaa 240
atgggccagg tgtggtagct cacagctata atcctggcta ctcaggaggg tgaggtagga 300
gcattgcttg aggcaggaaa ttcaagacca gtctgggcaa cacagtaaga tcccacctcc 360
cctgaaaaaa tttaaaaata aatcagctgg gcctggtggc atgtgtctac agtcccagct 420
acttgggagg ctaaggtagg angattactt gagncttaaa agtttnangc ttgnanng 478

<210> 5862
<211> 561
<212> DNA
<213> Homo sapiens

<400> 5862
gagacagggt ctcatcctgt tgcccaggct ggagttcagt ggcgcgatat agctcactgt 60
aaccacaaac acctgggctc aaacactcct cccaccttag tctcctgagt acctggagct 120
acaagcatgt accaccatgc ctggctaaat ttttcatcct tatttttgaa gaggcggggt 180
ctagctatgt tgcttgggct ggtcttaaac tcctggccac atgtgatcct ctcacctcag 240

0002702.6476250

cctcccaaag cactggaatt acaggctgag ccaccgcgcc tggctaatca tgtttttaa 300
aagccttcca ggttgaagtt aaaggcaaaa aaaatttcta gatgaataag agcccattac 360
taagcatcag ctatgcacaa agcatcctaa gagacaaaaa aaaaaaatga agtgacagtc 420
cctggagaat tcataattgg agatgggaag acagatggtc ctaaaaatac cgaggagttg 480
agaagttaac agctttaaag nctcanatga cttgcctggc aggcacttta nttgggccca 540
aggttccttc ntaaacctgn n 561

<210> 5863
<211> 568
<212> DNA
<213> Homo sapiens

<400> 5863
ggccatgtaa atgtcttctt tagagaagtg tccattcata tcctttgcct atgttttgat 60
aaggttgttt ttttttttct tgtaaatatg tttaagttcc ttttaaattc tggatattag 120
acctttgtca gatgggtaga ttgcaaaaat tttcttccac tctgtaggtt gcctgttcac 180
tctgatgatt atttcttttg ctgtgaagaa gctctttaat ttaattaaat cccacttgtc 240
aattttggct tttgttgcaa ttgcttttgg tgttttcatc atgaagtctt tgcccatccc 300
tatgtcctga atggtattgc ctaggttttc ttccaggatt tttatggttt tcagttttac 360
atttaagtct ttaatccatc ttgagttaat tttcatataa ggtgtaagga aggggtccag 420
tttcagnttt ctgcatatgg ctagccaagt tttcccagca ccatttactg gaataggaga 480
acctttccca tttcttggtt ttggcanggt tggccaaaga tcaaatgggt gnaaaccatg 540
gtggnttaat tctgagggcc cggtctng 568

<210> 5864
<211> 566
<212> DNA
<213> Homo sapiens

<400> 5864
atggggtttt tttttggagt tatttcctca gtggagcaca aattgccccc acagtctgat 60
ccaattaaat taaggaccat ttgaattttt gaggctagtc tgtgatatct gttatgactc 120
caggagggca cgttttacct gcattgtcct ctggctctcc cttgtaaact aactggccta 180
tggtttagct tgctgttctc attaaggtgc aagcctcctc ttaattaaga aacaccctgg 240
cttctaggcc acacctccat ggaatttagg ctctgcaaca catagctagc tagtagcaat 300
aagaaatgct gatggcctgt gcctcccaag gagataccat gttcctcaac tgggagctgg 360
agagagagga atccctgtgt tcttgaatga acttcaggta gaaggtgaat ttttatcaca 420
ctgaactgga agggggaagg agggaagctg tggntcaaat gtcacccgat tcttactctt 480
cttaccaagg tttaatagat ttcttgaata aatggtcctt catttggcta aggccctang 540
ccattttcca aaggttttaa aatagg 566

<210> 5865
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5865
acccaaagtg tcctttattc tttatcatcc tatttgagtt ttattgtttt tacacagctg 60

0020070246350

ggaaatgctt aaggtacaaa ttaataaatt ttaaactcag tatggaaaat acatttaata 120
aattaaagca aaaaccaaag aagatctgag gagatccaag agatcaagac aatctgtaac 180
cagagtctga agtatccaag gagctactct ttttgaggca tattctcctc agcttccagt 240
tatcatttga taaacacatc agcaaaaggt tcagtgtttt aaacaaatgt agactttatt 300
ttgtactgta caaagtgcta atgtcagtag atccattaaa atatagaata tttaagaaag 360
atcattaata aaagtaatgg tcattcaatt taatggtaca gtttacagcg gtttactgct 420
agtggtttaa gtcagcatga gcagtatcaa aggacttatg tagctaggtt ctaaacttta 480
cagaaaaccc agtccattcc agggctatag ccatataagc ntattcatat tnnaatagtt 540
tccatatgta caggaan 557

<210> 5866
<211> 414
<212> DNA
<213> Homo sapiens

<400> 5866
caaattgcat tttacagnaa aaatgcagac cactttggat agctatggct cgatacttct 60
gggtgccctc ctcctaagac atcctcttct tacattccac tgaacagaaa accatccctt 120
ctactggcat gaacttctgc ccaaggaggc atttgctgca gcaagagcac agaaggcact 180
gtgtggatgc atgccagctg aaattgttat aggtcacgcg ctgcacttct gggtcgatgg 240
cattgtggca tccttgacac accacagcgt gattcttcac atagcagggc ttgcacacgg 300
gcttgncatt gaccatcacg tatatctccc cagctagaag gctatcacag tcaaagcagc 360
agaagtgttt naggtgccaa ttctgntttt cngcctgggn natcctcatn gcng 414

<210> 5867
<211> 572
<212> DNA
<213> Homo sapiens

<400> 5867
gagatgaagt ctcgctctgt tggagtgcaa tggcgtgatc tcagctcact gcaacctccg 60
cctcccgggt tcaagcaatt ctcttgcctc agcctcctga gtagctggga ttacaggcat 120
gtgccaccac gcccggctaa tttttgtatt tttagtagag atagggtttc tccatgttgg 180
taagactggt ctcaaactcc tgacctcgtt atctgcctgc cttggcctcc caaagtgctg 240
ggattacagg cgtgagccac cgtgctgagc ctatcttttg ctctttaaaa ttttattctc 300
ctgtgaccca ctggtacagg atacagtaac gtataacaca gcaagagaca tctaacccac 360
tcaagaatca tgagattttc ctgacagtat ttatacaaga ggcctaaatt gaaaatgtca 420
ttaatttaaa aagaacatgt tagccaggca agtggctcat gcctgtaatc tcaacangca 480
tggaaggccn aagccggaag gacccaaang gcaggaaatc gagaaccttc tggctnacat 540
aagggaaacc atntttctta aaaaaaaaaa aa 572

<210> 5868
<211> 562
<212> DNA
<213> Homo sapiens

<400> 5868
gagagcacaa ctccaaatca tcttttatta atataaaaag ggcatattta gcaaaagaca 60

0004-0045-0

cacagataaa agagtcacta tggctcagga cacaaggcag ggaggtgcca ggcctgtgcc 120
cctgctgggg gagaaggagg ctcgggacaa agtgggagaa gtgctgggaa gggctgagcg 180
gtaggggcca caaaagttcc ggtgggcaac actgtcggca ggtcatgggt ggagcttaca 240
aaatttatat aaattctaga agaactaaaa ctaattttct atcagtctac attgtgtgta 300
aggagggaaa agaaaacata ttgataaagt ttgcttcata ctctaaaata gccagtgata 360
tttcaacatg ccaaataagc aactgttgct tcctttttga acccttatag ccaacagtta 420
gtgttccaag taagagtgga taaagtcccc caaaatcaag ttctagtaag aagacatttc 480
tttcaattaa acttaccccc tttntacagg aaatcanctt aacaagggaa tcctggcttt 540
aactattann tggcccattt an 562

<210> 5869
<211> 548
<212> DNA
<213> Homo sapiens

<400> 5869
gagacagggt catgcactgt caccttggct ggagtacagt gatacggtca cggctcactg 60
cagcctcctg gactcaggtg atctttccac ctcagcctcc caagtagctg ggactacagg 120
tacacaccac aatgcccagt tagtttttat ttatttattt attttgtaga gatgaagtat 180
catcatgttg cccaggctgg tattgaactc ctttgctcaa gcaatccccc tgcctcagcc 240
tcccaaagta ttgagattac aggtatgagc cactacaccc agccccaatg ttatccttta 300
agtataataa gattataaca tttcagaaat caacatgtgt tagtacaata ttttataaca 360
ttcaaagatg gaaactaaag taaatttcct acacctacct ttatttaaat taataggaaa 420
atcaatgtgg tggcataatc ctttcaaagg tagaaactta tgnttttaac tagctgatcc 480
aagacttgca tttgctttct gatggttaaa gnaactacct ttactttanc aagnccattt 540
antaattt 548

<210> 5870
<211> 423
<212> DNA
<213> Homo sapiens

<400> 5870
gctgacctgg ctatcttaag tagttagaag ctatattata atagggccac actatggtag 60
cttaaaatta tagaataggg agattaaaaa tatcttacag ngtttattct aaatctgata 120
gtattttaca aggtgtgtgt gtgtgtgcgt gtgcacgcat gtgtgtgttg gagacagggg 180
cagctgatat tcatggcaac atgtagtatg tgccagtatc ttgaacaatg atatataatg 240
ctaagactca aatggtttcg gtttttaata cttttgtttt aagctcaggg gtacaaatgc 300
aggtttgtta cataggtaaa gttatgtcat gggggttttt gtacaganta tttcatcacc 360
taggcnttaa gcctagtacc tattaggnat tnntcctgat tctnnccctc ttcctaccct 420
cct 423

<210> 5871
<211> 566
<212> DNA
<213> Homo sapiens

<400> 5871

gaaaaaattt ccaaatgcat caggaatctt acagtaccaa ctcatcattt ttcataacac 60
agatttatgt cttcaattgg agctatttag aaattggccc atagccacct gtaccctaaa 120
ttttctctgg gctacttgga agtatttaga gaaatgtgag atggtagttg atgaaaacag 180
agttcttcat cccaacagta acagctagat aactgactgc ttggccaaac atttgactca 240
atccagggaa tggaagatgc cattcaaagc cagattccag tttgtgttaa ggattatatt 300
tctgtcatca catttccttg acagtcccgc caactaaaaa tcccccagca aaagcccagt 360
gattaaattc tcctggagca tatttttcca gcttatggaa acaatctgct gcagtgtctc 420
ctgtaatatc caaaggatag ttccatttct gaggctgata tatggaagta gattactcac 480
aacccaatcc atcttccacc aacaatttga ntttgaaatg actatggaaa ggactggggn 540
aatnaaaatc ccatccctgg aanggg 566

<210> 5872
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5872
gagatgtagt ttcgctcgtt gcccaggctg gagtgcaatg gcacaatctt ggctcaccgc 60
aacttccgcc tcctgagttc aaatgattct cctgttgaaa cggtccagcc caggaaactt 120
gtgcaagcag aaggaggatg atagtggcct tcatgattta tctcatgtat tttcacaacc 180
agggaacctt ttaatccggg aatttgccac aggagccctc aaagctgaga tgtaattaca 240
ctaaatattc agcccaagta aaagagtttg caggtgtgga aaggaggagg gggnaggtgc 300
tgctctgtga ctaggttgaa aacctcctgc ttctactcca tagcacagtt aaatgattca 360
ttctccaagg catggaatag ttcttgcttt ataaaaatag tactgcgatt aaaaaaaaag 420
cacttctgcc aaaggaacca tgttccaaca ccggaaacaa ggtgttctgc ttaaacagaa 480
taagatcacc ancccatcc atccttnctt cctggtcccc tccaactttg agttgggcat 540
tccaccatgn cccgggggggg agg 563

<210> 5873
<211> 483
<212> DNA
<213> Homo sapiens

<400> 5873
caaataaata tcctttatta aagaaaaaga ggaatattgt taaaagcacc aaaactgtag 60
gttgttacat tgcatgtaca acaagagaaa ggtgattgca atacttggtg tccaagtact 120
taactctgaa gtcatgagtg taaaaaacat gaaatacaaa gcaatacaat tacaatgcag 180
aaaagctgca ctaaagagca aaaggcaaca gtcaaaacga ttactggaga tttcatggta 240
ttgctataaa tgcttgctta gtttttcctc tgtactttta atactttagg atgttaattg 300
aacatattta agtattgtaa atttgcaaga gttggcattt acaatacact gtgcacactg 360
tccatttaat gtaatggtac taaagccatc cttacaagcc aagcaaagca caatgtgcta 420
gtgttttgct tctacctttn ataatattgc acaaagctag tnaatggnga nngagtttnc 480
nat 483

<210> 5874
<211> 584
<212> DNA
<213> Homo sapiens

0003703.0045350

<400> 5874
aactcagagt taactagaaa aatccctttt attaaaatac attgtaaata ttgctcatta 60
atttcctgta cttgaaacat tttttctgaa cccctaagca ccacttagga tagatgaagc 120
aaacctgatg tgttttattc ttctctatta cctgagtatg aatgtgacat ttaactcctt 180
gaacttcttg ctcctctgaa gacatgaggt gctatcactg gatttctcta agtaagaata 240
gcagaagtcg ttttaaaaaa atactgcaga tagtttttct ttccaaattt tatgaaaata 300
ggtataggaa agaaaatctg aatgtccttg gtgtcagtat ccatctgctc catgcatcca 360
ggcagggctt ctttccattc ccaaagaggg gggcagtctg cctaacaggg ccattgctac 420
ccaactgtgg gagcccagct cttanactga gggaaggtct gaacaattgg nggttcgtgg 480
tgaaaatatc accctatcat aaaaccaaaa tgcngatgag acccancntt cataccttta 540
taaacccttc taccttaact tacctcggac cntttgnanc tctn 584

<210> 5875
<211> 668
<212> DNA
<213> Homo sapiens

<400> 5875
agaggtattc aaaaaattta ttgaaagcac tgtactagga gctgagaaca cgatgatgag 60
cacaacacag ttcttccctt tggaaacata gataagtgga gggaatgtca tcacaaatgt 120
aaaacttcac tatgagatga gttccgtgat aggattttct tagggaaacc tgagaaagag 180
ttgagactaa aggtatgtgt catatttttc acaaggcaaa actgggggaa tgacatatac 240
agaggcttgg gctagaaaaa agataccgtt agtccactta cttttgagac agttttggct 300
gctttccctc ttcagtgccc tgttttagaa ctgagtcctt actgaggctt gtaagatggc 360
tattatggga ggtgagagtg ttacaaaatg aggctgaaga ggtaggtaaa gaagccagac 420
cacttcaggc tccctctggc tttattaaag caagataaat ccatggtgga aaatcagatt 480
tgcaagaaaa ggtagttgaa ctaggttgct taattggtgn ctagacaaga gaccagcttg 540
gactaagtaa aantagtgaa ataagatcgg ttataggtgg atgacagagc cnacntagac 600
gtggtaatan agggaggggc cctaactggt aggngtcagc ttgccactgn tgagcataat 660
gccctagn 668

<210> 5876
<211> 646
<212> DNA
<213> Homo sapiens

<400> 5876
aggaaaacat gttctttaat aaacataaga gatagtcaag tctaaataaa ataataatga 60
taataataac agattctaca ccacagttgt atacacttcc agtgaagctt tatgcattcc 120
attctgagct cctaatacca ggtaaacacg aatcataggt ggaaatatgc catgtttagc 180
actagaagta acatcacagt ttattagcaa aataaagcag aaaatgatca aaatgatcag 240
gtaaataaat attacaacat ataatgtact ggtgatgaag ctgcaataaa gtaatataag 300
tgatgtttac aatttttttt ttttttttt ttttttttt actgggaagg ctagttgtaa 360
acataaacat tctcactgaa ctactggccc cccaaaacct aacctatctc acaatcaata 420
atcatctttt gctataaaat cataaaaact tgnactctgg ggctcttttg nctgggacag 480
cttttctact ttctgacatc tnttgaagtc tttcttctca aacttcaagc tcaggcttta 540
tctcctgcca aaacctttcc tgangctttc aggttctgtt aaaaccnggt tctttctttt 600

US 2003/0152960 A1

tttttttttg aaacggagnn tcctntgtgn ccagctggng ggcagg 646

<210> 5877
<211> 644
<212> DNA
<213> Homo sapiens

<400> 5877
agagcctaag ggcctgtatt ttaatgagaa aaaaaaaatt tccaacatag ttcgggtagc 60
tttgaatggt ctagtcaaaa aatacttttg gtatataaaa agcctgtacg tacaattcac 120
acctcagtga agcgccctcc ttgccttgag gctgggcctg ggacaaaggt ggcctcacag 180
ccagcccagg cagggagatc ggcagagagg ggtggcccct gaccccagct cctctgcccc 240
agctgctgct ccttggtggc ggcccctcct gacaccaggc gtctgccatc cttcaggcac 300
caaacagccc cgtctacctg gccctggtct gccctcacac cagtccaccc ccagccccaa 360
ccccaaccac cctccgctgc acggcctcca gcacctgact ccattcaggg aactgaattt 420
gagcttgcag gggtgagaac cacactgagc agcatgacag gctgtgagat cggaggagaa 480
gagtatatgc tgaggctntc ccagttgtca cttggcttan gggtcctggt gcccgtggnn 540
ccgcagtcca gccacagtgc tggcctgaca aatcagcctt aggtgactgg aacaggaagc 600
ggaaccccaa ggnggccaac aaaacggttc tggaggatac ccct 644

<210> 5878
<211> 613
<212> DNA
<213> Homo sapiens

<400> 5878
ctgaacgaat tggttaattt atttggtaaa taaaacaacc atttctaata tgacactgaa 60
atggcaaaat gatagtcaca tcacactagg gagaaaattt taataagcag acaaaacaaa 120
atgataacat tgnccatttt ttcaaagcac tgacatacaa aagtgaaaag atncaacagn 180
gcacattttc agggtaccta tgtttactga agtctaaaaa ctcctccacc tttaaaagtc 240
agcattattt cttgatggaa gaaaaataca cagtaacttt ttgatgtaat actaatatta 300
tngggttttc tttgcaaatt cctttagttc aagtattact aaagaaacat aaacatatgg 360
acattacaaa ttcagctaaa aaactaggta gtgctgacta tcctgtttaa tggtaatata 420
tgtattaggt atttaaattt gattattata ncacaaaata attttaacat ggaattctat 480
aaagnatgta ttttgtcact ctacagtgcc tgctnttcca tgggtttttt ttaagangtt 540
catcaattta cccaatttgg ncatanctgt accaccggaa tngggcctnt aacccaaaat 600
ttncgtaaag gct 613

<210> 5879
<211> 596
<212> DNA
<213> Homo sapiens

<400> 5879
aacttttaa ttcattttca ttttaaattg ctcatgctaa tgaacacagt agtatggctt 60
tacagatttc ctagacacaa tcctcaattt ggctcagact tgaatatacg tcatccaaga 120
gaacttttc gttccttctt aaggtgttta aaaaataaat ggctataaag tatggggaga 180
aaacatttaa gaataaggtc agagcacaca ttcagataca ctttggactc agatgtactc 240

0052-0-9-2-0-0-0

ttagagaact gtagagataa aatgctaatt atagtacatg taaacatctg ttcaaattga 300
taaagagtga acataaaata ataggatgat attattgtaa cagtcgtctc cagacaggaa 360
ctggtcttgc tcttgcagtc acaaagctaa attcaggcaa tgatgatctc tctctgctgg 420
aaaaagagaa gactattaaa aaaaactttg aaaatagcaa ataaatctaa acttgaatca 480
catcataaat ggcctccact tttctaacca ttaaaaangc tattggagaa agaatcaaaa 540
tcaaagtgca ggaaantacc caangntttg gctaaaanga tttaccaaac ctnttn 596

<210> 5880
<211> 653
<212> DNA
<213> Homo sapiens

<400> 5880
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 600
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnn 653

<210> 5881
<211> 645
<212> DNA
<213> Homo sapiens

<400> 5881
aatagacatg gtctcaatac gttgcccagg ctggtctcta actcctagct tcaatcaatc 60
ctcctgactt gtcttcccta agtgctggga ttacaggtgt gagccactgt gcctggtctc 120
acttttccaa ttctaaagaa tgtgttgtgt aagccttccc ctcaacaact tagtgaaagg 180
tgaaaaaaag gtttggaaat aaaagcatct gatgtttgaa aaagtacttt gtgaagtaaa 240
tgcactaaga gttatctgtg tattactgca aacaggtgaa catagtaaaa acaaatgaac 300
ttactgcaag tagctcaaca tagtaaaaac aatagaaatg tttggcttta cccatcagcc 360
aaataaaaaa atctccttgt aaggttaaaa ggatcgaaat gtaggaagac cgtgaatatt 420
caccaaaacc cttcatcttt tcaatttctt catctgtttc tgggctgctc attttggatg 480
ctttaacttg gttactacta ccagtatctg ctttaanata gtttggcttg ggtatctaac 540
aacccgagac tcttgaattg gcatctgcat ctaagtctaa nggtttatgc ttaatgattt 600
gnggggacta actggactac ttcangaatn cagngggtct accat 645

<210> 5882
<211> 540
<212> DNA
<213> Homo sapiens

0080270:6945950

0952046.0720800

<400> 5882
aagtattgaa tagagagaat cactcactac ccaataaatc ccagggtggg taagatattt 60
cccattttca gatgagggta ctaagggtca gaaggatgga ggcccagccc aatgctactg 120
acacagctag gattcagtat tgggtagaga atctctatcc agtacttaag ggttgtcaaa 180
aaaaacagca tatgaaaaag aatgcctgct ggagaaggaa gacaacacaa cagaaagcag 240
agatgggaga gagttcaatt cttgaactcc tggcctgaag tgatcctccc acctcagcct 300
gagagttgaa ttctgatgac attgtttgaa cccctagatc cagctttacc tgaagctaaa 360
tgcgctacta aacttctcag tttaaaaagc ctataaatcc tgctgnttga gtcaatttct 420
tatttgcaac tatgntctat tcaattcaaa gccttagggc tnancccagt taaactgctt 480
ctacanttct ggtggatctt tngactnatg aaacctaatc tttcgnttta ccacngtcca 540

<210> 5883
<211> 479
<212> DNA
<213> Homo sapiens

<400> 5883
gctgtgaaaa tactctgttt attaaagacc aggcggaggg aggtaaggtt gtgggttctg 60
tatgggaaac tgagtcccag ccccagggaa ggagaaggag gacggaccag ctggcagccc 120
gcgagaggtc acaggtcagt ggccggaccc cagtcatagc cgtcttcatc ggaggactcc 180
gcatcatgga ctcgcgtaaa ctttttcttc agggcttccc gttcataggt tcgcatgctg 240
tcctgtcgcc actgtccctg ggggtggcgg ctgtccacct gggccccctg atgagccgag 300
attctcccac gatccctcgg gctctgggac tcatctgcct gcacgggctc cgaggaccgg 360
ccagggctgg acccgggggc tcatcatcan atccgtgtag ggcccccctt gccgctgtgt 420
acccttgcna tccgtgtacc cnccgccttg ccgccggntt gnaanncctt gtaaccccg 479

<210> 5884
<211> 429
<212> DNA
<213> Homo sapiens

<400> 5884
actaaaacag aaagactttc aggaaaatgt catttaatga tttcagctat acattacata 60
tacaactctg tagcctagca acaatcattg ctacaccatc attaacttta aatattttgc 120
ttggtgagct attctcaaat gtagcacatt ttaagatttt gccatcatta tgactgtgga 180
atcattgttt ggttttcata ggaaacagat ctgtcacagt atgaagcttt gtttatttta 240
agaaactggt acacaattac atttccactt acaagagaac gccacagata taactaaagg 300
caggcttcga tggctccnca aaggttgcgt gcgggaccaa ccccacacct cctngnttcc 360
ccgtcgaacc gccntgncca ggttnacatg gtttcatttc cagagatgct ttgnttttcg 420
naagttagg 429

<210> 5885
<211> 632
<212> DNA
<213> Homo sapiens

<400> 5885
caaccaccaa agctgtaact tttatttgcc aatagatatt ttaataaaca ggcttactcc 60

atctgtaaga ccctgataat gcctcttagg aaatcataga aaaataaaat acaataatta 120
gtaatttgta ccttgtacaa aaatcttatt atgttgctca gcaggtagtt tgctaaacag 180
catattcttt cagcaaatag atgacatatg ttatgcaatt caccacaaac aacccctcat 240
attgagagct gagcattcta taacactatt aacttgtaag catgccagca catgaaaatt 300
tacatggaaa gttattaata ttatagtaga tttttgtaag ataaaaatag taccaccttc 360
aaataagtct ggactacttc actgctatag taaagtagat aataggtagg attgcagttc 420
aattgttaac acctttttac cttgtttata gctctaccat attgngatta taaccagaaa 480
agagaatgta ngctgtgtca ggaacctgag tggaaggcat atattgaagc tttaaatggt 540
gacagaatac taangagaaa accttaaaca gngctatact tcctatctca tagataaatc 600
ttttnccctt tgnaagacca atgggncaga gt 632

<210> 5886
<211> 494
<212> DNA
<213> Homo sapiens

<400> 5886
gagatggagt tttactctta tagttcaagt ctggagtgtg atggcagtga tctcaactca 60
ctgcaatctc cgcctcccgg gttcaagcga ttctcctgcc tcagcctccc aagttgaatt 120
acaggagccc accgacacgc cggctaattt tttgnatttt taatagagac tgggtgacag 180
agcaagatcc tgtctcaaga aaatgataat caattcaatt caattcaatg cagtccccag 240
atcaccggct ctgtgctcag caaacttcat cacaacggga ctgatgtgga tcagagtgat 300
gaccacttca cggatgagac acttcactcc ccgcctgcct cccagatgct aaggagggat 360
aatccaagtc tcagccttcg acagtccttc cttccagacg gcnngggntg gtttttctct 420
aagtgctttg ccattcaaga gcnaccaacc ccaccanctg gcntggacta agagggaaat 480
tantttttg gaac 494

<210> 5887
<211> 448
<212> DNA
<213> Homo sapiens

<400> 5887
atcttgatat tgnttattgn ttacggttat gacacattat atatatacac acacacacat 60
atgtatatag ttacgtacac acacaccaat ggcactgatt ttggtacaca tcagaattac 120
ttaagagagt ttgttaaaaa tggagattct ggagccccac tctgtgagtc tggacgatag 180
gtcctacatt tttaaatgcc cctgcctgcc cccaaggtgt ttttatacag atggtagact 240
cactctgaaa aacactagaa catacattct taaaatatca aacattgaat tctgggtatg 300
atcattcttt tttggtcagg gacaagaaaa aaactgtcaa agacaactga gattttgagt 360
ccaggtagcc cggaggaggg aaaagtaata cttacaaaaa taaggnctgg aatgaaaaag 420
ggagaagnnn ggataccnan nggttttt 448

<210> 5888
<211> 540
<212> DNA
<213> Homo sapiens

<400> 5888

0052-0056-0045-0000

aggataatta aaactacttt gaatttttta tttatcaatc tggtttctaa tataatttta 60
gttaaatgaa agacattcac aaagaatatt aggcatacgt acataatttc cttctttcat 120
tctagtttac atgctgttgc ttttagagag tgaaattttg tgttatttca caggggatgg 180
aatcctgttt gactttacag aaagaatatt tagcccagct tttcacagca ctaacctctg 240
cagtcaccac gctcactgaa aaaatttaaa aaacctgaca aaataaaact tagtaaaatc 300
tagaaacttg aattcaattt aataattgct gccctttttt tgggaaaatt gctcaacagg 360
gtggtgaaaa gaaaaaatgg ggggtttcaa attcagtgtt gnttggaggc atgagacata 420
aacggccatt aaaacgttta ctgcgtaaga acnaggtata atggggngag gaaaaggaga 480
aagaaaaaag gtngattgaa aagaacngat ttcntccttg aanggaagna aagctttttg 540

<210> 5889
<211> 570
<212> DNA
<213> Homo sapiens

<400> 5889
cataaaggaa aacaaaaaac aaaaaaacaa aaacaaaaca aaaaaaactt aaggtatgtt 60
tcctgcaagc aaaatggagg aaaaggtatt attgttgtta ctatgattat taagccacag 120
acacataaaa tccacaaaat ggattggtgg ctttggaaat gcaataccgt atcaaaggtg 180
cagactgttt caaatgttct ctacatattg ggctgaaaca agaaccaaac caaacttcaa 240
ccccatcagc gacgcaatgc tcctgtgacc ttggtgaaaa catcgtcgtg accagctaga 300
tccaggaatc cttctctaga gacacgtgga aacgtcccat caggtaggtc ctcaagtcca 360
aggtggggtt gaagggctct ggcttgtccc agggcaaagc acgtgcatta ttggaccaat 420
ttctgaatag aattttatta atatgtcnaa tcaattccag gcacttgaaa tggctttggc 480
tggaataacc caacatngca agaatatgga ttcacagagc attcagccca agctgggttc 540
ancangcaag ggntatnggt ccttnangct 570

<210> 5890
<211> 485
<212> DNA
<213> Homo sapiens

<400> 5890
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnn 485

<210> 5891
<211> 572
<212> DNA
<213> Homo sapiens

0005250.0045250

<400> 5891
gagacagaga ctcgcccagt tgcctagact agagtgcagt ggtgcaatca cagctcagtg 60
caccctcgac ctcctgggct caggtgatcc tcccacctct gcctcccaag tagctgggac 120
tacaggcatg caccacgacg cccagctagt ttttgtattt ttagtagaaa caggattttg 180
tcatgttgcc cagtctggtt tccaactact gagctcaagc catacgcctc cctcagcctc 240
ctaaagtgct ggggttacag gtgtgagcca ccacacccag ctcattttaa tctgtttaag 300
gattaaaata ctcccaactt caggtatgtt ataaatgaag aagtccattt ttcttctatc 360
ccacataact ccctcaaaaa aaggaaagta aaatgaggaa aaagatataa gtanaaaaga 420
aaaatgggct ttaaggggaa tacataggga gccatttata tagctctggt tgacaataag 480
gtggggagaa atnnctagaa gctaattnta ggggaaaaga tgnaaatggg ggnnatggcc 540
actggnntgg gttggctctg ggttccacca aa 572

<210> 5892
<211> 579
<212> DNA
<213> Homo sapiens

<400> 5892
cttttttttt tgagatgaag tctcgctctt gttgcccagg ctggagtgca gtggtgcgaa 60
cttggctcac tgcaacctcc gcctcccggg ttcaagcgat tctcctgcct cagccttcca 120
agtagctggg attacaggcg cacaccacca cgcccagcta atttctgtat ttttagtaga 180
gacagggttt caccatgttg gccaggctgg tctcgaactc ctgatctccg gagatctgcc 240
cgcctcggcc tcccaaagtg ctgggattac aggcgtgagc caccacgctt ggctggggca 300
gcttttcttt aatacacaaa ctgaggaaat gaccctgcaa atttcagggc ttagaaagcc 360
ttcatacgga atcacagatg aaatgcttct tgggaaattc acatgacaca gngccacgtc 420
atacctgctc tgcagggcct catgggggtg atgtacacac agcgcccctc cgagctctgc 480
agcagcattc caggatggca aactntgcca aatagtttтc cgttgccggg gggccccaaa 540
aacacnttgg nncnctgggg atacagggta aacctggnn 579

<210> 5893
<211> 595
<212> DNA
<213> Homo sapiens

<400> 5893
aagtatgaaa ataccatggc tttatttttc tcttaaaaag atagccgtgc ttatgagcta 60
aatggaaagg atgtatgtca ttctcatcag taaacaagat ttaactgctt tcagatgcaa 120
accataatgc cgaagaagtg acatgaaggg gataaaagtc taatgctttc atcttcacag 180
caatcaaatg caaagtaaag caaaaatgaa atggacttaa ttaatgctgg gcattcccac 240
agggaaaacg caagaggata ttataacaat cagtagcagt attgtataca atttaaaaat 300
tccattaggt tgagccaccc tcactcctct ctctggctct ctcccatctg aggtatagca 360
ggctggaact aacagaagct agtaagtcng gagccttttg cntttggagt ccactgagat 420
aagtgagtgg gcaaagtctt ggaagaccag ataatctggc tctggtgagg cacctacgtg 480
cacantgtcc cattatggaa gttgacaaca tactcagcat tagtcctntg cccagaaatn 540
ncgaaaggct caaaagggtg aaaggtgaag gcnccaaggg gnncncctgg gggtt 595

<210> 5894
<211> 542

0002720.6960

<212> DNA
<213> Homo sapiens

<400> 5894
aaaatgacgg aaatttattc tctcacagtt ctggaagcca gaagtcagac atcagcatca 60
ctgggtcaaa ctcaaggtgt cagcaacact gagctttctc aggaggctat agggtagact 120
ctgtgtcttg cctcttctgc tttctgctga ctgctggcat tccttggctt gtggccatgc 180
cactttagtt ttcaaggcca gcatcttcag ttgtttctct gctccgtcgt catatgacct 240
ctgatatggt ttgggtccgt gtccccaccc aaatctcatc tcaaattgta atccccataa 300
tccccacctg tcaagggagg gatgaggtgg aaggtgattg gatcatgggg gcggtgtccc 360
tcatgctgtt ttcatgatag tgagtgagtt ctcacaagct ctgatggttt tataaggcaa 420
gtttttcctc tctctctctc tctctctctc tctctctctc tctctcgcct gctgccatgt 480
aaagacatgc ctgcttnccc ttctgncatg aatggnangt tcatgangct ttccanncca 540
tg 542

<210> 5895
<211> 481
<212> DNA
<213> Homo sapiens

<400> 5895
gtggaaacaa ggatcttgcc caggctgttc tcaaactcct ggcctcaagt gatcctcctg 60
cctcagcttc cttaagaacc aacattcttt agggattggg ggcaaagttt ttttaaagga 120
atataatgtc caagttattt tgntataata gtctgatctg tatttccagn cttccatcta 180
gtattttata ttaagatcat gcccccacac acatctactg tatgtttcct taagttctag 240
attcaggaaa actaaattac aaaaaaatca aaatagtgct ctgactctgg agggaagggc 300
agagttgact ggcaacaagg gaactttgag gtaagagtaa tgttgtatac cttgatcaga 360
gagtggaatt gtctgtgtat acacttaaaa tgnatggggt tgcccggcgt ggtggctcac 420
gcctgnaanc ccagcacttt gggaggccca tgtggcanat caccagggca nganatcang 480
a 481

<210> 5896
<211> 468
<212> DNA
<213> Homo sapiens

<400> 5896
gagatgtagt cttgctctgt cacccaggct ggacatggtg gtttatacca agttcctgta 60
aacaggttta aagtatcaaa tgcttacaaa tgaattttta aaatatgaaa attagagaaa 120
atgaaaagtt attcctgtaa taacttgcct ttttcacttg tattttcata tgctttagtc 180
agaaaaggct agtgaagcat ccaatgcaca ggggatgcat gtaaaggact gtgaaccact 240
attcagaata gtctcctaaa cacacaaaca ttatccatga acacacagcg gtctaaaatc 300
caggttgatt tctaatactg tcacttgctg actgggcatt ctaaggcatt ttaaatttat 360
acggtttagg ttccacaata taattaacct attcaggtta actatattat attctcaata 420
atacttttt ttttttctt ttgagangaa ancttgntnt gnncccan 468

<210> 5897
<211> 567

09/15/2006 15:09:50 PM

0050504-0050563

<212> DNA
<213> Homo sapiens

<400> 5897
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnn 567

<210> 5898
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5898
gcactatata gatcagagtt tttacggcaa tttttccaaa aggccagagg agtttttaaa 60
ttctggtatt ataatttttt tggtctcttc caatttaaat aatctgtttc taggcaaaac 120
agtgtgatga agagtaaaat gtccctgaat gaagaccacc atgtggcccc tctgctgtcc 180
ttatacctcg gcagtctgcg atctccaatc ataagccaac agcatgatgc ctggggctgc 240
ggtgcccaca gcacgcgggc tagaagaagc tctcagcttt gatttagtgc tccctgaacc 300
aaccaacctt ctttcaagct gcttttcatg agaaagttca gtccagagca tcagccacag 360
ctgctccttc tagcccatat tgttcaccag gaaaagaaaa cctatttaga gccaaagaac 420
acacaggtga agcagaacac caaattgctt ttggcaggaa acaccactgg agaagtcaag 480
aaatctaaat tatgttgagg ccctgaagac aaggacactg gagncttaca gacggaggac 540
ctgnacttag gaaagcacct gtg 563

<210> 5899
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5899
gaaagaaaaa ctatttattt ctttatacac atcttgctta aacaatcacc aaaaagactt 60
tcattttctg tcacccaccc tgtccaccag ttatgttggc cttcaatatg tggcgttagc 120
aacatatata aatctatatc atatatttat acacacaaac acattctacc agcactgtga 180
agacacagac taggctttac taggcttggg gcctctccca tgccacttaa aaatgagcac 240
aggtttgctc tatgcaagaa tttcaacaga gttggtctgg ccatcagtct gcaatttccc 300
cgagataaga tagggtgaca aaatgggaca gcaactttga agtgaggtca gtccaatttg 360
gatatcatag aagaaaagaa ataggatgtg ctaggttaag cctgagatgg tatctgggaa 420
atcacccatt catgatgtga actcaaagac acangtgcta cagtggcaga cccaagccca 480
acctgctnga ccacangggc aagtgtggac tgggaatant ggtactgggn ccccccccnaa 540
atgtccggan gggacct 557

0082070 6/4/2010

<210> 5900
<211> 545
<212> DNA
<213> Homo sapiens

<400> 5900
gcttgtaaat tgtgctttaa tttctgcaat cagatatgat gcagtgagat acaagtataa 60
actttcattg tgcatccaga aaataaaaag cacaagtata caggtttagc tcaacagctt 120
attcccttat aaagaaaaaa aaagttttga attaaagcta gtttatcttc agtgtaaaaa 180
cttggaggta taaacaaact caagatatta tatacagtaa attaatttac atttccaaac 240
ttgcacagta cagcatttta aacaaagtaa atggtctcat ttcagctctc actgttaagc 300
ataatccaca tcccaatctc agataaaaat ttcacaatat ataaatccat tgagaattct 360
gtacacaaat acgagttata gaaatctgat ttcaaatata aatacaaaaa ttgtcatgac 420
cttacacgtt acaacagctt atttttctat tggaatttta aaaaatcata gaaaaatatg 480
tcaatgcaca ttcactgnta tgaccaangg catgaacctt gggnctttna ancatccttt 540
nanaa 545

<210> 5901
<211> 167
<212> DNA
<213> Homo sapiens

<400> 5901
aaagttttca gactttattt cacagcgatt gacacagaaa catactagag ttagtaacac 60
ggcacccagc cccaccgccg cccgcttcat cgggtcctgc tcctaggagg actgggctgg 120
ggctgggggt ggggatggga tgggggtggg gaagggacgg nnnnnnn 167

<210> 5902
<211> 530
<212> DNA
<213> Homo sapiens

<400> 5902
cttttagag acggagtctt gctcttttgc ccaggccgga ctgtagtggc gctatcttgg 60
ctcactgcaa actccgcctc ccgggttatg ccattctcct gcctcagcct cccgagtagc 120
tgggactaca ggcgcccgcc actgcgcccg gctaattttt ttgtatttcc agtagagacg 180
gggtttcacc gtgttagcca agatggtctc gacctcctga cctcgtgatc tgcccgcctc 240
ggcctcccaa tgtgctggga ttacaggcat gagccacccc acccagaaat ctctttatgt 300
ttaagaagag gaaagtgaag aacggaaagg gaagaaactg cccatcctca tgggtaactg 360
agaggaggga tggggagaga gacttccctc tttcacttcc tatttttttc tagctcccag 420
ctnttcccac tggcctcatc tggttcattt ggttcaaggt ctaatgatgc attttgctgg 480
gnctttcca attcttaatc ntgtaaggnn ggaggnaaaa gngtgagtnc 530

<210> 5903
<211> 551
<212> DNA
<213> Homo sapiens

0090704350

<400> 5903
aacagtcttt atgggcttaa atgtagtaga tatcacctgt gcatcaagca ttacacttca 60
ttcctttaag atgtgcttca tcctcactca agctgcttgc caccctccga tttctggtcc 120
agtctactct tgttactctt caccatgtag atgaagtagg caagggtctc tttttcattc 180
acaggtatgt tcctgaagtg tcgactcaca gtttctgcta actgggcctt attgaagcct 240
ggtctggtct gcaacttgta gtgtcgttta taacgtcgta gggtgttcac ctgcagctgg 300
aacagatcaa cctcaggaat gtcagtgtcg tgctcgggag aatctccgcc atcgtcactt 360
gtcttcctct tccttttatt tcggacactc tggatgaaat ttttgtgaaa atcacagata 420
tataggtgcc ttacgctctt gccgatgtcc agcttgagtt cttctgcgag atgctctttg 480
gaccctcttg ctgaaggaag cgttgccccg nggccggacg canngcttgg ccgnnctcga 540
tgaaggaana n 551

<210> 5904
<211> 564
<212> DNA
<213> Homo sapiens

<400> 5904
ccgagacaga gtcttgttct gttgcccaga gctggggtgc aatggcgcga tctcggctca 60
ctgcaacctc cgcctcccgg gttcaagcag ttctcctgcc tcagcctcct gactagctgg 120
gattacaggc gctgccacca tgctcggcta atttttttat ttttagtaga gacggggttt 180
caccatgttg gccaggctgg tctcgaactc ctgacctcgt gatccacccg tctcagcctc 240
ccaaagtgct gggattacag gagtatatga atgcttttat ccacaccact aagaagagaa 300
ttgaacatgt tttgaaaaca caagaggaaa ggcagaaact tcattacaaa tattctaagc 360
agtttctgac tttgtttcaa gattggaaca cgaacagtga aggctgagga accagaggaa 420
caaaaactag ctacaatgtt tcgagagcaa caaaagagtt gnctataagc tanaatgggt 480
taaaagacng agaccctgga accaattaaa ctggaatcag caatttctac ggggttggag 540
gacttnaana gaattnnaat tctt 564

<210> 5905
<211> 561
<212> DNA
<213> Homo sapiens

<400> 5905
gagatggagt ctggctcaat cgcccagact ggggtgcagt agggcaatct cggctcactg 60
taacctccac ctcccaggtt aaagcaattc tccacctcag cctctcgagt agctgggact 120
acaggtatag tctgtatacc tgagattaca ggcgcccacc atcatgccag gctaattttt 180
gtatttttag tagagacaca gtttcaccat gttggccagg ctggtctcga actcccaact 240
ttcagtgatc cacccatctc ggcctccaaa ggtgctgggg ttataggtgt gagccactgc 300
acccggccag ctcatttctt tttggtgctg attgatttcg tttgtgtcac actggctggc 360
tggtagaatt caccagtaca accatctggg tctgctgtct agaagctgnt ttaagtttat 420
atgggtattt caagggaact agnctatttt atctaattta tcaaatatgt gagtgagagc 480
ttatttatct attctcttac taatccngga tttaatccat gggattagcn gaataccccc 540
ntttattccn aaatnggcaa t 561

<210> 5906

0050876 : 0050876

<211> 587
<212> DNA
<213> Homo sapiens

<400> 5906
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnn 587

<210> 5907
<211> 565
<212> DNA
<213> Homo sapiens

<400> 5907
gtttttgttt tttctggtct aaatagaaaa agggaaaggg aaagtaaatt cttagggcca 60
gacctcgaaa tgccccaagt gtccaattgg cagctatagc atttgtgagg aggttccttt 120
gccctcagac gagtagtttc aacatttcag tgaaaacaaa ggttgcagaa agctgaaaac 180
ccagatcttg aaggttgctg tcatatatgt gtttgtgttt cttatattat ttccttttga 240
cttcagtttt gcatcccaaa tatgtatggg gtggcatttt aacagtcaat gagtcaaaca 300
gtcaaaggag gacaggaggg gagccagctg gtaggaggga gcagcaaccg tgtgtggacc 360
aagcgccatt tttgntttat agacgtgtct tgaagggatg gtcccagaat atacaaaata 420
tacaatctgn cctaataacc accccgcttg cttgcatang ccatttgatg gcctnaaggc 480
agctttggag ttgaaggcag tgncactact tggaatgccg gtagattgag acccttctgg 540
atgtgtnaat gtggcatgac cagta 565

<210> 5908
<211> 551
<212> DNA
<213> Homo sapiens

<400> 5908
gaggtagggt ctcattctgt cgcccaggct agagtgcagt ggtgaaatct cagctccacc 60
tcccaggttc aagcgattct catgcaacat ccacctccca ggttcgagcg attgtcatgt 120
ctcagcctcc caagtagctg gaattacaag tgcccaccac cacgcctggc taatttttg 180
tattttcagt agacacaggg tttcgctatg ttggccaggc tggtcttgaa ctcctggcct 240
caagtgatcc gcccacctcg gtctcccaaa gtgctgggat tacaggcatg agccactgtg 300
cctggccgaa cctctgcttt taaccccaat ggatttaagt agcatttaca agaggtagtc 360
tcaaactgac acgttttact ccaggataac cttcccaagt cccttgaggt tcccctacac 420
tggtgagtaa acaagctgta ccatggngcc ataaagaaat ggctttctac ccaangggac 480
ttaaattnga gagaaaaagn tncaaggctn accaaggatg tggaatattt ggacttntta 540

aataccgntg g 551

<210> 5909
<211> 567
<212> DNA
<213> Homo sapiens

<400> 5909
gagacagagt cttgctctgt cgcccaggct ggagtgcagt ggcgtggcat gatctcgggt 60
cactgcaacc tctgcctcac gggttcaagc aattctcctg cctcagcctc ctgagtagct 120
gagattacag gcacccacca ccacaccagg ctaatttttg tattttagta gagacggagt 180
ttcaccttgt tggtcaggct ggtctcgaac tcctgacctc aaatgatcca cctgccttgg 240
ccttgcaaag tgctgggatt gcaggagtga gccaccgtgc ccggcctgcc tactcatttt 300
cagccaaaaa attaaaacac accaacaagg gaatacagtt atttaatata tgggaaaaag 360
gggaagttat atgacagcaa tattctataa aggaataaaa acggaagaaa aggaaacatc 420
tgaattggtt catttaagca gtctacactg nactaccatt tacaaggaaa acgcccaggt 480
gacaaacata ttccaagctg gggaagtcag actcttgttg aaagggccca gagtctatca 540
gtcctggnga ataagcaaaa aactaan 567

<210> 5910
<211> 568
<212> DNA
<213> Homo sapiens

<400> 5910
cataacaagc attgtactat ataatactgc tcaggtaaaa gactgacttt tctaaagcgt 60
aagtctaatt gtagtactct cttcttgaac ctgttccatg gctttgaagt ttctagcctg 120
agtaactgat cagtatccat cttgttttat ggcatggcta ctgtaccagg agagatacaa 180
gtgagaagtt tgtgggctgt gtggaagtga agatgaccag gcccctcaaa aagaagggaa 240
gtggagatgc tcccactgga aactatgaaa aaggagaaca gaggctgtac tggggcacca 300
ggaagggaga atggaggctg agggcagtgg cagacaagaa agctcctgca actccagctt 360
agtcgttgca tgtgagatac actgttatgg cgtaggtgga aatcaattca tttacgcaac 420
aaaagcaata gacataccag taatccttgc ccaaataaat tccttttcgt agtcaggaat 480
cataccatct ggatctacgc taggtcacta cctttaaaaa taattattaa tcncttaatt 540
tagatntaat ctgaaccaaa agtcggcn 568

<210> 5911
<211> 380
<212> DNA
<213> Homo sapiens

<400> 5911
aatttgctgc taaatgaaaa gcaggtttgg ctttattcat gttaccgtaa aaactaaata 60
ataaagtatt cacaccaagc gtgaattttt ttttgccagc aaaagttaaa acatcaaaga 120
aacctctttc aaatactaac aaatttactt acaaacacct atatttatta tttcataaat 180
aggcncaaca ggttccataa aaaaagatta aatacagaca cagtatgaag aaacaataag 240
acagagccat atgtaaaagt tgtaatttag ctgtttccaa tctgtttctg catctaataa 300
aataccaggt aagcatttgg cagttttata cataaaagga cttaaaggac atttactaac 360

0625460.02800

cnttncncaa aangngntnc 380

<210> 5912
<211> 570
<212> DNA
<213> Homo sapiens

<400> 5912
agcatgcaat tttttattgn tttctaaatc tatttgtaca cttaatatgc tagtattaat 60
ttcacaaaca gtataaagaa tgtactccaa tgatattacg cggcaacaac tcacctgaaa 120
aagaaaacat tgtctctgaa ataattccta attatacaat tttgcaaata agcactataa 180
atgttaaaat gttaagactt cagtgtataa tgtcaataac atcctgcctt tttaaaattg 240
ctttaggtaa ttcgtaggtt gtaaaaacta atgagaagta aaaaaaaaaa attatgaagg 300
tattacaaca ctcccattaa aatgaaaatc tatgttacga ctttatgctc ttcaaatacc 360
acaccagact gaagcatcaa ccagtatatc aagtgttctg ntccttaaaa aatcgctttg 420
gttatggggg agtgatagcc ttgcttatta attttcaaaa atcctgccta ggtatccttt 480
agccngaatc atcttccaat tacatgggcn tcaaaattac cttttaatca gcaattcatt 540
gggnggctaa atggaaataa ttgcccagan 570

<210> 5913
<211> 564
<212> DNA
<213> Homo sapiens

<400> 5913
ctaaaatggt ctggtctctc tgctgtaaga gacgcttaag tgacatcact tcttctttca 60
attgacttat aaggacaaaa ttgtctgttc ccccactatc tgctgactga tttatagagc 120
tgacagaaat ggatgcaact ggcaaattac cttactaatg gcacacatta catacaccta 180
tctccattag atggcttaga ttccaatttg ggctttttct ttggagtttc attctgaatt 240
gttgcagagg atttatggct ctgtttccac agtccctgct cttcttctgg acttagattg 300
ctgattttgt gatggctact gctgtgacga tggtgatggt gatgatggtg gtgatgatgt 360
tttggatgat gctggtcttt ctcagtaaga gatgaagaag atgaatttga atgtgaagat 420
cccaggctct tccttggtct ttcgcttctg taaactcttt tgnaccataa agtncagagc 480
ccgcataata ccttncatna ccttcttctt ccttcctcct tccaacaaaa cncatggtgg 540
tgccctggtc acaggtttga gggg 564

<210> 5914
<211> 572
<212> DNA
<213> Homo sapiens

<400> 5914
aagacatggt ctcactctgt caccctggct ggagtgcagt ggtgcaatca tggcttgcag 60
cagcctttac ctcctgggct caagcaatcc tccacctcag cctcccagta gctaggacta 120
caagcgtatg acaccaagcc cagctaattt ttaaattttt tgtagagatg gggtctcagt 180
atgttgtcca ggctggtctt gaacttctgg ccccaagtga tcctcctgcc tcggcctccc 240
aaagggctgt gattacaggc atgagccact gcactcgacc tgaaccaggt gttacatggt 300
aaactgtgac tggcgctgtc tgggtgggct gcccctttggc tctcctgatt cttcagtaaa 360

0002020-0-0-0-0-0-0-0

atcttgcttt tgngatcaag tttggcttaa ctgggctgca ctgcaggcaa tggaanggct 420
gtcctggggc tgacaaagga agtggtggca gggactagca agaacgccat gaaaaagggc 480
attttcanag taagaactaa ggctggtacg tccacctgnt tttggggaaa tggntccaaa 540
agacctggtt aaaaaaanna ncnggtttcc at 572

<210> 5915
<211> 582
<212> DNA
<213> Homo sapiens

<400> 5915
agcttgaaac aataaattta ttcccatagt tctggaggcc aggaagtcca atatcagttt 60
tatcggtatc tgtagggcca tgctcctgct ggaagaggct ctggggaaga atctgttctt 120
tgcctcctcc agcttctggt ggctgtcagc attcctttgc tgcggctcca tcactccaat 180
ctctgcctct gtggtcactg tgctttctcc tcttctgtgt ggtaatatct ccctttgctt 240
ctatataagc atagatgtag ctgcatttag ggcactccca gattacccag aataatctct 300
ccatctcaag actttaactt aatcatatct tttgctatag aagagaacat ttccaggttc 360
cagggattgg gtatagggga tatcttttgg gaagcataat taagcctacc acaagttcct 420
aaaagtgttg aaatcatttc ttggngccaa gtaatnaaag ttggnggttt gnggtagaaa 480
acaaacctgg aaaagaaacc cccgggnaaa gtaattttaa aaaaggccgt tcaacaaaag 540
aaatggtnnn aaaaaagaan ttcataaagg gggattccaa na 582

<210> 5916
<211> 569
<212> DNA
<213> Homo sapiens

<400> 5916
gagatggagt ctcgctctgt cgcccaggct ggagggcagt ggcacagtct cggctcactg 60
caagctccgc ctcccgggtt cacgccattc tcctgcctca gcctcccagg tagctgggac 120
tacaggcacc cgccaccaca cctggctaat tttttgtatt tttagtagag acggggtttc 180
accctgttag ccaggatggt ctccatctcc tgaccttgcg atccgcctgc ctcggcctcc 240
caaagtgctg ggattacagg cttgagccac cgcacccagc ctaatttttg tatttttagt 300
ggagacgggg tttcaccatt ttggtcgggc tggtcttgaa ctcctgaggc ctccatgagt 360
catctcgctg gcccctccat aaccagctca gtgtctgtgt gtgccaaaca ggcataggag 420
cctgggtcgg cccaaagaca atctgcgtca cacactgtaa accaaanggt ccttggggcc 480
caagggctgg naacctggaa tcgcttatgg nggctgggaa tgatactggg gattctggac 540
tggttctgaa anatggttgg cacanggcn 569

<210> 5917
<211> 569
<212> DNA
<213> Homo sapiens

<400> 5917
atttgacagt ctcactctgt catccaggct ggagtgcagt ggtgccattt cggcccactg 60
caacctctac cttccaggtt caaatgattc tcctgcctca gcctcttcag tagctaggat 120
tacagtcaag tgccaccaca cctagccaat ttttgtattt ttagtaggga cggggtttca 180

ccatgttggc caggctggtc tcaaactcct gacctcaggt gatcctcctg ccccagcctc 240
ccaaagtgct gggattacag gtgtgagcca ctgcacccag ccgaaatctc catactattt 300
tctataatgg ctgcaccagt atgcgtttcc atcaacagtg tacaagagtt cccctggctg 360
ataaaagctg gaaacatctt gaatcaacaa cctaacatca caattaaaag aactagagaa 420
ccaaaagcaa acaaacccca aagctggcaa gaagacaaga aataaccnag atcagaagtg 480
gactgaagga gatcccgaac cgaaaaancc ttcaataaat caatgaatcc aggggtggct 540
ttttgnaaaa attantaang agctctttt 569

<210> 5918
<211> 561
<212> DNA
<213> Homo sapiens

<400> 5918
gagatggagt ctcgctctgt gcccaggctg gagtgcagtg gcgacagagc gagacttcgt 60
ctcaaaacaa acaaacaacc tcactggtcc aggtgagcct cacctcaagc agttgtcaca 120
gcttgataat tgtgtgtttc tgagagggtt tctttggaag cctgccacag agagtggctg 180
ggggaatggg gggaaaatcc atctcccatt ctgagcccag atgtacctca acacccatgc 240
ctgcttccag gtgcccttgg ggggtccctc cccacagagt gcagggttct cacagcagtc 300
agtcttgcag aggacctggg tagacatctg gtcaccattg aaggggctgg ggccaagcca 360
ggcaggcagc cctgagccta agtgctactc agaggcaggc cccggagcat ggctgggggа 420
tgtcactgac attccgggtn ctgcttggtg gggactttct ggcangactg naatgaagtt 480
gatcactctn aaggctgggt tgnttccttg aggccttggn taaaancccc aaatccggtt 540
caanaaggcc cagggaaggg a 561

<210> 5919
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5919
aatgttattt atttatttat ttatttgaga tggagtcttg ctctgttgcc caggccagag 60
cgcagtggcg cggtctcggc tcactgtaac ctccacctcc tgtgatctcc tgacggtgaa 120
ctcctgactt tgtgatccac ccgcctcggc ctcctaaagt ggtgggatta caagggagag 180
ccaccgcgcc cggtcttttt attttgtttt ttaaatgttt agtagagatg cagtctcgct 240
atgttgtcta ggctggtcct gaactcctga gctcaagcta tcttcctccc tcagccttcc 300
aaagtgttgg gattacaggg gtgagccacc gtgctcagct gctaaagact tttaaatcat 360
aaggaaaagg ataactgcag gaacatcatc aggaactcag acgcctggca aaggtaaacc 420
acactgggtt cttatgacag aaacccttcn tgattccttn accaccccca aatcttccct 480
ttggccagca acctaagctt naaaaaaagg gactgccttn ttactaccnt gaagaaaggc 540
nctttgancc nggattt 557

<210> 5920
<211> 562
<212> DNA
<213> Homo sapiens

<400> 5920

CCDS-7.0.0.0.0-5.0.0.0.0

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nn 562

<210> 5921
<211> 581
<212> DNA
<213> Homo sapiens

<400> 5921
acaaattgct tactttattt ctttaacaat gaaatagtaa taacacaata attcagttgt 60
aacaaagcca ccaacagagc aaaacaaaaa caaagctaat taagaagcat tgcttcagct 120
caaattagtt atctccttta aacaggaaaa acgaccatta gtctactggt tctcaaccct 180
gtctgcacat gagaggaatg gagggaaaca ggacaggtgt ttaaaaaaat agttatatcc 240
aagacccacc tcagaactat taaatgagaa tctctcaaga gtgaggccca ggcaaagatt 300
tttaaagtgc tgtcagtgtt gaaaactaca ggtctaaagt aataaggaat aaaaccatgc 360
ctcgaagcaa ttcaaaacca agaagctgat tatacaataa atttttttcct ctaatcctgg 420
gaaaacaggg gggaagcang gccccgatca gtttcatttt ctttatcctc ttcagttggc 480
catagtaaga gcntaancca catcaaatat tggaagcttt tgcaaacccg cttncccaaa 540
tggaaatatc acttcctttc cntttagaaa gctnttttaa a 581

<210> 5922
<211> 538
<212> DNA
<213> Homo sapiens

<400> 5922
ctgggtggta agatgcctct ttattggtgc tggagctgtt cctgagggag caggccatgg 60
gaccctcatc gggaccctcg ccctcagcta cttccgcctg cgggggatac tctgtcccaa 120
gggtatctct tctgtcagct tctgtaacaa gcgggcctgg taagcagggg gatcctntcc 180
agccaaaggc tgggggcgta cgtgcaggta gcgctcagtg gccgtctcca gctcttccac 240
ctcatacaag gnggctgggt ccagcgagtg ggcattgatg aggctcacaa gatactcttt 300
gtagtgtgcc tggcacaggc cggcatagcc agctggagtt tccttgccac aagcttcgtc 360
cctgagccca ttgggaacct ccttctgctc tatcactcgg cagcccgctt cagggactgc 420
ccgggcccca actggaggct ctgnattaaa catgacgtta tggcctgtaa caacttttga 480
acccgaaaac aatccaatcc ccaggtanaa aaggcaatct tnaagggngt ggnccnnc 538

<210> 5923
<211> 548
<212> DNA
<213> Homo sapiens

0824704.0950

0050750.0050750

<400> 5923
gtttgagaca gagtttcact cctgttgccc aggctggagt gcaatggcac gatctcggct 60
cacggcagcc tccacctccc ggattcaagc gattctcctg cctcagcctc ctgagtagct 120
gggattacag gtgcctgcca ccatgcctgg ctaatttttg tatttttagt agagacgggg 180
tttcaccatg ttggccgggc tggtctcaaa ctcccgacct caggngatcc gcccatctcg 240
gcctcccaaa gtgttgggat tgcaggcgtg agccactgtg cccagcccag actcagcttc 300
tttgcaaact ctaggagggc tcgcctcttt aagcccagct cagctgtggg ctagaatgat 360
cgtttctaat gntcattgca cttatggggt cagaagtaag gaacggtgga tgggtgtcaa 420
gggcatgccc tgctcantgg acccggggag aanactcaag ancctgaang gagatcggac 480
cttggntaaa tttgctaagg cataagttac acgaaccaaa aaggcttccc anggcccttg 540
gcacctng 548

<210> 5924
<211> 555
<212> DNA
<213> Homo sapiens

<400> 5924
gactttgctg atggtttatt accttaagga aaagacttac acagagaaat tgagcaatga 60
aaacccttca cattgagcaa acacattcca cgctacacaa atcatgagaa aaatgagaac 120
tgttgtgaaa catgacagat tgcccaagng ttatttttcc tctattggaa aattctaaga 180
cgtttcctca tgtgtagttt ttcagtcaca aaaatggcag taggaatatt taaatattaa 240
atcacagttt gaaaatagat acatacatac atatatatac acacacaggg atacatagtt 300
gacttatgat tcccagatat gcagggttat cattgngact gctttggatc aagacaagtt 360
tgtaaaaagc agcgacatag ttcgacataa tagtcaggag ctagattact tccctgtaat 420
tgctatgcac acacagtaca aggctagcga gattatagac aatcatgtca ttcgaatcta 480
ctatctttgg ataatctgaa tcattttcaa ggttaaaatg cgcttttggc agtaaagcgc 540
ctttataang gcatg 555

<210> 5925
<211> 567
<212> DNA
<213> Homo sapiens

<400> 5925
cctttgagac ggagtctggc tctgtcaccc aggctggagt gcaggggcgt gatcttggct 60
cactgcaatc tccgcctccc gggttcatgc cattctcctg cctcagcctc cagagtagct 120
gggactacag gcgcccgcca ccacacccgg ctaatttttt gcacttttag cagagacggg 180
gtttcaccgt cgtagccagg atggtctcaa tctcctgacc tcgtgatccg cccgcctcgg 240
cctcccaaag tgctgggatt ataggcgtga gccactgcac ccggccatgg cattctttag 300
ctacgaaatt ttgttagtaa cctgaaggaa gagtgagagg ctgaccttaa taccctaaa 360
agattcaggc tatggctaag tgatccctgg gtcttacaaa ggaaactgga ggctactggg 420
aaagctcagg gatcctgggc catggncttc cactctggat aaccaattca ttctcctnat 480
taccctaaaa gttcctggtt nacaccnana gaagtcanaa ggaaggggcc atnggatagg 540
ggagaagagt aaaattttan tcttcag 567

<210> 5926

0050250-050800

<211> 551
<212> DNA
<213> Homo sapiens

<400> 5926
caatccgttg gagacagatc atctcccact ttcaaaggca attcaattgt ggtttttgtt 60
gttggttttt ttgtattttt ttgtattttt ttttttttt acaagtaagc gtctatgcag 120
gcatcacaaa ctttggcgga tacagtanat atgtatttct ttgatgctga aaggtcagtc 180
cctaagacaa aatcaaatgt ctcaaagaat taaaagcaaa atgcatgtgt cttcctggca 240
aaggtttcca tttgcaatgt aatctgcatt tctacaaata ctcaatgtcc aaggccacta 300
gagggtgaaa aaccagggca gcgtnttcca gcaggagtca gggcaaaccc agagccaaaa 360
ctccatcctc agcccaacct tggaggccca acaactgggg ctnaaaaagn gggcccaggc 420
aacgccaggc ccttactggc cgccaccctn tgtgggctgg gtgcttgggg ncnagggatg 480
gcctgccttt tctgagcccc gggaaaggtt gttgccgggc tgntnacctt ttttgaccca 540
gtnnaaacag n 551

<210> 5927
<211> 558
<212> DNA
<213> Homo sapiens

<400> 5927
gtctaagaat gttcatagca gctttattca taacagtaaa aaacaagcag aaagagccca 60
gtgtccatca acagaaagat aaaaaaacaa actgtgatat attcatacga aagaatactc 120
agcaataaaa agaaatgaat cactgacaca tgcaacaaca tgaataaatc tcaaaaacat 180
tatgctaagt gaaagaagca ttacattttg tataatttca ctcatatgaa gtttagaaca 240
ggtaaattta acctttgata taaaagaatg agaacagtag ttatacctga ggggtgggga 300
ggggatagac tgggagaggg atttaggaaa ctttctgaag atgattgcaa tggtctaaat 360
tttggaaagg gtttgggtta cacaggtgta tatgtctgca agaactcagt aaatttatct 420
taagatttga cattttattg caggtaaatc ttaaatcnaa aaatttaaaa actaaataaa 480
tnctaanctc tagttaataa tctgcagttg aagtactnng gggaagtttt tcacaactgc 540
aatttttttt gaatccan 558

<210> 5928
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5928
caatgtcaaa tgcactttac tgggcccctg ggcctcccaa cactgtcctc accaaggctg 60
gggcacccca ttcccagcac caccagctgc ccaggaagca ggacggatag agggaacaca 120
tgtggaatgg ctgttctcct accccagagg gtgccggatg atgttgacag cacggctgct 180
tccctctccc ctgcagcttc tgtccccacc cagcagcttg gcctttccca tagcagggaa 240
gggggatacc tggggcttca aaccagccac ctgctcctgc ttaaaatggg gcaaggggcc 300
atttgcaaaa ttcttcgagg ggcagtggtg aggtagaagg ggtggcagcc tgctcctgtc 360
tggganaggg ctgggcagac actgggagcc gggcagacac tgggagcccg ggctggctct 420
tgcttcaggc ccanaaccct gggccctgct cgctgaggaa actggtggnt ggaancgcca 480
aggttaacca gcttaagctt gaaggagtac ttggtgggca anaagggtan ccagtccaaa 540

0002703-0050-0

tnggttttct taanaacccc aan 563

<210> 5929
<211> 563
<212> DNA
<213> Homo sapiens

<400> 5929
actttaaaag tgcttctcgg tatagaacaa agtaaatatt acagttttgt tcaacagcag 60
ccaagattta attgtctgtg aaatataagg cttacgacct gagtcgagtc cactactgtt 120
ctgctgatac aaactaggct ggcctacgag gtgaccgaac gcacccagca gctgatttac 180
acagaagagc catctccaaa gaattaaaag tgggccaggg acagccacac gcctgcagga 240
gtccatccaa agggctaggt gctttattct ttctgcagca gatttaaagt gactttgtac 300
aaaaagtcaa acaagaataa acagctgtgg aaaatgtaac aaatcatgct agcagttgaa 360
cagcgaggga gaagggaaat ccagcaaacc gctaacatgc actgaagaaa agcgagacgg 420
aggtagaaga gagagggaag gtggacagaa aaggaagccc ggtaaggaca cgacactggt 480
ttccacacgc gaatcacgca ctttantatt ggggatagct caatgactgg tangaacctg 540
aaagnatgnc ntnaccagtt ttg 563

<210> 5930
<211> 561
<212> DNA
<213> Homo sapiens

<400> 5930
gagaatactg gaccatcatt aaatgtgtac tgtgaagaga ttaatatgta tgaagggctt 60
taccaaagtc cactaaataa acactactca agtacagact gcaaaccaaa atgtatctgt 120
gttacgacat taattgcaaa tagcaagtat ggtgctaaag tctacaccaa tggaattaga 180
tgagtgctat gcacttaatt ttaaaataaa actagtttc agtaaaatgg cttcggtatt 240
tttgttttaa atacaaactt gtatatttgc agctctagtg aaccatctca tcatgtaatt 300
cagacttgga atcatgattt tatttactaa aagccatcaa gatgtagaat atagccatta 360
gtggcataaa acatccgttc attgcgtatt ccatactgag cattaaagcc cacaaaagta 420
tattggacac cactggtgcc tttttgagct taaaatcagt tggtagtatg ttagcaacta 480
cnggatctaa ttattcacaa tcatgccagc atcagaaaat ctggaagttt gatgtcnaag 540
tngggccccg aaaatggtta a 561

<210> 5931
<211> 558
<212> DNA
<213> Homo sapiens

<400> 5931
atggtattaa atataagtct tagcaccttt ggcatttttg tccaaacaga cttcgacata 60
tgaagtgggg acataaccct cttcatcttc atttctccga atgcgggtcc agccatcgcc 120
tttgtcttcc tctatgacat acaatgtttc tccttcaact acggaaatcg ttccctcatt 180
ctgaccttca aatgtgtaga gagctttgca cgtccctatg gcagggaggg gctcctcatc 240
atcaaactcg tcgtcaaaat ccgtggccag caccttcatc tcactctcct gactctgctc 300
ctctgtgtaa ctgccatctg ggctctcacg gtcctgggcg cagttgttga ctgtgggtgg 360

gttctggctg tcgtacagtc cgctctgccg gcgcgcctgc tcgctgcgtg ctgggagccc 420
ggccttcaac ctcagccagc caggcctcaa attctgggtc tctactcgca agttctctat 480
atttggcttg actctgntaa ttgggatcca aactgggctg gggcttccat tganggatct 540
ttaggagaca tnttcatt 558

<210> 5932
<211> 553
<212> DNA
<213> Homo sapiens

<400> 5932
aagtaagaag atttataata gaaaaaagtg gcaaattgtt actgngactt gattttctga 60
aaacatctgc aaattcacac tggcattaag aaaacccaag tctcaaaaat tctcctttct 120
ttctctccag ataatgngtt ttctgtgcaa aaataaatat ctgaaaattg cactaatact 180
tattttaact tctatattat gaataatctg cacatgctgc tttacagacg atacatattt 240
gtaaacttac tcatgcaaaa ttagtgtgcg caacagggat attggtaatt ttcatactta 300
aaaatgatac cttattatct tttaaaaatt gccaaactct ctgaaatggt taacaaatct 360
tatatggata ttcttgtctg ccagctaaaa atcaatttat gttgctgaaa acaaaaagtt 420
atacaagaaa aagaaacatg gtttttggtt tgcaagattt ttgattttta aatgagaaaa 480
tttntaaang gaaggaaatc tnggccccaa aatttaaccn tttaatccta accnttccgg 540
ggaaatggat ccg 553

<210> 5933
<211> 559
<212> DNA
<213> Homo sapiens

<400> 5933
aaagggaggt tggctcctgc atttccactc tttgaccata ggaacgcctg gctacaaaag 60
gggctgtaat tggctgctgc ctataggggc cccaggtcct tcctccaatt gcaaggcagc 120
aactccgaag ttctaagtcc catggaaagt ggcagtggtt gggctggact gtggctggag 180
gatcaccggg cctcggttct caagcaccat ctgtctggct gcagctgggc ccttcagctg 240
ggggccagtg ttgctttcca gctgccccca ccgggtcaga tcatctctgg caaggaagag 300
ctgctggcat ctcttactgt ccttctcgca ggccttcctc caccttgggt gcctcctgac 360
gcctgccccg gaagtcttca tcacacgcgt ggccctccac atcatccagg aggttggctg 420
ttgacgccgg cagcccccaa cgactgatgc ttcaacaagg ggtttcctct ttgactcctc 480
atttgggctt ctttgaaaag gttcggccaa gttnaacagn ttcctccggt ggactttcca 540
aggggtttca anttgccct 559

<210> 5934
<211> 560
<212> DNA
<213> Homo sapiens

<400> 5934
gctttaagtt ttaatgttta tttccccaag acagcctagc ctgcactcta cttggataaa 60
ttttacaagc tagttttctg ctgcttctag ttttaaactt taaccatgtt tctgatgaca 120
aggaatgctg caaaaatact ctagttcaac aaagagttat gatcacaaaa taatttttat 180

0082700-5945-0

ccattctaca gtgtttcaga attaccagtt gatttttaaa cacaaagtag atatagatgc 240
taatggtggc taatctggta tgtttcttat agcaaactgt tgttcatgca acacttgtgc 300
tcaaagggga aggcacagga tttcctacaa tgagccacct tataaagagt tctttttgta 360
caaattaatt tatgtcacat ttaatttagt gtgcataacc tcaaaactga ggtattattc 420
caatttataa aaaccacttg cataactttt atgcaggttt taaaaatcca agtttctcct 480
aaanggctca aaaatagatt ggtcatggct ggctacatnt aagataaaag gatcttaaac 540
cattggacng ataggcttnt 560

<210> 5935
<211> 562
<212> DNA
<213> Homo sapiens

<400> 5935
gagacggagt ctcgctgtgt cccccaggct ggagtacaat ggcatgatct cggctcactg 60
caacctctgc ctcccaggtt tcaagcgatt ttcctgcctc agcctcccga gtagctggga 120
ttacaggcac ccaccaccgt gcccagctaa tttttgtatc tttaatagag atggggtttc 180
accatcttgg ccaggctggt cttgaactcc tgacctcatg atccacccac ctcagtctcc 240
caaagtgctg ggattacagg catgagccac catgcccggc cccaaaacta tttctaagag 300
aagtgttgaa agtgaggctt ggctccttcc gactgcttat agtaaaataa cagaagagag 360
aaatgactta aatatgaaat tgttaggtaa aaaaggaagc agaacgtaaa gatttagaaa 420
attcttagac tatccatatt gcaaaacaag atacagtaaa gatgtgacca agcaaccatt 480
tgctaatgaa atttggatgg atcaagcatt ttaacagaaa ncnggtatga tcctttagac 540
aatgggaaga atgacccccca ag 562

<210> 5936
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5936
aggtttattt attttattgn ttgtttcact gtttgaatgt ttatcttgcg agagtctaca 60
gaattgagag aaaatatctg caggctaatt ttacataaca tgaggcaaag attaagcact 120
aaatataaaa aataaaactt ttagcttgct tattaaacta ggaagaattt tcctgaaaca 180
cagcagttaa attggtctac aatgcattaa taaatggaga acacggatct cgcctatgaa 240
atattttaaa cattgtggac gctaccaaaa agctcattgg tatataaaaa ttttcaagtc 300
acagtcctct aagcagacta aatacaagtt agtttttaac ctgaattcag aagtgcaaaa 360
tctgtaaaaa taaaaatatt tccattgntc tcagcaatct atggattaac cttacaaatc 420
cttaaagtct tttcagtaac atgaaccatg atctcttgac aagtccttgc ttaagggcaa 480
gtaacttttg aagctggact tctcaatctg nanagagaan ccagctgnat tcacagnatt 540
gntncctttg gaaaata 557

<210> 5937
<211> 550
<212> DNA
<213> Homo sapiens

<400> 5937

actgtattta tatagttttt actctatcag tcttgctgta gctcttgttt atgactaatt 60
tgaactatag gaattgatga ttacctcatt gatgactggg agaattaagt aggtaactcc 120
tattaatacc aactgaagtc tcatattata aaaaagtccc tgtgcatcaa gacaaaaaac 180
aaaatgttat caaaccaaaa tatctcagaa ggacaagaaa gggactatgg acactatgtc 240
cacaggcaac acactatggg ccattctctg aggatgacag acactcaaaa ggtcaaatat 300
accaatgcta ttccaaatta tttcttggta agataaaaag atctttaaat gtatttaata 360
cttgtagaaa atcacaataa aacaagttgc aatatgattt tttttaaaaa aacacaaaac 420
attgaaatct aatttagtat ttagaacctg acattccccc agatgaaaat ttatatttgg 480
nattttgga tccatggcca ctacccttcc gaaagtatcc cggatggggc cttatctaat 540
cattgggttt 550

<210> 5938
<211> 558
<212> DNA
<213> Homo sapiens

<400> 5938
aaatttcaca tgaaaaaata tttattttaa ttcacatcaa atacatttag aataaatcta 60
aatttttagc atcataatac ttacaaacaa acacagataa actttgggtg tataagtctc 120
cattctgtcc taaaagcatg tacaaaaagc tctcctgcaa ctattgatca tcacctcgtt 180
gccttaaatt tctagatttt ccattttcag ttcttctctt tttgaagact ggggccactc 240
catctgccat aactccaaga gaagtgactg ttttttcttt aaataccact ttgggttctc 300
cgccaccatc agcttctgaa gttgatacat actcattttc agtgcttgga agttccaaat 360
ctacctcctc atgagactca acctcttgtt taatttcttg ccattctcca tatgggtttg 420
atttcttaag agttttcgat ttttcttcat ttgaacctaa ngaattcggt tctgaatact 480
tttttctttc tggggttctg ggcacttnct ncatcactaa ttttattntt tttccttaaa 540
ccttaatttt ggnttttc 558

<210> 5939
<211> 545
<212> DNA
<213> Homo sapiens

<400> 5939
cctggtccaa ctcagcagct ctatttacat aacagcgtcg cccacacccc gnggggcctn 60
tcacggcttc ttggctttct tcacggaaga tgagctggag gccgactccc gtcgntttct 120
cgaattgggc gtgaggggtg cgcccaccac atcaatgatg gtgtccttgg ggtcaggacc 180
aagtccgggt tcagtcactg ccggctcagc anaggccggg cctgggcctg atgctggtgt 240
ggcagggccc cctagcacac cagcccgggc cagtgcctca tgacggtgcc gcagcatctg 300
cagctcatac tcgcagttgg cacaggcctg cttgagctcg tagagcagca ccaggtcgct 360
tcgcagctca ttgaacatgt gcaccagctc ctccgtangt gtcggctcag ntncacacca 420
agctccagca gcatctgttc canggccttg acttttctg tcccacaaaa cttggcaagt 480
tcatccgtgg ctccnancgg gacactgaaa cttgaattgg aaactgagcc tgaagnttag 540
aacac 545

<210> 5940
<211> 576
<212> DNA

0000270.6952.0

<213> Homo sapiens

<400> 5940
aaagagtaat ctttacatga tgttttaatt atcatacagt ataaacatta tcatttttt 60
cattaagata ggaaattatc attgttttcg ttaagatagg aaatgaaacc aaataaaatt 120
tgtgaaaatg tcagtcatct ttgggaaggc ctcaaatgaa caagggagag tcttgagctt 180
ggtatccttt catcttggaa gaattcatag ctgggaattg gctaaagctt tgcagtgggt 240
tgaatgatgg tttccaatga gatctgtcca tgccttagtc ttcagaactt gtgaatatga 300
ccttatttgg aaaaatggat tttacaggtg taattaagtt aggaatcttg agatgatatc 360
atcctggatt acccaggtgg gctctaaatc acatgaaaaa tgttctcata aaaatttcag 420
agagagtgaa gcctgcagac accttcattt caggcttcta gcctncagaa ctatgagata 480
ataaattctg gtggnttaag tcccaagatt tgggcaatgc atacagcact ctagggacta 540
atacagctcc ttaaagagag ttgaagaaan ctggng 576

<210> 5941
<211> 396
<212> DNA
<213> Homo sapiens

<400> 5941
cattggtaca aatgctttat tgaaactaaa tacataatac acacaaagag atgaagacaa 60
tatagaagtc cgcatagtca tcataatccc gttccttggc cggttgaggc agctcagtgg 120
ctgagcccag tcaagccaac ccgcagcttc actcacgact tcaagatttg atgctaattc 180
ttttggattt ctacagttat taaataagtg tctgagtgga ctgtctttgt tcctttgtgt 240
tttgagggct ggctgggtag gagtgggggt ggtttgtctg tggcagtgaa tttttgccag 300
gagaggaaca ttaaatgcca aaggtaggtg gcagtatttc agtctctgcc cnagccgaca 360
ggcagagaga ccttnacaan taatangacc nannaa 396

<210> 5942
<211> 554
<212> DNA
<213> Homo sapiens

<400> 5942
gtcaaagtca ctatttgggc cctaacataa tcctgctcag agcgacggaa aaaaggcaag 60
ccttttcaaa cataactctc tctacaagcc agctattatg gcaagggaaa aaagaaagca 120
tctagataaa tatctatcaa aattaacttt aagagaaata ctctctttcc ttaaaagccc 180
ttatttttg agacactaga aaataagtta ctataaaaag tggtggtctg ggggctaaaa 240
acaaaacaaa aaaaatcctc ttttctacat tttttagttt tctggcatat ttttgaagat 300
tttacagtcc caaatgagtc aaatgcctat ttgtttttg aataaacaat ggacttgtca 360
tgtgatatat gtttctaaac ttaagtatta cagaaaacat cactatccat ttgtaaaaaa 420
ctcattctgg aaaatacctt tcccttgggt tggtataaaa naccttccat anagctttn 480
gggaatcttg gccttgaaaa accaccggct ttcattaatt tccccccttna aaatcaangg 540
ncccnaactt aaac 554

<210> 5943
<211> 567
<212> DNA

09/25/2003 09:45:03

<213> Homo sapiens

<400> 5943
ctggaatgtg aaattggttt agaagccttc atatttgtaa ctctagcctt tgcactttct 60
aaaatggaaa tagtgtgtgt tgtctttcaa tctgtctctc acctgtggta gggcttttgc 120
agggctggag gtagaaggcg cgcccttgga gaagggtgtc agcacagaga ctgctgcctt 180
atgctcttgg ctgaacgaag gcttggtgta gatggcgttt cccgctaact tctcaggccc 240
ctgctgtgtg tgaggctgtt ccagctccct tggggctgga ctcccgagcc ttttttcttc 300
ggcagcgttc tccacagatg cctgggcacc ctgttccctc ctgatgctct gccttcccac 360
ctctttgaag tgccttttct ggatgctcat tgggcccatg aggactctat tcacttttg 420
ccggttttgg cctacagttt gaatctttgc caggctggtt cctgnggtgg caagtttaaa 480
tgaacggtgg aacattgatt cccatctang gttactgntg agaaatatgg caaaggnact 540
taangcctgg tacatactct nggattg 567

<210> 5944
<211> 568
<212> DNA
<213> Homo sapiens

<400> 5944
atagctgatc aagaatttat ctttattctg attatgattc ttcaaagagc attagttgtt 60
taaatttaat ttaagccatg cttaaatcga atacatacaa aatatgatta cttatattcc 120
ttttgaccaa agagctgaaa attttgtgtt ccagttcatc ttactcatgt tattctgatg 180
cgaaacactc taaatgcaaa ttgttttgaa agtaaatagg ccaagtggcc taccctgccc 240
tttttatagt ataaattctg tgatactgcc ttcttttcag tatatgctcc tctgtgggcc 300
tttggcttac acggagacca tcagctacaa cgcatggcag tcagcttcag agtcctcgct 360
ccagtgtgca tctcgtttct cagccacaag tttgatgaat tgagagtgac tggcataaag 420
cttcagttta tcattgatgt ccacccattt cacttttcca gcatcatctt cagcttctag 480
cattaagaat atccattatc tnaccggttc gcatgggagg tcacaagttc tggctcatac 540
agcnttataa gggttcagga catcaccn 568

<210> 5945
<211> 554
<212> DNA
<213> Homo sapiens

<400> 5945
gcattttaag ttttaatttt atcaaaacaa aataatttaa ccatataaag aaagaaagtt 60
caacaaacaa ccaagaagcc aatcatttcc ctgattgtga acaaccaatt gagtagtaaa 120
tcctgaacag ttgaccgcat atacaagaca ttccgtcatc ctctagtgct ccaagtggca 180
gaggctgatg tttttccctg gttcctattc ttccagtggt gaagtaatgt gctcaactgt 240
tcctatactt cttcagacca aattatgtat attcctacgt aagtgcaaag catggatgaa 300
aagaatcata cagggtagaa atccagcaca taagatttc taggttctga cccttatatt 360
taatgggttc tgaaaaataa ggacaataaa ttgtgcttaa atattgagaa atgtagtgtt 420
tcaaaggcca aagtgccttc ctacatgaac tattctctgn ggaagaaact gaggcatcag 480
ttgggtnaga ccttacctaa aggatntaat aaattacact gggnaaanta gcactgggga 540
agaaggaatc ctgn 554

0090/0450

0080-5-0-0-0-0-0-0-0

<210> 5946
<211> 568
<212> DNA
<213> Homo sapiens

<400> 5946
cccttgtgtc caggtttatt ttacattctc ttccagaggg gatgtggggc tgggggagag 60
ccagcaggca ggcgggcagc acacagcagt ctccctgggg aatatttgag ccaggctagt 120
ggtgcctggc cccacagtgc ggggtgatat gccagggcca gggccaggac ttggcagccc 180
ctgggaagag gaggccttgg ggccagagct cttgccaggc ctagatcgct aagaaggtgc 240
tgcgtctgtc ccccgccttg ctccgccccc ccacacccag ctggaggcca gaaggcaaag 300
agggcagcca gcaagctggg gtgctgggag gaaccccagc aggcgggggc ggcctttggt 360
ctctacgagg ctaggaactg gttctggtta gaggaacccc gtgggggcaa anccggaaaa 420
cttggtccct tgttagagga aacgcttgga ncaggatggg ggttggggac ttggggtctg 480
gtctcaataa gggctggaaa tggcttccgt ttnaaacaaa acttttgatt ttggggaagt 540
gttcccaatt tctnggtncc tccggana 568

<210> 5947
<211> 557
<212> DNA
<213> Homo sapiens

<400> 5947
aagccttcga acatctaaga tcttgtttct agcctagggg ctggctgcag aggaggctgt 60
gccaggcaca gtgacctcag aagctctttg atgacttcac agctgcagag ccaggacctg 120
tgccatcctg gaatttcaag gtctgactgg ctcctgactg ccctcagcta ggatccaggg 180
ccccctttcc cttcccaact ccccaaggca ccctgcctcc cacctgccaa caggggtggg 240
ggggatgagc tggattgcgg tgctggtggt aaggccccag catgtgccat tcatccagcc 300
catggtatgg aaggcttgct gagaggccct caggcaccac agctgaggag cagggcttgc 360
tcccctggcc accanaggct ttctcctgcc tgacatccat gaacggnaga acaggccagg 420
gcangnggtt tccccaaang cagctgcttc antcaggtgg acacacttgt taanggctgg 480
aaactcaagg gttttgaagg ggngggaact aaaatcccat ccaattntta ttcctggcca 540
aaggcaaaac agaaaaa 557

<210> 5948
<211> 554
<212> DNA
<213> Homo sapiens

<400> 5948
attgatacat cttagatgtg catattttgg gagtacatat gataattcaa cacattcata 60
taatcaaatc agcataattg ggatatttgt caccttaaat attgatcttt tcttgatgct 120
atgagcatta ggttaatggg tacaaatgta cagttagata aaaagaataa gacctggtct 180
tcaatacatc atggtggcta tagttaacat taaccattgt acatttcaaa atgctagaag 240
agaataattc caacacgttt tttgtttgct tacttttttc tgaattctaa tagactgata 300
catcagtccc tgctgtagcg aaaataatga cttcctcaaa atgcacttca agaatgtgac 360
ctcaatggat gtaacagaaa gaacctgctc ttggtgtttg ggaaagaaaa ggtgttaggc 420
ccgccacaat tccttctcct nccangtgga ttcanagtcc tggaggacag aatccttggg 480

aacttgagtg aactcctttn accagnccag ccttgactca aattcagctc atatagctca 540
caagctccct ggcc 554

<210> 5949
<211> 551
<212> DNA
<213> Homo sapiens

<400> 5949
gagatggagt cttgctctgt cacccaggct ggagtgcagt ggcacatgtc ggctcactgc 60
aacctccgag tcccaggttc acgccattct cctgcctcat cctcccgagt agctggagct 120
acaggtgccc gccaccactc ctggctaatt ttttgtattt ttagtagaga cggggtttca 180
ccatgttagt gaggatggtc tcgatctcct gacctcgtga tccgccctcc tcggcctccc 240
aaagtgctgg gattacaggc gtgagccaca gcgcccggcc taaaatattt tcaaagtaat 300
ggcaaaaact gcaattacat ttacaccaac ctaataacac aaatttattg ncttatggtt 360
ctggaggtca aaagtcagaa atgggtttca ctgggccaat caagggaggg agggaggcat 420
ggcccagtca gggagtcggc anggctgngc tcccttangg agaatccgtt ccttgntccg 480
gggttccgtc catctttaga acttacagta gaacatntnc aatctactgg nggtttcagt 540
tttacaccaa c 551

<210> 5950
<211> 560
<212> DNA
<213> Homo sapiens

<400> 5950
aagacagagt ctcactctgt tgcccaggct ggagagcagt ggtgcgatct cagctcactg 60
caagcttcgc ctcctgggtt cacaccattc tcctgcctca gcctcccaag gagctgggac 120
tacaggggcc cgccaccacg cccagctaat tttttgtatt tttttttttct ttttagtaga 180
gacggggttt caccatgtta gccaggatgg tctcgatctt ctgacctcgt gatccgtccg 240
cctcagcctt ccaaagttct gggattacag acgtgagcca ccgcgcccgg ccaaaagatc 300
cataaacttt gagtcaccag atagagctaa catttaccac agaggcatgt aaagaaaacg 360
attctagcag agtaactata atacaaaaga acaatattcc aattatgttc ctatgttcta 420
tccaggaagg tttaagagga gccttttaaa ctggaactat attctaagaa ggtgggaaaa 480
aagttttctt ttggttttct tattaaccgt accttgaaag ccccaaataa angttccttg 540
gttaaaagcc ctggganann 560

<210> 5951
<211> 556
<212> DNA
<213> Homo sapiens

<400> 5951
ggcaagtgta gaaatttatt tgaaccaaca ttttcactat gatgaaaatt attcttcaac 60
attgatccaa gctcccacat ttgaaggtta gggaaaatat tgcactttgc attttctagc 120
actcctcata cacggcaaaa agttttaaaa acattctgct agttttgttt tatacaatct 180
cccaaattca tgcacacaat cattccaaac caatgttagg ttatcccaaa aaaagggaaa 240
aactccaaaa accataacct taaaattgca ctaaagctct gtaaagaaaa aaatataata 300

09/25/2008 09:45:56

aatgtcttat acaaatttca gaacatttaa gtgcttgcca aaaagagttt attattcctc 360
atcctcattt tcattctctt gaccggagcc ttctgatctg tcaccctcca accggtcagc 420
tcggatatga ttaagtgaag ccaacatcct caacatgaaa gaagctggaa ctgnaatggg 480
gttctaggtt cttncacatg agttcgtttc gagttatact tcattagcaa gttttcgggt 540
aaaaatcctt gatttt 556

<210> 5952
<211> 551
<212> DNA
<213> Homo sapiens

<400> 5952
actgggaagg ctagttgtaa acataaacat tctcactgaa ctactggccc cccaaaacct 60
aacctatctc acaatcaata atcatctttt gactataaaa tcataaaaac ttgtactctg 120
tggctctttt gtctcgatga tttttcagag aaaaaaatta gctgtgttaa gtagtttcac 180
tgatttatcc atcttgaata gctgccagtt ctggaacttc atacatcctc agaacgtctt 240
catagagcaa ataattatgt aggcttctgg gaagtggcag ctgactaata taactgtcag 300
accgtagacg ttctgatttt agactggacc gaatttccaa acgacaaaga tgggtcaggg 360
atggaacagt ggcaatatgt tgctgtagaa tccaagcgtt tgaggcacga gcagagagca 420
tcctttcaac agctggtgca agtgtcttcc aattagtaac tccaaagtga agataagggg 480
gcaatgcttg ctgggtcaat ccaagaattg cccagtnnaa tcagngggtc aaatccgcaa 540
cccnaaaatg g 551

<210> 5953
<211> 551
<212> DNA
<213> Homo sapiens

<400> 5953
ctgagacagg ctcttgctct ctcacccaag ctggagtgca gtggcacaat catacctcgc 60
tgtagtcttg agctcctgga cacaagtgat actcttgcct tcctgcctca gcttgccaag 120
taactggaac tacaggcatg caccagcaag cctgctaatt ttaacatttt tgtggagaca 180
aatttccaag aacgaatgca aacacacaga gttgacaaaa tgataagtag aaattttaac 240
atgtctgaag agacaaaaag aaaggaaaaa tgcaggccta ataacacaga ttgtgattcc 300
tttaatatct agaccttaaa ttggatatac acttcattcc taaatgtgta ataatattct 360
ttgtgcttct aaattatttg actaatgtca acagaaaagc accagcatat gctaatggat 420
gagttcaatg ctgcatttat gggaaaattt cttattnccc aaatagctga aatgaatcct 480
attcactggc tggtcttgct atacgctgna aatttttaaa atgatgttga atgnaanggg 540
aattcccgtt g 551

<210> 5954
<211> 566
<212> DNA
<213> Homo sapiens

<400> 5954
aaggtaagaa agtttctgct tttattgaaa atttatatat gactcagtat tgtaataaat 60
aaacataacc attttcacaa aaaatgacag tgctatgcta aagaagaaaa tattaaatgg 120

0050345.0002